2020 - 2021 Electric Line Clearance (Vegetation) Management Plan

Transmission Operations Australia TOA (Elaine) / TOA2 (Ararat)

Transmission Operations Australia

June 11, 2020

Administrator: Hugh Vickers-Willis

Document No: V7

2020 - 2021 Electric Line Clearance (Vegetation) Management Plan

Transmission Operations Australia TOA (Elaine) / TOA2 (Ararat)

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1 PLAN INTRODUCTION

1.1 PLAN APPROVALS

Approved By

11/06/2020

Hugh Vickers-Willis
Head of Vegetation Management

Date

Endorsed By

Eric Lindner
CEO Transmission Operations Australia and Transmission Operations Australia 2 Pty Ltd

11/06/ 2020

Date

Document Revision History			
Version No.	**Revision Summary**	**Reviewer/Approver**	**Date**
1	Submission to ESV	Wayne Evans / Matt Thorpe	26 March 2018
2	Minor updates to following ESV evaluation	Wayne Evans	02 August 2018
3	Policy updated regarding Inspection dates and timeframes	Wayne Evans	16 August 2018
4	Submission to ESV	Hugh Vickers-Willis	**28 March 2019**
5	Revised to address ESV comments	Hugh Vickers-Willis	**12 June 2019**
6	**Submission to ESV**	**Hugh Vickers-Willis**	**30 March 2020**
7	**Revised to address ESV comments**	**Mike Tshaikiwsky / Hugh Vickers-Willis**	11 June 2020

1.2 PLAN ALTERATIONS

Alterations from the 2019/2020 ELCMP

ELCMP Clause #	Change/Updated Element	Comments
General	Vegetation Management Documents	Updated References and ELCMP attachments

1.3 PLAN DEFINITIONS

Act: Electricity Safety Act 1998.

Arborist: suitably qualified arborist as defined in Electricity Safety (Electric Line Clearance) Regulations 2015, who has at least 3 years of field experience in assessing trees.

Code: Code of Practice and related provisions contained in the Schedule of the Electricity Safety (Electric Line Clearance) Regulations 2015.

Consult: Means to provide an adequate opportunity to members of the public, local government and landowners to understand the vegetation works proposed and to seek additional information regarding the proposed works.

ELCMP: Electric Line Clearance Management (Vegetation) Plan relating to compliance with the Code of Practice for Electric Line Clearance for 2020 -2021.

Fall tree: means a tree, adjacent to the transmission line that may enter the minimum clearance space around the transmission line if the tree falls.

MCS: Minimum Clearance Space has the same meaning as defined in the Vegetation Management Policy.

Native Vegetation: Native vegetation means plants, trees, shrubs, herbs and grasses that would have been endemic to its current location before European arrival. Native Vegetation excludes plantings, regrowth, vegetation on road reserves, fire breaks and established powerline corridors.

RAD: Regulated Applicable Distance: the distance set out by Part 3 of the Code.

Regulations: Electricity Safety Electric Line Clearance Regulations 2015.

Service Provider: a Contractor or Sub-contractor engaged through contractual arrangements with CitiPower and Powercor.

Suitably qualified arborist: an arborist with qualifications, training and experience consistent with the definition in the Electricity Safety (Electric Line Clearance) Regulations:

- National Certificate Level IV in Horticulture and Arboriculture, including the assess trees module, or equivalent qualification, and
- At least 3 years field experience is assessing trees.

TOA/TOA2: Transmission Operations (Australia) Pty Ltd and Transmission Operations (Australia) 2 Pty Ltd

TOA/TOA2 primary service providers: TOA/TOA2 resources and manages the design, construction, operations and maintenance of its network plus manages the provision of its back office services through contractual arrangements with Powercor Network Services and CHED services, part of the Victorian Power Networks (VPN) Group which also includes CitiPower and Powercor. These contractual arrangements enable TOA/TOA2 to utilise the policies, procedures, resourcing and management systems of the VPN Group.

Vegetation Assessor: a person whose qualifications, experience and ongoing training and assessment demonstrate competency in assessing and scoping vegetation near live electrical apparatus. This person determines cutting requirements to confirm compliance for vegetation near live electrical apparatus.

Vegetation Management Documents: the document hierarchy of vegetation management documents, end-to-end business processes, activities and instructional material for implementation of the ELCMP.

This suite of documents are a reference to this ELCMP and as these are live working documents may be subject to change.

Vegetation Management System (VMS): the CitiPower & Powercor structured set of data to manage vegetation for compliance to the Electricity Safety (Electric Line Clearance) Regulations and corporate strategy.

[NOTE: In this ELCMP, "practicable" and "as far as practicable" have the same meaning as the Electricity Safety Act].

For other definitions refer to the Act, Regulations and Code.

1.4 Regulation Compliance Information

The purpose of this section in this *ELCMP* is to provide assistance to quickly cross reference and identify the specific items as required in the Electric Safety (Electric Line Clearance) Regulations 2015, Part 2 Prescribed Code of Practice provisions Section 9.

Item	Regulation Requirement	TOA/TOA2 *Plan* Reference
Code of Practice Part 2 Provision 9 clause (3) subclauses (a) – (q) cross reference table		
3(a)	The name, address and telephone number of the responsible person	Section 1.5 Responsible Persons
3(b)	The name, position, address and telephone number of the individual who was responsible for the preparation of the management *plan*	Section 1.5 Responsible Persons
3(c)	The name, position, address and telephone number of the persons who are responsible for carrying out the management plan	Section 1.5 Responsible Persons
3(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	Section 1.5 Responsible Persons
3(e)	The objectives of the management plan	Section 2 Plan Objectives
3(f)	The location to which the management plan applies, by the inclusion of a map	Section 0 TOA/TOA2 Network
3(g)	The location of areas of containing trees which may need to be cut or removed to ensure compliance with the Code and that are - (i) native; or (ii) listed in a planning scheme to be of ecological, historical or aesthetic significance; or (iii) trees of cultural or environmental significance	Section 3.3 Native Vegetation Coverage
3(h)	The means which the responsible person is required to use to identify a tree specified in paragraph (g)(i) (ii) or (iii)	Section 3.5 Important Vegetation Identification Process
3(i)	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 minimum clearance space as required by the Code (ii) specify the method for determining an additional distance that allows for cable sag and sway for the purpose	Section 3.7 Vegetation Inspection Section 3.8: Cutting To Maintain Vegetation Clear of Powerlines 3.8.2 Selection of method for maintaining clearance space

Item	Regulation Requirement	TOA/TOA2 *Plan* Reference
Code of Practice Part 2 Provision 9 clause (3) subclauses (a) – (q) cross reference table		
	of determining a minimum clearance space	
3(j)	Procedure to be adopted if it is not practicable to comply with of AS 4373 while cutting a tree in accordance with the Code	Section 3.7 If not practicable to comply with requirements of AS 4373
3(k)	A description of each alternative compliance mechanism in respect of which the responsible person has applied or proposes, for approval under clause 31 of the Code	Nil TOA/TOA2 alternative compliance mechanisms
3(l)	The details of each approval for an alternative compliance mechanism that- (i) the responsible person holds (ii) is in effect	Nil TOA/TOA2 alternative compliance mechanisms
3(m)	A description of measures that must be used to assess the performance of the responsible person under the management plan	Section 5 Monitoring and Auditing
3(n)	Details of the audit process that must be used to determine the responsible person's compliance with the Code	Section 5 Monitoring and Auditing
3(o)	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	Section 3.11 Training
3(p)	Notification and consultation procedures, including the form of notice to be given in accordance with the Code	Section 3.10 Notification and Consultation
3(q)	Dispute resolution procedures	Section 4 Dispute Resolution
4	A method for determining an additional distance that allows for cable sag and sway may provide for different additional distances to be determined for different parts of a span	Section 3.7 Vegetation Inspection
10(7)	The responsible person must ensure that a copy of the management plan is— (a) published on the Internet site; and (b) available for inspection at the principal office during normal business hours	Section 1.5 Responsible Persons
Code of Practice Schedule 1 Division 1 cross reference table		
2	Meaning of minimum clearance space	Primary Service Providers Vegetation Management Policy & Procedure
3	Responsible Person must keep minimum clearance space clear of trees	
7	Owner or Operator of transmission line must manage trees around minimum clearance space	Section 3.7 Vegetation Inspection
4 5 6	TOA/TOA2 does not intend to apply exceptions & TOA/TOA2 does not have any locations under these exceptions	
8	Responsible person may cut or remove hazard tree	Section 3.7 Vegetation Inspection and CitiPower, Powercor, and United Energy Vegetation Reference Guide 2020

1.5 Responsible Persons

Primary Service Providers in accordance with contractual obligations provide the ELCMP management services to TOA/TOA2.

