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Electric Line Clearance Management Plan 2026- 2031 (Public)

CONTROLLED DOCUMENT

Approved by Energy Safe Victoria
28 September 2026



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1. Purpose

This Electric Line Clearance Management Plan (ELCMP) represents the plan that must be submitted by NSW Electricity Networks Operations Pty Ltd (ACN 609 169 959) as trustee for the NSW Electricity Networks Operations Trust (ABN 70 250 995 390) (Transgrid) and Lumea Pty Ltd (ACN 626 136 865) as trustee for Lumea Trust (ABN 94 121 353 950) (Lumea) in compliance with the *Electricity Safety (Electric Line Clearance) Interim Regulations 2025 (ESELCR)* and its Schedule 1 – Code of Practice for Electric Line Clearance (*the Code*). This plan sets out the processes that Transgrid and Lumea will follow regarding the management of line clearance along Transmission Lines associated with Transgrid and Lumea Supply Networks, as a Major Electricity Company (MEC) in Victoria, to ensure compliance with *the Act*, *ESELCR*, and *the Code*. This ELCMP is in place for the period from 1 July 2026 to 30 June 2031. This ELCMP demonstrates how Transgrid and Lumea complies with the requirements of the *ESELCR* and *the Code* by defining:

- The duties of responsible persons.
- The standards and practices to be adopted and observed in vegetation management in the vicinity of the Transmission Lines.
- Management procedures to minimise the risk of vegetation entering the MCS of Transmission Lines and causing fire or electrocution.
- Any other matters for or with respect to the maintenance of electric lines and associated assets.

This ELCMP is required to be submitted by Transgrid and Lumea operating as Major Electricity Companies in Victoria in accordance with the *Electricity Safety Act 1998 (the Act)* and the *ESELCR* requirement for submission by 31 March 2026.

Transgrid and Lumea continually review this ELCMP to ensure it remains effective and current. Transgrid and Lumea will notify ESV of any proposed changes to the Supply Networks or processes that would result in an amendment to this ELCMP. A resubmission of this ELCMP for acceptance will be undertaken unless otherwise advised by ESV that resubmission is not required. No changes will be implemented until the changes are accepted and approved by ESV. This ELCMP is available to all staff and authorised Contractors via the Wire, and a public version, compliant with regulation 10 of the *ESELCR*, is available on Transgrid's website (www.transgrid.com.au) and Lumea's website (www.lumea.com.au).

This ELCMP has been prepared to cover the Transmission Lines at Supply Networks owned and leased by Transgrid and Lumea (Refer Appendix A). The structure of this document is aligned to the structure of the *ESELCR* as detailed in Section 4.2 – Compliance Information.

Signatories to the Electric Line Clearance Management Plan:			
Signed in the Transgrid and Lumea ESV approved version Jason Krstanoski Executive General Manager of Network, Transgrid		Signed in the Transgrid and Lumea ESV approved version Craig Stellan Executive General Manager, Lumea	
Endorsed by Murray Chandler	Endorsed by David Aurelius	Prepared by Steve Renshaw	Endorsed by Susan Huggett
General Manager of Asset Management	Chief Risk Officer	Strategic Asset Management Manager, Network	General Manager of Commercial Operations, Lumea

2. Scope

The Supply Networks within the scope of this ELCMP are:

Transgrid:

- Transmission Line X1/X9 from the NSW/Victorian Border to Red Cliffs Terminal Station including structure numbers 59-63.
- Transmission Line 060 from the NSW/Victorian border including structure numbers 321 and 322 and excluding tower 323 which is owned by AusNet Services. AusNet Services numbers tower 323 as tower 410.

Lumea:

- Berrybank 220kV Transmission Line (BB1/BB2) from Berrybank Terminal Station to Berrybank Windfarm Terminal Station.

3. Definitions

Table 1 Abbreviations and Definitions

Term	Definition
ACT	Australian Capital Territory
AFAP	As Far As Practicable – Acronym used in this ELCMP to describe how Transgrid and Lumea are meeting the requirements of Section 98 of <i>the Act</i> .
AMS	Asset Management System (an ISO 55001 compliant asset management system implemented and maintained by Transgrid and Lumea).
ARMS	Corporate system for managing corporate risk registers, Audit register, compliance register, and incident register. The ARMS includes functionality for recording and managing the completion of actions to improve risks, close out Audit actions, prevent repeat incidents, and ensure compliance activities are completed. Current system: Riskconnect (CAMMS)
AS	Standards Australia
asset	A physical component of a Supply Network unless referring to external Supply Network connections or asset management system processes and procedures.
Asset Manager	Refers to one of, or collective of, the Directors of Asset Management reporting to the General Manager Asset Management.
Audit	An activity undertaken to determine whether or not Transgrid and Lumea are satisfactorily complying with the requirements in this ELCMP.
AusNet Services	AusNet Transmission Group Pty Ltd (ACN 079 798 173) of Level 31, 2 Southbank Boulevard, Southbank Vic 3006 (AusNet Services)
BB1/BB2	Berrybank Terminal Station to Berrybank Windfarm Terminal Station 220kV line
BBTS	Berrybank Terminal Station
BBW	Berrybank Wind Farm 220/33kV Terminal Station
Berrybank Supply Network	Defines the collective assets of BBTS, BBW, and BB1/BB2.

Term	Definition
Blue Book	Code Of Practice On Electrical Safety For Work On Or Near High Voltage Electrical Apparatus – Available on the ESV website.
CAR Audit	Control Assurance Review A systematic method of: - Validating identified risk controls are in place and are effective. - Verifying compliance and facilitating improvements to our Management Systems, plans, standards, and procedures.
Consultation Manager	The system used by Transgrid and Lumea to manage external stakeholder engagement related to Electric Line clearance management. Current system: Salesforce
Contractor	Service provider that provides first response, emergency services, and/or maintenance services for the operation of Transgrid or Lumea's network supply via a signed contract.
Council	The governing body for one of the 79 local government areas in Victoria responsible for local services, planning, and community development.
Defect	An out-of-specification condition which, if left unattended, may affect the performance or reliability of the Transmission Line.
DTSO	Declared Transmission System Operator
EAM	Enterprise Asset Management system, often referred to as the Enterprise Resource Planning system (ERP). This system manages: - Asset register that contains metadata for the component parts of the network. - Management of maintenance activities by the creation of work packages under the cover of a work order. - Provision of reports on the performance of maintenance activities.
Easement Assessor	One of roles performed to assess trees and vegetation and used interchangeably with the term 'Easement Inspector'. This role is engaged in assessing and scoping vegetation near live electrical apparatus, determines cutting requirements to confirm compliance for vegetation near live electrical apparatus.
ELCMP	Electric Line Clearance Management Plan
Electric Line	Electric Line means: (a) the whole or any part of a wire, cable or other thing used or to be used for the purpose of transmitting, distributing, or supplying electricity; or (b) any thing enclosing or supporting such a wire, cable, or other thing - but does not include a wire, cable or other thing directly used in converting electrical energy into another form of energy.
ESI	Electricity Supply Index
ESMS	Electricity Safety Management Scheme - This scheme is to meet the requirements of the Electricity Safety Act 1998 (Vic) and the Electricity Safety (Management) Regulation 2019 (Vic). This scheme is an AS 5577 compliant system as applied to Transgrid and Lumea's Supply Networks.
ESV	Energy Safe Victoria, the Victorian technical and safety regulator
Fire Control Authority	CFA (Country Fire Authority) or FRV (Fire Rescue Victoria)
Fire Danger Period	A Fire Control Authority declares the Fire Danger Period (FDP) for each municipality (shire or council) at different times in the lead up to the fire season. It depends on the amount of rain, grassland curing rate and other local conditions. Transgrid and Lumea increases their internal reporting frequency from 1 October to the 31 March for operational purposes. This enables Transgrid to plan and operationally prepare for heightened bushfire risk at that time of year. Similarly, the end of FDP is unpredictable across the states. Transgrid and Lumea nominally identifies the end of fire danger period as 31 March due to the various end dates across Victoria, and to assist in reporting on bushfire performance.

Term	Definition
GSA	GeoSpatial Analysis – an application within TSS to generate environmental reports
Hazard Tree	A tree that is likely to fall onto, or come into contact with, an Electric Line.
HBRA	Hazardous Bushfire Risk Area – An area to which a fire authority has assigned a fire hazard rating of "high" under section 80 of the Act, whether or not the area is an urban area; or that is not an urban area (other than an area a fire control authority has assigned a fire hazard rating of "low" under section 80 (a) as defined by a Fire Control Authority.
High Potential Incident	Any incident or event that has the potential to result in an undesired outcome such as bushfire, loss of supply, public or worker safety issue, or environmental damage.
HSE	Represents Transgrid and Lumea's health and safety, and environment functions.
Indigenous Tree	A tree that is indigenous to Victoria. May also be referred to as native tree in the referenced documents.
InEight	Compliance system that provides users with the ability to access, complete and submit forms which have been digitised.
LBRA	Deemed to mean areas assigned a fire hazard rating of 'low'.
MCS	Minimum Clearance Space
MEC	A major electricity company as defined in the Act
NC	Non-Conformance
NSW	New South Wales
OHS	Occupational Health and Safety
Routine Maintenance	All planned repetitive activities that are programmed to check the performance or maintain the serviceability of an item of plant or equipment. Referred to as Routine Maintenance or inspection.
SCADA	SCADA (an acronym for supervisory control and data acquisition) is a control system architecture comprising computers, networked data communications, and graphical user interfaces for high-level supervision of machines and processes.
Services Agreements	Construction, Operations and Maintenance Services Agreements under which (Transgrid) provides construction, operations, and maintenance services to the service recipient (Lumea) and its subsidiaries.
SOM	Spatial Object Manager – An interfacing tool to support the refresh of external data into the TSS system.
Substation	Substations are the 'junctions' where circuits connect to one another, creating the network around which electricity flows at high-voltage and may include transformation of voltages, switching systems, protection systems, and other reactive plant to manage power quality. Within this ELCMP a reference to a 'substation' will be interpreted as a reference to a Terminal Station.
Suitably Qualified Arborist	Engaged to assess trees. Arborists must meet the qualification requirements as stated in <i>the ESELCR</i> : Suitably Qualified Arborist means an arborist who has: (a) as a minimum, the qualification of National Certificate III in Arboriculture including "Perform a ground-based tree defect evaluation" unit of competency, or an equivalent qualification; and (b) at least 3 years of field experience in assessing trees. Refer to Appendix F.
Supply Network	A network consisting of Electric Lines, substations, circuits, and any other thing required for the purposes of the transmission, distribution or supply of electricity as defined in Section 3 of <i>The Act</i> . Supply Network in this ELCMP is a reference to a Supply Network identified in Section 4.1.4.
SWHVA	Safe Work Handbook Victorian Assets
SWT1174	Line 060, structure 321 and 322

Term	Definition
SWT3170	Line X1/X9, structure 59-63
Terminal Station	Term used in Victoria for a transmission substation that forms part of a Transmission Network.
<i>the Act</i>	Electricity Safety Act 1998
<i>the Code</i>	Schedule 1 for Code of Practice for Electric Line Clearance from Electricity Safety (Electric Line Clearance) Interim Regulations 2025
<i>the ESELCR</i>	Electricity Safety (Electric Line Clearance) Interim Regulations 2025
the Wire	Transgrid and Lumea's internal intranet network webpage for information sharing.
TNSP	Transmission Network Service Provider - A person who engages in the activity of owning, controlling, or operating a transmission system, this being transmission network, together with the connection assets associated with the transmission network, which is connected to another transmission system or distribution system.
Transmission Line	Transmission Line means an Electric Line: (a) with a nominal voltage of more than 66 000 volts; or (b) operating at 66 000 volts that is supported on tower structures; or (c) operating at 66 000 volts that is adjacent to an Electric Line that has a nominal voltage greater than 66 000 volts;
Transmission Network	A network within any participating jurisdiction operating at nominal voltages of 220kV and above, plus: - any part of a network operating at nominal voltages between 66 kV and 220 kV that operates in parallel to and provides support to the higher voltage transmission network. - any part of a network operating at nominal voltages between 66kV and 220 kV that is not referred to in paragraph (a) but is deemed by the AER to be part of the transmission network.
TRIM	Total Records and Information Management. Transgrid and Lumea's document and record management System for storage of business records.
TSS	Transgrid Spatial System
VESI	Victorian Electrical Supply Industry
WSAT	Worker Safety and Authorisation Training – Computer system used by Transgrid and Lumea to manage field worker competence and training. Current: Transgrid partners with Avetta to deliver the system for Transgrid's use.

4. Electric Line Clearance Management

4.1. Introduction

4.1.1. Objective

The objective of this ELCMP is to demonstrate compliance to *the Act and the ESELCR*. This is done by describing the standards and practices used by Transgrid and Lumea to manage vegetation in the vicinity of Transgrid and Lumea's Transmission Lines in accordance with *the Code*. This supports:

- Electrical safety.
- Minimisation of fire starts from the Supply Networks.
- Effective management of reliability of supply.
- Achievement and promotion of public safety.

- Achievement and promotion of workplace safety.
- Maximised environment protection and amenity.
- Effective protection of areas of important vegetation.
- Community satisfaction.

This ELCMP will communicate how external stakeholders, such as Contractors, landowners, and Councils are engaged to ensure the objectives of this ELCMP are achieved.

4.1.2. Ownership of Assets

4.1.2.1. About Transgrid

Transgrid is a privately owned entity responsible for operating and maintaining the Transmission Network in NSW under a 99-year lease agreement with the NSW government. Transgrid also owns or holds leases of Supply Networks in Victoria. The entity is jointly owned by seven private stakeholders located in Australia and overseas.

Transgrid is the TNSP in NSW and ACT with a Transmission Network that extends from the Queensland border to the Victorian border. The Transmission Networks owned, operated, and maintained by Transgrid connect major load supply points and major power stations throughout NSW and ACT, and interconnectors with Victoria incorporating:

- More than 13,000km of high-voltage overhead Transmission Line and underground cable operating at voltages of up to 500kV.
- More than 100 substations, including switching stations.
- Five interconnectors to Victoria and Queensland.

In Victoria, Transgrid owns or leases the following Electric Lines for which it is a MEC:

- Two NSW to Victoria Transmission Line interconnectors, one at 220 kV and one at 330 kV with a combined distance of 1.85km as described in Appendix A.
- It also owns the Deer Park Terminal Station, and reactive capacity through capacitor banks located in AusNet Services Dederang and Wodonga Terminal Stations to support the Snowy Hydro connection to the Victorian Transmission Network. Transgrid operates these as a MEC.

4.1.2.2. About Lumea

Lumea is a commercial business that offers a range of infrastructure and telecommunication services. It has connected more than 55 generators to the National Electricity Market and brought 13 GW to the market.

In Victoria Lumea owns the following Electric Lines for which it is the MEC:

- The Berrybank Supply Network that includes a 220 kV Transmission Line connecting the 7.5 km from Berrybank Windfarm Terminal Station to Berrybank Terminal Station which Lumea operates as a MEC under operating licences issued by ESC (refer Appendix A).
- It also owns the Kiamal Terminal Station and Plumpton Renewable Terminal Station. This Lumea Supply Network does not contain Transmission Lines.

To construct, manage, operate and maintain its Supply Networks Lumea Pty Ltd (ACN 626 136 865) as trustee for Lumea Trust (ABN 94 121 353 950) (Service Recipient) and NSW Electricity Networks Operations Pty Ltd (ACN 609 169 959) as trustee for the NSW Electricity Networks Operations Trust (ABN 70 250 995 390) (Service Provider) enter into a 'COMA - Project Service Agreement' (Services Agreement) for each project. Under the Services Agreements, Transgrid provides to Lumea:

- Construction management services including:
 - Procurement of the following items of equipment:
 - > Equipment required to be procured by the Services Recipient under the Agreements that cannot be procured by the Services Recipient.
 - Procurement of the following works:
 - > All works required of the Service Recipient under the Agreements that cannot be procured or performed by the Services Recipient.
- Principal Contractor:
 - Unless agreed otherwise, the Service Recipient appoints the Service Provider or its nominee as the principal Contractor for all construction work forming part of the Connection Work under the WHS Legislation (each as defined in a Project Agreement). The Service Provider accepts that appointment and must comply with the duties of a principal Contractor. The Service Provider may appoint a third-party Contractor as the principal Contractor.
- The Service Provider will provide operations and maintenance services in respect of the Supply Networks as defined in the Network Services Agreements to enable the Service Recipient to perform its obligations to the Customer under the Agreements.

The processes and procedures to provide services to Lumea under the Services Agreements are performed by Transgrid using Transgrid branded strategies, policies, and procedures.

4.1.2.3. Supply Network Ownership in Victoria

Table 2 lists the Transmission Lines located at Transgrid and Lumea owned or leased Supply Networks in the Victorian Transmission Network. Details of these Supply Networks is provided in Appendix A and Appendix C.

Table 2 Transgrid and Lumea ownership of Victorian Supply Networks that include Transmission Lines

Legal Entity	Responsible Manager for Safe operations	Supply Network containing Transmission Lines	Licence Status and operator
NSW Electricity Networks Operations Pty Ltd (ACN 609 169 959) as trustee for the NSW Electricity Networks Operations Trust (ABN 70 250 995 390) (operating as Transgrid)	Executive General Manager Network 180 Thomas Street Haymarket NSW 2000 T: (02) 9284 3000 Postal address: PO Box A1000 Sydney South NSW 1235	Line X1/X9 Red Cliffs to Buronga 220 kV (Red Cliffs Gantry to NSW/VIC border) Line 060 Jindera to Wodonga 330 kV from the NSW/VIC border to AusNet Services owned tower '401' (Transgrid tower 323)	Exempt from Transmission Licence as per Victorian Government Gazette S 376 1 December 2015 Transgrid is a DTSO under Victorian Government Gazette S397 11 December 2015 and Transgrid is the MEC.
Lumea Pty Ltd (ACN 626 136 865) as trustee	Executive General Manager, Lumea 180 Thomas Street	Berrybank 220kV Transmission Line (BB1/BB2)	ESC Transmission Licence effective 25 March 2025 and Lumea is the MEC.

Legal Entity	Responsible Manager for Safe operations	Supply Network containing Transmission Lines	Licence Status and operator
for Lumea Trust (ABN 94 121 353 950) (operating as Lumea)	Haymarket NSW 2000 T: (02) 9284 3000 Postal address: PO Box A1000 Sydney South NSW 1235		Operated for Lumea by Transgrid under the Services Agreements. Lumea is the MEC.

4.1.3. Purpose

The management of the MCS from vegetation to Transmission Lines is essential to:

- Mitigate the risk of Transmission Lines causing fires through flashover to vegetation.
- Minimise the safety risk to the public.
- Minimise the damage to the environment and private property.
- Maintain high levels of system reliability by reducing the instances of vegetation entering the MCS.

This ELCMP specifies the standards for vegetation maintenance that Transgrid and Lumea will follow, to demonstrate compliance with *the Act*, the *ESELCR* and *the Code*. Transgrid's ISO55001 certified Asset Management System (recertified in 2023) and Electricity Safety Management Scheme (ESMS) (accepted by ESV) inform the effectiveness of vegetation maintenance.

