# Safety Management System Performance Measurement Report

October 2025







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# **Executive Summary**

The Annual Safety Management System Performance Measurement Report has been prepared in accordance with the Electricity networks reporting manual – Safety management system performance measurement (October 2024) issued by the Independent Pricing and Regulatory Tribunal (IPART) to fulfil this statutory obligation.

The report provides information regarding the performance of Endeavour Energy's Electricity Network Safety Management System (ENSMS) which has been prepared in accordance with the Electricity Supply (Safety and Network Management) Regulation 2014 (ESSNM). It comprises two sections:

- Section A Annual Safety Performance Reporting for the period 1 July 2024 to 30 June 2025; and
- Section B Bushfire Preparedness for the period 1 October 2024 to 30 September 2025.

Data has been provided for the previous periods where it has been possible to do so, and this will continue to be populated in future reports.

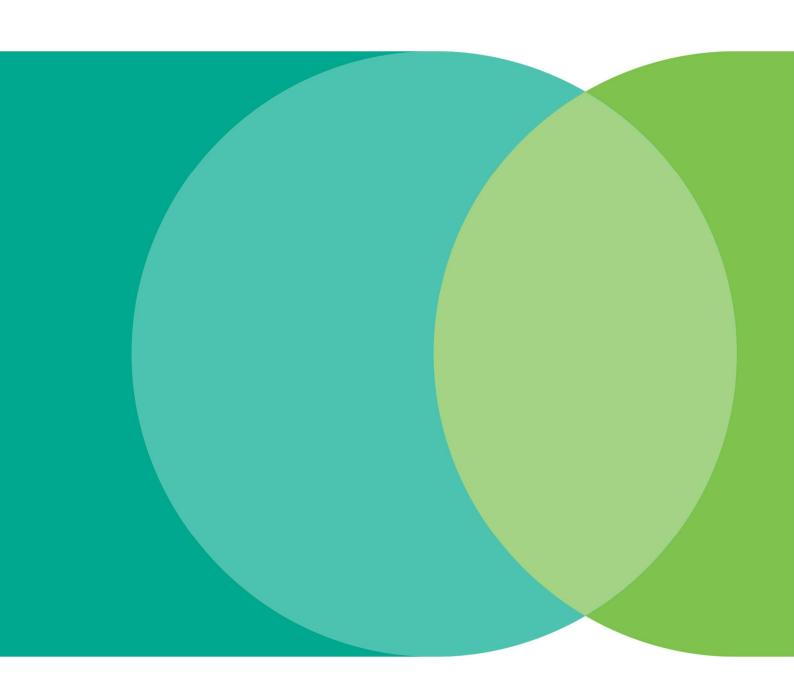
Where reported figures are shown as "-" this denotes no report data is available. Where "0" is shown this indicates a reported figure. For other scenarios, an explanatory note or footnote has been added.

The data in this report has been sourced as per the Basis of Preparation document provided. Endeavour Energy also maintains a Technical Basis of Preparation document containing code and technical details on the sourcing of this information.



# **Annual Performance Reporting**

**Section A** 





## A.1 Tier 1 – Major incidents

Tier 1 incidents are defined as a 'Major Incident' in accordance with the Electricity networks reporting manual – Incident Reporting.

Table A.1 Major incidents

ESSNM Objective		Description of each major incident reported under the Reporting Manual – Incident Reporting requirements					
Safety of members of the public		Nil reported					
Safety of persons working on the network		Nil reported					
Protection of property	Third party property	On 30 October 2023, a grass fire ignited near the base of an Endeavour Energy-owned pole on Montpelier Dr, The Oaks. The fire spread south-east toward dwellings located at the rear of the property, resulting in damage to five private power poles, crops, a small shed containing farm equipment, fencing, and irrigation equipment.  At the time, the incident did not meet the reporting requirements because the affected area was less than 10 hectares and there was no indication that the property damage would be greater than \$100,000. The information at the time was that the damage was limited to a shed and contents. However, following a property damage claim received in October 2024, and in accordance with IPART's incident reporting criteria, the incident was reported to IPART.					
	Network property <sup>a</sup>	Nil reported					
Safety risks arising from loss	of electricity supply <sup>b</sup>	Nil reported					

<sup>&</sup>lt;sup>b</sup> As defined for major reliability incidents in IPART's Reporting Manual – Incident Reporting.



<sup>&</sup>lt;sup>a</sup> Network property losses are not reportable under IPART's Reporting Manual - Incident Reporting requirements. For the purpose of this Reporting Manual, a network operator is to report each event in which losses exceed \$500,000 in relation to damage caused to electricity works as defined in the Electricity Supply Act 1995.

## A.2 Tier 2 - Incidents

Tier 2 incidents are defined as an 'Incident' in accordance with the Reporting Manual – Incident Reporting.

Table A.2 Incidents

ESSNM Objective	Description of each major incident reported under the Reporting Manual – Incident Reporting requirements
Safety of members of the public	Nil reported
Safety of persons working on the network	On 12 February 2025, a worker was feeling unwell. The worker sat down and rested their head on the table located in a Substation lunchroom. Worker woke up on the floor having fallen from their seat hitting their head during the fall. Worker required medical treatment.  On 20 March 2005, a worker was street, but a falling involved as a substantial production.
	<ul> <li>On 20 March 2025, a worker was struck by a falling insulator resulting in a cut to their leg requiring medical treatment.</li> </ul>
	<ul> <li>On 4 June 2025, a worker was grinding bolts at the job site, sparks went into their left eye despite safety glasses being worn. The left eye became irritated and required medical treatment.</li> </ul>
Protection of property	Nil reported
Safety risks arising from loss of electricity supply <sup>a</sup>	Nil reported

<sup>&</sup>lt;sup>a</sup> As defined for reliability incidents in IPART's Reporting Manual – Incident Reporting



## A.3 Tier 3 – Control failure near miss

Table A.3 Network asset failures

Performance measure	Population	5-year average	Annual functional failures (for reporting period)						
		annual functional		Unassisted		Assisted <sup>a</sup>			
		failures	Fire						
			No fire	Contained	Escaped	No fire	Contained	Escaped	
Towers	832	0.2	1	0	0	0	0	0	
Poles (including streetlighting columns/poles & stay poles)	576,927	77.4	6	1	1	59	2	2	
Pole-top structures <sup>b</sup>	315,834	128.2	43	31	4	15	3	1	
Conductor – Transmission OH <sup>c</sup>	3,174	7.2	5	0	1	4	0	0	
Conductor – Transmission UG <sup>c</sup>	461	0.8	0	0	0	0	0	0	
Conductor – HV <sup>d</sup> (including sub-transmission) OH	11,209	320.6	67	0	9	271	3	20	
Conductor – HV (including sub-transmission) UG	6,225	49.4	53	3	3	3	0	0	
Conductor – LV <sup>d</sup> OH	8,619	266.4	89	5	2	148	0	5	
Conductor – LV UG	11,497	123.8	99	15	4	11	1	0	
Service line <sup>e</sup> OH	449,966	648.8	322	1	1	227	0	1	
Service line <sup>e</sup> UG	442,387	117.6	92	0	0	9	0	0	

<sup>&</sup>lt;sup>e</sup> Overhead service and underground service as defined in the NSW Service and Installation Rules.



<sup>&</sup>lt;sup>a</sup> See Glossary for definitions of unassisted failures.

<sup>&</sup>lt;sup>b</sup> Pole-top structures/components are any structure that is attached to a pole to support electricity mains and apparatus.

<sup>&</sup>lt;sup>c</sup> OH means 'overhead'; and UG means 'underground'. Transmission and sub-transmission voltages are generally 33kV AC nominal and above. Transmission conductors form part of a transmission network. Sub transmission conductors form part of a distribution network.

d HV means 'high voltage', and LV means 'low voltage'. High voltage is voltages 1kV AC nominal and above. Low voltage are voltages below 1kV AC nominal.

Power transformers <sup>f</sup>	459	1.8	2	0	0	1	0	0
Distribution transformers	34,744	75.2	30	4	0	33	0	0
Reactive plant <sup>9</sup>	189	0	0	0	0	0	0	0
Switchgear – zone/subtranmission/transmission substation	4,667	6.2	8	0	0	1	0	0
Switchgear – distribution (OH) <sup>h</sup>	44,429	154.25	116	3	2	50	0	1
Switchgear – distribution <sup>i</sup> (ground-based)	36,395	19.25	2	11	3	1	0	0
Protection relays or systems	20,517	12.6	4	0	0	3	0	0
Zone/subtransmission/transmission substation SCADA system	226	3	1	0	0	0	0	0
Zone/subtransmission/transmission substation Protection Batteries	295	0.2	1	0	0	0	0	0
Network SAPS <sup>j</sup>	0	0	0	0	0	0	0	0

<sup>&</sup>lt;sup>1</sup> As per note H above.

