IPART Independent Pricing and Regulatory Tribunal | NSW

Safety management system performance measurement

Electricity networks reporting manual

October 2024

Energy »

Acknowledgment of Country

IPART acknowledges the Traditional Custodians of the lands where we work and live. We pay respect to Elders both past and present.

We recognise the unique cultural and spiritual relationship and celebrate the contributions of First Nations peoples.

Energy Networks Regulation Committee Members

The Committee members for this review are:

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The Independent Pricing and Regulatory Tribunal (IPART)

IPART's independence is underpinned by an Act of Parliament. Further information on IPART can be obtained from IPART's website.

Amendment record

Date issued	Amendments made
June 2016 to May 2017	• See previous issues for related amendments.
October 2017	• Separate Reporting Manuals published for reporting requirements. • Inserting Section 1 – The purpose and status of this reporting manual. • Minor wording changes to improve clarity.
April 2018	• Inserting sign-off requirements on reports. • Inserting section on extensions to reporting deadlines. • Minor formatting improvements.
August 2018	• Significant updates to safety management systems reporting after consultation. • Inclusion and update of requirements from the Electricity networks reporting manual – Bush fire risk management reporting, April 2018.
September 2020	• Changed the reporting period for safety performance. • Added requirement for network operators to provide more context to annual performance reports, including a 'basis of preparation' document. • Added requirement for Sydney Trains to provide an annual bush fire preparedness report.
September 2022	• Added light rail operators (ALTRAC and Keolis Downer Hunter) to section 2.1. • Added reporting requirements to Tables A.3 and A.11 for stand-alone power systems. • Updated reporting requirement in Table B.1 regarding directions for bush fire risk mitigation work on private land.

Date issued	Amendments made
October 2024	Added ACEREZ to the list of network operators subject to this reporting manual, from first energisation of its network.

Contents

1 Purpose

Reporting Manuals issued by IPART set out the reporting requirements for electricity network operators (network operators).

Licence conditions for the licensed network operators require that the licence holder complies with any Reporting Manuals issued by the Tribunal.[a] Although no regulatory requirement to comply with a Reporting Manual exists for non-licensed network operators, IPART expects that all network operators will comply with Reporting Manuals where applicable to their specific reporting obligations. Each Reporting Manual may not apply to all network operators, and this is specified where relevant.

The reporting requirements specified in Reporting Manuals do not replace any requirements identified in licence conditions, legislation, statutory instruments or codes that apply to network operators. Compliance with Reporting Manuals is required in addition to, not in substitution for, compliance with other applicable obligations.

The performance report published by a network operator in accordance with this Reporting Manual should assist stakeholders including the public and customers to assess a network operator's performance against its electricity network safety management system (ENSMS).

The information gathered through the reporting arrangements outlined in this Reporting Manual would allow IPART to:

- determine whether network operators are consistently and effectively meeting statutory obligations
- identify significant risks and long-term trends, and
- identify trends that signify emerging issues across the industry with a view to developing safety measures or supporting industry safety initiatives where appropriate.

IPART will review and amend this Reporting Manual from time to time, including where there are changes to statutory requirements and licence conditions.

IPART has also issued Audit Guidelines to guide network operators on how to maintain compliance with their obligations. These are available on IPART's website.[b]

[a] The licences of Ausgrid, Endeavour Energy, Essential Energy, Transgrid and ACEREZ are available on IPART's website here: https://www.ipart.nsw.gov.au/Home/Industries/Energy/Energy-Networks-Safety-Reliability-and-Compliance/Electricity-networks/Licence-conditions-and-regulatory-instruments

[b] More information about our audit process, including our Audit Guidelines is available on IPART's website here: https://www.ipart.nsw.gov.au/Home/Industries/Energy/Energy-Networks-Safety-Reliability-and-Compliance/Electricity-networks/Electricity-Networks-Auditing

2 Reporting requirements

IPART requires that performance reporting provide sufficient information for IPART or members of the public and customers to assess a network operator's performance against its ENSMS. Each network operator is to report annually on its safety performance and bush fire preparedness.