Responsibility	Name	Title	Address	Contact Details
ELCMP Responsible Person	Transmission Operations Australia Pty Ltd/Transmission Operations Australia 2 Pty Ltd	Electricity Transmission Business	40 Market Street Melbourne, 3000 **Post to:** Locked Bag 14090 MCMC Vic 8001	Phone: (03) 9683 2096 Email: elindner@aeoperations.com.au
ELCMP preparation	Hugh Vickers-Willis	Head of Vegetation Management	40 Market Street Melbourne, 3000	Phone: (03) 9236 7061 Email: hvickerswill@powercor.com.au
ELCMP carrying out	Hugh Vickers-Willis	Head of Vegetation Management	40 Market Street Melbourne, 3000	Phone: (03) 9236 7061 Email: hvickerswill@powercor.com.au
ELCMP reporting	Anwar Qayyum	Project Manager	40 Market Street Melbourne, 3000	Phone: (03) 9683 4732 Email: aqayyum@powercor.com.au
ELCMP Emergency Contact	TOA/TOA2 24 hour Emergency			Phone: 13 24 12

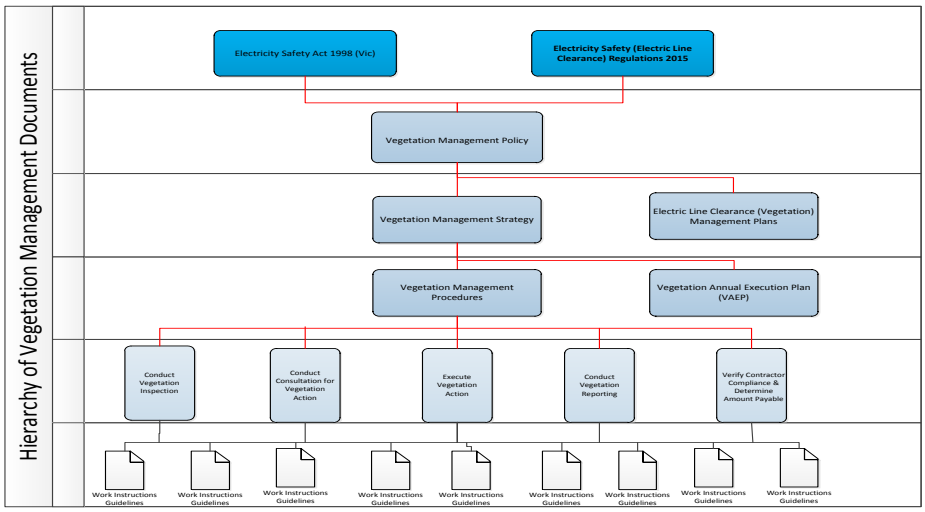
The Head of Vegetation Management will ensure that the updated ELCMP is published on the internet site: https://www.aeoperations.com.au/ following approval by ESV and made available at the Transmissions Operations Australia offices located at 40 Market Street, Melbourne during normal business hours (9.00 a.m. to 5.00 p.m.).

1.6 Plan References

- Electricity Safety Act 1998 (Vic) (The Act)
- Electricity Safety (Electric Line Clearance) Regulations 2015 (Vic)
- Industry Guidelines
- CitiPower and Powercor Customer Action and Response System (CARE)
- Environment Protection and Biodiversity Conservation Act 1999 (Cth)
- Flora and Fauna Guarantee Act 1988 (Vic)
- Victorian Planning Provisions and Planning Schemes
- Pruning of Amenity Trees AS4373(current version)
- Powercor Bushfire Mitigation Strategy Plan
- CitiPower, Powercor, United Energy (Vegetation) Reference Guide June 2020 V1.1
- 2020 - 2021 Electric Line Clearance (Vegetation) Management Procedure June 2020 V1.1
- CitiPower, Powercor, United Energy Hazard Tree Assessment Procedure
- CitiPower, Powercor, United Energy Hazard Tree Program Plan 2020

Figure 1 – Vegetation Management Documents describes the hierarchical structure of the vegetation management documents for key processes, end-to-end business procedures, activities and instructional material for implementation of the ELCMP.

Figure 1 – Vegetation Management Documents



The ELCMP shall be updated annually to ensure that the plan is consistent with the relevant regulations, the needs of the community and the TOA/TOA2 business drivers. The business compliance tracking tool facilitates regulatory compliance.

2 PLAN OBJECTIVE

The ELCMP has been prepared to comply with the requirements of the Electricity Safety (Electric Line Clearance) Regulations 2015. The objective of this Plan is to describe the management procedures employed to comply with the regulations and achieve the organisation's vision. An annual review of the regulations was completed prior to submission of the ELCMP to ESV for approval.

2.1 VISION

To minimise the risks to the community and the environment caused by the interaction of trees and powerlines.

This vision is supported by attention to our mission and instilling the following values:

- Live safely
- Drive and embrace change
- Be community minded
- Make it easy for our customers
- Be the best we can be
- Succeeding together

2.2 MISSION

To ensure that the vegetation clearance space is maintained in accordance with the Code for the period of the pruning cycle.

At all times vegetation management activities will be carried out with attention to:

- Minimising the risk of fire starts
- Ensuring public safety
- Ensuring electrical safety
- Ensuring private property security
- Ensuring continuity of supply
- Delivering a quality service
- Responsible Environmental Management
- Commitment to work place safety
- Minimising of community cost
- Consultation/Notification
- Reduction in number of inappropriate species of vegetation near powerlines

The outworking of the Vision and Mission is explained in more detail in this Plan. Monitoring critical performance outcomes for these activities is by established Key Performance Indicators.

2.3 VEGETATION MANAGEMENT POLICY

The TOA/TOA2 *Reference C: Vegetation Management Policy* is to minimise the risk to the community and the environment caused through the interaction of trees and powerlines, TOA and TOA2 are obligated and committed to comply with the requirements of the Electricity Safety (Electric Line

Clearance) Regulations 2015.

3 MANAGEMENT PROCEDURES

The *2020 - 2021 Electric Line Clearance (Vegetation Management) Procedure* provides clear and concise guidance on how to mitigate the risks to the community and the environment due to the interaction of trees and powerlines.

The *CitiPower, Powercor and United Energy Vegetation Reference Guide 2020* sets out the information and documentation to be used in the execution of vegetation management field works associated the electricity networks.

3.1 TOA ELECTRICAL OVERHEAD NETWORK

TOA's electrical overhead transmission lines cover approximately:

- 22km from the Mt Mercer Windfarm (MMWF) collector station to Elaine Terminal Station.
- 29.5km from Moorabool Wind Farm (MOWF) collector station to Elaine Terminal Station.

As shown below in *Figure 2a – Location of TOA Elaine Terminal Station, Figure 2b-TOA Overhead Line Route Map MMWF to ELTS,* and *Figure 2c – TOA overhead line route map MOWF to ELTS,* all assets are located in Hazardous Bushfire Risk Areas. The fire rating is recorded against each pole asset in the vegetation management database and made available to all field personnel. Vegetation in the vicinity of transmission lines is managed as required under Section 84 of the Act.