<sup>1</sup> This may include temporary, emergency or permanent SAPS. See Glossary for definition of Network SAPS.



<sup>&</sup>lt;sup>f</sup> Power Transformers are transformers where the secondary/output voltage is 5kV nominal or above.

<sup>9</sup> Reactive plants are reactors and capacitors.

h Recent improvements in AIML models to classify failures has been leveraged to correct previously reported volumes for <u>distribution switchgear</u> that were excessive relative to the population size. The historical average has been adjusted accordingly.

Table A.4 Vegetation contact with conductors

Performance measurement <sup>a</sup>	Event count – Current reporting period (FY25)	Event count – Last reporting period (FY24)	Event count – Two periods ago (FY23)	Event count – Three periods ago (FY22)	Event count – Four periods ago (FY21)	Comments
Fire starts – grow-in	0	3	1	0	0	
Fire start – fall-in and blow-in	43	35	17	14	15	Increases in incident occurrences in the last two reporting periods are in line with expectations with the return to neutral/El Niño conditions after 3 years of La Niña weather patterns.
Interruption <sup>b</sup> – grow-in	0	0	0	0	0	No change to previous results.
Interruption – fall-in and blow-in	1,527	910	857	1,451	3,583	This increase is due to the severity of windstorms experienced in FY25. This rise is also reflected in the increase of declared weather events in FY25 compared to FY24.



<sup>&</sup>lt;sup>a</sup> Vegetation hazard definitions as per the Industry Safety Steering Committee Guide for the Management of Vegetation in the Vicinity of Electricity Assets (ISSC3).
<sup>b</sup> Includes momentary interruptions.

Table A.5 Unintended contact, unauthorised access and electric shocks

Detail	Event count – Current reporting period (FY25)	Event count – Last reporting period (FY24)	Event count – Two periods ago (FY23)	Event count – Three periods ago (FY22)	Event count – Four periods ago (FY21)	Comments				
Electric shock <sup>a</sup> and arc flash incidents <sup>b</sup> originating from network assets <sup>c</sup> including those received in customer premises										
Public	83	89	62	85	107	Significant improvements in proactive identification of faulty neutral connections through a range of asset management programs, comprehensive routine testing processes and leverage of technology through smart meter data analytics.				
Public worker	3	4	6	9	1	Two reports of plumbers repairing a water meter receiving a shock and one report involving a roofing contractor				
Network employee/network contractor <sup>d</sup>	4	1	2	4	1	<ul> <li>Worker exposed to an arc flash when HV Switchgear failed during operation.</li> <li>Worker cut through a live LV cable.</li> <li>Worker exposed to an arc flash while testing LV link box.</li> <li>An arc flash occurred in pillar while lifting off a pillar lid.</li> </ul>				
Accredited Service Provider	0	0	1	2	1					
Livestock or domestic pet	2	0	1	1	0					

<sup>&</sup>lt;sup>a</sup> All electric shocks are to be reported except those resulting from static discharge, defibrillators, where the system is nominally extra low voltage or involving the DC rail traction system.

<sup>b</sup> Incidents that result in a burn or other injury requiring medical treatment and result from exposure to an arc.



Events caused by network assets, network asset defects or network activities, including shocks received inside customer installations, are to be reported. Customer installation events not associated with network assets are not to be reported.

d Includes all classes of authorised persons (network employee and network contractor). Accredited Service Provider employees are not included.

Contact with energised overhead network asset <sup>e</sup> (eg. conductor strike)								
Public road vehicle <sup>f</sup>	338	325	211	162	248	Includes Agricultural, Network Vehicles & Other this reporting period.		
Plant and equipment <sup>g</sup>	28	18	23	62	112	Improvements in industry engagements and stakeholder partnerships driving focus on OH powerline planning is a key driver in this space. Additionally, the use of Look Up and Live tool is enabling proactive planning practices for public workers.		
Agricultural and other <sup>h</sup>	N/A	N/A	N/A	N/A	58	Due to an ongoing implementation of SAP & ADMS Upgrades, we cannot differentiate Agricultural & Network Vehicles this reporting period. These have been included in the total (Public Road Vehicle).		
Network vehicle	N/A	N/A	N/A	N/A	0	Due to an ongoing implementation of SAP & ADMS Upgrades, we cannot differentiate Agricultural & Network Vehicles this reporting period. These have been included in the total (Public Road Vehicle).		
Contact with energised underground network a	sset <sup>e</sup> (eg. cond	uctor strike)						
Plant and equipment	39	52	40	57	71	Strategic partnership with BYDA is enabling improvement in this area despite rise in incidents due to infrastructure development and urban growth across Western Sydney.		
Person with handheld tool	0	1	0	0	0			
Unauthorised network access (intentional)								
Zone/BSP/Transmission substation/switching station	0	1	3	3	2			

Would not normally include contact with a pole, pillar, distribution substation etc, unless the contact results in subsequent contact with an energised asset.
 Including plant and equipment packed up for travel (i.e. plant and equipment travelling on a public road to or from worksite).
 Cranes, elevated work platforms, cherry pickers, excavators, handheld tools, etc.
 Examples include agricultural equipment, aircraft and watercraft.



Distribution substation	16	9	19	30	8	
Towers/poles	95	8	51	82	0	Continued activity in this area examples include Air Break Switch handles being damaged and earth cables being cut/stolen – likely link to copper prices driving some of this behaviour.
Other (e.g. communication sites)	3	20	0	0	0	
Safe Approach Distance (SAD)						
Network employee/network contractor	3	2	1	0	0	
Accredited Service Provider	0	0	0	0	0	
Public	0	0	0	0	0	There were no known near miss events reported to Endeavour Energy by members of the public during FY25.  It should be noted that members of the public may not be aware of the reporting requirements or how to self-report a breach.  The only known instances of SAD breaches involving the general public were related to theft and vandalism. These have been included under <i>unauthorised network access</i> .
Public worker	22	16	12	0	2	Increased awareness of Safe Approach Distance requirements and focus on improving quality and volume of near miss reporting related to public workers – each occasion is reported to SafeWork NSW for further triage/investigation.

 $<sup>^{\</sup>rm I}$  Encroachment into the applicable Safe Approach Distance for the type of individual involved.



Table A.6 Reliability and Quality of Supply<sup>a</sup>

Performance measure	Event count – Current reporting period (FY25)	Event count – Last reporting period (FY24)	Two periods ago	Event count – Three periods ago (FY22)	Event count – Four periods ago (FY21)	Comments
High voltage into Low voltage <sup>b</sup>	107	119	81	51	55	Continued above average significant windstorms in FY25 resulted in consistent vegetation contact (Table A.4) and also in the High voltage into low voltage incidents. Vegetation is a primary cause of these types of incidents. Increases in incident occurrences in the last two reporting periods are in line with expectations with the return to neutral/El Nino conditions after 3 years of La Nina weather patterns.
Sustained voltage excursions outside emergency range <sup>c</sup>	2,193,020	683,101	305,907	80,758	1936	During FY25, we gained access to approximately five times more voltage data than in previous years and the increase is expected given the increased penetration of solar installations in both new and existing customers. These figures cover data observed across ~19,000 meters compared to ~5,400 meters in FY24.
Reverse polarity	0	0	0	0	1	The testing and certification process for staff is effectively managing this risk.
Neutral integrity due to poor workmanship or incorrect procedure	1	2	0	0	0	Neutral integrity issues are ordinarily identified when a voltage is present within a customer's premises causing a shock. Consequently, these are already captured in Table A.5, specifically "Electric shock and arc flash incidents originating from network assets including those received in customer premises".

a Reporting is required by distribution network operators only.
 b May also be referred to as HV LV intermix or HV injection.
 c As defined by network operator with reference to the measurement methodologies used in Australian Standard AS61000.3.100.



Neutral integrity due to asset defect or failure	304	136	0	0	0	Reporting criteria and process has enabled better scrutiny of data. Significant advancements in smart meter data analysis have enabled the proactive identification and subsequent rectification of neutral connection issues that have degraded due to asset failure such as corrosion, ageing, wear, and tear, etc.
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Table A.7 Reliability and Quality of Supply - Critical infrastructure incidents

Type of critical infrastructure <sup>a</sup> (e.g. hospital, tunnel)	Minutes of supply lost <sup>b</sup>	Cause	Consequential safety impacts associated with supply issue
Hospital - Category B	131	Unknown	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category B	56	Tree contact	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category B	192	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category B	7	Defective equipment	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	95	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	73	Defective equipment	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category D1a	382	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category D1a	62	Human element	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category D1a	212	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category D1a	14	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category D1a	261	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	174	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	404	Foreign interference	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	3	Defective equipment	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	76	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.