In accordance with clause 10 of the *Electricity Supply (Safety and Network Management) Regulation 2014* (the ESSNM Regulation), each network operator is to publish the results of its performance measurements against its ENSMS annually (unless exempted from this requirement under clause 10(4) of the ESSNM Regulation).

2.1 Who these requirements apply to

Network operators with assets in NSW include:[c]

- Ausgrid
- Endeavour Energy
- Essential Energy
- Transgrid
- Sydney Trains
- Metro Trains Sydney
- ALTRAC (Sydney Light Rail)
- Keolis Downer Hunter (Newcastle Light Rail)
- APA Group (Directlink)
- Lord Howe Island Board
- Evoenergy (ACT)
- AusNet Services (Victoria)
- Powercor (Victoria),
- Energy Queensland operating as Energex and Ergon (Queensland), and
- ACEREZ Partnership

As discussed in section 1, licence conditions for the licensed network operators require that the licence holder complies with any Reporting Manuals issued by the Tribunal. Reporting in accordance with this Reporting Manual would also assist non-licensed network operators to meet their performance reporting requirements under the ESSNM Regulation.

A network operator is not required to comply with this Reporting Manual if IPART has given it a written exemption. The exemption may be time limited.

[c] Note that the requirements only apply to the extent that assets are in New South Wales.

2.2 Reporting periods and when to lodge reports

The annual performance report comprises:

- Safety performance,[d] and
- Bush fire preparedness.[e]

The reporting period for safety performance is from 1 July up to and including 30 June of the following year.

The reporting period for bush fire preparedness remains unchanged (i.e. 1 October to 30 September of each year).

Each network operator is to provide IPART with the annual performance report by 31 October each year.

2.2.1 How to lodge a report to IPART

Each network operator must notify IPART on or before 31 October following the period covered by the report, to:

- confirm that the report has been completed, and
- advise of the date on which it intends to publish the report.

The network operator must also attach a copy of the report (including the 'basis of preparation document', as discussed in section 2.3 of this Reporting Manual) to the notice, for IPART's information.[f]

The 'basis of preparation' document (as discussed in further detail in section 2.3 of this Reporting Manual) is not required to be published by network operators.

The network operator must lodge the report by email to energy@ipart.nsw.gov.au. It should provide contact details (phone, email) of the primary contact as well as an alternative contact for those times when the primary contact is unavailable.

2.2.2 Publication and how to seek an exemption to publication requirements

Each network operator must publish the report on its website by 30 November, in a way which makes it accessible to the public. It must also publish a media release advising of the report's publication to bring it to the attention of the public. Publication is subject to any exemption granted by IPART.

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[d] Appendix A of this Reporting Manual sets out the Annual safety performance reporting template.

[e] Appendix B of this Reporting Manual sets out the Bush fire preparedness template for Ausgrid, Endeavour Energy, Essential Energy and Sydney Trains, and Appendix C sets out the Bush fire preparedness template for Transgrid.

[f] The 'basis of preparation' document (as discussed in further detail in section 2.3 of this Reporting Manual) is not required to be published by network operators.

Where a network operator seeks to be exempt from the publication of information in accordance with this Reporting Manual, it must submit an exemption request to IPART when submitting the performance report in accordance with section 2.2. The exemption can be sought for a discrete section or sections of the report, or the entire report.

In considering whether to grant an exemption under clause 10(4) of the ESSNM Regulation, IPART will have regard to all matters relevant to the public interest in the circumstances of the case.

In deciding what is relevant to the public interest, IPART will consider the objects of the *Electricity Supply Act 1995* and ESSNM Regulation, such as promoting network safety of persons and property.[g]

IPART will then consider the impact that publication would have on matters relevant to the public interest. Depending on the circumstances, this could include the impact of publication on matters such as regulatory investigations, law enforcement and current and future legal proceedings.

IPART will provide a written response to the request either agreeing or disagreeing with each item in the request and the justification for each decision.

2.3 Minimum content requirements of the performance report

Annual performance reports for the SMS (including bush fire preparedness) must contain details of compliance with the network operator's SMS as well as performance measures for the network operator's SMS. The network operator must provide sufficient information, and any necessary contextual information (including statistics) in the report to enable stakeholders who may not have specialist knowledge (such as members of the public and customers) to understand the information. Sufficient detail must be provided to allow assessment of overall performance.