Figure 2a – Location of TOA Elaine Terminal Station (near the town of Elaine, Victoria)

Figure 2b – TOA Overhead Line Route Map MMWF to ELTS

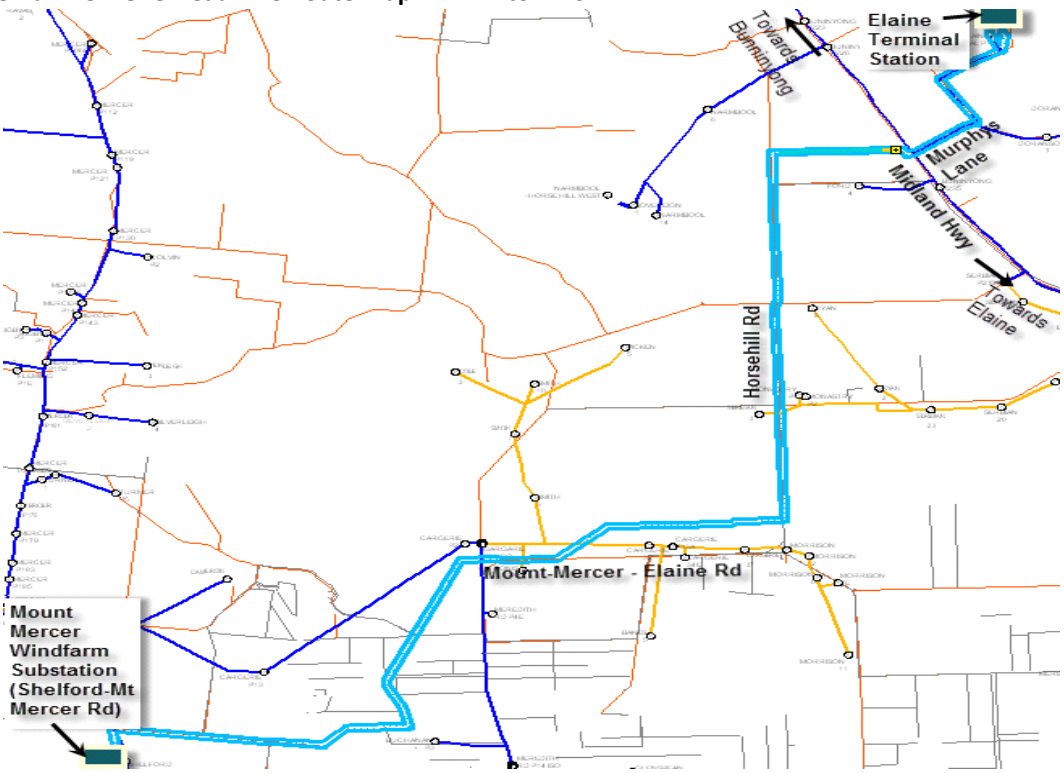
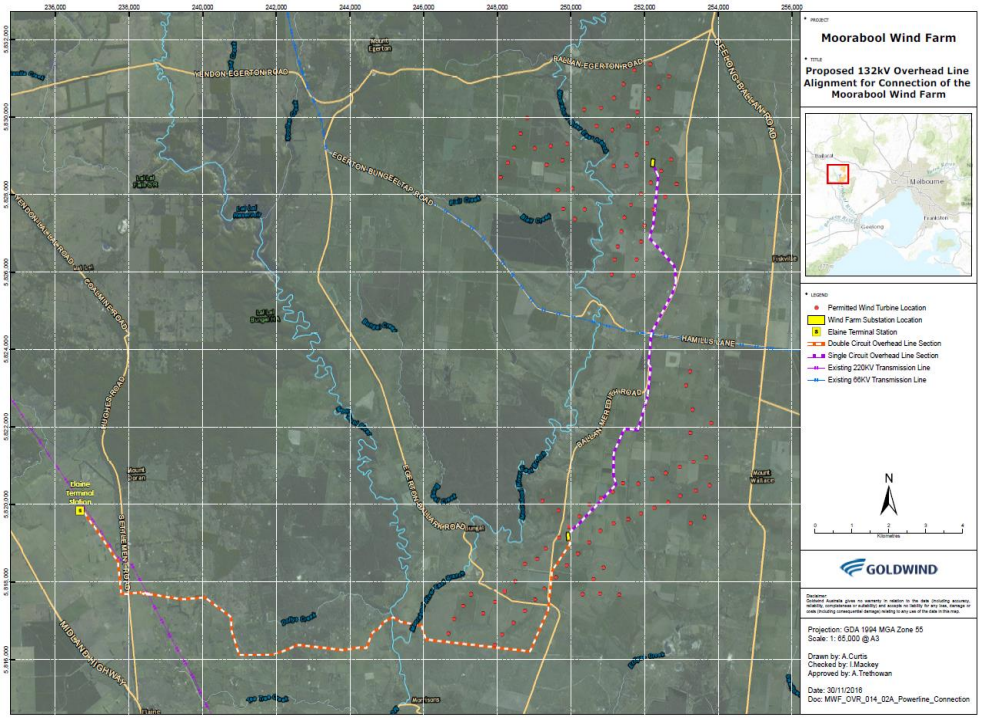


Figure 2c – TOA overhead line route map MOWF to ELTS



3.2 TOA2 Electrical Overhead Network

The TOA2 132kV transmission line covers approximately 21 km from the Ararat Windfarm collector station to Ararat Terminal Station (ARTS), and the line to the 220kV connection at ARTS for the incoming 220kV lines from Horsham Terminal Station (HOTS) and Waubra Terminal Station (WBTS). All assets are located in a Hazardous Bushfire Risk Area. Records are kept for each pole in the vegetation database and available to all personnel in the field. The vegetation in the vicinity of the transmission lines is managed by TOA2, in accordance with Section 84 of the Act.

Figure 3a – Location of TOA2 Ararat Terminal Station ARTS and *Figure 3b – TOA2 overhead transmission line corridor from ARWF to ARTS* show the location of TOA2 132kV assets.

Figure 3a – Location of TOA2 Ararat Terminal Station ARTS (near the town of Elmhurst, Victoria)

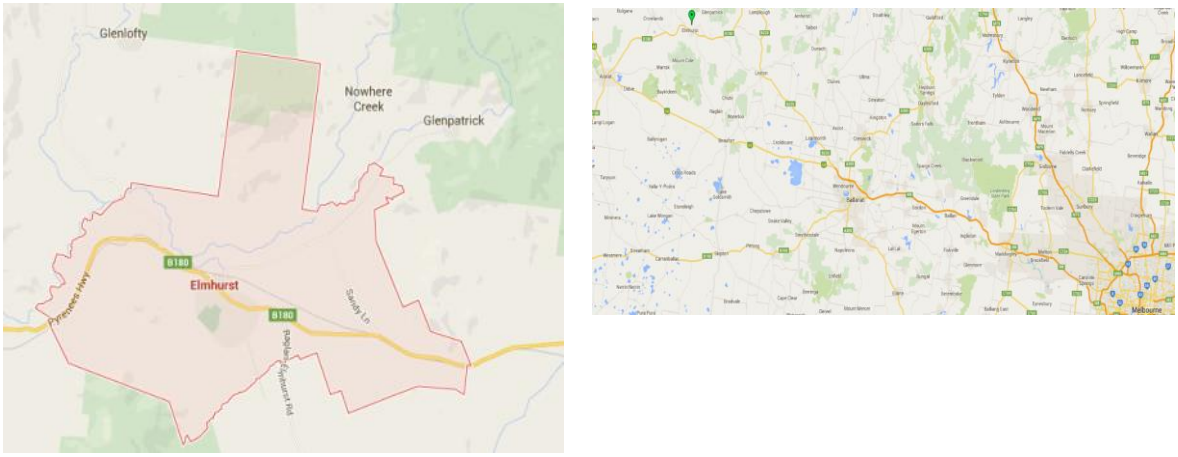
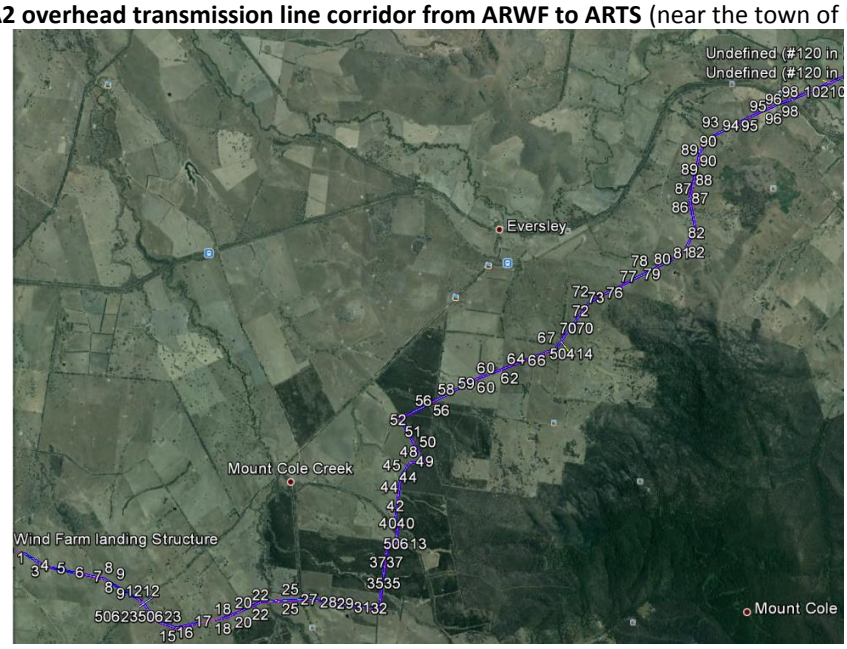


Figure 3b – TOA2 overhead transmission line corridor from ARWF to ARTS (near the town of Elmhurst, Victoria)



3.3 Native Vegetation Coverage

TOA/TOA2 are contained in a relatively confined areas and as such have restricted areas of native vegetation. The locations and categories are shown in *Figure 4 – TOA Vegetation Coverage Categories,* and *Figure 5 – TOA2 Vegetation Coverage Categories.*

More detailed information relating to local coverage can be found at the DSE Biodiversity Interactive website at the following link: http://maps.biodiversity.vic.gov.au/viewer/?viewer=NatureKit which has been overlayed onto the Powercor Google Earth Enterprise application.