 <sup>&</sup>lt;sup>a</sup> Critical infrastructure as identified in the network operator's formal safety assessment in relation to the safety risks associated with loss of supply.
 <sup>b</sup> Number of minutes that the critical infrastructure was without a network supply.



Hospital - Category C	221	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	315	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	46	Unknown	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category B	336	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category B	149	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category B	154	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category B	92	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category B	125	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category D1b	149	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category D1b	154	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category D1b	6	Defective equipment	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category D	92	Foreign interference	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category A1	10	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	7	Defective equipment	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	79	Defective equipment	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	28	Foreign interference	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category B	283	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category B	774	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.



Hospital - Category C2	377	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category A1	3047	Tree contact	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category A1	152	Defective equipment	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category A1	1157	Unknown	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C / C	83	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C / C	124	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	5	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	111	Tree contact	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	20	Tree contact	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	25	Tree contact	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category D	84	Foreign interference	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	120	Foreign interference	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	5	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	12	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	4	Unknown	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	64	Tree contact	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	363	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	211	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.



Hospital - Category C	4	Defective equipment	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	117	Other network	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	70	Defective equipment	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	4	Unknown	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	71	Defective equipment	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	874	Defective equipment	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	1017	Defective equipment	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	774	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category C	211	Defective equipment	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category B	370	Tree contact	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category B	7	Adverse weather	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category B	7	Unknown	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category B	40	Foreign interference	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category B	128	Foreign interference	No safety impacts resulted from the outage as alternate methods of supply was available.
Hospital - Category B1	114	Defective equipment	No safety impacts resulted from the outage as alternate methods of supply was available.



Table A.8 Network-initiated Property damage events

Detail	Event count – Current reporting period (FY25)	Event count – Last reporting period (FY24)	Event count – Two periods ago (FY23)	Event count – Three periods ago (FY22)	Event count – Four periods ago (FY21)	Comments		
Third party property (assets including ve	Third party property (assets including vehicles, buildings, crops, livestock)							
Damage (e.g. Fire, Physical impact or Electrical)	1	3	0	1	0	For further details, refer to Table A.1.		
Network property (including non-electrical assets including vehicles, buildings)								
Damage (e.g. Fire, Physical impact or Electrical)	0	0	0	0	0			



## A.4 Tier 4 – Control Implementation

#### **Formal Safety Assessments**

Endeavour Energy's ENSMS consists of five Formal Safety Assessments (FSA) that address the following risks:

- Public Safety: This FSA also addresses the risk of harm to third-party property apart from damage due to network-initiated bushfires.
- Worker Injury Electrical: This includes the risk of injury through both electric shock and arc flash.
- Bushfire Worker Injury Non-Electrical
- Safety risks due to Loss of Supply

Table A.9 outlines amendments and/or improvements made to Endeavour Energy's FSAs during FY25 and the Treatment Action Plans (TAP) developed and/or in progress.

A.9 Amendments and improvements to Formal Safety Assessments (FSA) or Associated Risk Treatments<sup>a</sup>

FSA	Amendments/Improvements
Public Safety	The Public Safety FSA was reviewed in September 2024 with three new TAPs developed and in progress.
Worker Injury - Electrical	The Worker Injury – Electrical FSA is currently under review and is due to be completed in FY26 with 2 TAPS in progress.
Bushfire	No amendments made to the Bushfire FSA during FY25. The FSA is due for review in FY26.
Worker Injury – Non-Electrical	No amendments were made to the Worker Injury – Non-Electrical FSA during FY25.
Loss of Supply	The Loss of Supply FSA had a major revision in FY25. The assessment was updated to reflect developing trends in network performance, encompass impacts due to climate change, and consider other societal vulnerability factors. The risk register was also comprehensively reviewed and updated to reflect developments in grid automation technology, and a more robust qualitative review process.

#### **Environmental Management System**

The risks of harm to the environment are managed through the implementation of Endeavour Energy's ISO14001-certified Environmental Management System (EMS). Endeavour Energy's EMS Manual had been updated to enhance integration of sustainability requirements and Environmental Management Standards updated to incorporate the latest regulatory requirements. The EMS was last audited in November 2024 with no non-conformances identified.

<sup>&</sup>lt;sup>a</sup> Adjustment or modifications made by the network operator to formal safety assessments, or risk treatment action plans, including those changes informed by consideration of the results of the investigation and analysis of incidents, near misses or asset failures, where the network operator has assessed that existing assessments or risk treatments do not eliminate or reduce risk so far as is reasonably practicable.



Table A.10 Design, construction and commissioning

Performance measure <sup>a</sup>	Current reporting period (FY25)	Last reporting period (FY24)	Two reporting periods ago (FY23)	Three reporting periods ago (FY22)	Four reporting periods ago (FY21)
Old Methodology - Designs for which Safety in Design (SiD) Reports have been completed <sup>b</sup>	NA	1,012	541	843	1,121
New Methodology - Designs for which Safety in Design (SiD) Reports have been completed (One SiD report per internal/"K" project) <sup>c</sup>	425	409	439	434	N/A
Designs for which Safety in Design (SiD) Reports have been audited (Note 2) <sup>d</sup>	0	26	10	0	5
Contestable designs certified <sup>e</sup>	1,221	1166	1319	1394	1490
Contestable level 1 project safety reviews performed	790	1074	1042	865	1410
Contestable level 2 project safety reviews performed <sup>f</sup>	152	136	197	210	303
Non-contestable project safety reviews performed	3,885	5289	3996	2469	2769
Project closeout reports completed for contestable projects <sup>9</sup>	702	761	838	1204	1045
Project closeout reports completed for non-contestable projects	182	301	268	217	23

<sup>9</sup> Separate values for contestable and non-contestable projects being audited are not required, as all project closeout reports must be audited prior to closure in accordance with the project closeout procedure



<sup>&</sup>lt;sup>a</sup> The unit of measure is the number of designs/projects.
<sup>b</sup> Previously reported methodology counted each element of a project design separately, but the SID is performed at project level, so revised reporting method illustrated in row two.

As per above new reporting methodology reflecting prior year trends.
 Methodology was revised including full process revisit including templates and procedures – hence no audits completed this year

The network operator is to advise where no contestable designs have been performed.
 A safety review would include checking that work on or near the network is being performed safely.

Table A.11 Inspections (assets)

Performance measure <sup>a</sup>	Planned	I	nspection tas	ks	Tasks Corrective action tasks		tasks	Comments	
	inspection tasks <sup>b</sup>	<b>Achieved</b> <sup>c</sup>	<b>Open</b> <sup>d</sup>	Outstanding <sup>d</sup>	categories) <sup>c</sup>	Achieved	Open	Outstanding <sup>e</sup>	
Transmission/Zone Substations	36,379	27,660	0	8,719	181	36	6	139	Outstanding corrective actions and inspections
Distribution Substations	5,850	2,297	0	3,553	46	10	2	34	are prioritised based on initial inspection
Transmission OH	5,949	5,581	0	368	194	60	63	71	assessment of likelihood of failure as well as
Transmission UG	3,326	2,461	0	865	1	0	0	1	consideration of consequence based on
Distribution OH <sup>f</sup>	80,716	78,664	0	2,052	2732	713	423	1,596	location within the network and broader community to take into considerations such as load/customer impacts and public safety.
Distribution UG	10,469	5,804	0	4,665	1,594	237	1,263	94	
Network SAPS <sup>9</sup>	-	-	-	-	-	-	-	-	

During FY25, Endeavour Energy recognised that the focus on inspections and corrective actions had been mixed relative to other work programs. This resulted in the formation of a new position within the Enterprise Portfolio Management Office (EMPO) Team titled *Program Director Maintenance & Pre-Summer Bushfire Inspections* whose role will be to lead, coordinate, and oversee the delivery of maintenance programs and pre-summer bushfire inspection activities across the Endeavour Energy network. This additional focus will see the deployment of dashboards and scheduling system improvements to drive greater accountability and transparency across the business for completion of these programs.

<sup>&</sup>lt;sup>9</sup> This may include temporary, emergency or permanent SAPS. See Glossary for definition of Network SAPS.