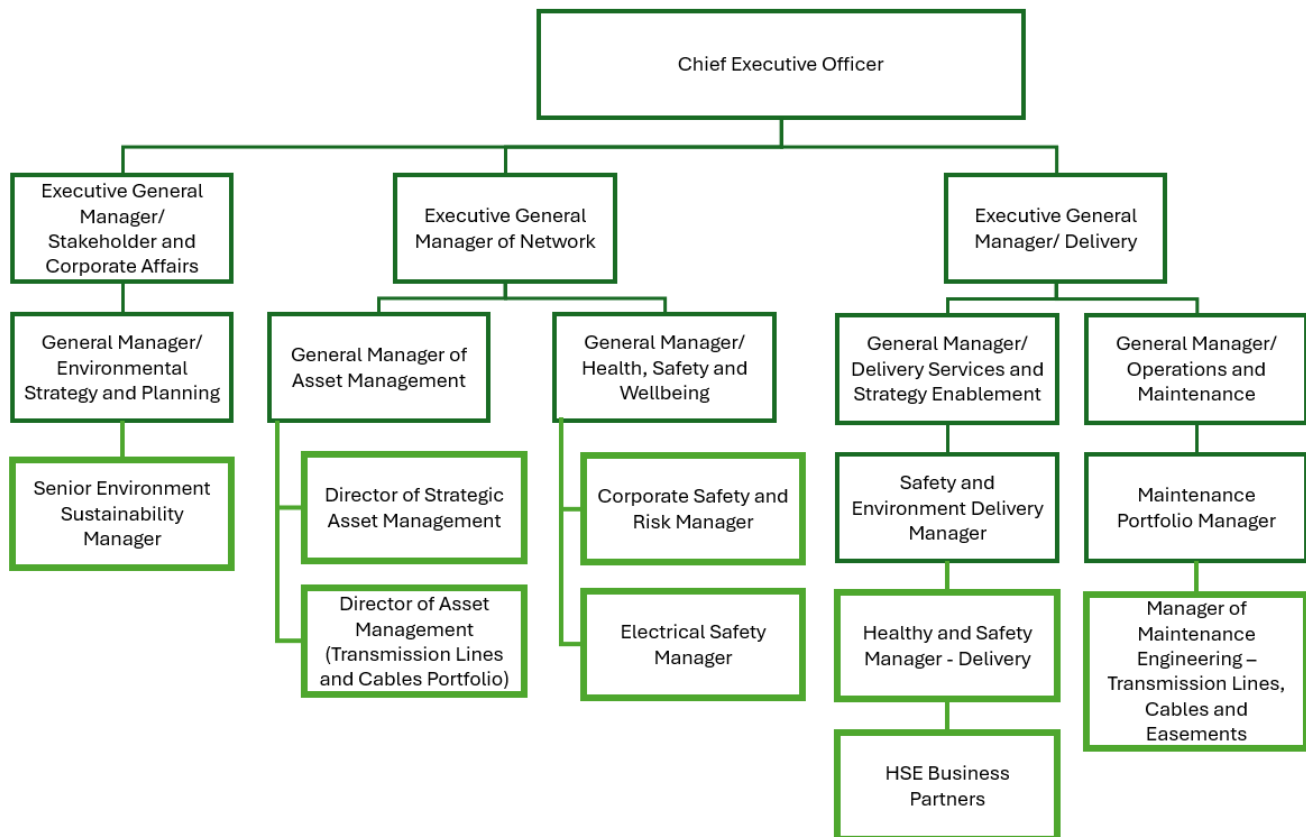
This ELCMP demonstrates how Transgrid and Lumea's staff and Contractor's coordinate activities to achieve our regulatory obligations. Table 3 and Figure 1 provide information on key Transgrid internal stakeholders involved in vegetation management in Victoria.

Table 3 Transgrid Organisation Structure for Vegetation Management

Title	Role in Vegetation Management
Director of Strategic Asset Management	Responsible for: • Development and delivery of the Electricity Safety Management System in compliance with AS5577, <i>the Act</i> and <i>the ESELCR</i>. • Coordinating internal and external audit activities related to this safety management systems. • Ensuring that actions that arise as a result of system audits are recorded in the ARMS and implemented. • Maintaining the currency of the following documents: - ESMS - Victorian Bushfire Management Plan (VBMP) - ELCMP
Director of Asset Management (Transmission Lines and Cables Portfolio)	Define the easement strategy. • Develops and monitors the implementation of the Maintenance Plan – Easement and Access Tracks, and the easement maintenance requirements in Maintenance Plan – Non-Prescribed Assets. • Undertakes Control Assurance Reviews (CAR) on the implementation of the nominated Maintenance Plans.
Manager of Maintenance Engineering – Transmission Lines	• Implement the ELCMP along with the relevant Maintenance Plans, such as: Easement and Access Tracks and the easement – Non-Prescribed Assets Maintenance Plans.

Title	Role in Vegetation Management
	• Participate in the internal audit on the implementation of the Maintenance Plan – Easement and Access Tracks and the easement maintenance requirements in Maintenance Plan – Non-Prescribed Assets. • Manage contracts with Contractors providing easement maintenance services. • Manage Contractors' quality of service by ensuring their procedures are compliant with Transgrid and Lumea's procedures and this ELCMP. • Manage Contractors' technical competency.
Senior Environment Sustainability Manager	• Ensure Contractor's environmental management system is equivalent to or better than Transgrid's certified Environment Management System. • Track Contractor performance and perform environmental audits on Contractors. • Develop and communicate Supply Network specific site management plans to Contractors.
Corporate Safety and Risk Manager	• Establish and maintain frameworks to verify compliance of Contractor safety management systems. • Establish and maintain Critical Risk Audit programs to test the effectiveness of safety management systems
Health and Safety Manager - Delivery	• Coordinate project-level verification activities to confirm management system prior to delivery. • Monitor closure of management system related findings during delivery
HSE Business Partners	• Verify compliance of safety management systems pre, post and periodically during delivery. • Record and track non-conformances to enable business unit oversight.
Electrical Safety Manager	• Manage Contractor safety competency when working near or on Transgrid and Lumea's Supply Networks.

Figure 1 Transgrid Organisation Structure for Vegetation Management

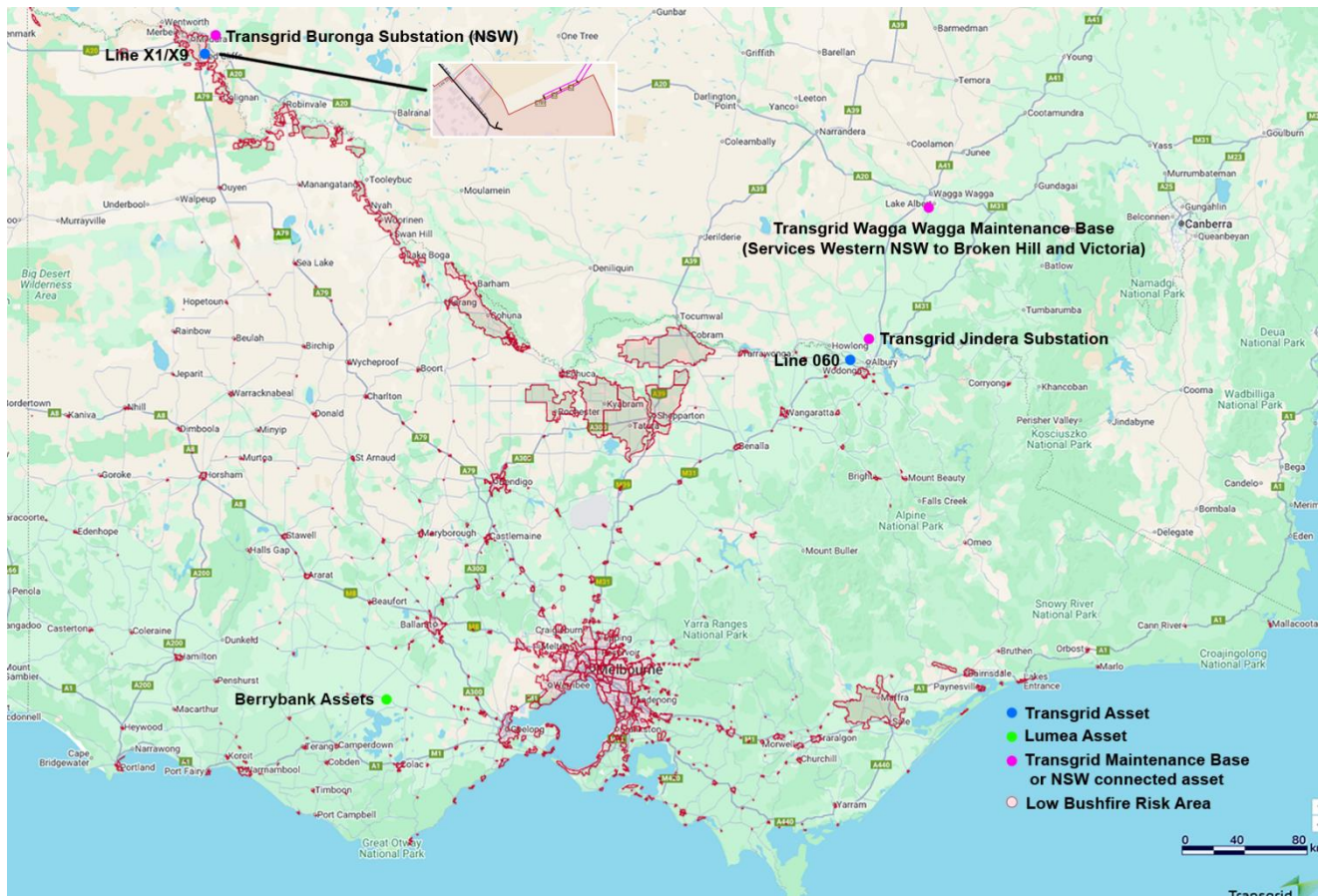


4.1.4. Geographical implementation of this ELCMP

The Transgrid and Lumea Supply Networks in this Plan are separate and not connected to each other. Supply Network specific line clearance management activities are included in Appendix A.

Figure 2 illustrates that all current Transgrid and Lumea Supply Networks are in a HBRA with the exception of two spans of Line X9. In this ELCMP Transgrid and Lumea treat all Supply Networks as if they are located in a HBRA. Figure 3 identifies the location of the Supply Networks in the Victorian Transmission Network

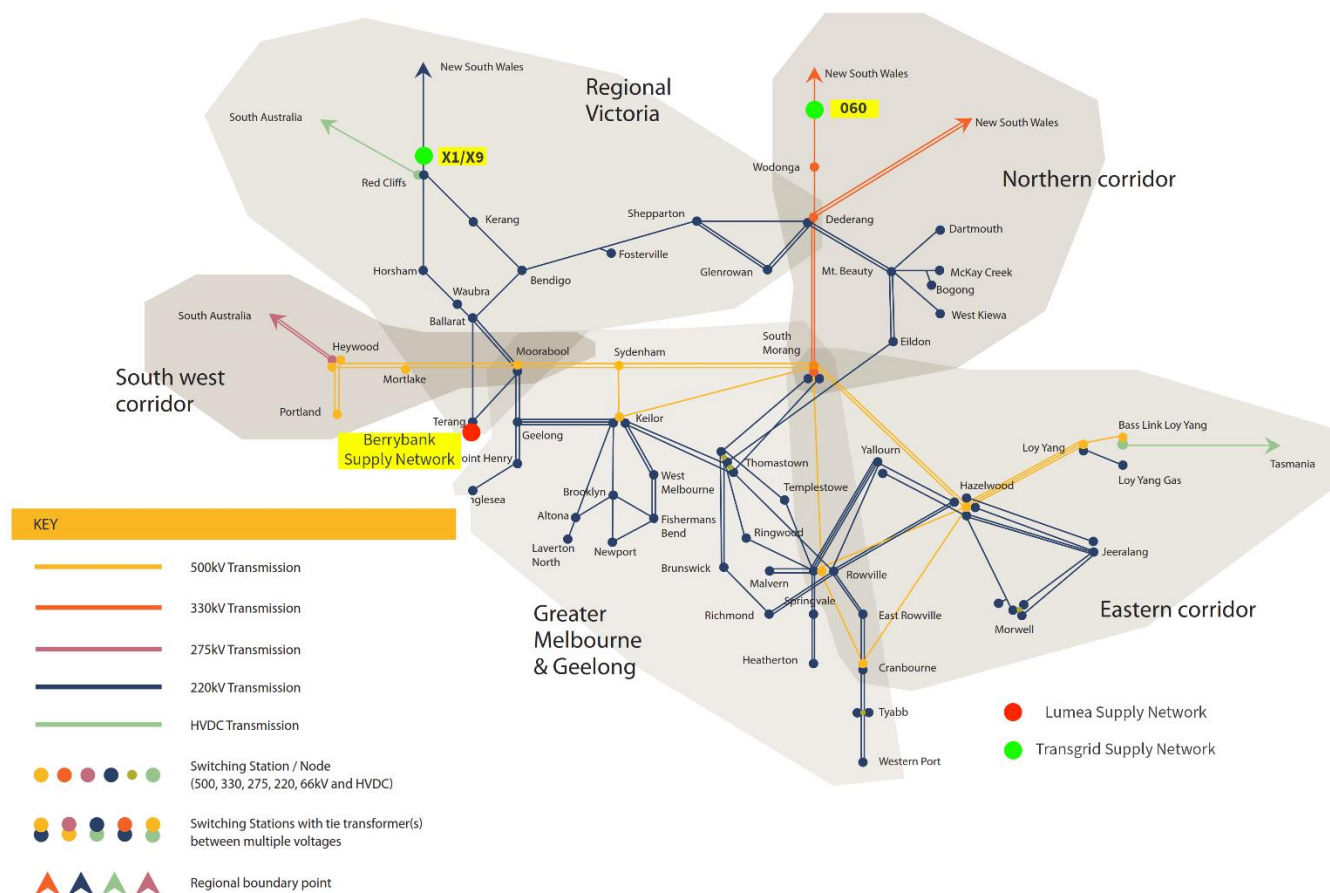
Figure 2 Bushfire risk area coverage in Victoria including Supply Networks in the scope of the ELCMP



This ELCMP will be updated and resubmitted for approval if new Transmission Lines are developed or acquired by Transgrid and Lumea.

During each review of the ELCMP Transgrid and Lumea examines if the Bushfire Risk Area status dataset in both Transgrid's Spatial System and EAM is accurate, and ensure both datasets are up to date with the current dataset available from a Fire Control Authority.

Figure 3 Victorian Electricity Network – Supply Network Transmission Lines



4.2. Compliance Information

This document is structured in accordance with the *Electricity Safety (Electric Line Clearance) Interim Regulations 2025* to demonstrate compliance as shown in Table 4.

Table 4 The ESELCR Compliance Reference

Clause	Regulatory Requirement	Location in ELCMP
Part 2 – Prescribed Code of Practice and related provisions		
9 Preparation and submission of management plans		
9(1)	This regulation does not apply to a responsible person referred to in section 84A or 84B of the Act.	Not applicable
9(2)	Before 31 March in each year, a responsible person must ensure that a management plan relating to compliance with the Code for the next financial year is prepared.	2
9(3)	A responsible person that is a major electricity company, before 31 March 2026, must prepare and submit to Energy Safe Victoria for approval a management plan relating to compliance with the Code for the period from 1 July 2026 to 30 June 2031	2, 5, Table 3
9(4)(a)	The name, address, and telephone number of the responsible person Note that name and email are redacted in the public version of this plan.	5
9(4)(b)	The name, position, address, and telephone number of the individual who was responsible for the preparation of the management plan Note that name and email are redacted in the public version of this plan.	5

Clause	Regulatory Requirement	Location in ELCMP
9(4)(c)	The name, position, address, and telephone number of the persons who are responsible for carrying out the management plan Note that name and email are redacted in the public version of this plan.	5
9(4)(d)	the telephone number of a person who can be contacted in an emergency that requires clearance of a tree from an electric line that the responsible person is required to keep clear of trees	5
9(4)(e)	the objectives of the management plan	4.1.1
9(4)(f)	the land to which the management plan applies (as indicated on a map)	4.1.4
9(4)(g)	any hazardous bushfire risk areas and low bushfire risk areas in the land referred to in paragraph (f) (as indicated on the map);	4.1.4
9(4)(h)	each area that the responsible person knows contains a tree that the responsible person may need to cut or remove to ensure compliance with the Code and that is— - indigenous to Victoria; or - listed in a planning scheme to be of ecological, historical, or aesthetic significance; or - a tree of cultural or environmental significance	4.3
9(4)(i)	the means which the responsible person is required to use to identify a tree of a kind specified in paragraph (h)(i), (ii) or (iii)	4.3
9(4)(j)	the management procedures that the responsible person is required to adopt to ensure compliance with the Code, which must— (i) include details of the methods to be adopted for managing trees and maintaining a MCS as required by the Code; and (ii) for the purposes of determining a MCS in accordance with Division 1 of Part 3 of the Code- (A) must specify the method for determining an additional distance that allows for conductor sag and sway; and (B) may provide for different additional distances to be determined for different parts of an electric line span;	4.5, 4.6
9(4)(k)	the procedures to be adopted if it is not practicable to comply with the requirements of AS 4373 while cutting a tree in accordance with the Code	4.6.4.1
9(4)(l)	a description of each alternative compliance mechanism in respect of which the responsible person has applied, or proposes to apply, for approval under clause 31 of the Code	Not Applicable
9(4)(m)	the details of each approval for an alternative compliance mechanism that— the responsible person holds; and is in effect is in effect;	Not Applicable
9(4)(n)	a description of the measures that must be used to assess the performance of the responsible person under the management plan	6.1
9(4)(o)	details of the audit processes that must be used to determine the responsible person's compliance with the Code	6.2
9(4)(p)	the qualifications and experience that the responsible person must require of the persons who are to carry out the inspection, cutting or removal of trees in accordance with the Code and the Electricity Safety (General) Regulations 2019	7.1
9(4)(q)	notification and consultation procedures, including the form of the notice to be given in accordance with Division 3 of Part 2 of the Code	4.4, 7.2, Appendix D
9(4)(r)	a procedure for the independent resolution of disputes relating to electric line clearance	7.2
9(4)(s)	if Energy Safe Victoria has granted an exemption under regulation 11 relating to a requirement of the Code, details of the exemption or a copy of the exemption.	Not applicable

Table 5 identifies the specific items as required in (*the Code*) of the *ESELCR*, Schedule 1 Part 2.

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Table 5 the Code Compliance Reference

Reference	Requirement	Location in ELCMP
3	Responsible person must keep MCS clear of trees	Table 3, Table 12
4	Exception to MCS for structural branches around insulated low voltage electric lines	Not applicable
5	Exception to MCS for small branches around insulated low voltage electric lines	Not applicable
6	Exception to MCS for small branches growing under uninsulated low voltage electric lines in low bushfire risk areas	Not applicable
7	Exception to MCS for structural branches around uninsulated low voltage electric lines in low bushfire risk areas	Not applicable
8	Owner or operator of Transmission Line must manage trees around MCS	4.5.1, 4.6.2
8(a)	manage trees below the Transmission Line to mitigate, as far as practicable, the fire risks associated with the fuel load below the Transmission Line; and	4.6.4.2, 4.6.4.3, 4.6.4.4
8(b)	manage trees adjacent to the Transmission Line to avoid, as far as practicable, a tree entering the MCS around that line if the tree falls	4.6.4.2, 4.6.4.3, 4.6.4.4
9	Responsible person may cut or remove Hazard Tree	Complied as TNSP under Code Clause 8.
10	Cutting of tree to comply with Standard	4.6.4
11	Cutting or removal of specified trees must be minimised	4.6.5
12	Cutting or removing habitat for threatened fauna	4.6.5
13	Restriction on timing of cutting or removal if notification is required	4.4
14	Restriction on urgent cutting of trees	4.4
15	Restriction on urgent removal of trees	4.4
16	Responsible person must provide notification before cutting or removing certain trees	4.4, Appendix D
17	Responsible person must publish notice before cutting or removing certain trees	4.4, Appendix D
18	Responsible person must consult with occupier or owner of private property before cutting or removing certain trees	4.4.1
19	Notification and record keeping requirements for urgent cutting or removal	4.4.2, Appendix D
20	Duty relating to the safety of cutting or removal of trees close to an electric line	4.5
21	Duty relating to assisting to determine the allowance for cable sag and sway	4.6
22	Duties relating to management procedures to minimise danger	Not applicable
23	Additional distance that allows for cable sag and sway	4.6
24	Insulated electric lines in all areas	Not applicable
25	Uninsulated low-voltage electric line in a low bushfire risk area	Not applicable
26	Uninsulated high-voltage electric line (other than a 66,000 volt electrical line) in a low bushfire risk area	Not applicable
27	Uninsulated 66,000 volt electrical line in a low bushfire risk area	Not applicable
28	Uninsulated low voltage and high-voltage electric lines (other than a 66,000 volt electrical line) in a hazardous bushfire risk area	Not applicable
29	Uninsulated 66,000 volt electric lines in a hazardous bushfire risk area	Not applicable

Reference	Requirement	Location in ELCMP
30	Transmission Lines	4.6

4.3. Vegetation with Significance

Transgrid and Lumea implement strict environmental frameworks to ensure vegetation management is done in ways that minimise the impact to threatened fauna and trees with significance in Victoria. The spread of vegetation indigenous to Victoria is provided in Figure 4, with Transgrid and Lumea's Supply Network Transmission Lines identified by green circles.