Local coverage of nationally significant vegetation can be found using the Protected Matters Search tool at the Australian Government Department of the Environment website at the following link: http://www.environment.gov.au/topics/about-us/legislation/environment-protection-and-biodiversity-conservation-act-1999/protected

TOA will as far as practicable restrict cutting or removal of native vegetation to the extent necessary for compliance with the Code, in accordance and the vegetation clearance cycle.

Figure 4 –TOA Vegetation Coverage Categories

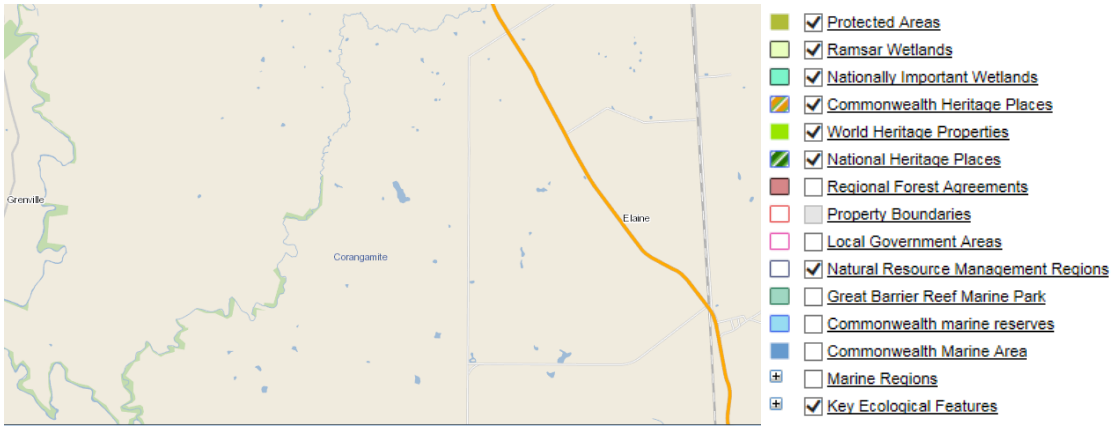
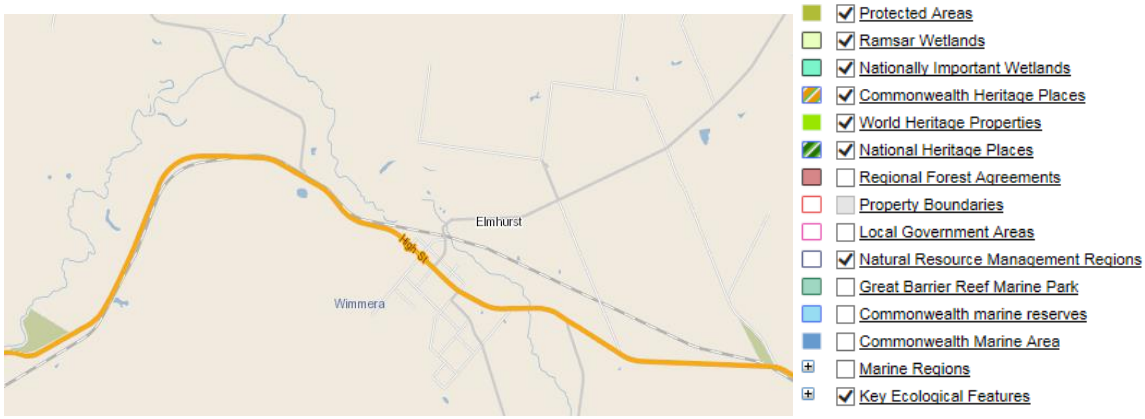


Figure 5–TOA2 Vegetation Coverage Categories



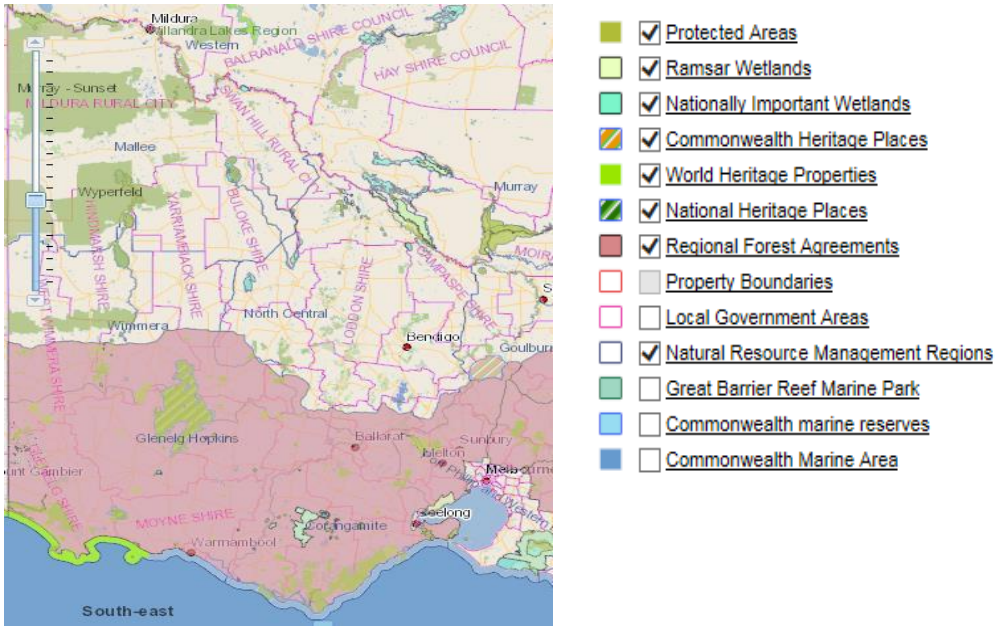
3.4 IMPORTANT VEGETATION COVERAGE

In this ELCMP Important Vegetation is considered to include trees and vegetation which may need to be cut or removed to ensure compliance with the Code and that are:

(i) listed in a planning scheme to be of ecological, historical or aesthetic significance
(ii) of cultural or environmental significance as defined in the Regulations (this includes trees, flora and habitat protected under Victorian laws)
(iii) nationally environmentally significant and listed under the Environment Protection Biodiversity and Conservation Act 1999.

The location of important vegetation is registered in *Reference B: TOA/TOA2 Significant Tree Register* which is individually linked at span level in the Vegetation Management Database. This database is made available directly to the General Auditors to ensure that all important vegetation is identified at the inspection stage prior to any cutting or removal works.

Figure 6: Western Victoria Vegetation Coverage Categories



3.5 Important Vegetation Identification Process

The *2020 – 2021 Electric Line Clearance (Vegetation) Management Procedure: 3 - Vegetation Action* is used to identify the location of important vegetation for special consideration. Councils and Public Land Managers were contacted to obtain the specific locations of vegetation that may require pruning or clearing under the Regulations, including;

- The Victorian Heritage Register http://vhd.heritagecouncil.vic.gov.au/
- The Victorian Aboriginal Heritage Register https://w.www.vic.gov.au/aboriginalvictoria/heritage/heritage-tools-and-publications/victorian-aboriginal-heritage-register.html
- Department of the Environment, Land, Water and Planning, Flora and Fauna Guarantee Act 1988, Threatened List https://www.environment.vic.gov.au/conserving-threatened-species/victorias-framework-for-conserving-threatened-species
- The DEPI Biodiversity Interactive Mapping Website http://maps.biodiversity.vic.gov.au/viewer/?viewer=NatureKit
- Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act), List of threatened flora, List of threatened ecological communities, List of threatened fauna and the Protected Matters Search Tool website http://www.environment.gov.au/epbc/about/epbc-act-lists#species, and
- Council records, including the relevant zoning and overlay controls in the planning scheme. https://mapshare.vic.gov.au/vicplan/

Pruning/clearing of these trees will only be completed after consultation with the tree owner in relation to the regrowth of that vegetation to minimise the impact on this vegetation, as detailed in *Section 3.10: Notification and Consultation.*

Nationally significant vegetation will not be cleared, pruned or otherwise impacted without first deciding whether the activity requires referral and approval from the Department of the Environment, Land, Water and Planning, and obtaining the required approvals as detailed in *Section 3.6: Process to Identify Nationally Protected Vegetation and Habitat.*

Where pruning/clearing of a tree or vegetation is proposed for fauna habitat listed as either;

- threatened in accordance with section 10 of the Flora and Fauna Guarantee Act 1988
- listed in the Threatened Invertebrate Fauna List with a conservation status in Victoria of vulnerable", "endangered" or "critically endangered"
- listed in the Threatened Vertebrate Fauna List with a conservation status in Victoria of “vulnerable”, “endangered” or “critically endangered”;

the pruning/ clearing of the tree will be undertaken outside of the breeding season for the fauna species. Where it is not practicable to undertake cutting or removal of the tree outside the breeding season for that species, translocation of the fauna will be undertaken wherever practicable.