<sup>&</sup>lt;sup>a</sup> Table A.11 should not include activities reported in Table B.3 (Vegetation tasks) and Table B.4 (Asset tasks).

b Includes all 'Open' and 'Outstanding' tasks from the previous reporting period.

c Inspection tasks must only be reported as 'Achieved' when all associated corrective action tasks to address the faults of a particular asset have been identified.

<sup>&</sup>lt;sup>d</sup> All Inspections due in FY25 that are open as at 30 Jun 2025 are considered 'outstanding'.

The network operator must provide commentary to explain how it is managing risk associated with outstanding tasks and when the outstanding tasks are expected to be completed.

<sup>&</sup>lt;sup>f</sup> This includes OLI/GLI our primary Overhead inspection activity. that drives the majority of Corrective Actions in Distribution OH

Table A.12 Inspections (vegetation) Aerial/Ground-based

Bushfire risk category	Population (spans/poles)	Target	Achieved	Outstanding	Open	Comments
Aerial <sup>a</sup>						
Total	116,429	N/A	N/A	N/A	0	Covered in table B.2
Ground-based <sup>b</sup>						
Total	479,115	479,115	479,115	0	0	Of which 91,055 spans identified for cutting and 91,055 achieved for cutting.



<sup>&</sup>lt;sup>a</sup> Note this year the population of aerial reported only covers those in bushfire prone areas that are subject to the inspection as a part of the PSBI program. <sup>b</sup> This includes traditional routine vegetation management activities.

Table A.13 Public electrical safety plans and activities<sup>a</sup>

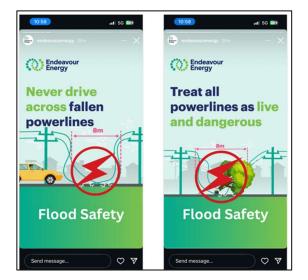
Network operator public safety programs/ campaigns	<b>Details</b>
Public Safety Plan	Public Safety Plan is reviewed annually to strengthen with additional initiatives and more comprehensive coverage across a broader range of business activities relating to public safety (both directly and indirectly).
Public Safety Communications Plan	A communications plan was developed to inform internal and external communication and engagement activities including traditional media, social media and community outreach activities with various industry sectors, threat scenarios, and key messaging.

## Case study: Public Safety – Improved social media engagement and collaborative creative content with other Distribution Network Service Providers (DNSP)

The Public Safety Team together with the Corporate Communications Team have successfully developed a range of social media content that is seeing significantly improved audience reach across multiple platforms (in some cases 10 – 20 times more reach and engagement than compared to FY24).

In NSW, there is a great appetite for collaboration amongst DNSPs to extend the reach of safety promotional material to a broader audience and share ideas such as digital creative content options to support social media posts as well as traditional media campaigns that can be physically displayed on construction sites and at industry conferences and events.

Ongoing projects include educational videos on public safety risks and community safety. The videos will be used for proactive communications in preparation for extreme weather events and reactive posts to help respond to customer and community queries in times of need.



<sup>&</sup>lt;sup>a</sup> Network operator to provide details on the plans and other activities that the network operator undertook to provide safety information to the public. Examples may include a publication of a Public Electrical Safety Awareness Plan, advertisements associated with electrical safety and awareness, publication of a bush fire risk management plan, shocks, and tingles awareness program, etc.

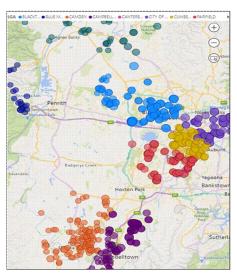


#### Case study: Public Safety - Leveraging geospatial data for trend analytics

Endeavour Energy is working to operationalise a geospatial data report that shows a geographical representation of defect locations with some analytics built within to identify 'hot spots' where repeat events are occurring within a 50m proximity. This report will be semi-automated over time.

The long-term intention of this report is to inform awareness activities with the relevant local councils; and drive asset management programs internally where reactive projects can be cost-justified as these 'hot spots' are identified.

Additionally, the Digital & Insights team is progressively populating the Digital Twin with known network defects building capability for improved defect rectification. Further development of this reporting functionality is anticipated to eliminate or minimise the need for physical site visits.

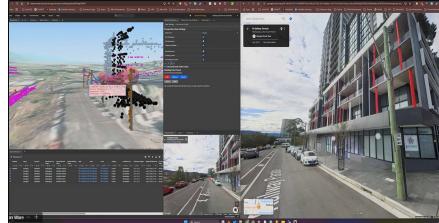


### Case study: Public Safety – LiDAR / LiCAR Digital Modelling to identify development and construction risks

In response to the increased volume of construction and development activity within Endeavour Energy's network area, there is a current initiative being explored to utilise digital modelling to identify objects such as buildings within clearances to powerline exclusion zones.

Like the use of LiDAR to identify vegetation defects, this technology can be adapted and applied to other potential obstructions as a supporting tool for the assessment of Development Applications and existing construction defects.

Whilst this is a retrospective identification of a potential issue, it is anticipated that Endeavour Energy will be able to provide more timely intervention in the early design stages of construction as opposed to managing an entire re-design or asset relocation.

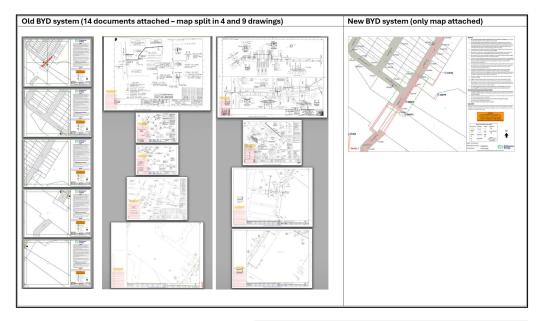




## Case study: Public Safety – Simplification of underground drawings and mapping to reduce third party excavation strikes

Endeavour Energy is responsible for a network area that is enduring an enormous increase in civil construction activity, population growth, urban expansion, and infrastructure development and as a result, ~23,500 enquiries are received on average per month from an average of 5000 individuals. The response time is typically within three to seven minutes of the user submitting the enquiry, and whilst this may seem like great customer service, the data provided to some end users can be quite overwhelming and challenging to interpret.

Endeavour Energy is leading a change for our end users to enable safer communities and an improved ability to reduce damage and asset strikes. The previous process for referrals combined all sources of underground asset data, including underground field book recordings and at times, resulted in dozens of pages of asset data being provided to interpret and decipher for underground utility works. Endeavour Energy has implemented a revised process that combines all asset data into a simplified single network line diagram that will reduce complexity and enable effective and efficient site safety controls to be employed for excavation work; one page / one line vs multiple pages of complex drawings. The example shows the difference between the complex old BYD system with new simplified BYD system.



## Case study: Public Safety – Aerial markers and improved visual indication to reduce the risk of plant and equipment overhead powerline contact

Endeavour Energy is promoting and installing 'rota markers' to help reduce unintentional blindness on construction sites and enable better visual indication of the presence of powerlines. The use of these aerial markers is expanding across the transport, logistics and construction sectors with continued promotion and advocacy.

Energy Queensland were early adopters of rota markers on a large scale across their network and have reported considerable success with a 75% reduction in OH strikes within their agricultural footprints.





Table A.14 Internal audits performed on any aspect of the ENSMS (as per AS 5577a clause 4.5.4)

Audit scope	Identified non-compliances	Actions taken or proposed by network operator
Network Electrical Asset Commissioning	Nil identified	All staff will be trained on the commissioning process to reinforce the importance of why and how to comply with the Commissioning of Network Electrical Assets procedure.
		Include steps in the switching plan to ensure that the testing has been completed.
		Review the data storage for commissioning forms.
Natural Hazard Preparation and Response	Nil identified	<ul> <li>Complete storm-impact analysis to define thresholds, impacted areas, and network design/operations improvements.</li> </ul>
		Engage academia/experts to identify credible wind/storm models and integrate into forecasting.
		Finalise the draft Reliability & Resilience Principles policy and publish on BMS.
		<ul> <li>Monitor AEMC/AER guidance on Value of Network Resilience (plus ENA/CSIRO work) and integrate into methodology where possible.</li> </ul>
		<ul> <li>Stand up a SharePoint location (with guidance) for internal access to geographic climate overlays.</li> </ul>
		Identify key internal user groups for climate-change data.
		<ul> <li>Deliver briefings to user groups on interpreting and using the data (including assumptions/limits).</li> </ul>
		Update network resilience documentation ahead of the upcoming regulatory reset.

<sup>&</sup>lt;sup>a</sup> AS 5577 is the Australian Standard Electricity network safety management systems, 2013, published by Standards Australia.