All data fields must be populated. If data for a particular field is not available, commentary must be provided on why it is not available and any plans to obtain the data for future reports. Significant deviations from planned implementation of controls (for example, outstanding tasks/defects or where risks have not been eliminated or reduced so far as is reasonably practicable) must be highlighted, with commentary provided on recovery plans, an assessment of risk exposure and how risk will be mitigated.

Network operators must also provide a separate 'basis of preparation' document to IPART with the annual performance report. This document must contain sources for the reported data and any other information that may assist IPART and auditors in understanding the information reported.

[g] *Electricity Supply Act 1995*, s 3(d).

Full details of reporting requirements are included in the annual performance report templates in Appendices A, B and C. The templates require network operators to provide data for the last five reporting periods, starting from the report that was provided to IPART on 31 October 2019 for the reporting period 1 October 2018 to 30 September 2019 (first reporting period). We summarise the relevant reporting period for safety performance, and bush fire preparedness below:

- on safety performance, the reporting period is 1 July to 30 June each year, and
- on bush fire preparedness, the reporting period is 1 October to 30 September each year.

Network operators must provide data from the first reporting period, until rolling 5-year periods are being reported.

2.4 IPART's dual assurance approach to monitoring performance

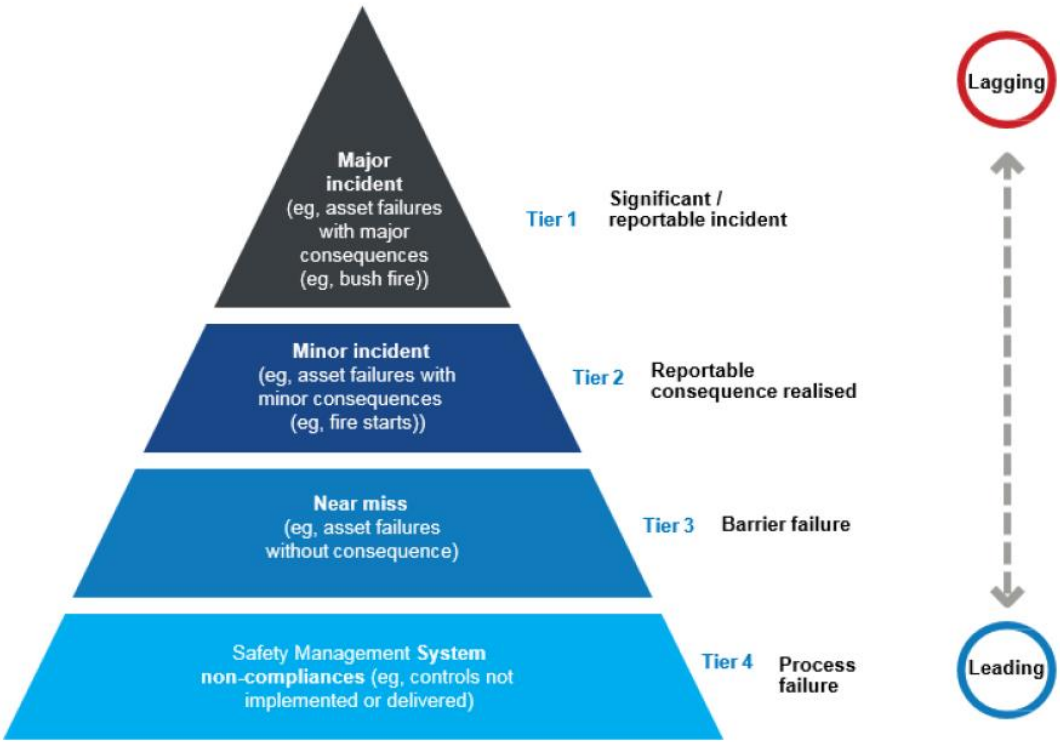
IPART adopts a dual assurance approach to monitoring network operator performance. Dual assurance considers both the leading and lagging measures of performance that enables a proactive, predictive and focused approach to preventing adverse events.