If there is proposed pruning/clearing of a tree or vegetation that has been identified as habitat for fauna listed in the EPBC Act List of Threatened Fauna as "vulnerable", "endangered", "critically endangered" or "extinct in the wild" (Nationally significant habitat), then that nationally significant habitat will not be cleared, pruned or otherwise impacted without deciding whether the activity requires referral and approval from the Department of the Environment, Land, Water and Planning.

Significant and Important tree/vegetation located on private property will be managed using the same process as that for tree/vegetation located on public land.

Trees which do not meet the criteria for significant trees but have specific management requirements agreed with the tree owner, will be recorded in the sensitive customer database.

All trees which are listed in the planning scheme as being of ecological, historical, aesthetic, cultural or environmental significance will be inspected by a suitably qualified arborist and the arborist advice recorded in the VMS in accordance with *Vegetation Management Procedure 2; Manage Vegetation Inspection*.

The tree management plans and concerned customer database which holds this information are made available directly to the vegetation assessors to ensure that important vegetation is identified at the inspection stage prior to any clearing works.

3.6 Process to Identify Nationally Protected Vegetation and Habitat

This section outlines the process to be employed to ensure nationally protected vegetation and habitat located in the vicinity of powerlines is given due consideration when pruning or clearing vegetation is proposed to facilitate compliance with the legislation.

Line clearance works, only need federal environmental approval if they are likely to have a significant impact on nationally protected vegetation or habitat. *2020 - 2021 Electric Line Clearance (Vegetation) Management Procedure: 3 - Manage Vegetation Action* will be used to identify nationally protected vegetation or habitat and determine whether the line clearance works are likely to have a significant impact on the vegetation or habitat.

Guidance provided by the Department of the Environment, Land, Water and Planning suggests that most fire prevention activities are unlikely to require approval by the federal government refer to http://www.environment.gov.au/resource/bushfire-management-and-national-environment-law).

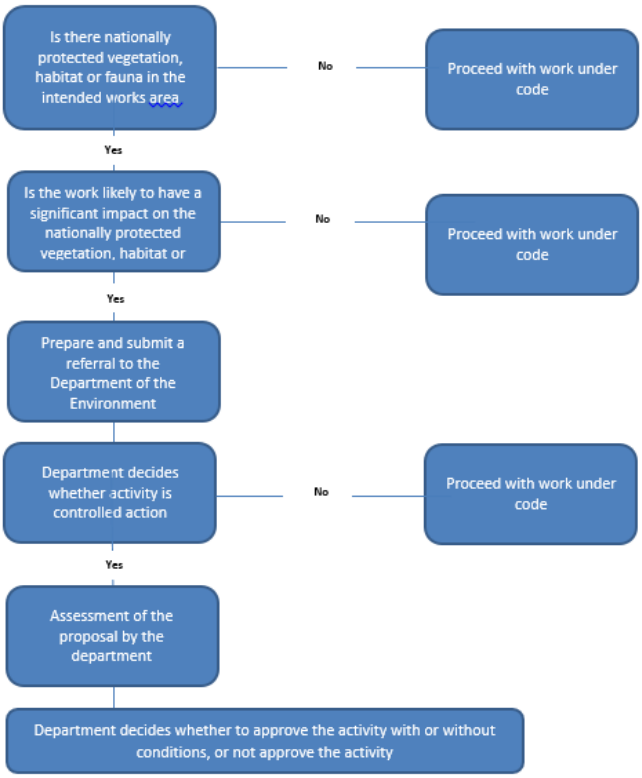
A "significant impact" is defined by the Department of the Environment, Land, Water and Planning as an impact which is important, notable, or of consequence, having regard to its context or intensity. Whether or not an action is likely to have a significant impact depends upon the sensitivity, value, and quality of the environment which is impacted, and upon the intensity, duration, magnitude and geographic extent of the impact(s). *Reference F: Assessment and Approval Process for Controlled Actions* shall be employed in determining the nature and magnitude of the impact, considering:

- the sensitivity of the environment which will be impacted
- the timing, duration and frequency of the action and its impacts
- all on-site and off-site impacts and all direct and indirect impacts
- the total impact which can be attributed to the action over the geographic area, and over time
- existing levels of impact from other sources
- the degree of confidence with which the impacts of the action are known and understood.

Further guidance on assessing whether an activity is likely to have a significant impact on nationally protected vegetation or habitat is provided in the *Significant Impact Guidelines 1.1.* available at: www.environment.gov.au/epbc/publications/nes-guidelines.html

The EPBC Act referral process is summarised in *Figure 7: Summary of EPBC ACT*, and provides further information on how to refer a matter to the Department of the Environment, Land, Water and Planning. If the department decides that the activity is a controlled action, then the action will be subject to *Reference D: Environment Protection and Biodiversity Conservation (EPBC) Referral Process* and *Reference E: Assessment and Approval Process for Controlled Actions.*

Figure 7: Summary of EPBC Act



3.7 Vegetation Inspection

2020 - 2021 Electric Line Clearance (Vegetation) Management Procedure: – 2 Manage Vegetation Inspection details the vegetation inspection process and confirms that the entire TOA/TOA2 network, will be inspected and cut, each calendar year. The scheduled cyclic inspection program will be supplemented by additional inspections undertaken from time to time, including audits by employees, contractors, consultants, ESV and reports from the public, landowners, Local Government or other agencies.

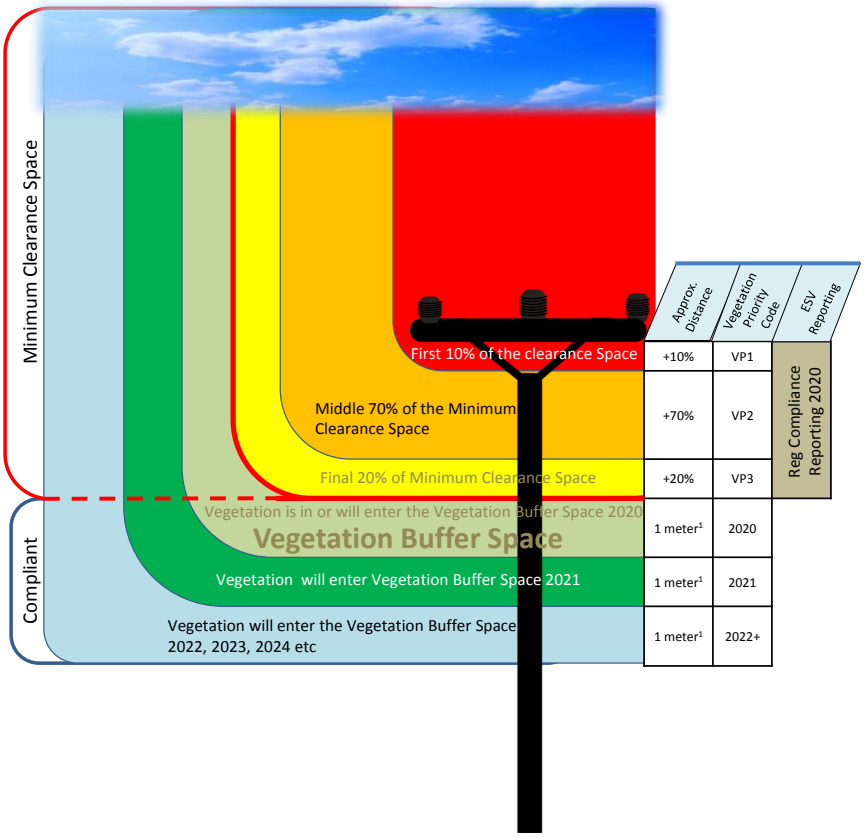
The procedure details how LiDAR and ground-based vegetation inspections will be used to select the method for maintaining the Minimum Clearance Space (MCS). The annual calendar year inspection of each site will gather the information required to determine the most effective method of maintaining the vegetation clear of the powerlines.