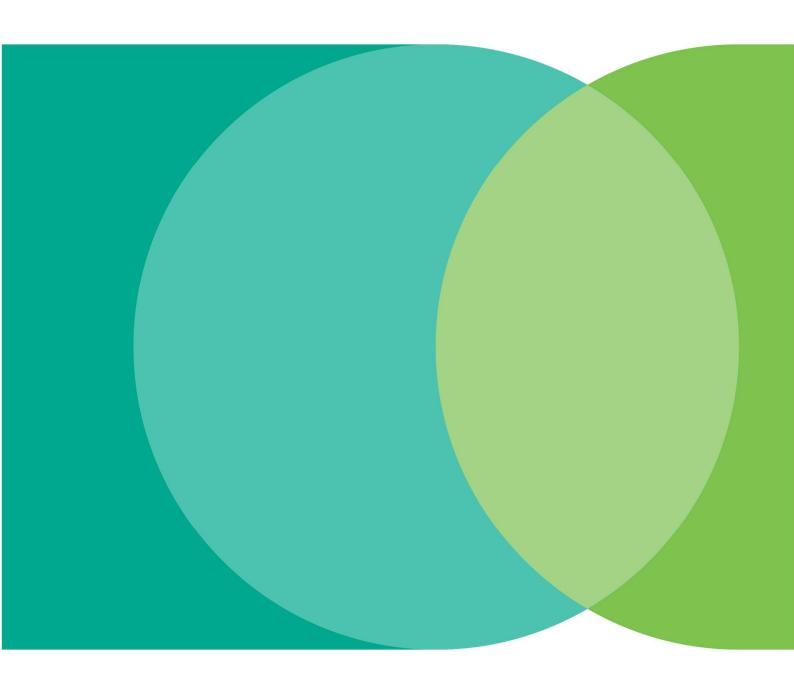
Table A.15 External audits performed on any aspect of the ENSMS (as per AS 5577 clause 4.5.4)

Audit scope	Identified non-compliances	Actions take or proposed by network operator
Loss of Supply & Bushfire Risk Management	Nil identified	Not applicable



# **Bushfire Preparedness**

**Section B** 





# B.1 Bushfire risk profile across network operator's supply area

#### Year in review

During FY25, the Endeavour Energy network area recorded a dry start to the fire season following El Niño conditions earlier in 2024.

Spring and the start of summer saw below average rainfall across most of the footprint, with five Total Fire Ban (TOBAN) days declared within Endeavour Energy's network area during this period. Conditions shifted wetter in January, with many locations recording well-above average monthly totals that reduced ground-fuel flammability. Wetter conditions persisted through autumn and into winter, resulting in elevated soil moisture across the area at the close of the reporting period. A sixth TOBAN was declared in March, just prior to the end of the statutory Bush Fire Danger Period.

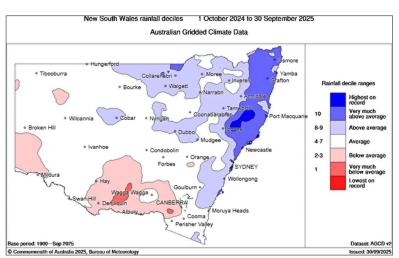


Figure B.1 – NSW Rainfall for October 2024 – September 2025

In summary, the year featured a drier than usual commencement and a wetter than usual finish. Taken together, the Endeavour Energy network area experienced an overall average fire-risk profile across FY25, with early-season curing tempered by mid to late season rainfall and moisture retention.

#### **Forecast**

The Bureau of Meteorology's (BoM) latest long-range guidance (issued 2 October 2025) indicates above average rainfall is likely across much of eastern Australia through spring, extending into early summer. The signal is stronger for November than October, with October to December probabilities of 60–80% for above-median rainfall over large parts of the east.

Daytime temperatures are still likely above average, and nights very likely above average. <u>El Niño–Southern Oscillation</u> (ENSO) is currently neutral; BoM expects the tropical Pacific to briefly reach La Niña levels during spring before returning to neutral by summer, while a negative Indian Ocean Dipole (IOD) persists through spring. Together, these drivers favour more frequent rain/storm periods in the Endeavour Energy network area during spring and early summer.

Lithgow Katoomba Richmond 80 'Sydne' (%) 75 rainfall 70 Wollongon 65 Bowral. median 60 Goulburn. 55 Nowra 50 - Tuggeranong exceeding 45 Batemans Bay 40 35 o 30 Chance 25 Bega 20

Figure B.2 – NSW Rainfall Forecasts for November 2025 to January 2026

Consistent with the rainfall outlook, the Australasian Fire and Emergency Service Authorities Council's (AFAC) Seasonal Bushfire Outlook (Spring 2025) does not flag elevated early-season bushfire potential for NSW, and the NSW Rural Fire Service (RFS) 2025–26 Fire Season Statement anticipates a later onset to higher fire danger given a wet spring—while noting above-normal grass growth and recovering forest fuels may increase risk as the season progresses.

Operationally, this leads to reduced ignition risk within the network area in the first half of the fire season. Additionally, gaining access to sites to rectify some vegetation and network defects has been challenging due to water inundation in certain areas of the network.



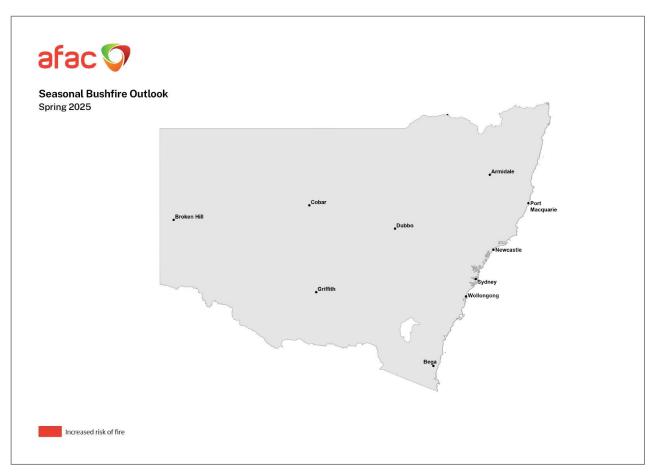


Figure B.3 – NSW AFAC Spring 2025 Season Bushfire Outlook



# B.2 Permanent / temporary declaration of areas by Rural Fire Service and network operator's actions

The NSW RFS may vary the commencement of the Bush Fire Danger Period (BFDP) by Local Government Area (LGA). No temporary changes were declared within the Endeavour Energy network area during the reporting period. The table below lists the LGAs in Endeavour Energy's network area and their BFDP commencement dates.

Region	LGA	Temporary	Permanent
Greater Sydney	Blacktown City	Nil	1 October
, ,	Blue Mountains City	Nil	1 October
	Camden	Nil	1 October
	Campbelltown City	Nil	1 October
	Fairfield City	Nil	1 October
	Hawkesbury City	Nil	1 October
	Liverpool City	Nil	1 October
	Parramatta	Nil	1 October
	Penrith City	Nil	1 October
	The Hills Shire	Nil	1 October
Illawarra / Shoalhaven	Kiama	Nil	1 October
	Shellharbour City	Nil	1 October
	Shoalhaven City	Nil	1 September
	Wingecarribee Shire	Nil	1 October
	Wollondilly Shire	Nil	1 October
	Wollongong City	Nil	1 October
Central Ranges	Lithgow	Nil	1 October
-	Mid-Western Regional	Nil	1 October

Endeavour Energy carries out a number of bushfire risk mitigation activities including both year-round and seasonal activities leading up to and during the bushfire season. During the reporting period Endeavour Energy undertook the following actions to mitigate bushfire risks.

#### Pre-bushfire danger period inspection and defect rectification

To strengthen on-time delivery before the BFDP, and improve coverage in higher-exposure corridors, the PSBI program was re-prioritised and re-phased for 2025 and beyond. The re-prioritisation utilised bushfire risk modelling developed in conjunction with the University of Melbourne and NSW RFS to bring in additional high-risk poles not within the NSW Bushfire Prone Land Layer into Endeavour Energy's pre-summer program:

- Map-based planning: Endeavour Energy divided bushfire-prone corridors into inspection maps with clear annual or two-year frequencies. Maps with higher exposure (e.g. long spans, steep or forested interfaces, historic ignition density, known wind corridors) are scheduled every year with lower-exposure maps scheduled every second year. This creates a stable annual workload and removes end-of-season compression.
- More poles in scope: Each map now includes all poles on bushfire-prone land plus additional high-risk poles
  that were not previously in the program, increasing the pole population inspected compared with previous
  programs. This improves continuity along high-risk areas and reduces missed spans at map boundaries.
- Right method, right time: Pole-top condition is inspected primarily with drone/HD imagery whilst vegetation
  clearances are assessed using LiDAR-derived analytics. These activities are decoupled where needed so each
  can be delivered in the best weather/access window rather than waiting on the other.
- Milestones aligned to BFDP: For Shoalhaven (1 September) and all other LGAs (1 October), bushfire defects on high-risk maps identified during PSBI are required to be rectified before the local BFDP start. Delivery plans include buffer weeks for weather and access contingencies.
- Quality control: An Overhead Line/Ground Line Inspection (OLI/GLI) validator reviews contractor-raised PSBI
  defects so that only genuine bushfire-relevant items proceed to remediation, with feedback loops to improve
  identification consistency.