Transgrid's D2023/01113 Environmental Assessment Framework - Victoria is applied to identify the need for the Environmental Effects Statement and/or environmental approvals for each Transgrid and Lumea Supply Network listed in Section 4.1.4. None of the Transgrid and Lumea Supply Networks trigger the threshold for requiring an Environmental Effects Statement.

Details on the location of easements are contained in Transgrid's Spatial System (TSS). Extracts of easement details are provided in Appendix A. The TSS database is updated by Transgrid's Delivery Services and Strategy Enablement Group and includes a search on responsible authority websites and the consultation with relevant internal stakeholders. TSS is available to all staff and will be used prior to any inspection and maintenance activity to identify locations and details of vegetation that may be:

- A tree indigenous to Victoria.
- Trees listed in a planning scheme to be of ecological, historical, or aesthetic significance.
- Trees of cultural or environmental significance.

Transgrid and Lumea applies the process below to third-party Victorian datasets.

- All data that is considered static is reviewed annually.
- Data that is updated more frequently will be refreshed as required when a material change has been identified or notified by a third party.

Appendix B identifies the Victorian datasets provided in TSS.

The Delivery Services and Strategy Enablement Group is responsible for ensuring that the TSS and the Victorian datasets listed in Appendix B are updated for use by this ELCMP.

In addition to the TSS system for recording vegetation with significance, Transgrid and Lumea's D2023/02153 Transgrid's Environmental Handbook Section 5.1 outlines the minimum standard controls to be followed for vegetation management that are also applied to Victorian vegetation under this ELCMP.

For activities not regulated under the Environmental Protection or Planning Acts, internal due diligence requirements apply. To ensure environmental risks are considered appropriately, Transgrid and Lumea internal environmental risk review requirements categorise actions as 'Negligible', 'Low', or 'Medium'. D2023/01113 Environmental Assessment Framework - Victoria provides a detailed definition of each risk level and required actions.

Negligible risks generally comprise access and inspection of existing infrastructure or sites, minor vegetation management that does not include indigenous vegetation, minor asset maintenance activities,

and like-for-like replacement of assets where the works involve no ground disturbance. Actions classified as negligible must not involve:

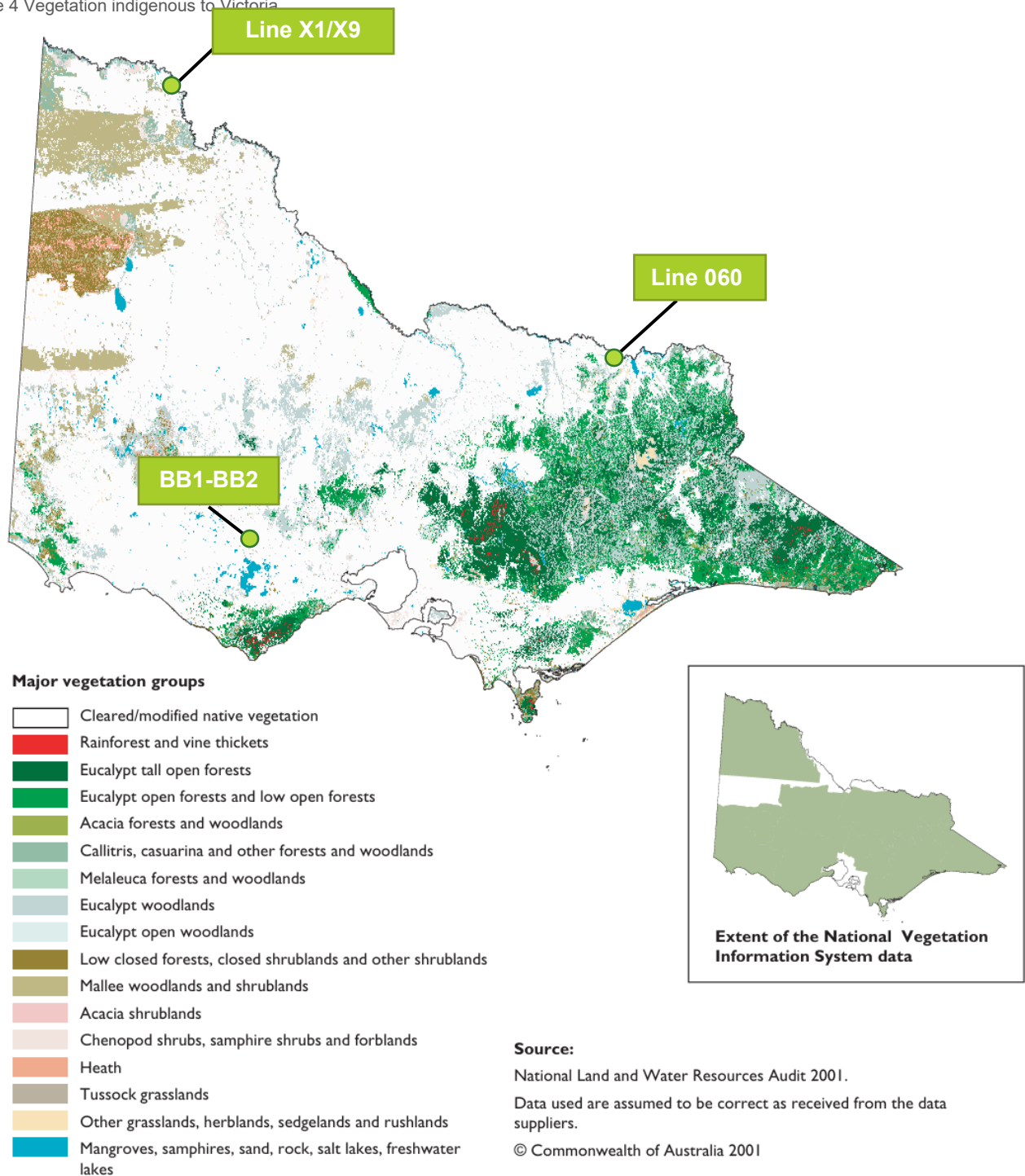
- Permits or statutory authorisations.
- Permanent physical change to the land.
- Excavation using mobile plant.
- Transport and handling of oil quantities above 3,000L outside premises.
- Generation or transport of any amount of solid or liquid PCB material (other than small quantities for testing).
- Disturbance of asbestos or contaminated material.
- Application of herbicides using powered equipment.
- Vegetation management beyond Minor Vegetation Management.

For actions that fall within low and moderate risk, an Environmental Checklist needs to be completed. The following is a list of the Environmental Checklists that are used by Transgrid and Lumea for low and moderate risk actions:

- D2016/07962 Environmental Low Risk Checklist
- D2016/07964 Environmental Moderate Risk Checklist (General)
- D2017/07960 Environmental Moderate Risk Checklist (Vegetation Maintenance)
- D2022/00546 Environmental Moderate Risk Checklist (Water Crossing)
- D2016/07961 Oil/PCB Transport Form

The checklists indicate the documentation requirements for control measures, handover process of environmental documentation and authorisation requirements depending on the site assessment.

Figure 4 Vegetation indigenous to Victoria



4.4. Notification and Consultation Procedure

4.4.1. Landowner and Council Notification and Consultation

Transgrid and Lumea may perform activities on land that is privately owned or vested under another authority. The information on special access or consultation requirements is stored on TSS and must be consulted first.

For private landowners and Councils:

- Prior to cutting a tree that Transgrid and Lumea must consult:
 - If the tree is to be cut within the boundary of the private property – an occupier of the property.
 - If the tree is to be removed – an owner of the property.
- Notification must be provided 14 days in advance of the proposed action, and the works are to be completed within 60 days from then.
- If the tree is on land that is managed by a Council that is not the responsible person – that Council.
- If the tree is on land that is contiguous to private property and the use of that property may be affected during the cutting or removal – an owner or occupier of that property.

All works are assigned a priority according to Section 4.6.4.4 Table 11.

If the work is not completed by the committed timeframe, the work will be classified as overdue, and the affected persons must be re-notified. If the tree intended to be pruned is a tree of cultural, historical, aesthetic, or environmental significance the notice will include details of the impact and the proposed mitigation actions. Section 7.2 provides detailed information on the notification issued to landowners and Councils.

Landowners and Councils will be notified using the form in Appendix D and all the attempts and evidence of contacting landowners will be recorded. The following details will be captured:

- Stakeholder, property owner, or Council name.
- Contact details.
- Details of stakeholder/ property owner consultation, including date, time and topics discussed.
- Stakeholder/ property owner requirements.

Transgrid and Lumea consults with Landowners and Councils on planning for visits and work. In the case where the work cannot be completed within the original timeframe (for example, due to availability of resources, weather, or access), Transgrid and Lumea will consult and notify with the Landowner as soon as possible on the new plan. This may include either cancelling, extending, or rescheduling the work. The re-notification process follows the standard process and the timeframe resets.

Information of the owner or occupier of a property is stored on TSS.

4.4.2. Emergency Notification (including urgent cutting) and Record Keeping

Transgrid and Lumea may carry out emergency work to cut or remove vegetation as a result of:

- Encroachment or growth of trees into the MCS that was not anticipated in the ELCMP.
- Tree falling or becoming damaged so that it is required to be cut or removed to maintain the MCS.

When performing emergency cutting Transgrid and Lumea must not cut a tree further than one metre from the MCS for an Electric Line span if Transgrid or Lumea are not the owner of the tree.

Emergency works means works carried out in response to:

- (a) A sudden natural event, including a storm, flood, tree fall, bushfire, landslip, or coastal inundation.
- (b) Accident, equipment failure, or structural collapse.
- (c) Damage caused by vandalism, arson, or a pollution incident, if the works involve no greater disturbance to soil or vegetation than necessary and are carried out in accordance with all applicable requirements of the Blue Book.
- (d) Encroachment or growth of trees that is not anticipated in the management plan or is assessed to encroach in foreseeable local conditions by a Suitably Qualified Arborist.
- (e) A tree falling or becoming damaged is required to be cut or removed to maintain the MCS as determined by a Suitably Qualified Arborist.
- (f) Cutting or removal of vegetation or tree during a Fire Control Authority declared *Fire Danger Period*.

Transgrid and Lumea must provide written notice to the landowner or Council in control of the municipality in which the Electric Line is situated, or as soon as practicable after completing the urgent cutting or removal of vegetation or trees. The notice will specify the following:

- (a) Where and when the cutting or removal was undertaken.
- (b) Why the cutting or removal was required.
- (c) The date of the last inspection of the span of the Electric Line in relation to which the cutting or removal was required before it was identified that the urgent cutting or removal was required.

Where urgent cutting is to be undertaken on public land, a notice shall be given on Transgrid or Lumea's external internet site and local community page (Facebook or the like) as shown in Appendix E.

The notice is kept on file for 7 years in the same location (Consultation Manager) for notices sent for non-urgent vegetation or tree management. Refer to Appendix D for urgent cutting Notification contained within the Easement Works Notification Form.

In the event of an emergency, environmental impacts will still be considered, and the appropriate treatments are implemented as far as practicable prior to and post event. The D2016/00985 Environmental Assessment Framework - Victoria is followed to ensure the environmental impacts are addressed appropriately during the emergency conditions.

Consultation Manager is a system used by Transgrid and Lumea to keep a record of landowner and Council engagement. Records of the documentation of and landowner and Council notification prior to and post the emergency event are kept in accordance with D2024/01413 Document and Records Management.

4.5. Responsible Vegetation Clearing Practices

4.5.1. Objective of Vegetation Clearing (Clause 8)

The process in this section ensures that Transgrid and Lumea always maintains the MCS around Transmission Lines.

This involves the following key activities:

- Manage trees below the Transmission Line to mitigate, as far as practicable, the fire risks associated with the fuel load below the Transmission Line, and

- Manage trees adjacent to the Transmission Line to avoid, as far as practicable, a tree entering the MCS around that line if the tree falls”.
- Vegetation management on Transmission Line easements is to be carried out in accordance with the Code.
- Vegetation management on transmission easements should eliminate both the risk of fire initiation and the risk to the safe and reliable operation of the Transmission Lines.

4.5.2. Responsible Vegetation Clearing to Environmental Requirements

The following process is employed to ensure responsible clearing of vegetation:

1. Vegetation maintenance requires compliance with the D2016/00985 Environmental Assessment Framework - Victoria.
2. Vegetation maintenance must be completed in accordance with any relevant Memorandums of Understanding or Protocols.
3. Subject to the D2016/00985 Environmental Assessment Framework – Victoria and the constraints for indigenous and significant trees (Section 4.6.5), the preferred method of vegetation control is to remove - rather than prune - tall growing vegetation that will eventually infringe the MCS.
4. If stumps cannot be treated with herbicide, they are managed at the discretion of the service provider to prevent / minimise regrowth, where practical and environmental considerations allow.
5. Where herbicide is planned to be used, it is used strictly in accordance with Transgrid's D2009/09991 Use of Pesticides procedure.
6. Any tree, or part of a tree, that could fall into the MCS but will not come in contact with the conductor (i.e. through falling or grow-in), will be wholly or partially pruned (i.e. reduction in height or removal) in accordance with AS4373:2007 and *The Code*. A tree may be permitted to pass through a portion of the MCS in the event of unexpected failure, where it can be demonstrated that it will not contact a conductor and cause a flashover.
7. A minimum distance of approach must be maintained between the conductor and the arc of a falling tree, to reduce the risk of contact and flashover as far as practicable.
8. Urgent pruning or removal must be undertaken to the extent practicable in accordance with the *ESELCR*, whilst ensuring consistency with established practices for the location and the provisions for MCS are maintained. Clearing may occur if it is the usual treatment for the site, or where the applicable horizontal distance (including allowance for sag and sway) is difficult to maintain and pruning is considered impractical or undesirable.
9. Vegetation control must be carried out using the safest and most cost-effective method in an environmentally acceptable manner, in consultation with property owners, stakeholders or managers, and other statutory authorities, as necessary.
10. Retain and prune as required hollow bearing trees or other vegetation specifically selected for its habitat value as locally significant fauna habitat. Vegetation is managed in accordance with Section 4.6 and may be poisoned (if appropriate) to prevent regrowth. Pesticide application is in accordance with the D2009/09991 Use of Pesticides procedure.
11. The use of practices other than those described in this section are not precluded. Approval is obtained from Environment Manager regarding the acceptability of the environmental impacts before any other practices are applied.

12. Special requirements for vegetation maintenance of Transmission Lines covered by an Environmental Effect Statement (EES), or an Operational Environmental Management Plan are adhered to in the assessment of vegetation to be removed. The Contractor will provide this information to Transgrid (and to Lumea under the Services Agreements) to capture in TSS.
13. The density and character of vegetation outside the MCS is managed to ensure the conditions for the safe and reliable operation of the line, to facilitate inspection confidence, and to mitigate, as far as practicable, the fire risks associated with the fuel load below and beside the Transmission Line.
14. Elevated fine fuel hazard level is assessed and managed in accordance with the rating system from Department of Sustainability and Environment – Overall Fuel Hazard Assessment Guide 4th Edition. The fuel load assessment is conducted during easement inspections and when the fuel hazard rating reaches a “Moderate” level as per Table 4.1 of the Overall Fuel Hazard Assessment Guide 4th Edition, the fuel load will be reduced through removal of fuels and/or mulching of fuels.
15. The size, MCS and vegetation management cycles are stated in the D2020/00269 Non-Prescribed Assets Maintenance Plan for Berrybank and D2003/2398 Maintenance Plan – Easement and Access Tracks for Line X1/X9 and 060, in consultation with affected persons, as optimal to maintain clearances. The required vegetation clearance is stated in this ELCMP document. This annual assessment will consider factors including regrowth rates, the size of the MCS, risks, access, operating costs, and environmental considerations.
16. Annual vegetation inspection will be carried out to evaluate the effectiveness of the treatment for existing vegetation, as stated in the D2020/00269 Non-Prescribed Assets Maintenance Plan for Berrybank, and D2003/2398 Maintenance Plan – Easement and Access Tracks for Line X1/X9 and 060. These inspections will be conducted prior to the Declared *Fire Danger Period*. Refer to Section 4.6.2 for further information on the annual vegetation inspections.
17. Clearing will generally be used for management of vegetation where appropriate and practicable, as stated in the Maintenance Plan.
18. When performing the Routine Maintenance inspections of vegetation easements, the vegetation management workers will determine the method for maintaining the vegetation. The vegetation management workers are Suitably Qualified Arborists who are informed of the requirement of ensuring risks are reduced as far as practicable by assessing if there is a foreseeable possibility that the trees will grow or fall into the MCS. Where it is not practicable to follow AS 4373:2007, the Suitably Qualified Arborist determines the most appropriate methods and recommends the appropriate equipment, taking into consideration the safety of people, and the environmental/visual impact. The determination is recorded in the appropriate Environmental Risk Checklist.
19. When a tree becomes unviable to prune a tree in compliance with AS 4373:2007, and presents a risk of falling into the MCS, the tree will be removed.
20. Pruning will generally be used for the management of significant vegetation and may be considered for the clearance of vegetation in the MCS.
21. Vegetation management workers must have sufficient knowledge and training to ensure that vegetation activities under their control are conducted in a safe and environmentally responsible manner. As a minimum, vegetation management workers carrying out pruning or removal works must comply with current industry work practices and/or relevant Australian standards. All vegetation management workers must be trained and authorised (refer to Section 7.1.2). Transgrid (and for Lumea under the Services Agreements) only engages vegetation management workers who have sufficient experience in the electrical industry to perform tree-clearing works in a safe manner. All new employees to the

electrical industry must be approved by Transgrid (and for Lumea under the Services Agreements) and be initially supervised by an experienced person.

22. Transgrid (and for Lumea under the Services Agreements) must conduct regular training needs analysis of their employees and Contractors to ensure that the level of training is consistent with the requirements of the task to be performed. Results of audit processes are reviewed to determine these needs. Required training levels for operators are set out in Section 7.1.
23. Audits of both work-in-progress and/or completed work are conducted by the Easements Maintenance Group to ensure that vegetation management workers:
 - Undertake pruning works in accordance with Australian Standard AS 4373:2007 Pruning of Amenity Trees where practical.
 - Demonstrate compliance with the prescribed safety and environmentally responsible aspects of industry/company requirements.
24. The requirements detailed in this ELCMP are communicated to all field personnel working in Victoria through the field vegetation assessment guideline – 2026/01925 Field Vegetation Assessment – Victoria. The guideline includes MCS requirements, minimum distance of approach to be maintained to mitigate risk of trees falling and causing a flashover, fuel load thresholds, indigenous and significant trees, emergency cutting, and stakeholder notification.

The Contractor performing vegetation management for Transgrid (and for Lumea under the Services Agreements) must have its staff authorised under relevant categories in the D2016/00985 Environmental Assessment Framework - Victoria, as stated in the contract.

Post work audits are performed by Transgrid representatives (and for Lumea under the Services Agreement with Lumea) at both the assessment and cutting stages of the program to ensure compliance to the requirements in this Plan. All non-conforming audit results are recorded in InEight and action is taken to address deficiencies to achieve compliance as soon as practical. Payment will not be processed for vegetation cutting crews until the works have been rectified.

4.5.3. Vegetation Maintenance Outcomes

To meet the requirements of this ELCMP, the following maintenance outcomes are required for vegetation maintenance:

- (a) Any tall growing vegetation that, due to constraints, cannot be removed, must be pruned with an allowance for growth to ensure that vegetation will not intrude into the MCS prior to the next Routine Maintenance activity at that location.
- (b) Any vegetation that becomes unviable and presents a risk of intruding into the MCS will be removed.
- (c) Any vegetation identified during inspection that intrudes the MCS:
 - > Is considered to be a violation and must be addressed as defect vegetation with a priority assigned relative to the risk of interference (in accordance with Section 4.6.4.4) prior to the next Routine Maintenance activity.
 - > Must be removed or maintained such that the vegetation will not be reported in subsequent inspection reports prior to the next Routine Maintenance activity.
- (d) Trees are identified and then managed on a risk basis in accordance with Section 4.6.4.4.

- (e) Indigenous or significant trees are identified and managed in accordance with Section 4.6.5.
- (f) Manage fuel loads on easements.