2020 - 2021 Electric Line Clearance (Vegetation) Management Procedure: – 8 Reference Material and Templates (10) Vegetation Clearance Charts Guideline defines the process to be used to determine the distance that needs to be added to allow for powerline sag, sway, and vegetation re-growth to determine the vegetation cutting distance as shown below in *Figure 8: Vegetation buffer zone Clearance Spaces.*

Sag and sway is a component of the minimum clearance space, and a function of the conductor stranding, conductor material, conductor temperature, conductor tension and the maximum wind load.

The vegetation regrowth allowance is the additional distance added to the minimum clearance space to cater for the anticipated vegetation growth between cutting cycles which aims to achieve a two year cutting cycle as a minimum.

Figure 8: Vegetation buffer zone Clearance Spaces



Whilst for the purpose of inspection and LiDAR processing we assume regrowth of 1m per year, during audit and cutting activities greater consideration is taken when determine the annual growth rate. Factors may include: species, environmental factors (eg. Rainfall/water availability), region, time of year etc. (see above diagram for representative example).

LiDAR is the primary tool used for vegetation inspection. It is a remote sensing method that uses pulsed laser light to measure the distances between conductors and trees. The LiDAR information is used to determine the degree of cutting required establish the MCS for each span. An additional distance is added to the MCS to cater for vegetation regrowth, a function of tree species, the environment, the climate and the vegetation cutting cycle.

Following annual inspection, the vegetation code for each span is updated. SAP Business Intelligence (BI) reports are produced to confirm that redundant codes do not persist in the vegetation management database. A LiDAR report is being developed to confirm that all

spans have been allocated a current year code in SAP / VMS. For tracking purposes the database also records the year codes for spans that that were not cut during the year.

Where ground based inspection is employed, vegetation clearance charts are provided to vegetation assessors in *2020 - 2021 Electric Line Clearance (Vegetation) Management Procedure: – 8 Reference Material and Templates.*

An annual LiDAR inspection is completed on the TOA / TOA2 networks to:

- determine and record the vegetation clearance distances and growth patterns to facilitate vegetation cutting and modelling of vegetation growth patterns
- improve the quality of LiDAR inspection data and processing algorithms, supported by quality assurance audits
- deliver a cutting program that is based on near real time inspection data
- reduce the risk of errors associated with vegetation growth assumptions.

Sample field audits by staff and/or sub-contractors provide assurance that the vegetation inspection, and cutting programs facilitate compliance.

The information gathered during the vegetation inspections, is used to:

- determine the actual vegetation clearing method
- plan and schedule the work force required
- identify and quantify the equipment and accredited personnel required
- deliver notifications as required by the Code
- consider the site specifics, including: identification of important vegetation, engineering solutions, alternative compliance mechanisms, the significance or public amenity of the site tree, tree removal, replacement with a more suitable species, the environmental impact of the proposed works, the extent to which pruning in accordance with AS4373 is practicable, past pruning practice, hedging options, pruning for habitat, deferral - negotiate with Affected Persons where vegetation action is to be postponed outside breeding season or involves the engagement of specialists for relocation of fauna species

Vegetation inspection includes the identification of unsuitable species. Information is provided free of charge to the public on the planting and the maintenance of vegetation near powerlines *"Planting Trees near Powerlines – A Guide for Home Gardens and Rural Properties"*. Planting of inappropriate species near powerlines adds to the cost of Code compliance and increases the risk of future contact between vegetation and powerlines. Responsible planting strategies are actively promoted with land owners, land managers and Councils to ensure that only appropriate species are planted near powerlines.

Where inappropriate species have been identified near or under powerlines, negotiations will be initiated with the Affected Person / Councils to remove the vegetation that may "… otherwise come in contact with an electric line". Where agreement cannot be reached on the management of the unsuitable specie the process outlined in *Section 4 Dispute Resolution* shall be used.

The vegetation inspection process also monitors compliance with the legislative requirement that an occupier of land is responsible for the keeping the whole or any part of a tree situated on the land clear of a low voltage electric line which solely services that land to ensure land owners and occupiers are aware of, and discharge their responsibilities.

Inspection for Hazard Trees, and powerline fuel load

HBRA hazard Trees are managed using the process outlined in the *CitiPower, Powercor, and United Energy Vegetation Reference Guide 2020: Section 16 Hazard Trees*. The vegetation clearance space is inspected by a Certificate Level IV Arborist (suitably qualified arborist) as part of the hazard tree, and fuel load, inspection program to identify and evaluate potential hazards;

- trees with major cavities that the arborist considers may compromise the tree or branch structural integrity/safety
- trees with structurally defective bifurcated stems
- hung up trees or limbs
- trees with decay compromising structural integrity
- dead trees
- trees where physical damage or environmental events have de-stabilised the tree
- trees which may fall or otherwise come in contact with the electric line
- fuel load under the powerline.

Ground inspections will identify trees capable of falling into the clearance space, and these spans are then inspected by a suitably qualified arborist. Arborist inspections will be carried out according to the *CP, PAL and UE Hazard Tree Management Plan* and the *CP, PAL and UE Hazard Tree Assessment Procedure.*

The responsible person will be notified that the tree has been inspected, and that the tree or part of the tree is likely to fall into the clearance space using *Reference A Vegetation Work Calling Card* where the third check box refers to urgent cutting required due to the tree being too close to the powerline.

Where the fuel load under the powerline may become a hazard, the responsible person will be notified and a risk mitigation strategy agreed.

Notification and consultation process is outlined in *2020 - 2021 Electric Line Clearance (Vegetation) Management Procedure: - 5 Affected Persons Notification and Consultation.*

3.7.1 Hazard tree program (includes fall trees)

Hazard tree risk assessment is a systematic process used to identify, analyse, and evaluate the risks to the electricity network associated with tree falls or failures.

While not all tree falls or failures can be predicted, many network faults could be avoided by identifying trees that may fail or otherwise impact the electricity network, by implementing mitigation measures to minimise the risks as far as practicable.

A Hazard Tree Program Management Plan and Hazard Tree Assessment Procedure have been developed to assess and manage the threat to the electricity networks posed by hazard and fall trees. The management plan incorporates the following elements:

- **Planning**: develop a three year tree inspection cycle to identify tree hazards, including fall trees, across the networks
- **Assessment**: assessment of the trees by a suitably qualified arborist using tree health as a key indicator to identify and evaluate potential hazards
- **Action**: develop, prioritise, plan and implement risk mitigation and re-inspection activities
- **Monitoring**: establish clear accountabilities to monitor and report on the progress and findings of hazard and fall tree inspections, and the mitigation activities

3.7.2 Tree inspections

The tree inspection program aims to identify and mitigate hazard and fall trees before they adversely impact the electricity network.

TOA/ TOA2 contractors, employees, councils and the general public identify and report potential hazard trees. In accordance with the CP, PAL and UE Vegetation Reference Guide, cutting crews are responsible for identifying obvious tree hazards and reporting these to the Vegetation Management Team. The trees identified shall be inspected by a suitably qualified arborist in accordance with the Hazard Tree Assessment Procedure and managed in accordance with the Hazard Tree Program Management Plan.

In the TOA / TOA2 region, ground inspections are used to identify potential hazard and fall trees which are then scheduled for inspection by a suitably qualified arborist.

In accordance with the CP, PAL and UE Hazard Tree Assessment Procedure, a suitably qualified arborist will conduct a ground based visual tree inspection (level 1 assessment) from a location, or locations, within the span where the tree hazards in the span can best be assessed.

Where a potential tree hazard has been identified, the suitably qualified arborist will undertake a Level 2 risk assessment in line with the CP, PAL and UE Hazard Tree Assessment Procedure.

Upon completion of the tree inspection, the suitably qualified arborist shall assign a risk rating to the tree (see the CitiPower, Powercor and United Energy Hazard Tree Program Management Plan) or assign no risk rating to indicate that no hazards have been identified.

Trees that have been identified as a hazard tree or a fall tree shall be managed in accordance with the CP, PAL and UE Hazard Tree Program Management Plan.