Leading measures monitor the strength of the preventative barriers (controls) by measuring performance in maintaining robust controls. Lagging measures record the number of events or actual consequences where preventative barriers (or controls) have failed.

Leading and lagging measures are complementary tools. Leading measures are forward-looking, and input based; lagging measures are retrospective, and outcomes based. Near misses and low consequence events can be used as both leading and lagging measures of performance as they can help inform the likelihood of more severe consequences.

IPART's dual assurance approach to performance monitoring is shown in Figure 2.1.

Figure 2.1 Dual assurance performance monitoring framework



Tier 1 and Tier 2 performance measures, which are lagging indicators, align with the network operator's incident reporting requirements and the objectives of the ESSNM Regulation. They are relevant to all network operators and reflect the outcomes achieved from the actions taken to manage risks associated with the regulatory objectives.

Tier 3 and Tier 4 performance measures, which are leading indicators, are also aligned with incident reporting requirements (where applicable) and are intended to monitor the risk controls that each network operator has put in place as articulated through its SMS Formal Safety Assessments. Tier 4 measures are leading indicators that monitor operational activities associated with maintaining the control environment. Tier 3 measures are leading indicators that signal the potential for a Tier 1 or 2 incident to occur.

Appendices

A Annual safety performance reporting template

Network operators should include the relevant reporting period in table headers where applicable (Tables A.4 to A.6, A.8, A.10 and B.1).

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* (Reporting Manual - Incident Reporting).[h] Table A.1 provides a template for the minimum reporting requirements.

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		
Safety of persons working on network		
Protection of property	Third party property	
	Network property[a]	
Safety risks arising from loss of electricity supply[b]		

a. 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.
b. As defined for major reliability incidents in IPART's Reporting Manual – Incident Reporting.

[h] The Reporting Manual – Incident Reporting is available on our website here: https://www.ipart.nsw.gov.au/Home/Industries/Energy/Energy-Networks-Safety-Reliability-and-Compliance/Electricity-networks/Electricity-Networks-Reporting

A.2 Tier 2 – Incidents

Tier 2 incidents are defined as an 'Incident' in accordance with the Reporting Manual - Incident Reporting. Table A.2 provides a template for the minimum reporting requirements.

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	
Safety of persons working on network	
Protection of third party property	
Safety risks arising from loss of electricity supply[a]	

a. As defined for reliability incidents in IPART's Reporting Manual – Incident Reporting.

A.3 Tier 3 - Control failure near miss

We request network operators to report 'Network SAPS' information in their 2021-22 annual performance reports for the reporting period and require network operators to provide this information in their 2022-23 annual performance report and for every report thereafter.

Table A.3 Network asset failures

			Annual functional failures (for reporting period)					
			Unassisted[a]			Assisted[a]		
				Fire			Fire	
Performance measure	Population	5-year average annual functional failures	No fire	Contained	Escaped	No fire	Contained	Escaped
Towers								
Poles (including street lighting columns/poles & stay poles)								

Performance measure	Population	5-year average annual functional failures	Annual functional failures (for reporting period)					
			Unassisted[a]			Assisted[a]		
				Fire			Fire	
			No fire	Contained	Escaped	No fire	Contained	Escaped
Pole-top structures[b]								
Conductor – Transmission OH[c]								
Conductor – Transmission UG[c]								
Conductor – HV[d] (including sub-transmission) OH								
Conductor – HV (including sub-transmission) UG								
Conductor – LV[d] OH								
Conductor – LV UG								
Service line[e] OH								
Service line[e] UG								
Power transformers[f]								
Distribution transformers								
Reactive plant[g]								
Switchgear – zone / subtranmission/transmission substation								
Switchgear – distribution (OH)								
Switchgear – distribution (ground based)								
Protection relays or systems								
Zone / subtransmission/transmission substation SCADA system								

Performance measure	Population	5-year average annual functional failures	Annual functional failures (for reporting period)					
			Unassisted[a]			Assisted[a]		
				Fire			Fire	
			No fire	Contained	Escaped	No fire	Contained	Escaped
Zone / subtransmission/transmission substation Protection Batteries								
Network SAPS[h]								
(insert additional rows as required)								

a. See Glossary for definitions of unassisted failures and assisted failures.
b. Pole-top structures/components are any structure that is attached to a pole to support electricity mains and apparatus.
c. 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 are voltages 1kV AC nominal and above. Low voltage are voltages below 1kV AC nominal.
e. Overhead service and underground service as defined in the NSW Service and Installation Rules.
f. Power Transformers are transformers where the secondary/output voltage is 5kV nominal or above.
g. Reactive plants are reactors and capacitors.
h. This may include temporary, emergency or permanent SAPS. See Glossary for definition of Network SAPS.
Note: The network operator may provide more detailed information when reporting failures. These can be added under the headline metrics.