4.6. Maintaining Minimum Clearance Space (MCS)

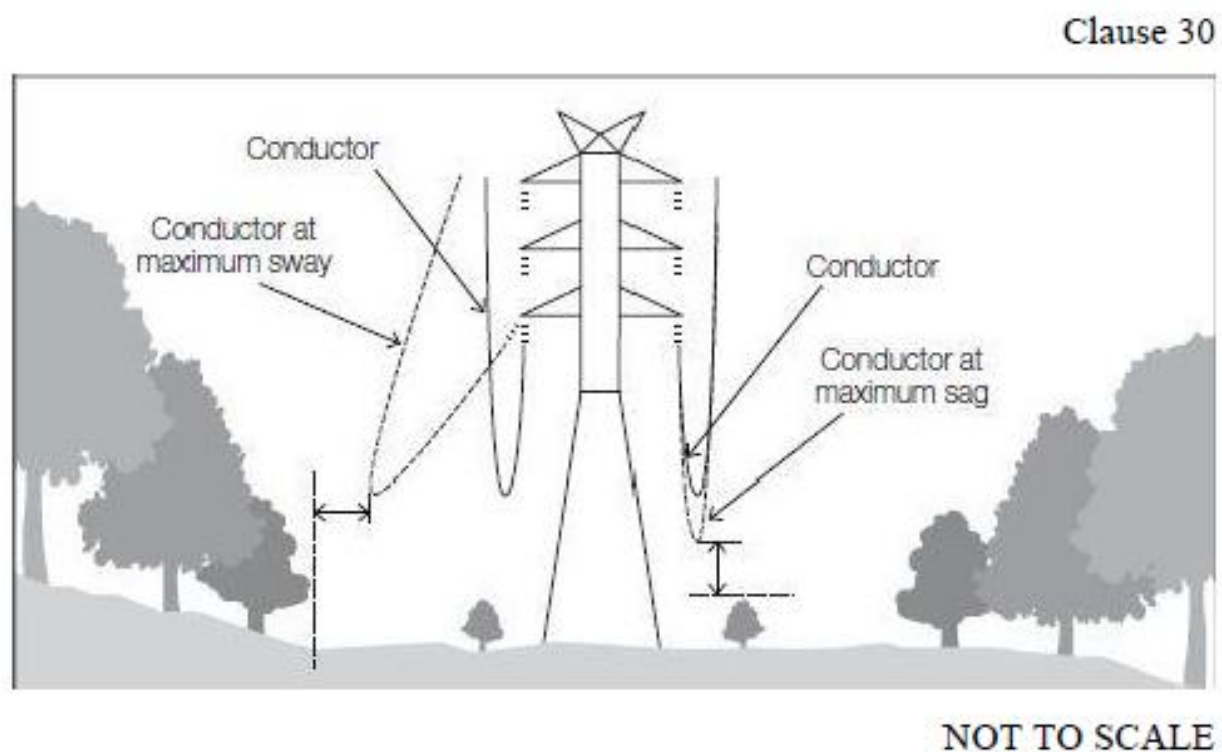
4.6.1. The Code Clause 30 Distances

Table 6 reflects the requirements of *the Code* Clause 30 and specifies the applicable distances (without allowance for sag and sway) to be always maintained from Transmission Lines. Transgrid and Lumea add maximum sag and sway (calculated as per Section 4.6.2) to the distance in Table 6 to determine the applicable distance and MCS in accordance with *the ESELCR*. Figure 5 shows an illustrative example of the applicable distance from *the Code*.

Table 6 Distances without allowance for sag and sway based on *the Code* Clause 30 for Transgrid and Lumea's Victorian Transmission network

Nominal Voltage (kV)	Applicable horizontal distance (without allowance for sag and sway)	Applicable vertical distance (without allowance for sag and sway)
220	4.6 m	3.7 m
330	5.5 m	4.7 m

Figure 5 End View of the Transmission Line



4.6.2. Minimum Clearance Space (Regulation 9(4)(j))

Transgrid and Lumea's Transmission Lines are designed to meet the requirements of AS 7000:2016. Transgrid and Lumea use PLS-CADD models to determine the maximum sag (maximum operating

temperature) and maximum sway (50°C + 500Pa) conditions for a Transmission Line to ensure these requirements are always satisfied.

The MCS¹ stated in Table 7 accounts for the maximum sag, maximum sway, and horizontal and vertical distances as per *the Code*, Schedule 1 for the Transmission Lines at Transgrid and Lumea's Supply Networks. These distances account for the space from the conductor furthest from the Transmission Line centreline, for both left and right circuits, at the maximum line operating condition.

Table 7 MCS that is to be maintained at all times at Transgrid and Lumea's Supply Networks

Nominal System Voltage	Minimum Clearance Space to be maintained at all times	
	Horizontal distance from conductor , including allowance for sag and sway	Vertical distance from conductor , including allowance for sag and sway
330 kV Line 060	25 m	10 m
220kV Line X1/X9	16 m	7 m
220 kV Line BB1/BB2	16 m	7 m

The *Code* requires management of any trees and vegetation that is within the MCS or has the potential to enter the MCS (e.g. falling into the MCS) to mitigate fire risks as far as practicable. Section 4.6.2.1 describes the minimum approach distance and the management of trees that could fall but pass through the MCS.

Clauses 8(a) and 8(b) of *the Code* establish the requirements to manage trees below the Transmission Line to mitigate fire risks associated with the fuel load below and manage trees adjacent to the Transmission Lines to avoid a tree entering the MCS presented in Table 7.

Inspections of Transgrid and Lumea's easements are conducted annually and any defects or non-compliances to the MCS are corrected prior to the Declared *Fire Danger Period*. Easement ground inspections as described in Section 4.6.3.1 is used as the primary approach in identifying vegetation encroaching the MCS using a rangefinder. LiDAR inspections are used if this is undertaken to inform ground inspections of vegetation that has the potential to infringe on the MCS.

All workers implementing this ELCMP, including inspectors, arborists, tree cutters, and any others detailed in Appendix F, will be informed of the MCS through the inspection scripts provided from the EAM for the completion of works. The requirements detailed in this ELCMP are communicated to all field personnel working in Victoria through the field vegetation assessment guideline – 2026/01925 Field Vegetation Assessment – Victoria.

The sections below describe the maintenance and management activities to ensure compliance to MCS as per *the Code*.

4.6.2.1. Falling Trees Adjacent to the Minimum Clearance Space

Trees located adjacent to Transgrid and Lumea's Transmission Lines are managed to reduce, as far as practicable, the risk of tree falling through the Minimum Clearance Space and causing electrical flashover.

¹ The conductor position is modelled at everyday condition of 15°C when applying the Minimum Clearance Requirement in PLSCADD.

To determine that the risk of a tree falling through the boundary of the MCS and causing flashovers has been mitigated as far as practicable, a risk-based approach is utilised to calculate the minimum distance that a tree will approach a conductor during the fall. To achieve this Transgrid and Lumea will cut any trees sufficiently to ensure that during a fall the following minimum approach distance is maintained.

The minimum horizontal and vertical distance of approach is calculated for a Transmission Line by summing (Refer Figure 6):

- The conductor sway at blow out of 100Pa for horizontal distance and the maximum sag at maximum operating temperature for vertical distance
- The minimum flashover distance for the nominal voltage, as specified in AS/NZS 7000 Overhead Line Design.
- Additional 1.5m safety margin.

The minimum horizontal and vertical distances of approach for 220kV and 330kV are summarised in Table 8 and Table 9.

Table 8 Minimum distance of approach - 220kV

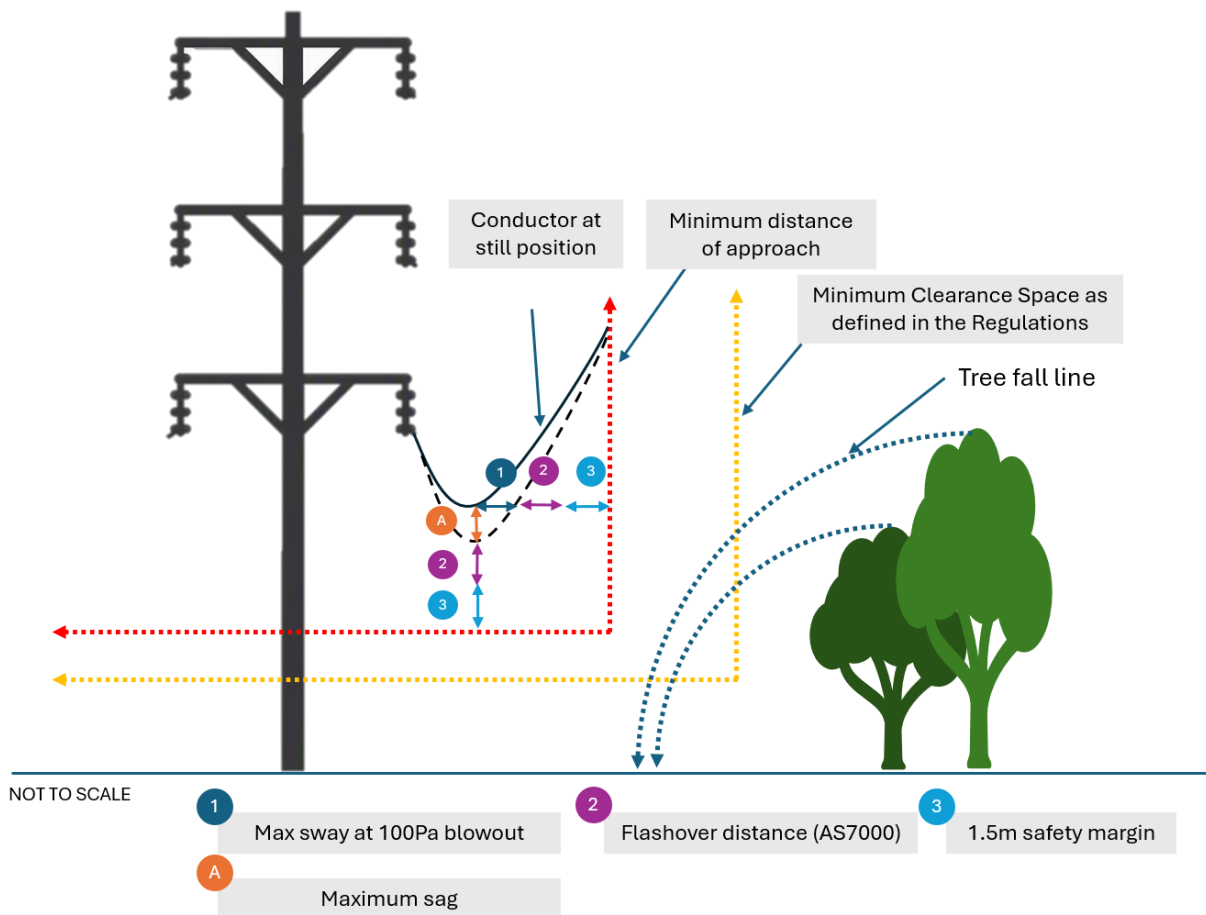
220KV – Distances in metres				
Horizontal Distance	Blow out 100Pa	Flashover Distance (AS/NZS 7000) Table 3.4 Condition (b)	Safety Margin	Minimum distance of approach
	2.2	1.9	1.5	6
Vertical Distance	Maximum Sag	Flashover Distance (AS/NZS 7000) Table 3.4 Condition (b)	Safety Margin	Minimum distance of approach
	3.3	1.9	1.5	7

Table 9 Minimum distance of approach - 330kV

330kV – Distances in metres				
Horizontal Distance	Blow out 100Pa	Flashover Distance (AS/NZS 7000) Table 3.4 Condition (b)	Safety Margin	Minimum distance of approach
	3.8	2.6	1.5	8
Vertical Distance	Maximum Sag	Flashover Distance (AS/NZS 7000) Table 3.4 Condition (b)	Safety Margin	Minimum distance of approach
	5.3	2.6	1.5	10

This minimum distance of approach is illustrated in Figure 6.

Figure 6 Minimum distance of approach between conductor and arc of a falling tree



The required minimum approach distances shall be communicated to field staff in the [2026/01925 Field Vegetation Assessment – Victoria](#).

Any tree adjacent to the MCS that is at a height where the arc of the tree falling could breach the minimum distance of approach, will be pruned to an appropriate height, or removed entirely, to eliminate the risk of the tree coming in contact with the conductor and causing a flashover. The assessment of pruning or removal will be performed by a Suitably Qualified Arborist.

4.6.3. Vegetation Preventative Maintenance Activities

Transgrid and Lumea conducts easement inspections annually prior to the start of the Fire Danger Period of Transgrid and Lumea's Transmission Lines to ensure compliance to this ELCMP.

4.6.3.1. Easement Ground Inspection

Easement inspections are performed at ground level of Transgrid and Lumea's Transmission Lines using a rangefinder to determine whether the vegetation on the easement satisfies the vegetation maintenance outcomes identified in Section 4.5.3 and identify trees that have the potential of entering the MCS.

Easement inspections are:

- Scheduled and completed annually prior to the start of the Fire Danger Period with sufficient time to rectify defects that present bushfire risk prior to the start of the Fire Danger Period.
- Defects identified during easement inspections are prioritised based on their proximity to the MCS (Section 4.6.2)

The scope of the easement inspection includes:

- The inspections are applied to the Supply Network Transmission Lines at a span level.
- Identify if any tree or vegetation has entered the MCS.
- Identify if any regrowth has the potential to enter the MCS prior to the next scheduled inspection.
- Identify trees and fuel load below the Transmission Line that present fire risk and minimise this risk as far as practicable. Assessment of elevated fine fuel hazard level is as per the rating system from the Department of Sustainability and Environment - Overall Fuel Hazard Assessment Guide 4th Edition.
- Identify trees adjacent to the Transmission Line that have the potential to enter the MCS if they fall and assess that they are not, as far as practicable, at risk of falling into the MCS prior to the next annual inspection.
- Record vegetation defects validated in the field inspection as Issues in the EAM. Refer to Section 4.6.4.1.
- Report any unauthorised easement encroachments or unpermitted activities – such as unapproved fuel loads on the easement – that are not aligned with Transgrid's Easement Guidelines. Report encroachments and unpermitted activities as an Issue.

Maintenance workers perform and utilise scripts provided through the EAM system for performing inspections or as a computerised form to be returned to the Easement Maintenance Delivery Manager or delegate for entry into the EAM after the inspection is complete.

Issues identified during a ground inspection must be completed within a timeframe based on the assessed priority (Refer Section 4.6.4.4) from the date the defect is validated by the ground based inspection.

4.6.3.2. LiDAR Inspection (Applicable only if LIDAR flight is performed on a Supply Network in any year)

Airborne 3D laser scanning of the Transmission Lines, vegetation, other above ground installations, and ground modifications can be carried out as supplementary tool to support ground inspection undertaken under Section 4.6.3.1. This inspection is used to Identify trees and vegetation that potentially do not comply with clearance requirements specified in Section 4.6.2 and requires ground inspection under Section 4.6.3.1.

LiDAR inspection does not negate the need for annual ground inspection.

An additional buffer of 1.5 m is added to the MCS in Section 4.6.2 when processing and identifying vegetation defects through LiDAR (refer to Section 4.6.4.1 on processing defects).

If LiDAR inspection identifies that trees or vegetation that is infringing the MCS, then this must be immediately verified through ground inspection and a Work Order created for rectification in accordance with Section 4.6.4.1.

4.6.4. Vegetation Management Activities

4.6.4.1. Vegetation Management Guidance

Vegetation management on Transmission Line easements is to be carried out in accordance with *the Code*.

Vegetation management on Transmission Line easements must minimise the risk of fire initiation, and the risk to the safe and reliable operation of the Transmission Lines as far as practicable.

Contractors must comply to AS 4373:2007 - Pruning of amenity trees, when pruning amenity trees on Transgrid and Lumea's Transmission Line easements. Where it is not practicable to follow this standard, the vegetation management worker will determine the most appropriate method and recommend the proper equipment, taking into consideration customer satisfaction, safety of people, and the environmental/visual impact. The determination is recorded in the Environmental Risk Checklist.

Vegetation management work is to be performed by workers that are qualified and competent, as detailed in Section 7.1 and defined in the *Electricity Safety (General) Regulations 2019*. The work will be performed to the clearances detailed in Appendix G. Section 7.1 describes how Transgrid and Lumea manages and monitors the qualification of workers to implement this ELCMP.

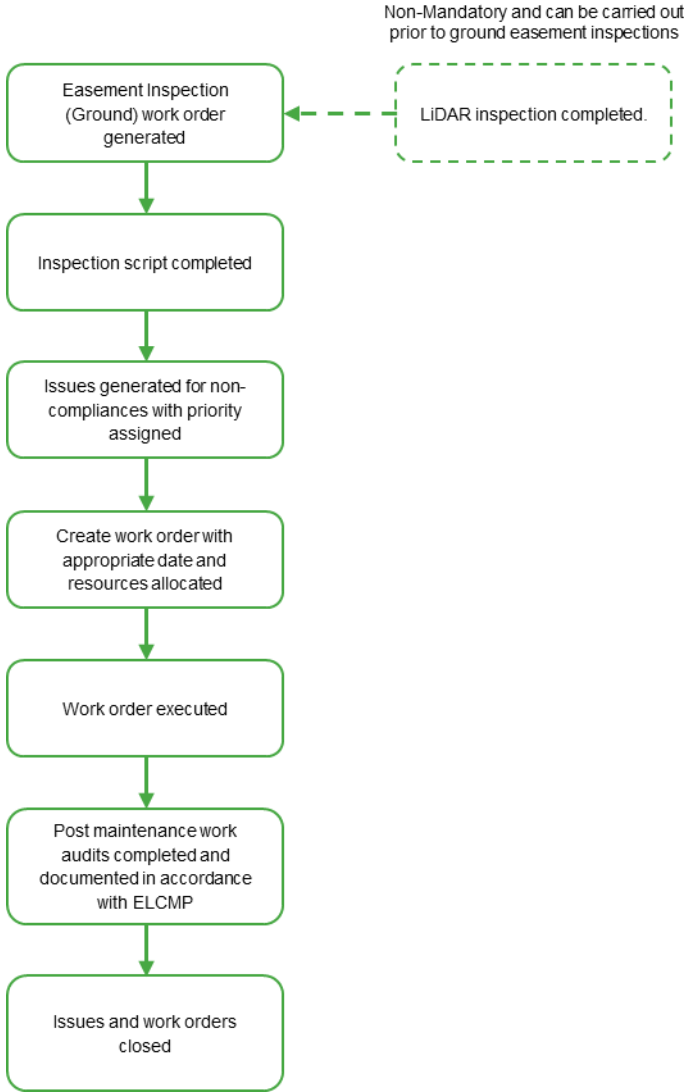
4.6.4.2. Vegetation Condition Based Maintenance

Vegetation maintenance requirements for Lines BB1/BB2, 060 and X1/X9 are identified based on the defects or condition identified from easement inspections described in Section 4.6.2. Defect maintenance is delivered to address vegetation non-compliances and defects that present a bushfire risk prior to the next scheduled inspection or the Fire Danger Period, whichever comes first. The defect maintenance delivery process is described in Section 4.6.4.4.

4.6.4.3. Vegetation Management Process

The process for managing vegetation that threatens to violate the MCS is as per Figure 7.

Figure 7 Vegetation Management Process



4.6.4.4. Vegetation Defect Maintenance

Vegetation that does not maintain compliance to the MCS is recorded as a defect and follows the process in Section 4.6.4.3 and the Corrective Maintenance Process show in Figure 8. Further detail on this process is provided in the D2017/01717 Corrective Maintenance Process.