- Operational coordination: Weekly dashboards track map burn-down, defect age, and close-out before BFDP gates. Exceptions (weather, landholder access, environmental constraints) trigger make-up patrols or targeted ground inspections to close any gaps.
- **Inspections methods:** combine aerial patrols where practicable and targeted ground patrols where flying is constrained. LiDAR and imagery products support clearance measurement, pole-top condition assessment, and defect identification.

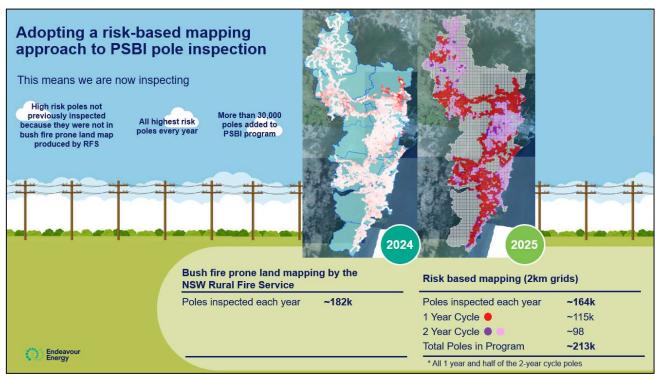


Figure B.4 – Re-prioritisation of Pre-summer Bushfire Inspection Program



#### Routine maintenance

In addition to the annual PSBI outlined above, routine maintenance regimes and cyclic inspections also identify any faults or issues that need to be repaired. These are prioritised to ensure that the most significant issues are rectified ahead of the bushfire season.

#### **Vegetation clearing**

To help minimise safety and bushfire risks Endeavour Energy delivers annual vegetation programs to keep vegetation clear of powerlines. Clearance requirements are based on the Industry Safety Steering Committee (ISSC) 3 - Guide for the Management of Vegetation in the Vicinity of Electricity Assets.

In heavily vegetated areas where clearing is problematic, alternatives such as line relocation, conversion to covered conductor or underground conversion may be considered where appropriate.



Figure B.5 – Bushfire Mitigation Investments in the coming years

#### **Covered Conductor Thick (CCT) project**

Following a review of the 2019-20 bushfires, Endeavour Energy fast-tracked a project to replace bare overhead conductor with Covered Conductor Thick (CCT) to further reduce the risk of bushfire ignition.

Recent developments in bushfire risk modelling have provided clearer identification of locations on the network where a higher bushfire ignition risk exists. The modelling identified several locations that represent the highest bushfire ignition risk of all HV distribution spans in Endeavour Energy's network area and as a result investment in additional bushfire ignition risk mitigation works has been approved for coming years.

#### Fire Mesh

Also, following the 2019-20 bushfires, a case for investment was approved for the application of a product known as Fire Mesh to high-risk timber poles in order to protect the poles from catching fire during a bushfire. The case for investment recommended the application of Fire Mesh to selected timber poles in a proactive manner based on risk assessment and for general application in a reactive manner when and overhead line is threatened by bushfire.

These mitigative measures are expected to provide significant enhancements in the network's resilience to bushfire as well as improving reliability of supply for customers.



#### **Early Fault Detection**

Endeavour Energy is continuing to roll out Fault Anticipation Technology. Early Fault Detection (EFD) units are now actively monitoring 15 high-risk feeders for developing faults in real time. The technology provides 24/7 monitoring for developing defects and alerts Endeavour Energy in real time as assets deteriorate in condition. This allows Endeavour Energy to prioritise repairs on these feeders and protect the community from bushfire risk.

#### **Emergency Preparedness and Response**

Endeavour Energy is committed to being prepared for incidents to provide an effective response. Effective operational responses minimise danger to workers and the public, limit disruption to customer service, protect assets, and minimise harm to the environment.

The normal year-round emergency response and incident management systems are in place to coordinate a response to any incidents that are declared during summer. During incidents, communications plans are coordinated according to the incident management process, to ensure that stakeholders and responders are notified of response progress.

At an organisational level, Endeavour Energy will implement the Incident Management Plan (IMP) once it becomes clear that managing the impact of an incident or event requires a more coordinated response and significant reprioritisation of the operational needs and resources as outlined in the procedure.

The IMP has a broad scope and has been designed to respond to a wide range of major network incidents. It provides a framework which defines the actions to be taken upon declaration of a major disruptive event by providing:

- guiding principles for response;
- the company's structure for management of an incident;
- roles and responsibilities for management of an incident;
- escalation and notification schedules:
- checklists for initial considerations upon activation of an incident;
- checklists to monitor that planning addresses all the relevant issues; and
- the type of documentation required to be retained.

Following each incident, the same communications processes continue, to provide updates on changes in network risk, and the actions taken to maintain network security. Where the BoM announces a Fire Weather Warning Rating of Catastrophic for a designated area, no planned electricity supply interruptions will occur that affect customers in that designated area.

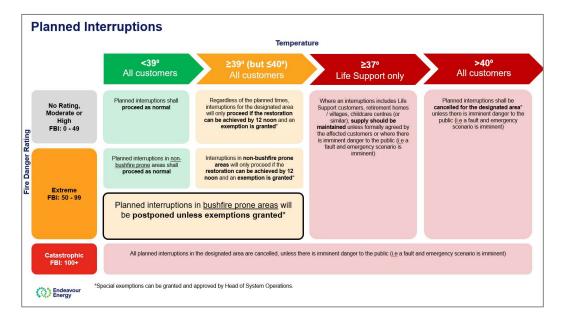


Figure B.6 – Planned Interruption Cancellation Policy on Hot Days and Total Fire Ban Days



#### Liaison with NSW RFS and with Local Councils

Endeavour Energy maintains strong relationships with the NSW RFS and Fire and Rescue NSW as well as with local councils, National Parks and Wildlife Service (NPWS) and other stakeholders. Endeavour Energy has identified staff to perform the Liaison Officer role for each local government area. These Liaison Officers attend Local Emergency Management Committees and local Bushfire Management Committees in each local government area to stay connected with events as they arise along with preparation for the upcoming season.

Additionally, Endeavour Energy field staff complete training in Bushfire Awareness delivered by the NSW RFS online which provides an outline of the safety requirements for working in and around bushfire areas.

Endeavour Energy bushfire mitigation teams also attend quarterly working group meetings with NSW DSNPs, and the NSW RFS Data Analytics Team to further develop bushfire risk modelling methodologies.

#### Communications

Prior to the onset of the storm and bushfire season, Endeavour Energy pro-actively distributes safety media releases. Information is also available on the Endeavour Energy's website and social media channels, including:

- Bushfire and storm safety advice;
- Dangers of trees near powerlines;
- Electrical safety for emergency services personnel

Advertising campaigns are targeted to incorporate safety messages that align with seasonal issues. Where aerial patrols are conducted as part of pre-summer network inspections, radio and press notifications advising of the aerial patrols are also carried out.

Endeavour Energy's Contact Centre provides an important service of informing affected customers of supply restoration developments during incidents. Contact Centre team members are continually provided with updated information and key contacts in other nominated business sections to enable customer queries to be addressed promptly.

The Contact Centre also provides an important feedback function whereby new information received through calls is recorded in internal systems and relayed to the System Operations team where appropriate. This provides a greater level of situational awareness to System Operators and the Incident Management Team.

Information updates on incidents are also regularly communicated through Endeavour Energy's social media channels and website. Endeavour Energy also provides information via a range of conventional media outlets as appropriate during incidents.

#### **Standards**

In bushfire prone areas Endeavour Energy has adopted standards that require new powerlines to be either underground cables or where overhead is permitted, to be predominantly of covered or insulated construction.

Endeavour Energy's vegetation management standard has recently been revised to incorporate consequence rating levels for cutting maps to better prioritise cutting activities before the bushfire season. This is based on outputs of the University of Melbourne Phoenix RapidFire bushfire simulator and risk assessment decision support tool.