Table A.4 Vegetation contact with conductors

Performance measure[a]	Event count – Current reporting period	Event count – Last reporting period	Event count – Two periods ago	Event count – Three periods ago	Event count – Four periods ago	Comments
Fire starts – grow-in						
Fire start – fall-in and blow-in						
Interruption[b] – grow-in						
Interruption – fall-in and blow-in						

a. Vegetation hazard definitions as per the Industry Safety Steering Committee Guide for the Management of Vegetation in the Vicinity of Electricity Assets (ISSC3).
b. Includes momentary interruptions.

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

Detail	Event Count Current reporting period	Event Count Last reporting period	Event Count Two periods ago	Event Count Three periods ago	Event Count Four Periods ago	Comments
Electric shock[a] and arc flash incidents[b] originating from network assets[c] including those received in customer premises						
Public						
Public worker						
Network employee / network contractor[d]						
Accredited Service Provider						
Livestock or domestic pet						
Contact with energised overhead network asset[e] (e.g. conductor strike)						
Public road vehicle[f]						
Plant and equipment[g]						
Agricultural and other[h]						
Network vehicle						
Contact with energised underground network asset[e] (e.g. conductor strike)						
Plant and equipment						
Person with handheld tool						

Unauthorised network access (intentional)
Zone / BSP / Transmission substation / switching station
Distribution substation
Towers / poles
Other (e.g. communication sites)
Safe Approach Distance (SAD)[i]
Network employee / network contractor
Accredited Service Provider
Public
Public worker

a. 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.
b. Incidents that result in a burn or other injury requiring medical treatment and result from exposure to an arc.
c. 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.
e. Would not normally include contact with a pole, pillar, distribution substation etc, unless the contact results in subsequent contact with an energised asset.
f. Including plant and equipment packed up for travel (i.e. plant and equipment travelling on a public road to or from worksite).
g. Cranes, elevated work platforms, cherry pickers, excavators, handheld tools, etc.
h. Examples include agricultural equipment, aircraft and watercraft.
i. Encroachment into the applicable Safe Approach Distance for the type of individual involved.

Table A.6 Reliability and Quality of Supply[a]

Performance measure	Event count - current reporting period	Event count - last reporting period	Event count - two periods ago	Event count - three periods ago	Event count - four periods ago	Comments
High voltage into Low voltage[b]						
Sustained voltage excursions outside emergency range[c]						
Reverse polarity						
Neutral integrity due to poor workmanship or incorrect procedure						
Neutral integrity due to asset defect or failure						

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.

Table A.7 Reliability and Quality of Supply – Critical infrastructure incidents

Type of critical infrastructure[a] (e.g. hospital, tunnel)	Minutes of supply lost[b]	Cause	Consequential safety impacts associated with supply issue
(insert additional rows as required)			

a. Critical infrastructure as identified in the network operator's formal safety assessment in relation to the safety risks associated with loss of supply.
b. Number of minutes that the critical infrastructure was without a network supply.
Note: Incidents include outages and supply quality events that adversely impact critical infrastructure.

Table A.8 Network-initiated Property damage events

Detail	Event count - current reporting period	Event count - last reporting period	Event count - two periods ago	Event count - three periods ago	Event count - four periods ago	Comments
Third party property (assets including vehicles, buildings, crops, livestock)						
Damage (e.g. Fire, Physical impact or Electrical)						
Network property (including non-electrical assets including vehicles, buildings)						
Damage (e.g. Fire, Physical impact or Electrical)						

Note: Event counts should include any event where there is a reasonable likelihood that damage was caused by electricity works.