Figure 8 Corrective Maintenance Process – High Level Process Map

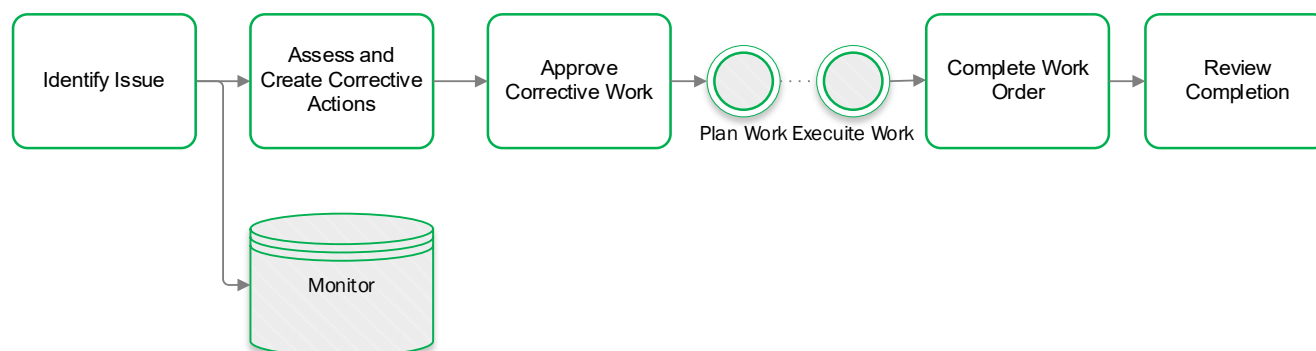


Table 10 Corrective maintenance process summary

Sub-Process	Description	Accountabilities
Identify Issue	Issue is identified in the field and captured in the system. Urgent issues (P1, P2) are escalated to the AMC where required.	Field Staff, Program Leads, AMC
Assess and Create Corrective Actions	Issue is assessed and corrective actions recommended, including scope and timing, are proposed in a work order.	AMC (P1, P2, P3)
Complete Work	Field staff (internal or external maintenance staff with active and current qualifications in the WSAT) complete the work order, including details of the status of the issue.	Field Staff
Review Completion	AMC reviews completed high priority work (P1,2) and manually closes issues.	AMC

Vegetation defects for Transgrid and Lumea's Supply Network Transmission Lines are actioned and closed within the timeframe specified in the below Table 11.

Any vegetation defects that are not actioned and closed within the timeframe specified are recorded as an outstanding defect and corrective actions are prioritised to address the risk of overdue work orders. The maintenance backlog is monitored and reviewed as per Section 6.1. Classification of Vegetation Defects

Vegetation defects identified during vegetation preventative maintenance is recorded and actioned as per Table 11.

Table 11 Classification of Vegetation Defects

Priority Code	Standard Job	Timeframe ³	Defect Criteria
P1	All	1 day	Emergency cutting (includes urgent cutting) Trees are non-compliant with the ELCMP and within the distances specified in Table 5.
P2	TEASCO	31 days ¹	Vegetation is within MCS. Trees adjacent to the transmission line that have a height that could fall into the minimum approach distance defined in Section 4.6.2.1.
P3	TEASCO	93 days	Potential for trees adjacent to the transmission line to grow into the MCS before the next inspection activity.
	TONEA ²		Potential for trees adjacent to the transmission line to grow to a height that could fall into the minimum approach distance defined in Section before the next inspection.
			Excess fuel load identified (as per Section 4.6.3.1) requires removal.

Priority Code	Standard Job	Timeframe ³	Defect Criteria
¹ Issues identified as having an imminent risk to bushfire, safety or security are considered urgent and will be assessed within 1 day. Following the assessment, these urgent works will be prioritised within the pool of P2 corrective works to ensure the set planned completion date reflects the level of urgency assessed. ² Trees found on and off easement will have TONEA standard job. ³ The action timeframe commences on the day a ground inspection is conducted, and a defect is identified and verified. The timeframe shall not reset until the non-compliance is removed from the network.			

4.6.5. Indigenous and Significant Trees

An indigenous or significant tree as defined in Clause 11 of the Code will have constraints imposed on the cutting or removal of the tree, these are identified as follows:

- Trees that are indigenous to Victoria.
- Trees listed in a planning scheme to be of ecological, historical, or aesthetic significance.
- Trees of cultural or environmental significance.

Indigenous and Significant Trees are identified during routine easement inspections (Section 4.6.2) and managed in accordance with Section 4.6.4.2. The inspection identifies unsafe situations including:

- Trees, or any part of a tree, that is capable of falling into the MCS
- Vegetation in HBRA found in the MCS after declaration of Fire Danger Period.
- Excessive fuel load below the transmission line that could increase fire risks (refer Section 4.6.3.1).

The assessment and management of indigenous and significant trees is managed in accordance with the MCS and criteria in Section 4.6.2 with additional constraints as per Clause 11 of *the Code*.

Work orders generated from the inspections with indigenous or significant trees are validated by a Suitably Qualified Arborist prior to rectification to ensure that any pruning or cutting of indigenous and significant trees is not more than the extent necessary to maintain MCS or make the situation safe. Identification of vegetation with significance is done in accordance with Section 4.3.

Transgrid and Lumea will not remove or destruct Indigenous or significant trees unless it is necessary to meet the MCS requirements detailed in *the Code* or if the trees present an unsafe situation as defined above. Removal of indigenous and significant trees is permitted in the following circumstances:

- A Suitably Qualified Arborist has inspected the tree and advised that cutting the Indigenous and significant trees would make the tree unhealthy or unviable.
- Indigenous and significant trees that present an immediate risk of personal injury or damage to property. Only the part of the vegetation that presents the immediate risk may be removed.
- Removal or pruning (to the minimum extent necessary) to reduce fuel load as required under Section 4.5.2, which would otherwise make the situation unsafe.
- When a tree becomes unviable after being pruned in compliance to AS 4373:2007, and a Suitably Qualified Arborist has advised that the unviable tree presents a risk of falling into the MCS.

Removal of trees that provide habitat for threatened fauna should only be undertaken if a risk assessment determines that the tree must be removed for safety reasons. Pruning to retain hollows is the preferred

method of managing habitat trees. Any pruning or removal of habitat trees must be undertaken outside the breeding season.

The determination of indigenous and significant tree removal, including habitat trees is recorded in the appropriate environmental checklist and has to be authorised by the relevant Transgrid and Lumea representative as per the D2016/11314 Authorisation to Work before work can commence. The Environmental Risk Checklists include information such as:

- Transmission Line Number and Location.
- Classification of vegetation (i.e. Native, Non-Native, Mixture).
- Site specific constraints including details of any unsafe situation.
- Description of action, scope and methodology undertaken, including the equipment used.
- Whether the works are within the location of habitat for threatened fauna (habitat trees).

D2023/01113 Environmental Assessment Framework – Victoria provides further guidance on required actions to assess and mitigate environmental impact in Victoria.

4.6.6. Incident Response

Transgrid and Lumea Supply Network Transmission Line related incidents and events, including asset failures associated with fire starts, are identified and managed through the following processes:

- 24-hour monitoring:
 - Operators identify failures and events either through the SCADA monitoring systems, or from an external incoming call and record the incident through the Operations Logging System (OpsLog). This asset failure is recorded as a Defect to be addressed in accordance with the D2017/01717 Corrective Maintenance Process.
- Identified during the Routine Maintenance process as described in Section 4.6.2
 - Vegetation within the MCS or in imminent danger of damaging the Transmission Line identified during Routine Maintenance activities are reported as an Issue. For serious events, the control room operator is contacted to commence emergency management procedures.

Transgrid and Lumea capture information related to a fire event that has led to, or could have led to, injury to people, damage to plant and machinery, or environment damage. The process for incident investigation is:

- Fire and safety risk incidents (initiated by Transgrid or Lumea staff, including Contractors), are responded to and investigated in accordance with D2019/03823 HSE Incident Management.
- Incidents are recorded in ARMS for traceability and assurance that the investigation is completed, the findings are recorded, and actions are taken to prevent the incident from occurring again.
- Incident response requires Transgrid and Lumea staff and Contractors to make the site safe, getting help, notifying supervisors about and escalate incidents as soon as possible. The decision whether to suspend machinery, staff and/or work activity is based on the incident type and its consequences.
- Incident triage involves the Delivery and Health Safety and Wellbeing (Networks) business group reviewing the consequences from the incident and determining the internal and external notification requirements. The notification requirements of an incident to WorkSafe Victoria, Energy Safe Victoria,

and Environment Protection Authority Victoria is disclosed in [D2020/01357 HSE External Notification of Incidents](#).

- [D2018/01241 Regulatory Incident Reporting Procedure](#) must be followed for external reporting to regulators and government agencies (such as WorkSafe Victoria). The criteria, timeframe, and the responsible Transgrid or Lumea business group for reporting to external stakeholders is provided to ensure compliance with external regulations on incident reporting.
- The [D2015/07223, Health, Safety, Environment and Network Safety Communication and Reporting](#) procedure must be followed for communicating and reporting fire incidents affecting health, safety, and environment.

5. Accountability

For the purposes of Part 2 of the Code, the prescribed particulars related to sections 9(4) (a) – (d) of the *ESELCR* are provided in the below table. The responsible person identified below is to ensure this ELCMP is reviewed each year, the compliance to the approved Plan, and renewal, preparation, and submission of this ELCMP for a 5-year period or as of when a change needs to be incorporated to the approved Plan.

Table 12 Responsible Officers

The ESELCR Reference	Prescribed particular – contact details	Transgrid Information
9(4)(a)	the name, address, and telephone number of the responsible person	Executive General Manager of Network. NSW Electricity Networks Operations Pty Ltd (ACN 609 169 959) as trustee for NSW Electricity Networks Operations Trust (ABN 70 250 995 390) (operating as Transgrid) 180 Thomas Street Haymarket NSW 2000 T: (02) 9284 3000 Postal address: PO Box A1000 Sydney South NSW 1235
		Executive General Manager of Lumea. Lumea Pty Limited (formerly known as Transgrid Services Pty Limited) ACN 626 136 865 as trustee for the Lumea Trust (formerly known as Transgrid Services Trust) ABN 94 121 353 950 (operating as Lumea) 180 Thomas Street Haymarket NSW 2000 T: (02) 9284 3000 Postal address: PO Box A1000 Sydney South NSW 1235
9(4)(b)	the name, position, address, and telephone number of the individual who was responsible for the preparation of the management plan	General Manager of Asset Management / Network / Transgrid 180 Thomas Street, Haymarket NSW 2000 T: (02) 9284 3000

The ESELCR Reference	Prescribed particular – contact details	Transgrid Information
9(4)(c)	the name, position, address, and telephone number of the persons who are responsible for carrying out the management plan	General Manager Operations and Maintenance / Delivery / Transgrid 180 Thomas Street, Haymarket NSW 2000 T: (02) 9284 3000
9(4)(d)	the telephone number of a person who can be contacted in an emergency that requires clearance of a tree from an Electric Line that the responsible person is required to keep clear of trees	Transgrid and Lumea Emergency Contact Number for general public (open 24 hrs and available on Transgrid website): 1800 027 253 https://www.transgrid.com.au/Pages/contact.aspx

As per Part 2 s.10(7) (b) of *the ESELCR* a copy of the approved and current ELCMP will be available on site at Victorian Network Assets by arrangement and at Transgrid and Lumea's offices located at:

Suite 3, Level 19
80 Collins Street
Melbourne VIC 3000

An electronic copy of this ELCMP can be viewed at:

- <https://www.transgrid.com.au/media-publications/>
- <https://lumea.com.au/news/>

Transgrid's complaint handling policy can be viewed at (Transgrid manage complaints for Lumea based on the Transgrid Complaints Policy under the Services Agreement detailed in Section 4.1.2:

- [Ombudsman | Feedback & Complaints | Transgrid](#)

To lodge a complaint please call the toll-free hotline or email us at:

Transgrid:

M: 1800 222 537
E: community@Transgrid.com.au

Lumea:

M: 02 9284 3000
E: info@lumea.com.au

Transgrid or Lumea can also be contacted at:

<https://www.transgrid.com.au/contact-us/>
<https://www.lumea.com.au/contact-us/>

6. Implementation

6.1. Measuring performance of this ELCMP (Regulation 9(4)(n))

Transgrid (and for Lumea under the Services Agreements) measures the ongoing implementation and performance of this ELCMP through performance measures and periodic reports described in Table 13. The measures used to monitor the performance of this program include:

- Achievement of maintenance on-time targets
- Bushfire Mitigation Index
- Completion of easement inspection program and closure of outstanding defects prior to Declared Fire Danger Period

Performance targets are developed annually and are reported to senior management and the board as detailed in Table 13. Targets are determined based on a combination of regulatory requirements, risk mitigation, Contractor's performance, and vegetation regrowth.

Transgrid and Lumea's [D2018/00674 Victorian Bushfire Mitigation Plan](#) contains specific measures on the performance of this ELCMP in managing the bushfire risk arising from vegetation management.

The continual improvement of this ELCMP is performed through:

- The review of Transgrid and Lumea's procedures identified in this ELCMP.
- Implementation and auditing of key processes in the AMS that ensure the maintenance strategy development and planning processes are effective. This is covered in Section 6.2.

An Easement Maintenance Working Group that includes the Transmission Line and Underground Cables Asset Manager and their team, and Easement Maintenance Manager and their key managers, monitors the progress of vegetation management to the Maintenance Plan. Issues or concerns affecting the delivery of vegetation management program are discussed and corrective actions taken to achieve compliance as soon as practical. As mentioned in section 4.5.1, payments are only processed once defects are rectified in a timely manner.

Table 13 Measuring Performance of this ELCMP

Report Name	Freq.	Report Duration	Scope	Prepared / Audience
Bushfire Mitigation Index	OSIRIS	Weekly/Monthly	Report on the progress of bushfire mitigation activities. For further information, refer to D2022/01901 ESV Reporting through OSIRIS	Strategic Asset Management / ESV
Vegetation Clearance	OSIRIS	Weekly/Monthly	Report for the easement activities. For further information, refer to D2022/01901 ESV Reporting through OSIRIS	Strategic Asset Management / ESV
High Potential Incidents	Monthly	Past Quarter	Provides insight on how the Supply Networks are performing with respect to bushfire risk.	Strategic Asset Management / Asset Management Committee

Report Name	Freq.	Report Duration	Scope	Prepared / Audience
Bushfire Preparedness Program Report	Yearly	Beginning of June this year.	In scope work orders that have Required By Dates between 1 June to end of fire danger period, assumed 31 March of following year. The report will not identify new non-routine work orders created after the issue of this report.	Asset Analytics and Insights Manager / General Manager of Asset Management
<u>Online report (Maintenance focus)</u>	Daily	Every day of the year	Maintenance delivery performance measures (such as on-time and overdue) for bushfire in scope work orders for all Supply Networks.	Maintenance Programs / Asset Maintenance Managers Asset Managers
Online report (Compliance focus) & (Maintenance focus)	Yearly	May	Identifies maintenance performance against set measures.	Strategic Asset Management / General Manager of Asset Management M/Maintenance Programs
Executive Reporting	Monthly	Past Month	The report provides assurance to the Executive that Transgrid is effectively maintaining the Supply Networks in managing bushfire risk throughout the fiscal year.	Strategic Asset Management / Transgrid Executives

6.2. Auditing compliance of this ELCMP to *the Code* (Regulation 9(4)(o))

6.2.1. Control Assurance Review Audit

Auditing of the compliance of this ELCMP to *the Code* is undertaken by 2nd line of defence Audits under Transgrid and Lumea's three lines of defence process described in the **ESMS** and is undertaken through. Compliance of ELCMP to *the Code* (including AS 4373) requires that:

- The Transmission Lines identified in this ELCMP are correctly identified in the EAM and inspections and maintenance is applied as per section 4.6.2.
- Inspection and maintenance being undertaken in the field are identifying vegetation Defects on the assets in compliance with work instructions and approved inspection guidelines, and these are compliance with this ELCMP.
- The information collected is provided in compliance with the work instructions to allow effective review and correction of Defects.
- Defects are being corrected in compliance with section 4.6.4.4 of this ELCMP.

A Control Assurance Review (CAR) Audit of all Transgrid and Lumea Supply Networks included in this ELCMP is undertaken by the Strategic Asset Management Branch with assistance from Asset Managers or their technical staff on a three-year cycle.

The scope of each audit is determined by a Judgement-based sampling process as defined in AS/NZ 19011:2019. This relies on the competence and experience of the audit team to determine the scope,

considering any previous identified significant risks, opportunities for improvement and output from the monitoring of management systems to select the appropriate sample.

A list of the requirements of the AMS related to successful implementation of this ELCMP are as follows:

- Ensure that the maintenance and inspection activities, as set out within the Maintenance Plan, are scheduled correctly within the maintenance planning systems (EAM Job Plans, and Inspection scripts).
- Ensure the inspection and maintenance activities required by Asset Managers and communicated through the Asset Management Plans, Asset Management Instructions, or Internal Work Requests (IWR) are being undertaken to a satisfactory standard.
- Ensure that all activities being undertaken are in accordance with the relevant asset management policies, service instructions, standards, and processes.
- Ensure that underlying processes which initiate or support operations and maintenance practices have provided the required Supply Network related data, such as equipment fitment information, issues, defects raised from these issues, and conditional data obtained from inspections are being correctly recorded within the appropriate corporate EAM.
- Ensure that Supply Network defects are recorded appropriately in EAM as per procedure.
 - Ensure the rectification of defects is effective and occurring in accordance with priorities.
- Ensure that inspectors who complete the Supply Network maintenance for Transgrid and Lumea have valid competencies.

Further information can be found in the D2003/2422 Control Assurance Review (CAR) document.

Outcomes from Audits of inspection effectiveness must have an Audit risk rating categorised in accordance with Section 6.8.2.4 Audit Risk Rating in the **ESMS**. Opportunities for improvement are recorded in a continual improvement register. All other Audit outcomes are recorded in the ARMS with corrective actions to be undertaken to address the identified issues.

CARs are scheduled in the referenced D2021/00073 AMS, ENSMS and ESMS Audit Plan that is updated annually.

Further detail on undertaking Audits is detailed in D2014/18781 AMS, ENSMS and ESMS Audit Procedure.

6.2.2. Auditor Competency

Auditors undertaking the Audits included in Section 6.2.1 must have the following skills and qualifications to carry out the Audit:

- The appointed lead auditor must have one of the following competencies:
 - Certification to the Exemplar Global Scheme for 'Internal Management System Auditor' or equivalent.
 - Certification as Certified Asset Manager Assessor (CAMA) under the World Partners in Asset Management (WPIAM) scheme.
- At least one of the Technical staff assisting the Auditor team leader must:
 - Possess the knowledge and skills to achieve the intended results of the Audits they are expected to perform through having worked in the relevant asset class for at least one year.

- Audit team leaders must have previously performed an Audit as a team member under an experienced Auditor.

6.2.3. Audit Records

The record of audit outcomes in an action tracking system for monitoring and tracking of completion to prevent re-occurrence is outlined in Table 14. Refer to [D2003/2422 Control Assurance Review](#) for more information.

Table 14 Record and monitoring of audit outcomes

Guidance for Categorisation of Corrective Actions	Action Tracking System
Actions must be created in the ARMS where: • A deficiency identified on a control and the effectiveness rating is less than rating identified in the ARMS. • There is a non-compliance to an Asset Management Plan requirement. • A correction of a deficiency that has been considered essential to effective operation of Management System processes.	ARMS
Actions that: • Address a short coming in processes or practices are identified and jointly agreed upon by the relevant team or • Represent an opportunity for improvement and not directly acted upon during the CAR must be recorded in a relevant Continuous Improvement Register	Relevant Continuous Improvement Register or other action management system
If a required corrective, action is immediately actioned or completed, for example by direct action occurring during the assessment.	To be noted in the report for scoping of future assessments (e.g. IWR created)

6.2.4. Auditing of Contractor

Transgrid and Lumea ensure the Contractors satisfy expectations and requirements on performance objectives for carrying out any work on Transgrid and Lumea's Supply Networks and Transmission Line easements. The performance of Contractors is reviewed and audited through:

- Implementation Audits (Section 6.2.4.1)
- HSE System Audits (Section 6.2.4.2)
- Field Work Reviews (Section 6.2.4.3)

6.2.4.1. Implementation Audits

Implementation Audits are undertaken as a component of the CAR Audit when Transgrid or Lumea develops a new, or modifies a, Supply Network, or when a revision is undertaken of this ELCMP. An implementation audit schedule for the Supply Networks in this ELCMP is detailed in Appendix C.5. The scope covers the topics below:

- Inspection script compliance
- Compliance with corrective action
- OHS Records

- Monitoring/Measurement
- Training
- Emergency Procedures/Equipment
- Process Control
- Risk Management
- Environment
- Subcontracting & Purchasing

The implementation audits are described in detail in Section 5.16 of the **VBMP**

6.2.4.2. HSE System Audits

Inspection of contractor health and safety compliance is performed concurrently with easement inspections. Transgrid or Lumea Easement Maintenance representatives will accompany the contractor to undertake site-based HSE observations and verification activities at each inspection activity. HSE findings, observations and identified non-conformances are recorded in an inspection form at the time of the inspection to ensure accurate documentation.