3.8 Cutting To Maintain Vegetation Clear of Powerlines

2020 - 2021Electric Line Clearance (Vegetation) Management Procedure; 8-10 Vegetation Clearance Charts Guideline will be used to determine the minimum clearance space.

Programmed cutting will be actioned following the annual vegetation inspection cycle. The work will be prioritised in accordance with the assessed code for the span and the corresponding rectification timeframe as detailed in *2020 - 2021 Electric Line Clearance (Vegetation) Management Procedure; 8-10 Vegetation Clearance Charts Guideline.*

The cutting cycle at each locality shall be determined, based on the cutting distance determined by the vegetation inspection, and the clearance distances achieved as a result of consultation with owners/occupiers.

The aim is to maintain a cyclic cutting program, based on the results of the annual vegetation inspection cycle. Out of cycle cutting may be used to maintain the minimum clearance space at locations where sufficient cutting cannot be achieved to maintain the preferred cutting cycle. TOA/TOA2 aim to cut the vegetation prior to the vegetation entering the buffer space and maintain a two year cutting cycle.

The additional distance (regrowth allowance) to be trimmed will be determined following due consideration of the vegetation species and likely growth rate, to ensure that the vegetation remains outside the minimum clearance space at least until the next planned (annual) cutting cycle.

The application of appropriate pruning standards may over-ride simplistic calculated re-growth assumptions. The clearance distances determined by using the regulated MCS, adding an amount for the calculated sag and sway based on conductor type, stringing and span length (as required), and adding a regrowth allowance until the next vegetation cutting date shall be recorded in the VMS database and the MCS clearly communicated in the Work Packages allocated to, and actioned by the field cutting crews. Quality assessment sample audits shall be carried out to ensure that appropriate cutting quality (distance) has been achieved.

3.8.1 Urgent Cutting/Removal

Urgent cutting or removal may be undertaken;

- as a result of encroachment or growth that was not anticipated in the management plan
- as a result of a tree falling or becoming damaged and entering the MCS
- if an arborist's assessment confirms the imminent likelihood of contact with electrical assets
- where vegetation exists within the MCS during the fire danger declaration period.

Urgent cutting will be carried out in accordance with the clause 13.2 of the Code or as agreed with the tree owner following consultation, and communicated in the work package to the cutting crew.

Affected persons shall be notified as soon as practical after urgent pruning has been undertaken, and records of pruning shall be maintained for 5 years in the vegetation management database, in accordance with the clause 18(4) of the Code.

3.8.2 Selection of method for maintaining clearance space

The purpose of this section is to outline the strategy to be employed in choosing the most appropriate method for maintaining the vegetation clearance space between the powerline and the vegetation.

In general all vegetation cutting shall be carried out in accordance with *AS4373 Pruning of Amenity Trees*, as far as practicable, by the use of:

- Suitably qualified or experienced personnel
- Training and induction
- Appropriate plant and equipment
- Verification of cutting standards (auditing)
- Actions to resolve pruning not in accordance with *AS4373 Pruning of Amenity Trees*

The notification and consultation with the owner/occupier, will seek to preserve the amenity value of trees, and as far as practicable, comply with the principles of *AS4373 Pruning of Amenity Trees* in managing the vegetation.

In some instances it may not be practical to undertake the cutting in accordance with *AS4373 Pruning of Amenity Trees*:

- where the customer insists that work not be completed to *AS4373 Pruning of Amenity Trees* (eg; limbs not cleared to growth points)
- where the amenity value of the tree is insignificant to the owner/occupier
- adherence with past practices on large windrows of Pine or Cypress hedges where the use of mechanical devices is deemed a safer and more efficient method of meeting clearance requirements with little or no negative health impacts on the tree and is not economically viable to cut to *AS4373 Pruning of Amenity Trees* .

Suitably qualified, experienced personnel shall identify and assess locations where adherence to *AS4373 Pruning of Amenity Trees* is deemed to be impractical. This includes the use of the appropriate plant and equipment such as mechanical pruning, for the management of vegetation.

The Head of Vegetation Management is responsible for overseeing the development and implementation of the vegetation management program. Where it is not practicable to comply with the principles of *AS4373 Pruning of Amenity Trees*, and achieve compliance with the Code, the tree cutting procedure will be subject to approval by the Head of Vegetation Management.

A comprehensive, routine, monitoring, auditing, reporting and review process has been established to confirm the effectiveness of the vegetation management program in achieving TOA/TOA2 objectives. The Head of Vegetation Management, as part of the normal auditing regime, will undertake audits and take corrective action, where pruning is not in accordance with *AS4373 Pruning of Amenity Trees .*

The owner/occupier will be notified of the extent of the proposed tree cutting to achieve code compliance, and offer further consultation on the planned tree cutting.

The identification, evaluation and merit of alternate compliance methods shall be referred to the General Manager, Asset Management for assessment and implementation.

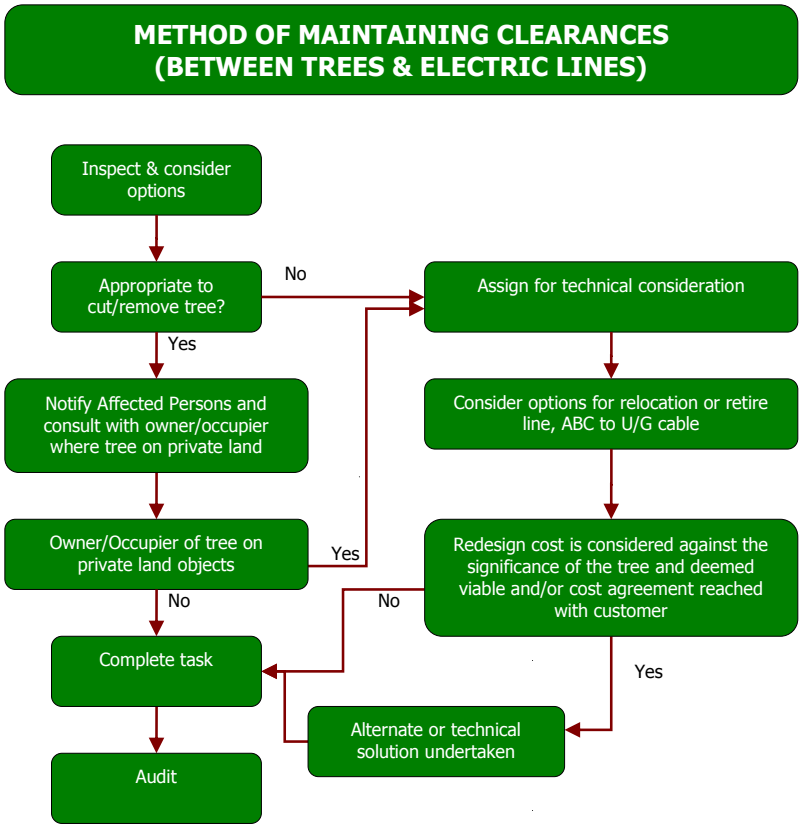
Where trees that are not the responsibility of TOA/TOA2 have been identified as requiring cutting or removal, the ORP shall be duly notified requesting that the tree(s) be cut or removed.

The Head of Vegetation Management shall determine the most appropriate method for cutting or removal of trees that are the responsibility of TOA/TOA2. Due consideration shall be given to:

- The significance of the site as a natural habitat for rare or endangered species, both flora and fauna
- Areas determined by the relevant municipal council to contain culturally or environmentally significant trees, or trees specified in planning schemes to be of ecological, historical or aesthetic significance
- Impact on the tree's amenity and utility value if subjected to cutting versus removal
- Assessing the benefit of implementing, available, practicable, alternative compliance methods
- The risk to safety and supply reliability
- Significance and value of the site aesthetics
- Opportunity to replace the tree with a more suitable species
- Environmental impact of the proposed works

Consultation based on the evaluation and decision making process outlined in *2020 - 2021 Electric Line Clearance (Vegetation) Management Procedure: - 5 Affected Persons Notification and Consultation* will be initiated where the standard practice cannot be used, for example, where pruning in accordance with *AS4373 Pruning of Amenity Trees* may not achieve the required clearance or lead to excessive pruning.