A.4 Tier 4 Control implementation

Table A.9 Amendments and improvements to Formal Safety Assessments (FSA) or Associated Risk Treatments[a]

FSA	Amendments / improvements
(insert additional rows as required)	

a. 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[a]	Current reporting period	Last reporting period	Two reporting periods ago	Three reporting periods ago	Four reporting periods ago
Designs for which Safety in Design (SiD) Reports have been completed					
Designs for which Safety in Design (SiD) Reports have been audited					
Contestable designs certified[b]					
Contestable level 1 project safety reviews performed[c]					
Contestable level 2 project safety reviews performed[c]					
Non-contestable project safety reviews performed[c]					
Project closeout reports completed for contestable projects					
Project closeout reports completed for non-contestable projects					
Project closeout reports audited for contestable projects					
Project closeout reports audited for non-contestable projects					

a. The unit of measure is the number of designs/projects.

b. The network operator is to advise where no contestable designs have been performed.

c. A safety review would include checking that work on or near the network is being performed safely.

Table A.11 Inspections (assets)

Performance measure[a]	Inspection tasks				Corrective action tasks				Comments
	Planned inspection tasks[b]	Achieved[c]	Open[d]	Outstanding[d]	Tasks identified (all categories)[c]	Achieved	Open	Outstanding[e]	
Transmission Substations									
Zone Substations									
Distribution Substations									
Transmission OH									
Transmission UG									
Distribution OH									
Distribution UG									
Network SAPS[f]									

Note: The network operator may provide more detailed information when reporting tasks. These can be added under the headline metrics. Field captured inspection data may require additional processing to identify the appropriate corrective action tasks.

a. 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.

d. 'Open' and 'Outstanding' tasks are those tasks categorised as such at the end of the reporting period.

e. 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.

f. This may include temporary, emergency or permanent SAPS. See Glossary for definition of Network SAPS.

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

Bush fire risk category	Population (spans / poles)	Target	Achieved	Outstanding	Comments
Aerial					
(insert additional rows as required)					
Total					
Ground-based					
(insert additional rows as required)					
Total					

Note: Table A.12 should not include activities reported in Table B.3 (Vegetation tasks) and Table B.4 (Asset tasks).

Table A.13 Public electrical safety plans and activities[a]

Network operator public safety programs / campaigns	Details
(insert additional rows as required)	

a. 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.

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

Audit scope	Identified non-compliances	Actions taken or proposed by network operator
(insert additional rows as required)		

Note: Network operators are only required to report internal audit non-compliances that are related to ENSMS or safety issues.
a. 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 taken or proposed by network operator
(insert additional rows as required)		

B Bush fire preparedness template (Ausgrid, Endeavour Energy, Essential Energy and Sydney Trains only)

B.1 Bush fire risk profile across network operator's supply area

[Network operator to provide map or link to reference documentation available on its website. Include relevant commentary (such as local climatic considerations) from Bush fire Risk Management Committee for the forthcoming bush fire season]

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

[Network operator to identify the fire risk declarations for areas across its network and any specific actions taken to prepare accordingly]

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

[Network operator to briefly describe the scope of private line and pole inspections and risk mitigation for both HV and LV assets]

[i] Item B.3 is not applicable to Sydney Trains.

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

Performance measure	Current reporting period		Last reporting Period		Two periods ago		Three periods ago		Four periods ago	
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual
Private LV lines[b] checked by the network operator										
Number of directions for bush fire risk mitigation issued to LV customers by the network operator[c]	N/A		N/A		N/A		N/A		N/A	
Number of directions for bush fire 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		N/A		N/A		N/A		N/A	
HV customers (metering point count) advised to undertake pre-season bush fire checks in accordance with ISSC 31[d]										
HV customers (metering point count) providing statements of compliance in accordance with ISSC 31										
HV customers (metering point count) requiring additional risk mitigation prior to start of the reporting year[e]										
HV customers (metering point count) where additional risk mitigation has been completed prior to start of the reporting year										

a. Table B.1 is not applicable to Sydney Trains.
b. 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.
c. Refers to directions issued under section 53C of the Electricity Supply Act 1995.
d. Industry Safety Steering Committee Guideline for the Management of Private Overhead Lines (ISSC 31).
e. 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).