Non-conformances are shared with the contractor.

HSE System audits are completed by the Health, Safety, and Environment group in accordance with the D2014/19387 Health, Safety and Environmental Audit and Assurance Procedure. The first line of assurance seeks to verify that operational and field-level controls are implemented and effective.

6.2.4.3. Field Reviews

The Easement Maintenance team personnel perform a field review of every easement inspection to verify that activities being undertaken by internal staff or contractors are performed in accordance with approved scopes, specifications, procedures, and quality requirements in compliance to *the Code*. Transgrid and Lumea Easement Maintenance representatives will conduct site-based reviews of completed and in-progress work, assess workmanship standards, and identify any defects, non-conformances or OFIs. Findings from the reviews are documented in a prescribed field review form at the time of inspection and any OFIs or non-conformances are shared with the contractor.

The appointed Easement Maintenance team member performing the review must have the following minimum competencies:

- Certification to AHC30824 Certificate III in Arboriculture
- Minimum experience level of three years

Further details of system reviews are included in Section 6.8.2.2 of the **ESMS**.

6.2.4.4. Management Responsibilities

The Contractor must plan and document its required inspections and verifications of work performed by the Contractor and any Sub-Contractors to ensure quality of work. Additionally, the Contractor must submit Field Progress Reports as required, detailing plant on site, personnel on site, work completed, expenditure details and weather conditions including any man hours lost to wet weather. Unannounced site conformance inspections will be undertaken periodically throughout the term of the contract. Non-

conformances that are identified during audits and inspections will be notified by the issue of Corrective Action Requests (CARs) or Non-Conformance reports (NCs). CARs and NCs will be recorded in the ARMS for monitoring and tracking closure.

Health, safety, and environmental performance reports, including incident statistics, are submitted by the Contractor during the performance of the work under the Contract on a monthly basis. The reports are made available on request to Transgrid and Lumea. The following will also be maintained by the Contractor and made available on request:

- Hours worked by the Contractor and its sub-Contractors on a monthly basis.
- Inspection reports, audit reports, and any non-conformances identified.
- Incident statistics (including incident frequency rates and environmental incidents).
- Hazard statistics.
- Risk Assessments conducted.
- Incident investigation reports.
- Records and minutes of Health and Safety meetings and toolbox meetings.
- Induction and training records.
- Safety equipment records.
- Records of any complaints received and action taken.

7. Monitoring and review

7.1. Required qualification to implement this ELCMP (Regulation 9(4) (p))

7.1.1. Safety Qualifications

All Transgrid and Lumea staff, including Contractors must be trained and achieve the necessary authorisation level under the [D2025/00007 Safe Work Handbook Victorian Assets](#) (SWHVA) and Environment Authorisations to attend to energised equipment or work near powerlines. The SWHVA Manager has checked the compliance of the SWHVA against the Blue Book. Clearance comparison between Blue Book and SWHVA is provided in Appendix G. A plan has been developed to close identified gaps in a timely manner.

Specific technical qualifications required for job roles are listed in Section 7.1.2.

Transgrid has an integrated online Authorisation System (WSAT) that acts as the repository tool to store staff and Contractor's authorisations, qualifications, and competencies and ensure that they are available for review and audit by Transgrid and Lumea and flags any expired or the need of license renewal or training refresher. For outsourced services, these are covered by inclusion of relevant clauses into the engagement contract to ensure the competency of their staff is equivalent to the competency of Transgrid and Lumea's personnel. Contracts must contain specific clauses that will ensure contractors have the appropriate training and competencies for the roles relating to inspection activities on Transgrid and Lumea's Supply Networks and have authorisation granted by Transgrid and Lumea.

Contractors are required to be onboarded on the WSAT system and provide evidence of required training and qualification, prior to being assigned worker roles linked to authorisation. The onboarding process ensures the following activities are completed for each Contractor:

- Provision of corporate Health, Safety and Environmental (HSE) induction to all personnel as an e-learning module on the WSAT system.
- Provision of Site/Task specific HSE/Technical induction including any HSE procedures, information and expectations related to the works the Contractors perform.
- For providers that deliver first response service, familiarisation with the required site as well as induction on the emergency response management process and plan for the site(s).
- Transgrid SWHVA and Environmental Management training and relevant level of authorisations in place.
- Technical competency review and assessment of Contractor where required.

Transgrid and Lumea staff and Contractors are subject to performance reviews and refresher training to maintain competency and performance at the required levels. Competency of Contractors holding authorisations are assessed at no longer than three-year intervals and refresher training provided to restore competency where required. Non-conformances to authorisation requirements are addressed as per Section 7.1.3. Information on the safety training and auditing to manage safety qualifications for delivery of this ELCMP are provided in the [D2018/00674 Victorian Bushfire Mitigation Plan](#).

7.1.2. Technical Qualification

Transgrid and Lumea will engage Victorian-based easement Contractor's familiar with, and compliant with, ESV requirements. As part of Contractor management, Transgrid and Lumea will ensure the Contractors satisfy expectations and requirements on competencies for carrying out maintenance or any work on Transgrid and Lumea's Supply Networks. Transgrid and Lumea requires Contractors to have achieved mandatory qualifications, experience, and training. Information on the technical qualifications of competent staff and Contractors to ensure this ELCMP is implemented correctly, and the auditing to ensure they are competent is provided in the [D2018/00674 Victorian Bushfire Mitigation Plan](#).

Transgrid and Lumea engage with Victoria based easement and Transmission Line Contractors familiar with and satisfy ESV compliance requirements as stated in this plan. Transgrid and Lumea ensure that all inspectors have the following qualifications by specifying the requirement in its contracts. Transgrid and Lumea require staff and Contractors to have the following mandatory qualifications in the table below.

Table 15 Skills and Training Summary Guideline

Role	Qualification
Vegetation Roles	
Easement Assessor Worker (or Easement Assessor) (Appendix F)	UET20321 Certificate II in ESI - Powerline Vegetation Control
	Core Standard Units
	UETDRVC001 Apply work health and safety requirements for powerline vegetation control
	UETDREL002 Comply with environmental requirements
	UETDREL006 - Working safely near live electrical apparatus as a non-electrical worker.
	AHCMOM213 - Operate and maintain chainsaws

Role	Qualification
	UETDRVC009 Monitor vegetation control work in the vicinity of live electrical apparatus
	Mandatory elective units
	UETDRVC002 Assess vegetation in an electricity supply industry environment
	PUAWHS002 Maintain safety at an incident scene
	UETDRMP002 ESI safety rules for work on, near or in the vicinity of electrical apparatus
	AHCPCM204 Recognise plants
	CPCWHS1001 Prepare to work safely in the construction industry
Suitably Qualified Arborist	AHC30824 Certificate III in Arboriculture, which includes the AHCARB408 Perform a ground-based tree defect evaluation unit of competency, and has at least three years of field experience in assessing trees

Further details about roles and skills along with core and elective units refer to Appendix F. It is required that the Contractor will have a current certificate specifying satisfactorily completion of an approved training course in tree clearing and authorised as per *the Electricity Safety (General) Regulations 2019*.

Authorisation of staff and compliance to *Electricity Safety (General) Regulations 2019* is monitored through the WSAT system. At the commencement of works in Victoria, the Easement Maintenance team reviews the WSAT system to ensure all nominated staff have the required qualifications and that these are currently valid.

A worker's authorisation will not proceed until adequate information regarding qualification and training has been received. The system contains the following information to ensure workers are qualified, experienced, and trained and hold a valid and current qualification to implement this ELCMP. These include:

- Vegetation Skills and Training Matrix are modelled on the VESI matrix (to ensure competency personnel undertaking tasks related to Electric Line clearance). Note, Transgrid and Lumea are not part of VESI.
- Skills required to perform vegetation management safety at Transgrid's or Lumea's Supply Networks and easement.
- Staff details and their qualifications. It is the responsibility of the Contractor to maintain the currency of staff details, their qualifications and use of Registered Training Organisation (RTO). WSAT will be the repository tool that contains all the staff's competency detail.
- Processes relevant to the management of training records (initial and refresher).
- Induction and authorisation processes for all new ELC personnel.
- Authorisation details of staff, including Contractor staff, is maintained in WSAT.
- It is the responsibility of the Contractor to monitor the expiry date of their skills, which will trigger notifications to ensure the skills are updated before working for Transgrid or Lumea.
- Required training that is to be provided via an RTO.
- ELCMP induction.

All contractors authorised under the WSAT system are responsible for ensuring the training is up to date. Any outdated training will be flagged with the contractor. Prior to any works in Victoria, the Easement Maintenance team reviews the WSAT system to ensure all nominated staff have the appropriate and

current qualifications. The qualification and competency of contractors and relevant staff are verified prior to each vegetation management activity. These ongoing assessments verify competency, compliance and adherence to safety and quality requirements, ensuring personnel remain suitably qualified and capable of performing the work. Where assessments identify competency gaps or non-conformances, additional training or corrective actions will be undertaken.

7.1.3. Non-conformances to Authorisation Requirements

The Contractors are responsible for updating the training matrix of staff and monitoring competency requirements on the WSAT system to ensure they are compliant to the requirements listed in this ELCMP. The WSAT system is configured with a set of business rules to assess any uploads from Contractors to ensure that it aligns with the Transgrid and Lumea authorisation requirements. The WSAT system sends an automated notification to the Contractors regarding upcoming expiring competencies.

Contractors and relevant staff with non-conformances to authorisation requirements will not be issued authorisation and will be unable to perform works on the Transgrid and Lumea networks. Non-compliant staff will be expelled from site and disciplinary action undertaken. Transgrid and Lumea's response to such an event and the consequence to the Contractor will be remedied through the Contractor performance management processes and discussed by the responsible Maintenance Engineering Delivery Manager or delegate at Contractor review meetings. Corrective actions will be managed through the ARMS.

7.2. Dispute Resolution Procedure (Regulation 9(4)(r))

Transgrid and Lumea ensure that landowners' details and any access challenges and conditions are recorded against the property in Transgrid Spatial System (TSS). Landowners include public authorities including Councils. This information is maintained under Transgrid and Lumea's privacy policy. The intention is to minimise the occurrence of disputes by ensuring Transgrid, Lumea and our Contractors satisfy and overcome the landowners' and Council's access conditions and challenges. Refer to Section 4.4.1 for information on consultative process for landowners and Councils.

The easement maintenance scenarios that require cooperation with landowners and Councils are:

- Inspection and/or pruning of vegetation on easement.
- Inspection and/or pruning of Trees on/off easement.
- Urgent removal of trees when the tree either has fallen or become damaged and is to be removed to keep the MCS for a span of Electric Line as specified in *the ESELCR* and as assessed by a Suitably Qualified Arborist.

The letter to be issued in the above scenarios is attached in Appendix D.

For the first scenario, a dispute is likely to occur if the landowner or Council does not provide Transgrid access to Transgrid's or Lumea's easement to inspect and/or maintain the easement. In such instances, the field officer (Contractor representing Transgrid (and for Lumea under the Services Agreements) aims to resolve the dispute without escalation, by communicating Transgrid and Lumea's responsibility and authority to perform such work under the *Electricity Safety Act 1998*. If landowner or Council consent is still not received, the dispute is escalated to the Contractor's manager to involve Transgrid's Easement Maintenance Manager. The Easement Maintenance Manager will issue the letter prior to entering the land without landowner or Council permission to complete the required easement maintenance work before a

safety risk is realised. Division 3 of *the ESELCR* outlines requirements for notification, consultation and dispute resolution regarding Electric Line clearance works.

An outline of the content in the letter sent to targeted landowners and Councils requesting consent is listed below. The landowners or Councils of interest are owners or occupiers of the property when the tree is within the boundary of a private property, if the tree is on land that is contiguous to private property, or public authorities and the use of that property may be affected during the cutting or removal.

Transgrid and Lumea communicate their obligation under *the Act* to ensure the Transmission Line does not cause a safety risk to the landowner and general public. Consent, and any conditions, is received via email (community@Transgrid.com.au) or phone call (1800 222 537), which is then communicated to the Easements Manager. The Easements Manager then communicates the consent to the Contractor to complete work.

Where a landowner or Council wishes to complain the complaints policy is available at:

- [Ombudsman | Feedback & Complaints | Transgrid](https://www.transgrid.com.au/contact-us/feedback-and-complaints/)<https://www.transgrid.com.au/contact-us/feedback-and-complaints/>
- (Transgrid manage complaints for Lumea based on the Transgrid Complaints Policy under the Services Agreement detailed in Section 4.1.2)

Or Lumea may be contacted at:

- <https://www.lumea.com.au/contact-us/>

7.2.1. Inspection of vegetation or Trees on/off easement.

The letter will state when inspections start and duration of the inspections, the next steps in remediating any issues found and that Transgrid (and for Lumea under the Services Agreements) bears the cost of this work.

7.2.2. Pruning of vegetation or Trees on/off easement.

1. Where vegetation is on easement:
 - > The letter will state that Transgrid (and for Lumea under the Services Agreement) will be undertaking the vegetation or tree(s) pruning works in accordance with our easement terms, and states that it is at no cost to the landowner or Council. Images of the vegetation are attached to the letter.
2. Where vegetation or Tree(s) are off easement:
 - > The letter will state that Transgrid (and for Lumea under the Services Agreements) will contact the landowner or Council to obtain consent prior to pruning of vegetation or tree(s) and at no cost to the owner. Images of the vegetation or Tree(s) are attached to the letter. The next letter is issued when the landowner or Council refuses to provide consent.
3. Details of whether the vegetation or tree to be cut or removed is:
 - > On private or contiguous or public land.
 - > A tree of cultural or environmental significance.
 - > Listed in a planning scheme to be of ecological, historical, or aesthetic significance.
4. Details of the intended cutting or removal of trees.

5. Details of the impact that the intended cutting or removal may have on the landowner's or Council's use of their land during the cutting or removal. This only applies to landowners of private land.

7.2.3. Electricity Safety (Electric Line Clearance) Interim Regulations of 2025 Notice.

A formal notice under *the ESELCR* is sent to the landowner or Council when they cannot be contacted or refuses to provide consent for pruning of a tree(s). In accordance with *the Act*, Transgrid and Lumea are allowed to cut the tree(s) without landowner or Council permission as written notice is given to the landowner or Council. Transgrid and Lumea will provide a set timeframe to complete the required works.

Each notice will include requirements, such as safety information.

7.2.4. Details of the consultation procedure Transgrid and Lumea will follow.

1. Transgrid or Lumea's representatives contact details, including the contact details for all enquiries regarding vegetation and the intended cutting or removal of trees.
2. States the number of days on which, or a period during which, Transgrid or Lumea intends that the intended inspection, and/or cutting or removal will commence. The first day of which is:
 - a. After 14 days from the date of the notice; and
 - b. Less than 60 days from the date of the notice.
3. If no resolution is obtained, then a dispute/complaint can be lodged with the Energy and Water Ombudsman (Victoria) provided the complaint does not involve electrical safety or a breach of the Code of Practice. Complaints in these latter categories should be referred to Energy Safe Victoria.
4. Transgrid (and for Lumea under the Services Agreements) advises the landowner of Council to refer the matter to Energy and Water Ombudsman Victoria Advice for any dispute and provides the details on how to obtain access to [Transgrid Complaints and Enquiries Management Policy](#).
5. The notification requirements when a tree is on public land that is not privately owned is as follows:
 - a. The Council with jurisdiction of the land occupied by the Electric Line shall be provided with a written notice as per Section 4.4.2 unless the cutting or removal of vegetation is urgent in which case the cutting occur is accordance with Section 4.4.2).
 - b. The notice is to be published in a newspaper circulating generally in the locality of the land in which the tree is to be cut or removed. The notice will also be published on Transgrid's external website.
6. The notice must:
 - a. Describe the cutting or removal that Transgrid (and for Lumea under the Services Agreements) intends to undertake.
 - b. States the number of days on which, or a period during which, Transgrid (and for Lumea under the Services Agreements) intends that the intended inspection, and/or cutting or removal will commence. The first day of which is:
 - i. After 14 days from the date of the notice; and
 - ii. Less than 60 days from the date of the notice.
 - iii. If the 60 days expires and the intended cutting or removal of trees has not taken place, the affected stakeholder shall be re-notified.
 - c. A summary of Transgrid's dispute process is outlined in the Transgrid's Complaints Handling Policy, which is available on Transgrid's website.

Where written or published notice is issued under this Plan, works will not commence earlier than the first day (or the first day of the period) specified in the notice.

8. Change from previous revision

Table 16 Change from previous version

Revision No.	Approved By	Comment
1	Energy Safe Victoria	As per ESV Letter Ref: CM-9509, Approval Of Electric Line Clearance Management Plan This public version is identical to the full version with exception of removal of sensitive configuration information. As reviewed and approved by ESV 31 March 2021
4	Executive General Manager of Network	- As per ESV Letter Ref: CM-11390, 11515, ELCMP Evaluation CM-12236 - Added a description on the current process of recording the inspection outcomes on each span as part of the Supply Network inspection process and creating issues and defects with the appropriate defect coding in the relevant systems in section 4.6.4 - Changes in Vegetation Clearance section 4.6.2.2 - Previous clearance on the centreline of the structure has been corrected to start from the conductor resulting in the reduction of MCS but no actual impact on the actual amount of area of clearance. Added information for Line X1 and 060 in 4.6.3 to 4.6.5, Appendix A, Appendix C Other editorial changes: - Re-numbered sections, change in document template and format, fixed cross references. - Additional information on Berrybank Line 2 (BB2), aerial images, general SLD and location, - Update the current contact detail in section 5 Accountability. - Version has been reviewed by ESV per Letter Ref 12236-17 Dated 13 August 2024.
5	Executive General Manager of Network	- Update to reporting undertaken under this plan. - Changing description of 0X1/0X9 to X1/X9 - Changing of Table fonts to 9pt. - Some general formatting clean ups such as page breaks. - Update to position titles. - Update to Figure 5. - Incorporate changes from ESMS/Bushfire Mitigation Plan update ensuring alignment.
6 (Numbered 5)		- Include commitment to resubmit ELCMP to ESV for approval prior to implementation of any material change to the Supply Networks or processes covered in this ELCMP. - Update objectives and commitments to Act and Regulations to improve clarity. - Remove content relating to hazard trees and mention to Code Clause 9 . - Changes to Minimum Clearance space section. - Update 'native' to 'indigenous' and included in definition - Include threshold for filling out Environmental Checklist

Revision No.	Approved By	Comment
		- Additional wording on contractor competency and training - Additional information on inspection and maintenance approach - Update rectification timeframes from months to days and included action timeframe requirement - Update fuel load assessment and management approach - Added wording to stakeholder consultation and notification requirements Other editorial changes: - Update reference to Regulations - Update reference to Transgrid documents - Update emergency contract details
7		- Changes to MCS and fall-in trees and the management approach of vegetation along the MCS - Previous wording had one approach to MCS and did not differentiate between trees falling into the MCS with no impact to the conductor, and trees that could impact the conductor and cause a flashover. Included illustrative diagram to support the approach. - Changes to auditing and reviewing of code compliance, HSE and contractor competency. - Include definition of Suitably Qualified Arborists - Include trigger for fuel load reduction - Remove mention of VESI courses - Additional information on how personnel will be informed of the requirements of the ELCMP Other editorial changes: - Update broken links - Update revision number - Update reference document title This public version is identical to the full version with the exception of removal of sensitive configuration information.