#### **Total Fire Ban Days**

Endeavour Energy has installed reclosing devices at most of its zone substations and many field locations. These devices are designed to isolate supply in the event of a fault and then attempt to restore supply a brief period later. If the fault is persistent, supply is isolated until a repair is undertaken, and at this point the recloser is re-set. This type of protection is considered appropriate during most conditions as many faults are only of a temporary nature, such as tree branches on mains etc.

In line with ISSC 33 - Guideline for network configuration during high bushfire risk days, Endeavour Energy adopts a risk-based approach to determining which feeders should have auto-reclosing disabled on TOBAN days. Since 2024, Endeavour Energy has adopted the use of enhanced protection settings on high bushfire risk circuits in bushfire prone areas on TOBAN days. This involves disabling auto-reclosing and activating fast tripping settings on these high voltage distribution circuits, along with any that have known defects that may result in the ignition of a fire.

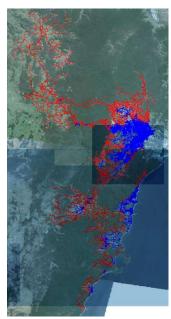


Figure B.7 – Feeders with Enhanced Bushfire Protection Settings (red)



# B.3 Aerial consumers mains on bush fire prone land (HV and LV)

Aerial consumers mains are the overhead conductors and support structures between the main switchboard of an electrical installation and a support structure that is the connection point with the distribution system.

#### Low and high voltage overhead lines

Endeavour Energy's routine overhead line inspection program incorporates the inspection of aerial low voltage consumer mains including poles, conductors, and fittings. High voltage lines are inspected up to and including the high voltage metering point or the first point of protection (for example, dropout fuses, circuit breaker, or switch fuse), whichever is first. If there is no high voltage metering point, all poles are inspected for the entire line length.

Where a defect is identified the customer is advised of the defect in writing and a copy of the written defect is to be forwarded to the Asset Protection Manager. It is the customer's responsibility to have the defect repaired. Any defect that could result in a loose neutral connection, burning, or live metallic structures are regarded as an emergency hazardous situation and reported to the Endeavour Energy's OLI/GLI team for further action.

The program also includes inspection of overhead aerial consumer mains located in bushfire prone areas. In a similar manner to the routine OLI program, the customer is advised in writing of any defects identified on overhead aerial consumer mains and are given a period of time that the defect must be rectified within. Should the defect not be rectified within the specified timeframe Endeavour Energy will, under the powers provided by the Electricity Supply Act, either undertake the required works to rectify the defect and recover the reasonable costs for the work or disconnect the installation from the electricity network.

#### **High Voltage Customers**

The maintenance of electrical assets owned by High Voltage Customers (HVC) is the responsibility of the owner. These requirements are detailed in Endeavour Energy's HVC Operating Protocols, however, in addition Endeavour Energy writes to HVCs annually advising them of the need to undertake inspections of their equipment and their responsibility for rectifying any defects capable of initiating a fire prior to the start of the bushfire danger period.

HVCs are requested to formally advise Endeavour Energy that the inspection and rectification of defects have been completed. Where inspections are not completed, or defects are outstanding, Endeavour Energy identifies suitable actions to reduce the likelihood of a HVC network fault causing a bushfire ignition during high-risk conditions.



Table B.1 Aerial consumers mains on bush fire prone private land (HV and LV)

Performance measure	Current reporting period <sup>e</sup> PSBI 2025		Last reporting period PSBI 2024		Two periods ago PSBI 2023		Three periods ago PSBI 2022		Four periods ago PSBI 2021	
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual
Private LV lines <sup>a</sup> checked by the network operator			49,156	49,156	100%	100%	100%	100%	100%	100%
- Phase 1 - Phase 2	33,144 12,046	33,144 10,091								
Number of directions for bushfire risk mitigation issued to LV customers by the network operator <sup>b</sup>	N/A	36	N/A	36	N/A	42	N/A	73	N/A	52
Number of directions for bushfire risk mitigation issued to LV customers by the network operator that have exceeded the timeframe for rectification specified in the direction notice and remain unresolved	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
HV customers (metering point count) advised to undertake pre-season bushfire checks in accordance with ISSC 31c	73	73	73	73	84	84	84	84	90	90
HV customers (metering point count) providing statements of compliance in accordance with ISSC 31	73	59	73	73	75	73	84	47	90	79
HV customers (metering point count) requiring additional risk mitigation prior to start of the reporting year <sup>d</sup>	N/A	13	N/A	19	0	2	0	1	0	11
HV customers (metering point count) where additional risk mitigation has been completed prior to start of the reporting year	13	6	N/A	19	2	2	1	0	11	0



<sup>&</sup>lt;sup>a</sup> Private lines means aerial consumers mains on bush fire prone private land. Network operators may report in terms of numbers of LV installations or the numbers or percentage of areas targeted and checked. Inspection of phase 1 (higher priority locations) is complete, and Phase 2 (lower priority locations) is on track for inspection in accordance with our program. Phase 2 inspections are split across a 2-year cycle based on resource effort hence the overall total volume from PSBI 2024 to PSBI 2025 differ.

b Refers to directions issued under section 53C of the Electricity Supply Act 1995.

c Industry Safety Steering Committee Guideline for the Management of Private Overhead Lines (ISSC 31).
d Includes the number of high voltage customers who did not provide a statement of compliance or had identified defects requiring mitigation, where the network operator is ensuring appropriate risk mitigation (e.g., inspection by the network operator).

<sup>e</sup> All figures in Table B.1 is as at 1 October 2025.

Table B.2 Pre-Summer bushfire inspections

Pre-summer bushfire inspections <sup>e</sup>	Population (spans/poles)	Target	Achieved	Outstanding	Open	Comments
1 Year Cycle Poles	116,429	116,429	116,429	0	0	
2 Year Cycle Poles	98,369	46,034	10,114	0	35,920	Note: the 46,034 2-year cycle poles target are not due until 31 December 2025.

As outlined in Section B.2 above, Endeavour Energy's approach to the annual PSBI program has changed. Poles on a one-year inspection cycle are now inspected prior to the commencement of the bushfire danger period, while poles on a two-year cycle continue to be inspected during the bushfire danger period.

<sup>&</sup>lt;sup>e</sup> All figures in Table B.2 are as at 1 October 2025.



Table B.3 Vegetation tasks

Bushfire risk category	Status	Encroachment Classification A1 <sup>a</sup>	Encroachment Classification A2 <sup>b</sup>	Encroachment Classification A3°	Encroachment Classification A4 <sup>d</sup>
Network Defects					
Bushfire Prone Network	Identified	899	584	749	104
(Target: 31 August)	Completed	868	543	749	104
	Open <sup>e</sup>	26	37	0	0
	Outstanding <sup>e</sup>	31	41	0	0
Bushfire Prone Network	Identified	5,771	2,671	3,080	546
(Target: 30 September)	Completed	5,131	2,116	2,429	476
	Open	405	384	467	49
	Outstanding	640	555	651	70
Bushfire Prone Network	Identified	0	0	1,431	539
(Target: 31 October)	Completed	0	0	642	322
	Open	0	0	0	0
	Outstanding	0	0	789	217
Bushfire Prone Network	Identified	0	0	1,015	928
(Target: 31 November)	Completed	0	0	358	418
	Open	0	0	0	0
	Outstanding	0	0	657	510
Bushfire Prone Network	Identified	0	0	2,189	11,250
(Target: 31 December)	Completed	0	0	715	4,958
	Open Outstanding	0	0	0 1,474	0 6,292

Due to significantly higher than average rainfall across much of the Endeavour Energy network area in 2025, vegetation growth has been well above typical rates, resulting in a record number of vegetation defects being detected during our LIDAR scans. Compounding this, access to the network for heavy machinery and vehicles required to rectify these defects has been severely constrained. Many areas, including wet paddocks and access tracks, remain too saturated to safely support heavy plant, restricting Endeavour Energy's ability to undertake timely vegetation trimming and maintenance.

e The Open status in this table refers to open defects as at the 5 October, outstanding is the full volume of defects as at 1 October. The outstanding figure includes the open defects.



 $<sup>^{\</sup>rm a}$  A1 – vegetation has encroached as far as 75-100% into the minimum vegetation clearance  $^{\rm b}$  A2 – vegetation has encroached as far as 50-75% into the minimum vegetation clearance

 $<sup>^{\</sup>rm c}$  A3 – vegetation has encroached as far as 25-50% into the minimum vegetation clearance.  $^{\rm d}$  A4 – vegetation has encroached as far as 0-25% into the minimum vegetation clearance.