Table B.2 Pre-Summer bush fire inspections

Pre-summer bush fire inspections	Population (spans / poles)[a]	Target	Achieved	Outstanding	Comments
Inspections					

a. Sydney Trains may report on feeders instead of spans.

Table B.3 Vegetation tasks

Bush fire risk category	Status	Encroachment Classification A1[a]	Encroachment Classification A2[b]	Encroachment Classification A3[c]	Encroachment Classification A4[d]	Hazard trees[e]
(insert additional rows as required)	Identified					
	Completed					
	Open[f]					
	Outstanding[f]					
Total	Identified					
Total	Completed					
Total	Open					
Total	Outstanding					

a. A1 – vegetation has encroached as far as 75-100% into the minimum vegetation clearance.
b. A2 – vegetation has encroached as far as 50-75% into the minimum vegetation clearance.
c. A3 – vegetation has encroached as far as 25-50% into the minimum vegetation clearance.
d. A4 – vegetation has encroached as far as 0-25% into the minimum vegetation clearance.
e. Hazard trees are blow-in/fall-in vegetation hazards as defined in ISSC3 Guide for the Management of Vegetation in the Vicinity of Electricity Assets.
f. See Glossary for definitions of open and outstanding.

Table B.4 Asset tasks

Bush fire risk category	Status	Category 1[a]	Category 2	Category 3	Category 4 (insert additional columns as required)	Totals
(insert additional rows as required)	Identified					
	Completed					
	Open[b]					
	Outstanding[b]					
Total	Identified					
Total	Completed					
Total	Open					
Total	Outstanding					

a. Network operator to define task priority (Categories 1-4).
b. See Glossary for definitions of open and outstanding.

C Bush fire preparedness template (Transgrid only)

C.1 Bush fire risk profile across Transgrid's supply area

[Transgrid to provide map or link to reference documentation available on its website. Include relevant commentary (such as local climatic considerations) from Bush fire Risk Management Committee for the forthcoming bush fire season]

C.2 Permanent / temporary declaration of areas by Rural Fire Service and Transgrid's actions

[Transgrid to identify the fire risk declarations for areas across its network and any specific actions taken to prepare accordingly]

Table C.1 Pre-summer bush fire inspections

Pre-summer bush fire inspections	Population (spans / poles)	Target	Achieved	Outstanding	Comments
Inspections					

Table C.2 Vegetation tasks

Bush fire risk category	Status	Encroachment Classification A1[a]	Encroachment Classification A2[b]	Encroachment Classification A3[c]	Encroachment Classification A4[d]	Hazard trees[e]
(Transgrid to define – insert additional rows as required)	Identified					
	Completed					
	Open[f]					
	Outstanding[f]					
Total	Identified					
Total	Completed					
Total	Open					
Total	Outstanding					

a. A1 – vegetation has encroached as far as 75-100% into the minimum vegetation clearance.
b. A2 – vegetation has encroached as far as 50-75% into the minimum vegetation clearance.
c. A3 – vegetation has encroached as far as 25-50% into the minimum vegetation clearance.
d. A4 – vegetation has encroached as far as 0-25% into the minimum vegetation clearance.
e. Hazard trees are blow-in/fall-in vegetation hazards as defined in ISSC3 Guide for the Management of Vegetation in the Vicinity of Electricity Assets.
f. See Glossary for definitions of open and outstanding.

Table C.3 Asset tasks

Asset category	Status	Within bush fire prone areas					Outside bush fire prone areas				
		Category 1[a]	Category 2	Category 3	Category 4 (insert additional rows as required)	Totals	Category 1[a]	Category 2	Category y 3	Category 4 (insert additional rows as required)	Totals
Substation	Identified										
	Completed										
	Open[b]										
	Outstanding[b]										
Transmission Line	Identified										
	Completed										
	Open										
	Outstanding										
Automation	Identified										
	Completed										
	Open										
	Outstanding										
Network Property	Identified										
	Completed										
	Open										
	Outstanding										

a. Network operator to define task priority (Categories 1-4).
b. See Glossary for definitions of open and outstanding.

Glossary

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.

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