9. References

Table 17 Document References

Referenced / Incorporated	Document Number (if applicable)	Document Name	Document Revision
Referenced	N/A	Electricity Safety Act 1998 (Victoria)	2024
Referenced	N/A	Electricity Safety (Electric Line Clearance) Interim Regulations 2025	S.R. No. 40/2025
Referenced	N/A	Electricity Safety (Management) Regulations 2019	2019
Referenced	N/A	Electricity Safety (General) Regulations 2019	2019
Referenced	N/A	Electricity Safety (Bushfire Mitigation) Regulations 2023	2023

Referenced / Incorporated	Document Number (if applicable)	Document Name	Document Revision
Referenced	N/A	Code Of Practice On Electrical Safety For Work On Or Near High Voltage Electrical Apparatus - Victorian Blue Book 2022	2022
Referenced	D2023/02153	Transgrid's Environmental Handbook	2021
Referenced	D2018/00673	Electricity Safety Management System (ESMS)	3
Referenced	D2016/00985	Environmental Assessment Framework	7
Referenced	D2023/01113	Environmental Assessment Framework - Victoria	0
Referenced	D2024/01413	Document and Records Management	0
Referenced	D2018/00674	Victorian Bushfire Mitigation Plan	5
Referenced	D2021/00073	AMS, ENSMS and ESMS Audit Plan	5
Referenced	D2014/18781	AMS, ENSMS and ESMS Audit Procedure	10
Referenced	D2014/19387	Health, Safety and Environmental Audit and Assurance Procedure	
Referenced	D2016/06839	Transmission Lines, Easement and Access Track Data Collection Procedure	4
Referenced	D2017/01717	Corrective Maintenance Process	2
Referenced	D2009/09991	Use of Pesticides	7
Referenced	D2020/00269	Non-Prescribed Assets Maintenance Plan	9
Referenced	D2003/2398	Maintenance Plan – Easement and Access Tracks	20
Referenced	D2016/11314	Authorisation to Work	12
Referenced	D2003/2422	Control Assurance Review (CAR)	12
Referenced	D2019/03823	HSE Incident Management	4
Referenced	D2020/01357	HSE External Notification of Incidents	1
Referenced	D2018/01241	Regulatory Incident Reporting Procedure	7
Referenced	D2015/07223	Health, Safety, Environment and Network Safety Communication and Reporting	10
Referenced	D2022/01901	ESV Reporting through OSIRIS	1
Referenced	D2025/00007	Safe Work Handbook Victorian Assets	3
Referenced	D2016/07962	Environmental Low Risk Checklist	6
Referenced	D2016/07964	Environmental Moderate Risk Checklist (General)	5
Referenced	D2017/07960	Environmental Moderate Risk Checklist (Vegetation Management)	6
Referenced	D2022/00546	Environmental Moderate Risk Checklist (Water Crossing)	2
Referenced	D2016/07961	Oil/PCB Transport Form	2

10. Attachments

Appendix A Easement information in TSS

D2020/00020, Electric Line Clearance Management Plan 2026-2031 (Public) Corporate Wide Procedure Revision 7

Appendix B TSS Spatial Datasets

Appendix C Asset Information

Appendix D Easement Works Notification Form

Appendix E Website/Newspaper Publication

Appendix F Vegetation Worker Skills and Training Matrix

Appendix G Clearance Comparison between Blue Book 2022 and SWHVA

Appendix A Easement information in TSS

A.1 Berrybank Transmission Lines

BBTS and BBW Network Assets are located approximately 50 km southwest of Ballarat, and 10 km north of Berrybank, Victoria. The connecting Transmission Line (approximately 7.5 km in length) runs southeast from BBTS to the BBW, following the alignment of Padgetts Lane. Land use along the alignment is predominantly private property, used primarily for agriculture, with cropping, sheep and cattle grazing observed.

The topography of the site is generally flat with gently undulating countryside. A 5m wide access track is provided to BBTS from Willowvale Road, Mount Bute.

In broad terms, the assets that are within the scope of this plan are:

- Substation equipment.
- Property under the control of Lumea.
- Secondary systems, including metering systems.
- Transmission Line and associated fittings and fixtures.
- Easement.

For the operation of BBTS, Lumea (supported by Transgrid under the Services Agreement) interfaces with another major electricity company (MEC) AusNet Services. For the operation of BBW, Lumea (supported by Transgrid under the Services Agreement) interfaces with the windfarm generator Union Fenosa. Appendix C contains more information on the operational interface between these connected parties.

BBTS, BBW and Line BB1/BB2 are on HBRA based on the spatial data provided by a Fire Control Authority to Transgrid's Delivery Services and Strategy Enablement Group, this can be seen in Figure 2.

A.1.1 Berrybank Terminal Station (BBTS)

The Berrybank Terminal Station is connected to the existing 220 kV Transmission Network, specifically at the Transmission Line that runs between Terang and Ballarat Terminal Stations. BBTS is located at Mount Bute, approximately 1.5 km off Lismore-Scarsdale Road or approximately 1.4 km off Willowvale Rd.

A.1.3 Berrybank 220/33kV Windfarm Terminal Station (BBW)

The Transmission Line terminates at a gantry, which then connects to two power transformers. The Berrybank Substation is strategically located to connect to the Berrybank Wind Farm via 33 kV underground cables.

The neighbours, in order of increasing distance from the BBW are as follows:

- BBW is located off Padgetts Lane.
- The town Lismore, which is approximately 20 km southwest of BBW.

A.1.2 220kV Line BB1/BB2

The 220 kV double circuit Transmission Line connects the BBW to the BBTS to enable electricity to flow from the Berrybank Wind Farm to the Victorian Transmission Network.

The line is approximately 7.5 km long on a 50 m easement. The structures used are of double circuit single steel pole.

The approximate location of the BBW and BBTS-BBW is shown in the table below.

Line BB1/BB2: The easting (m) and northing (m) of the first and last structure is provided in the below table. Most of the Transmission Line is in parallel with Padgetts Lane, in the road corridor, which is taken into careful consideration to eliminate, if not possible to reduce to as far as practicable, the bushfire risk during the design of the line.

Table 18 Berrybank Structure Easting and Northing

Line	Structure Number	Easting (m)	Northing (m)
BB1	1	715808	5803926
BB1	24	720698	5799016
BB2	1A	720790	5803922
BB2	24A	720671	5799012

A.2 Line X1/X9 Red Cliffs to Buronga 220 kV (Red Cliffs to border)

The Transmission Line X1/X9 is a new 220 kV Transmission Line that connects Buronga Substation in NSW with Red Cliffs Terminal Station in Victoria, constructed as part of Project Energy Connect.

The line section that sits in Victoria is approximately 1.5 km long (out of 23.9 km length of full line). The structures use dual circuit steel poles holding both the X1 and X9 line on each structure. The line crosses over Murray river, across Kings Billabong Park, and terminates at Red Cliffs Terminal Station.

This Supply Network's location is classified as an LBRA for two of its spans. Transgrid has opted to apply the higher standard to these spans, treating them the same as the other spans located within the HBRA.

Table 19 Line X1/X9 Structure Easting and Northing

Structure Number	Easting (m)	Northing (m)
Ref Cliffs Gantry (SWT3170000) AusNet Services owned	614015.6	6204827.8
63 (SWT3408063) Transgrid owned	614066.05	6204850.3
59 (SWT3408059) Transgrid owned	614778.72	6205883.6

A.3 Line 060 Jindera to Wodonga 330 kV (Span 322-323)

Line 060 is a 330 kV Transmission Line that connects Transgrid – Jindera 330/132kV Substation to the AusNet Services network in Victoria and forms an electricity interconnector between Victoria and NSW. This line has been operational since 1980. It is operated as part of the NSW Transmission Network for which Transgrid is the TNSP and NSW License holder. The section of this Supply Network that is located in Victoria is exempt from the requirement for an operating licence in Victoria as detailed in the ESMS.

Table 20 Line 060 Structure Easting and Northing

Structure Number	Easting (m)	Northing (m)
323 (SWT1174323) (AusNet Services owned structure)	1023576.38	5992945.3
322 (SWT1174322)	1023739.52	5993229.5

Appendix B TSS Spatial Datasets

Table 21 TSS Spatial Datasets

Type of Dataset	Source	Source Type	Implementation status in TSS
Indigenous Vegetation	Indigenous vegetation Native Vegetation - Modelled 2005 Ecological Vegetation Classes (with Bioregional Conservation Status) - Dataset - Victorian Government Data Vic Indigenous Vegetation regulation https://discover.data.vic.gov.au/dataset/native-vegetation-regulation-location-2017 Native Vegetation Regulation Location (2017) - Dataset - Victorian Government Data Vic Tree Density Vicmap Vegetation - Tree Density Polygon - Dataset - Victorian Government Data Vic	Shapefile	Available via SOM/GSA
Council planning scheme overlay for historical, cultural, environmental, or aesthetic significance	Vicmap Planning - Planning Scheme Overlay History Polygon - Dataset - Victorian Government Data Vic	Shapefile	Available via SOM/GSA
Heritage register National / Commonwealth / World Heritage is already available	Victorian Heritage Register - Dataset - Victorian Government Data Vic	WMS feed	Available via SOM/GSA
Victorian Aboriginal heritage register	https://achris.vic.gov.au/#/dashboard Alternatively, use publicly available sensitivities at: https://achris.vic.gov.au/#/onlinemap	Online Data	Application was denied. Data not publicly available in appropriate format.
Threatened flora & fauna list	Victoria's Threatened List and Process List in accordance with the Flora and Fauna Guarantee Act 1988 Victoria's Threatened List and Processes List	Online Data	
Flora and fauna as listed as threatened with a status of 'vulnerable', 'endangered' or 'critically endangered'.	Flora and Fauna Atlas data Victorian Biodiversity Atlas The Atlas of Living Australia	Unknown	Available via SOM/GSA
Threatened invertebrate fauna list	Victorian Biodiversity Atlas The Atlas of Living Australia	Unknown	Available via SOM/GSA
Threatened vertebrate fauna list.	Victorian Biodiversity Atlas The Atlas of Living Australia	Unknown	Available via SOM/GSA

Appendix C Asset Information

C.1 Plan and Profile

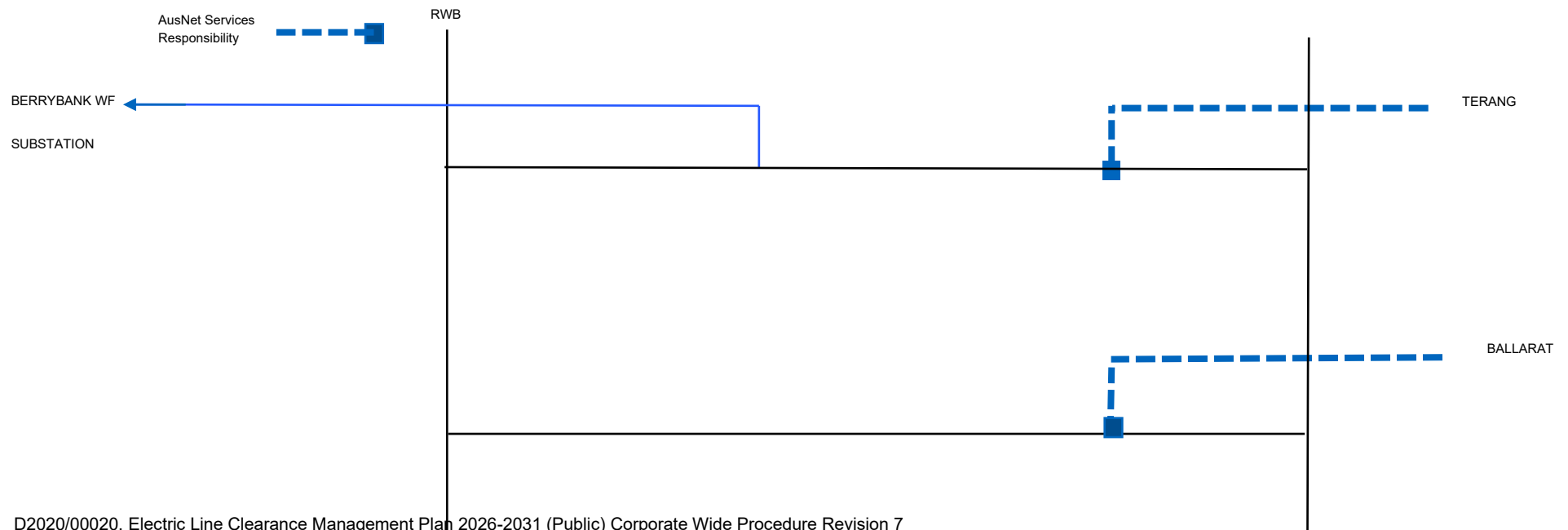
This information is not available in the public version of this plan.

C.2 Operational Boundary Points

C.2.1 Berrybank

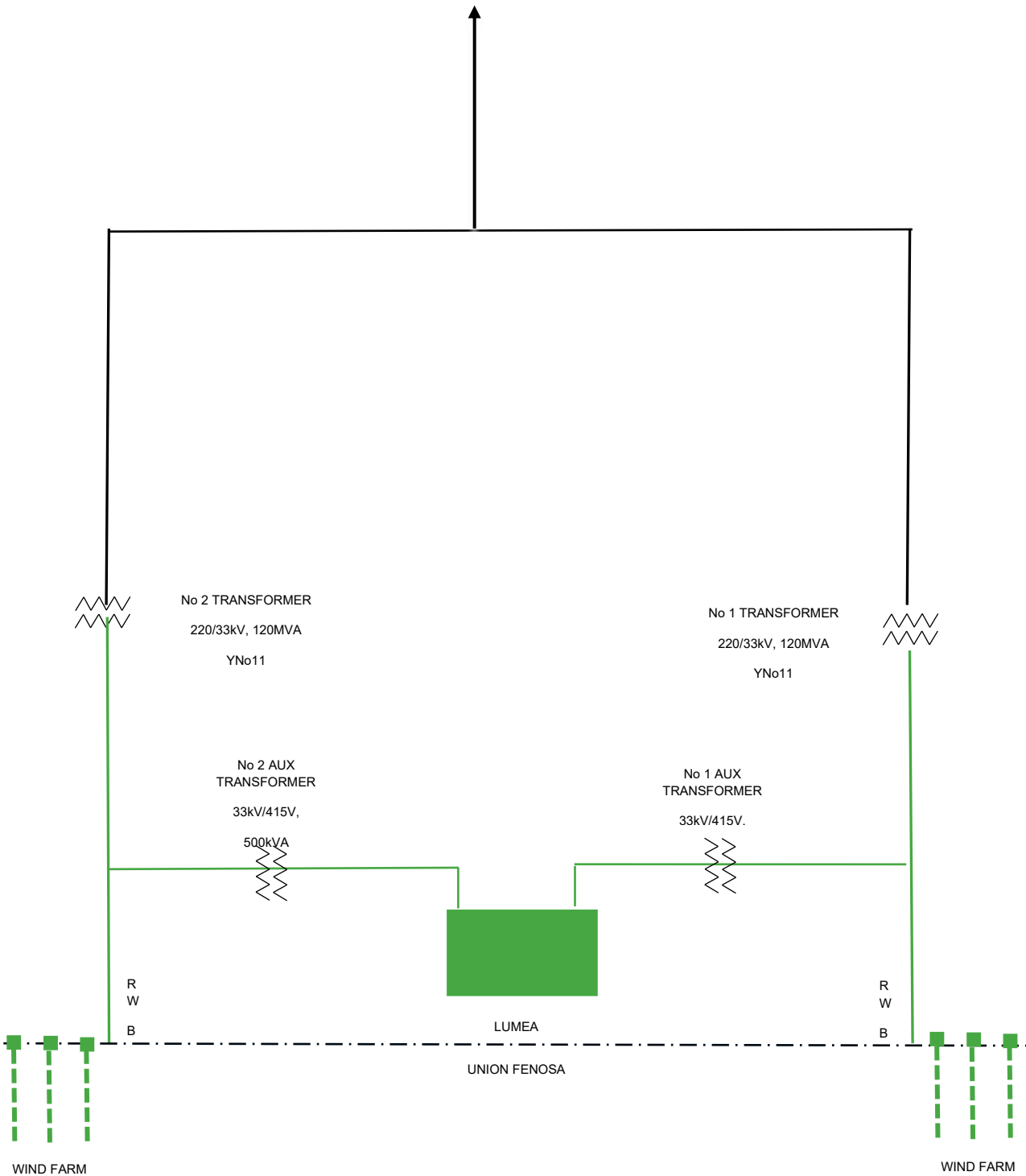
The specific operational interface points at BBTS and BBW are shown in Figure 9 and Figure 10, respectively.

Figure 9 Operational Boundary Points between Lumea and AusNet Services (220 kV lines)



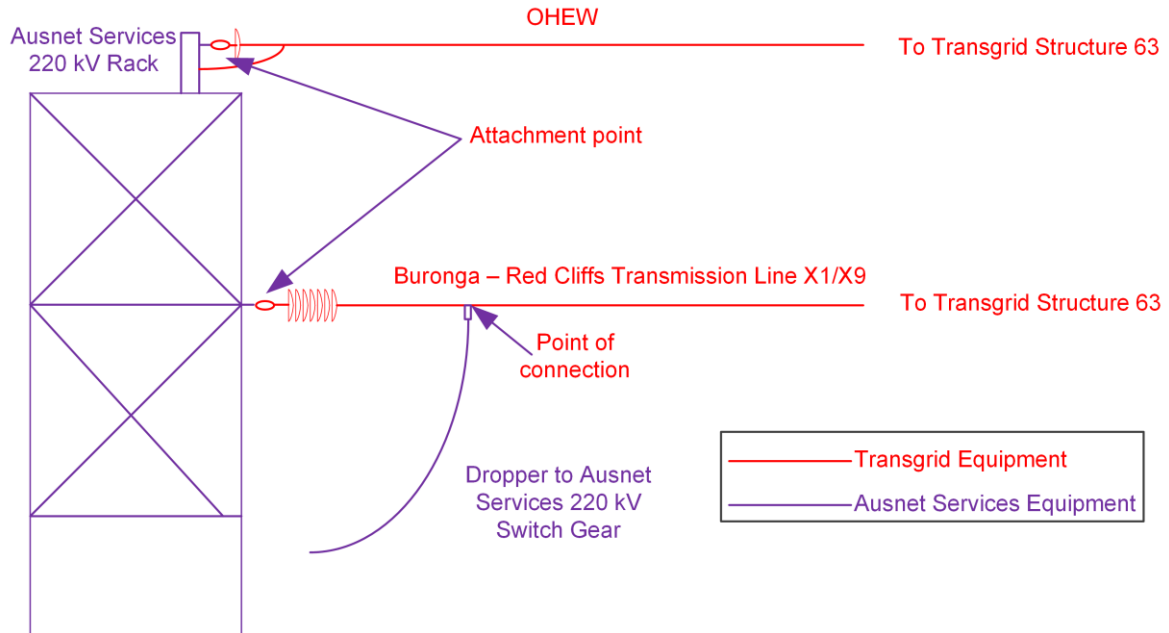
D2020/00020, Electric Line Clearance Management Plan 2026-2031 (Public) Corporate Wide Procedure Revision 7

Figure 10 BBW Operational Boundary Points between Lumea and Union Fenosa (33kV) – As Built Date 21 July 22



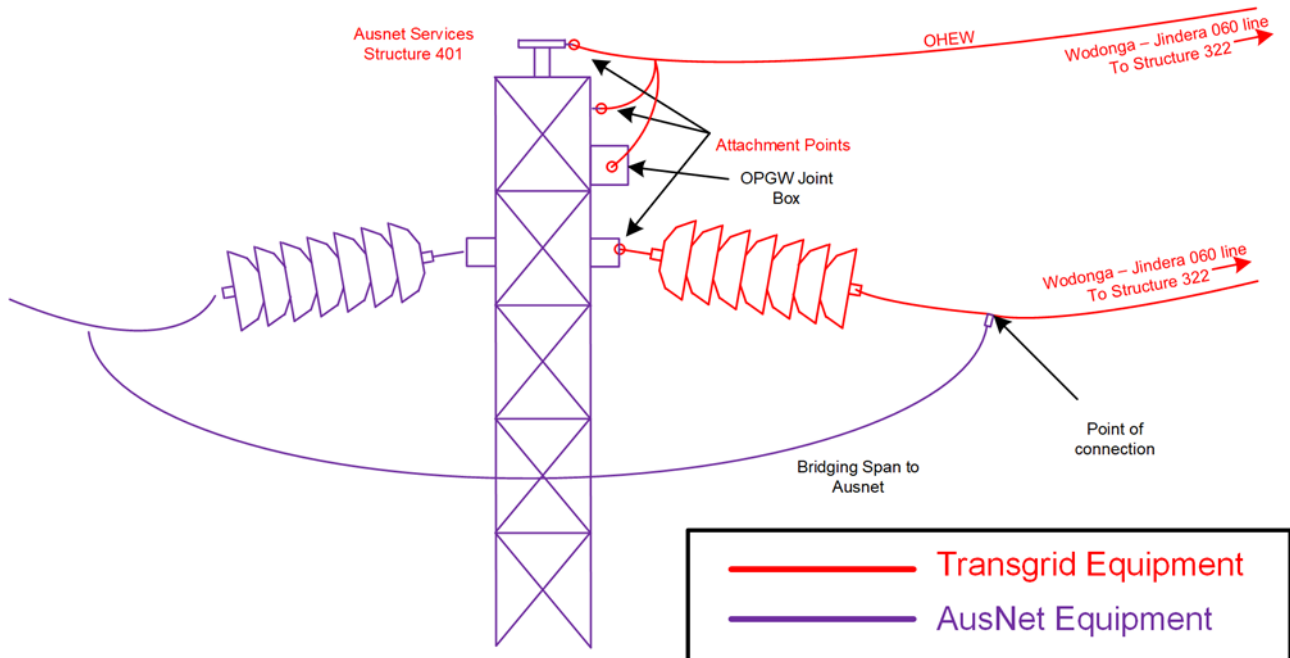
C.2.2 Operational Boundary for Line X1/X9

Figure 11: Line X1/X9 operational boundary



C.2.3 Operational Boundary for Line 060

Figure 12 Line 060 operational boundary



C.3 Maintenance Task Frequency

The maintenance tasks and their frequency for Line BB1/BB2 is specified in the D2020/00269 Non-Prescribed Assets Maintenance Plan.