Table B.3 Vegetation tasks

Bushfire risk category	Status	Encroachment Classification A1 <sup>a</sup>	Encroachment Classification A2 <sup>b</sup>	Encroachment Classification A3 <sup>c</sup>	Encroachment Classification A4 <sup>d</sup>
Customer Defects					
Bushfire Prone Network	Identified	1,264	239	215	80
(Target: 31 August)	Completed	1,251	238	215	80
	Open <sup>e</sup>	11	0	0	0
	Outstanding <sup>e</sup>	13	1	0	0
Bushfire Prone Network	Identified	10,286	1,817	1,384	445
(Target: 30 September)	Completed	10,085	1,754	1,337	431
	Open	105	39	28	10
	Outstanding	201	63	47	14
Bushfire Prone Network	Identified	0	0	212	145
(Target: 31 October)	Completed	0	0	164	114
	Open	0	0	0	0
	Outstanding	0	0	48	31
Bushfire Prone Network	Identified	0	0	98	207
(Target: 31 November)	Completed	0	0	77	142
	Open	0	0	0	0
	Outstanding	0	0	21	65
Bushfire Prone Network	Identified	0	0	79	817
(Target: 31 December)	Completed	0	0	69	608
	Open Outstanding	0 0	0 0	0 10	0 209

Note: Hazard trees form part of the Hazard Tree Program and not part of the Bushfire Program. Therefore, these results are not included within the Table B.3 Vegetation tasks.



 <sup>&</sup>lt;sup>a</sup> A1 – vegetation has encroached as far as 75-100% into the minimum vegetation clearance
 <sup>b</sup> A2 – vegetation has encroached as far as 50-75% into the minimum vegetation clearance
 <sup>c</sup> A3 – vegetation has encroached as far as 25-50% into the minimum vegetation clearance.
 <sup>d</sup> A4 – vegetation has encroached as far as 0-25% into the minimum vegetation clearance.
 <sup>e</sup> The Open status in this table refers to open defects as at the 5 October, outstanding is the full volume of defects as at 1 October. The outstanding figure includes the open defects.

#### Table B.4 Asset tasks

Status°	Category 1ª	Category 2	Category 3	Category 4	Totals	Comments
Identified	52	268	285	0	605	
Completed	51	268	285	0	604	All asset bushfire defects were rectified prior to the beginning of the bushfire season in October.
Open <sup>b</sup>	0	0	0	0	0	
Outstanding <sup>b</sup>	1	0	0	0	1	An 11kV recloser required for sensitive protection operation on a Total Fire Ban (TOBAN) remains outstanding due to failure several days before the 1October deadline. The recloser is scheduled for rectification in October.

- 1. Asset tasks "Identified" is the quantity of defects requiring attention following Endeavour Energy's review of the defects received from the PSBI contractor's defect identification process. An experienced pole inspector/auditor undertook a detailed review of each defect identified by the PSBI contractor to assess for consistency with the Defect Handbook (MMI 0002). Findings from this review process will be used to refine the PSBI contractor's defect identification processes in future programs.
- 2. Defect Categorisation (source: SMI 124 Maintenance data entry and defect prioritisation).
- Category 1: Defects that pose a direct and immediate risk to safety of the public/staff, and/or to the network availability, requiring diversion of resources to isolate supply if required and control/repair the defect.
- Category 2: Defects that pose risks to safety of the public/staff, and/or the network availability, where the asset condition is such that a response in a period materially less than the business-as-usual processes for arrangement of isolations, materials ordering, and resource allocation is required.
- Category 3: Defects that pose a non-immediate risk to the safe and/or reliable operation of the network over the short term and would be prioritised for action during this period using the business-as-usual processes.
- Category 4: These defects do not impose a level of risk that warrants an escalated priority response but do represent a risk which needs to be managed and resolved in the medium term.

<sup>&</sup>lt;sup>c</sup> All figures in Table B.4 are as at 1 October 2025.

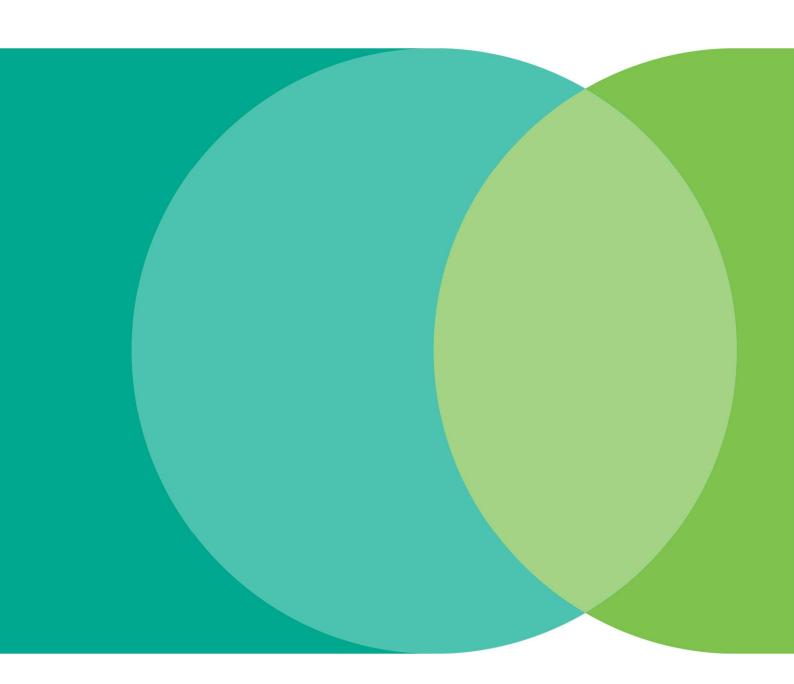


<sup>&</sup>lt;sup>a</sup> Network operator to define task priority (Categories 1-4).

<sup>&</sup>lt;sup>b</sup> See Glossary for definitions of open and outstanding.

# **Glossary**

## **Reporting requirements**





#### Glossary

Term	Definition
Assisted failure	Any functional failure of a piece of equipment (component of an asset or asset) where the equipment was subject to an external force or energy source against which the network operator's standards for design and maintenance do not attempt to control.
Fire	A state, process, or instance of combustion in which fuel or other material is ignited and combined with oxygen, giving off light, heat, and flame. This includes 'smouldering' or 'smoke' events, and LV wires down events resulting in burning around the point of contact on a combustible surface. Excludes LV wires down arcing events on non-combustible surfaces.
	Network Scope: Applicable to any fire caused by, or impacting, a network asset.
Functional failure	Performance of a piece of equipment (or component of an asset or asset) that represents a reduction below acceptable limits of the specification for a piece of equipment resulting in reduced capability required for service. In general, a functional failure is represented by a defect condition where the equipment that is required for service can no longer perform its expected function, and which results in an unplanned maintenance action to restore condition to an acceptable limit.
	Note: operation of protection equipment (e.g. fuse) within its design characteristics is not a functional failure.
Incident	Defined in accordance with IPART's Electricity networks reporting manual – Incident reporting, available on the IPART website.
Major incident	Defined in accordance with IPART's Electricity networks reporting manual – Incident reporting, available on the IPART website.
Network worker	A person who has been authorised by the network operator to plan or conduct work on or near the network. Includes persons employed by the network, persons engaged under a contract by the network operator, and persons authorised by the network operator and working for an Accredited Service Provider.
Open (with respect to defects/tasks)	A defect/task that has not been rectified by the network operator but where the time that has elapsed since being identified has not exceeded the standard time that the network operator has set for having the defect rectified.
Outstanding (with respect to defects/tasks)	A defect/task that has not been rectified by the network operator where the time that has elapsed since being identified has exceeded the standard time that the network operator has set for having the defect rectified
Public worker	A party or parties that are conducting work that is not directly associated with the electricity network such as building work, landscaping, landfill work, excavations, road works and includes the construction, maintenance, adjustment or dismantling of mobile plant and scaffolding.
Network SAPS	Stand-alone power systems, which consist of a distribution system owned, controlled, or operated, or proposed to be owned, controlled, or operated, by a network operator.
Unassisted failure	Any functional failure of a piece of equipment (component of an asset or asset) where the cause of the failure is of a type for which the network operator's design and maintenance standards include specific controls to mitigate against the risk of failure and which is neither an assisted failure nor a maintenance induced failure. These failures are generally caused by a deterioration of the condition of the equipment and also include overhead connection failures and vegetation within the mandatory vegetation clearance window.