Meanwhile the task and frequency for Line X1/X9 and 060 is specified in the D2003/2398 Maintenance Plan – Easement and Access Tracks.

An extract of the maintenance requirement for the easement is provided in the table below.

Table 22 Easement Maintenance Requirement

Customer	EAM Location and. Line Number	Structure Type	Section	Easement Inspection
Berrybank – Global Power Generation	SWT3379, Line BB1/BB2	DC SP	Berrybank 220 kV connection	Yearly
Prescribed	SWT3170, Line X1/X9	SC ST	Red Cliffs Buronga 220 kV connection	Yearly
Prescribed	SWT1174, Line 060	SC ST	Jindera Wodonga 330 kV connection	Yearly

C.4 Key Documents

Table 23 Key Documents

Document	Description
D2003/2398 Maintenance Plan – Easement and Access Tracks	Transgrid and Lumea's standard easement inspection and maintenance activities that details scope and frequency applicable to all assets in Transgrid's and Lumea's Supply Networks.
D2020/00269 Non-prescribed Assets Maintenance Plan	Non-standard easement inspection and maintenance activities, scope, and frequency, if any, applicable to BBTS-BBF.
D2016/06839 Transmission Line, Easement and Access Track Data Collection Procedure	Defines a systematic approach to identify and record easement data during inspection and maintenance activities for easements.
D2014/18781 AMS, ENSMS and ESMS Audit Procedure	Describes the procedure to audit key artefacts in the AMS, ESMS, and ELCMP that demonstrate our compliance to <i>the Act</i> and <i>ESELCR</i> .
D2003/2422 Control Assurance Review (CAR)	Describes the process to be used by Asset Management in conjunction with the Works Delivery group to plan, schedule, and carry out targeted reviews (CAR) related to the operations and maintenance component of the asset lifecycle.
Environment Effects Statement (EES) or other environmental approvals and permits	Not required for Berrybank, Line X1/X9 and 060.

C.5 Implementation audit

Table 24 Implementation Audit

Scope	Audit Type – Desktop/Field	Completion Due Date		
		Berrybank	Line X1/X9	Line 060
Cutting or removing habitat for threatened flora and fauna with a status of 'vulnerable', 'endangered' or 'critically endangered'. Vegetation listed in a planning scheme to be of ecological, historical, or aesthetic significance. Heritage Register. Threatened Invertebrate Fauna List Threatened Vertebrate Fauna List	Desktop	Energisation	Existing. The due diligence was completed as part of the X9's construction planning and new deed obtained with Vic Parks	Existing
Victorian aboriginal heritage register	Desktop	Practical Completion	Existing	Existing
Vegetation easement training and authorisation in the WSAT, Pegasus (refer to Section 7.1.2).	Desktop	Energisation	Existing	Existing
Implementation of this ELCMP and the Maintenance Plans	Desktop and Field	2021 (completed)	TBA	TBA
Vegetation Clearance as part of Bushfire Mitigation Management Audit	Desktop and Field	2021 (completed)	TBA	TBA

Appendix D Easement Works Notification Form

See next page.

ABN 70 250 995 390
180 Thomas Street, Sydney
PO Box A1000 Sydney South
NSW 1235 Australia
T (02) 9284 3000
F (02) 9284 3456

Customer Name:	
Address:	
Contact No:	
Line/Location:	
Anticipated Work Date:	
Last Inspection Date (Urgent Cutting):	

Dear Property owner,

Re: Vegetation Maintenance Work

Transgrid manages and operates high-voltage transmission network assets in Victoria, NSW, and the ACT. Protecting the safety of the public and our staff is our highest priority as we deliver reliable and efficient transmission services to the communities we serve.

Under the Victorian *Electricity Safety Act 1998* and the *Electricity Safety (Electric Line Clearance) Interim Regulations 2025*, Transgrid has the responsibility and authority to maintain vegetation both on and off the Transmission Line easement to protect the electricity infrastructure.

Recent inspections of the Transmission Line easement on your property or Council property (public land) have identified vegetation that requires management to meet regulatory requirements. Vegetation, predominantly trees and tall shrubs with the potential to intrude into the minimum required vegetation clearances - must be managed clear of electricity assets to prevent bushfires or other risks.

All Transgrid employees and their Contractors are issued with identification as authorised representatives.

☐	Pruning Works
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Pruning works will be carried out in accordance with the regulatory requirements and to Australian Standard AS 4373:2007 'Pruning of Amenity Trees' as far as practicable.

No action is necessary by you unless you are concerned about the vegetation being pruned. If you require consultation, please contact Transgrid on the number provided below or send us an email.

☐	Vegetation Removal
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Whilst pruning is the preferred option, in some cases, it may not be possible to achieve the required clearances without compromising the vegetation's shape, character and health. In these instances, a complete removal is the preferred management practice. No mature vegetation will be removed without

prior consultation with you. *Where vegetation exists in a hazardous state and poses a threat to electrical assets, Transgrid or Lumea may undertake immediate preventative works without prior notice.*

Please contact Transgrid on the number provided below or send us an email.

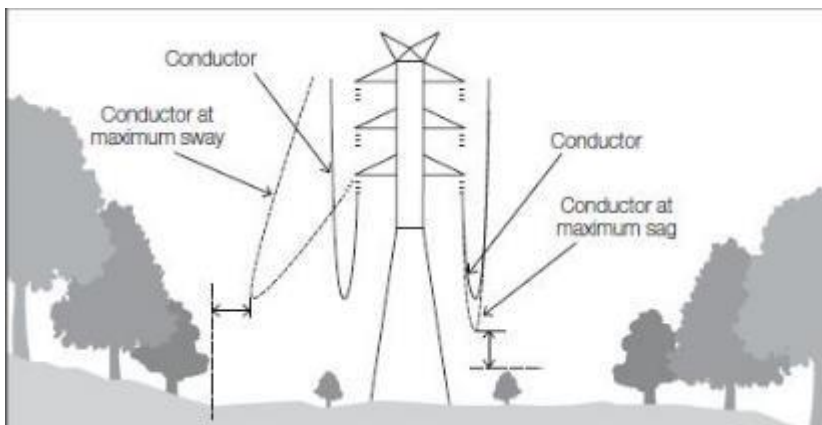
Provide a diagram that shows the tree and where the electric line is in relation to the tree, and where the tree will be cut. See the Code, Clause 16(5)(iii).



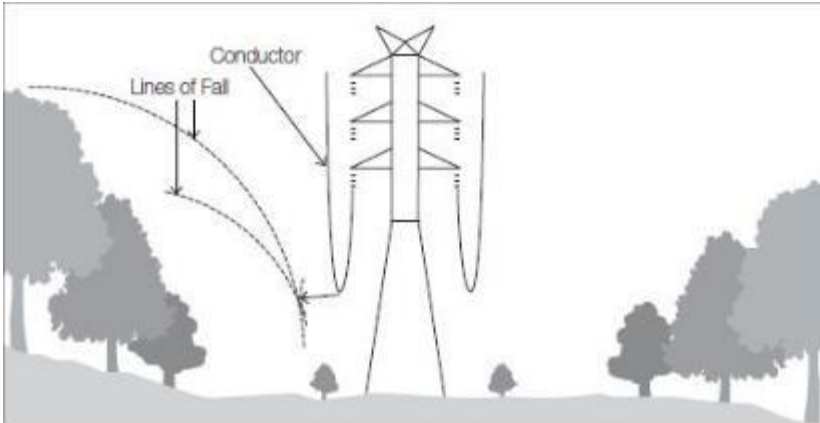
Access

Transgrid or Lumea requires access to your property, Council, or public land to undertake the proposed works to maintain the minimum required clearance spaces. The diagrams below illustrate how trees may be pruned or removed to protect electricity infrastructure. Please contact Transgrid on the number provided below or send us an email.

End View of the Transmission Line



Trees Adjacent to the Transmission Line



Vegetation of Significance

Transgrid or Lumea consults with landowners and local, State (including Councils), and Federal Government agencies to identify vegetation of significance located within the area of its network assets.

Transgrid or Lumea will communicate if a tree has cultural or environmental significance or is listed in a planning scheme to be of ecological, historical, or aesthetic significance and the actions intended to manage it.

Provide details of the tree's significance.



Debris Management

Vegetation (branches) that have been pruned or removed will be cleared away as soon as practicable. Where safe to do so, larger limbs or logwood will be cut into manageable lengths and remain onsite (non-urban areas only). All stumps will be cut at ground level where practicable. If any chemical treatment (herbicide application) is undertaken, you will be notified of any potential impact.



Urgent Cutting- due to Emergency/Fault/Storm

Where vegetation exists in a hazardous state and poses a threat to electrical assets, because of an Emergency, Fault or Storm event, Transgrid or Lumea may have to undertake urgent preventative works without prior notice.

It may be the responsibility of the owner, council, or other government authority of the vegetation (where it existed) to dispose of it. Where possible you will be advised of the locations where you are responsible for the disposal of vegetation that Transgrid or Lumea has actioned.

Training of Employees

All personnel involved in vegetation management works have been suitably trained in relation to the task they are performing. Transgrid and Lumea utilise authorised and trained Contractors to carry out these works.

Easement Planting Restrictions

Transgrid and Lumea strongly encourages only planting of low growing vegetation on the easement to reduce the need for ongoing inspections and maintenance. Restrictions may be placed regarding the planting of vegetation within the transmission easements on your land.

For any advice regarding the planting of vegetation on or adjacent to transmission easements, or any other questions or concerns regarding any matter stated above, please contact our Community Information Line on 1800 222 537 or via email at community@Transgrid.com.au.

Transgrid and Lumea has procedures for resolving disputes relating to Electric Line clearance works. You can access them at <https://www.transgrid.com.au/safety/network-safety/> as well as other resources at <https://www.transgrid.com.au/safety/community-safety/>

Thank you in advance for your cooperation.

Yours faithfully

Transgrid Community Relations

Appendix E Website/Newspaper Publication

Notification of urgent cutting works (sample):



Electric Line Clearance – Notification of Urgent Cutting Works

As part of our obligation to keep powerlines clear of vegetation as per the Electricity Safety (Electric Line Clearance) Interim Regulations 2025 we have identified trees that require pruning or removal in <insert location>.

These works are proposed to take place within, and no later than, 31 days of this notice.

For further information relating to Electric Line Clearance please contact Transgrid and Lumea on 1800 222 537 or community@transgrid.com.au noting that your enquiry is regarding proposed vegetation clearance in your area.

Appendix F Vegetation Worker Skills and Training Matrix

Table 25 Vegetation Worker Skills and Training Matrix

		Qualification / Competency Standard Unit (CSU) number	Suitably Qualified Arborist	Assessor	Assessor Trainee	Chipper Operator	Cutter working at Ground Level	Cutter working at Ground Level Trainee	Cutter working from EWP	Cutter working from EWP Trainee	Ground Based Plant Operator	Herbicide worker	Mechanical tree trimmer / Hedger	Mechanical tree trimmer / Hedger	Tree Climber	Tree Climber Trainee
	Qualifications															
	Certificate II in ESI - Powerline Vegetation Control	UET20321		M			M		M				M		M	
	National Certificate III in Arboriculture	AHC30824	M ²													
	Licence															
	High Risk Work Licence - Boom-type Elevating Work Platform (WP)								M	C						
	Core Competency Standard Units															
	Apply work health and safety requirements for powerline vegetation control	UETDRVC001		M	C		M	C	M	C			M	C	M	C
	Comply with environmental requirements	UETDREL002		M	C		M	C	M	C			M	C	M	C
	Monitor vegetation control work in the vicinity of live electrical apparatus	UETDRVC009		M	C		M	C	M	C			M	C	M	C
	Operate and maintain chainsaws	AHCMOM213		M	C		M	C	M	C	C		M	C	M	C
	Working safely near live electrical apparatus as a non-electrical worker	UETDREL006		M	C		M	C	M	C			M	C	M	C
	Elective Competency Standard Units															
	Access trees for inspection	AHCARB322													M	C
	Apply chemicals under supervision	AHCCHM201										M				
	Assess vegetation in an electricity supply industry environment	UETDRVC002		M	C											
	Control vegetation in the vicinity of live electrical apparatus from an elevated work platform	UETDRVC004							M	C						

² Arborist must have a minimum of 3 years' experience in addition to the qualification.

		Qualification / Competency Standard Unit (CSU) number	Suitably Qualified Arborist	Assessor	Assessor Trainee	Chipper Operator	Cutter working at Ground Level	Cutter working at Ground Level Trainee	Cutter working from EWP	Cutter working from EWP Trainee	Ground Based Plant Operator	Herbicide worker	Mechanical tree trimmer / Hedger	Mechanical tree trimmer / Hedger	Tree Climber	Tree Climber Trainee
	Control vegetation in the vicinity of live electrical apparatus from ground level	UETDRVC005					M	C								
	Control vegetation in the vicinity of live electrical apparatus from within the tree	UETDRVC006													M	C
	Control vegetation using pruning techniques	UETDRVC007					M	C	M	C			M	C	M	C
	Fell Small Trees	AHCPM205					M	C	C						C	
	Licence to operate a boom-type elevating work platform (boom length 11 metres or more)	TLILIC0005							M	C						
	Maintain safety at an incident scene	PUAWHS002		M	M	M	M	M	M	M	M	M	M	M	M	M
	Operate a mobile chipper/mulcher	FWPHAR2208				M										
	Operate machinery and equipment	AHCMOM304				M										
	Perform a ground-based tree defect evaluation	AHCARB408	M													
	Perform rescue from within a tree in the vicinity of live electrical apparatus	UETDRVC010													M	C
	Recognise plants	AHCPM204		M	C		C	C	C	C	C	C	C	C	C	C
	Use specialised plant to cut vegetation above ground in the vicinity of live electrical apparatus	UETDRVC011											M	C		
	Initial training															
Initial training	ESI safety rules for work on, near or in the vicinity of electrical apparatus	UETDRMP002		M	M	M	M	M	M	M	M	M	M	M	M	M
	Prepare to work safely in the construction industry	CPCWHS1001		M	M	M	M	M	M	M	M	M	M	M	M	M
Frequency	Training															
1 Year	Perform elevated work platform-controlled descent escape	UETDRMP004							M	C						
1 Year	Perform elevated work platform rescue	UETDRMP005							M	C						

		Qualification / Competency Standard Unit (CSU) number	Suitably Qualified Arborist	Assessor	Assessor Trainee	Chipper Operator	Cutter working at Ground Level	Cutter working at Ground Level Trainee	Cutter working from EWP	Cutter working from EWP Trainee	Ground Based Plant Operator	Herbicide worker	Mechanical tree trimmer / Hedger	Mechanical tree trimmer / Hedger	Tree Climber	Tree Climber Trainee
1 Year	Perform rescue from within a tree in the vicinity of live electrical apparatus	UETDRVC010													M	C
1 Year	Provide cardiopulmonary resuscitation	HLTAID009		M	M	M	M	M	M	M	M	M	M	M	M	M
1 Year	Provide first aid in an ESI environment	UETDRMP010		M	M	M	M	M	M	M	M	M	M	M	M	M
1 Year	Safe Approach Distances - Vegetation Work			M	M	C	M	M	M	M	C	C	M	M	M	M
2 Yearly	Health Safety and Environment Training			M	M	M	M	M	M	M	M	M	M	M	M	M
3 Yearly	Control traffic with stop-slow bat	RIIWHWS205E		C	C	M	M	M	M	M	C	M	M	M	M	M
3 Yearly	Implement traffic management plan	RIIWHWS302E		C	C	M	M	M	M	M	C	M	M	M	M	M
3 Yearly	Manual Handling			M	M	M	M	M	M	M	M	M	M	M	M	M
3 Yearly	Safe to Approach SWER			C	C	C	C	C	C	C	C	C	C	C	C	C
3 Yearly	Environmental Authorisation			M	M	M	M	M	M	M	M	M	M	M	M	M
	Authority Training															
3 Yearly	Apply access authority procedures to work on or near electrical apparatus	UETDRMP001							C							
3 Yearly	Enter Enclosures			C	C						C					
3 Yearly	Make Application for								C							
	Other															
	ESI Worker Card		M	M	M	M	M	M	M	M	M	M	M	M	M	M
	Network Operator Induction		M	M	M	M	M	M	M	M	M	M	M	M	M	M

Legend	
M	Mandatory
C	Conditional - a person may be required to have this Qualification, Licence, Competency Unit, or training for the works being performed.

Appendix G Clearance Comparison between Blue Book 2022 and SWHVA

All clearances are in meters. All Transgrid and Lumea personnel must be either Authorised by SWHVA or instructed by Authorised person. Below is the comparison of the Safe Approach Distance (SAD) from Blue Book section 6.2 to 6.4 against Transgrid's SWHVA, which shows to be the same for most operating AC Voltage or slightly greater, or conservative at different scenario as highlighted in red.

Table 26 Clearance Comparison – Safe Approach Distance - Instructed or Authorised Persons

Nominal phase to phase AC voltage (kV)	Blue Book Section 6.2 Table 1 (m)	SWHVA (m)
6.6	0.7	N/A
11	0.7	0.7
22	0.7	0.7
33	0.7	0.7
50	0.75	N/A
66	0.9	1
110	1	N/A
132	1.2	1.2
220	1.7	1.8
275	2.3	2.3
330	2.7	3
400	3.3	N/A
500	3.6	3.9

Table 27 Clearance Comparison – Safe Approach Distance - for vehicles under instructed or authorised persons.

Nominal phase to phase AC Voltage (kV)	Blue Book Section 6.3 Table 3 (m)	SWHVA (m)
Low voltage	0.6	N/A
HV up to and including 33	0.7	0.7
50	0.75	N/A
66	1	1
110	1	N/A
132	1.2	1.2
220	1.8	1.8
275	2.3	2.3
330	3	3
400	3.3	N/A
500	3.9	3.9

Transgrid or Lumea do not utilise insulated plant or treat an insulated mobile plant as uninsulated. All mobile plant would require a Risk Assessment which then determines whether a mechanical restrictions or safety observer is required. If none of the two is available, an outage will be planned to allow for safe work. Refer to the table on the next page for the list of Safe Approach Distance for a mobile plant (whether insulated or not insulated and must be utilising either restrictive device or safety observer as per a RA).

Table 28 Clearance Comparison – Safe Approach Distance – Uninsulated Mobile Plant operated with a safety observer or restrictive devices.

Nominal phase to phase AC voltage (kV)	Blue Book Section 6.4 Table 4 (m)	SWHVA (m)
Low Voltage	1	N/A
HV up to and including 33	1.2	1.2
50	1.3	N/A
66	1.4	1.4
110	1.8	N/A
132	1.8	1.8
220	2.4	2.4
275	3	3
330	3.7	3.7
400	4	N/A
500	4.6	4.6