Figure 9 - Selection of the Method of Maintaining the Clearance Space



3.9 Assistance to Responsible Persons and the General Public

TOA/TOA2 provides general information and advice regarding tree owner's rights and responsibilities regarding the management of vegetation close to TOA/TOA2 transmission lines, including;

- **Communications and Direct Assistance** - a communication program with councils by letter andr face to face meetings to discuss local and specific issues relating to compliance with the Code.
- **Unsuitable Species Identification** – providing information to the public on the planting and maintenance of vegetation near transmission lines. Planting of inappropriate species near transmission lines significantly adds to the cost of complying with the Code and increases the exposure of future contact between vegetation and transmission lines. Where inappropriate species are planted near or under transmission lines, TOA/TOA2 will negotiate with the Affected Person to remove vegetation which may at some time enter the clearance space

A copy of the current TOA/TOA2 Vegetation Management Plan, and other information relating to vegetation management and industry regulations are made available to the general public, including;

- Planting Trees near Power Lines - a guide for Home gardens and Rural Properties,
- Private Overhead Electric Lines (Understanding your responsibilities)
- Powerlines and Your Property
- "No Go Zone" brochures

TOA/TOA2 vegetation work programs are communicated to Local Government Authorities and other Affected Persons, to ensure that tree clearing activities are co-ordinated and rationalised.

Following approval by ESV, a copy of the approved ELCMP shall be made publicly available on the Transmission Operations Australia website under Corporate Documents at
https://www.aeoperations.com.au/about-us/

Transmission Operations Australia	**General Enquires 1300 543 949**

3.10 Notification and Consultation

TOA/TOA2 shall decide how to maintain clearance distance between the transmission lines and the vegetation. However, this does not preclude Affected Persons from negotiating conditions under which other solutions may be used. The Affected Persons at each location shall be determined by the process detailed in *2020 - 2021 Electric Line Clearance (Vegetation) Management Procedure: - 5 Affected Persons Notification and Consultation.* Consultation shall be carried out for the cutting or removal of all trees, in accordance with clause 17 of the Code of Practice.

A minimum of 14 days and not more than 60 days written notice will be provided to all Affected Persons prior to works commencing, or by publication in a newspaper circulating generally in the area. Should cutting not proceed within the requested notification period re-notification will occur.

Where the tree intended for pruning/clearing is a tree of cultural significance or national, state or local environmental significance the affected person/s will be provided with details of the impact of the cutting or removal of the tree and actions taken to minimise the impact.

Each of these situations will be subject to specific negotiation and notice following negotiation will be in writing and will be tailored to suit the individual situation and meet the regulatory requirements.

If emergency clearing is undertaken, the responsible person or landowner shall be notified as soon as practicable after the event in accordance with Schedule 1 clause 18 of the Code. Copy of a typical notification notice is shown in *Reference A: Example Notification Letter.*

3.11 TRAINING

The qualifications, training and experience of all TOA/TOA2 employees and contractors undertaking vegetation management activities shall be appropriate for the task being performed.

Training requirements are agreed by the joint VESI™ and are documented in the *VESI Vegetation Management Guideline* published at www.vesi.com.au..

In addition to the VESI requirements TOA/TOA2, Vegetation Workers classified as Ground Crew require a Certificate II in ESI–Powerline Vegetation Control. The following table outlines the Units of Competency required for the Vegetation Ground Crews. All Mandatory (M) units of competency must be completed to undertake the role. Other units of Competence may be required to complete the task being undertaken.

Legend

M - Mandatory

A - Additional - If worker requires this training for the works being performed

	Qualification / Competency Standard Unit (CSU) number	**Ground Crew**
Qualification		
Certificate II in ESI - Powerline Vegetation Control	UET20312	M
Certificate II Powerline Vegetation Control – Core Competency Standard Units		
Apply Occupational Health Safety regulations, codes and practices in the workplace	UEENEEE101A	M
Comply with sustainability, environmental and incidental response policies and procedures	UETTDREL13A	M
Working safely near live electrical apparatus as a non-electrical worker	UETTDREL14A	M
Operate and maintain chainsaws	AHCARB205A	M
Plan the removal of vegetation up to vegetation exclusion zone near live electrical apparatus	UETTDRVC23A	M
Monitor safety compliance of vegetation control work in an ESI environment	UETTDRVC27A	M
Certificate II Powerline Vegetation Control – Elective Competency Standard Units		
Operate specialist equipment at ground level near live electrical apparatus	UETTDRVC31A	M
Fell small trees	AHCARB202A	M
Apply chemicals under supervision	AHCCHM201A	M
Operate machinery and equipment	AHCMOM304A	M
Operate a mobile chipper/mulcher	FPIHAR2206B	A
• Workers classified as Ground Crew to be trained annually in Safe Approach Distances – Vegetation Work. • All Vegetation workers to be trained in Maintain safety at an incident scene (PUAOHS0002B)		

Training requirements are confirmed as meeting the agreed industry and TOA/TOA2 standards prior to a vegetation worker commencing work on the network and in system audits.

Annual training includes refresher training for the Vegetation Reference Guide for compliance with the Regulations and this Plan as far as reasonably practical.

Prior to a Vegetation worker commencing work the employer submits evidence of all training requirements and this is verified. System Audits are undertaken to verify that Vegetation workers training records are being maintained and are current. TOA/TOA2 will engage individuals as “under supervision” to enable them to be assessed as competent to perform a given task or while training is being completed. Individuals will attend all training applicable for the role and be deemed competent by a Training Provider. Evidence to demonstrate competence, including Statement of Attainment, Certificate of Completion, will be provided to Powercor and when all valid evidence is provided the “under supervision” will be removed.

Any person without appropriate training will be removed from site as detailed in TOA/TOA2 ESMS 2016 (Part 3 Section 09 Incident Reporting).

4 DISPUTE RESOLUTION

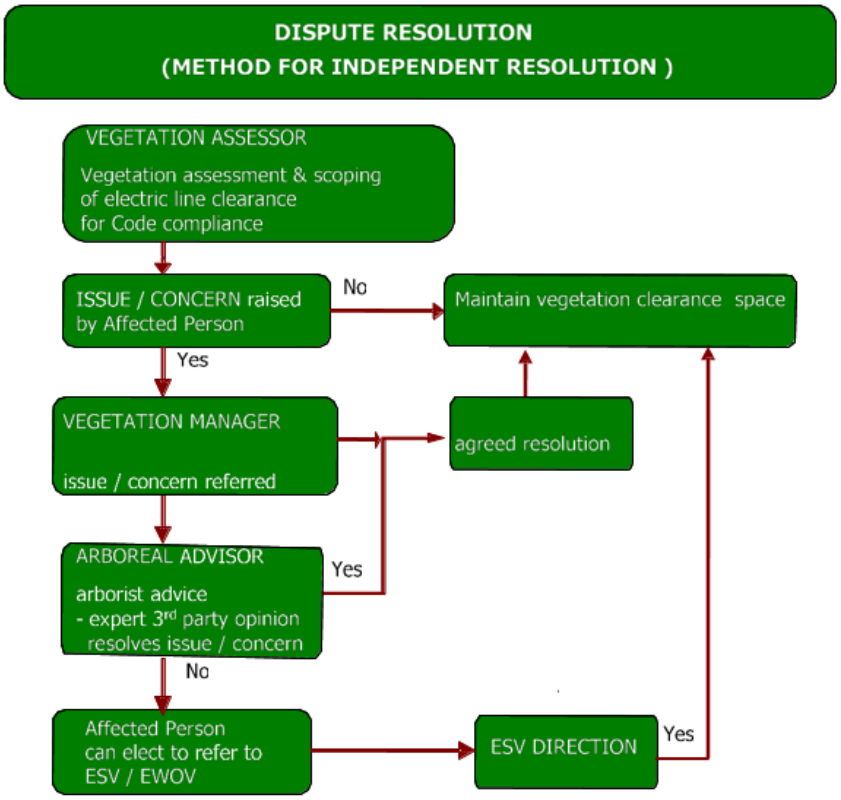
TOA/TOA2 will provide contact details including; name, position and telephone number on individual notices provided to all Affected Persons. This is expected to be the first point of reference if the Affected Person feels the need to follow up on an issue or concern. If the Affected Person does not have these contact details or is unable to contact the person nominated, they can contact TOA/TOA2 as nominated in *Section 1.5 - Responsible Persons* to obtain the appropriate first level contact to address their concern and/or resolve the dispute.

Where a dispute cannot be settled the Vegetation Assessor (VA) the matter shall be referred to the Head of Vegetation Management.

While all Vegetation Assessors have had training in tree identification, pruning techniques and tree physiology, special situations may require greater expertise. Advice may be sought from an arborist where the dispute requires an expert third party opinion on a matter relating to the tree or trees in question. TOA/TOA2 refers to a number of expert arborists who are widely respected in academia and industry.

If intervention by the Head of Vegetation Management does not resolve the dispute, the land owner or occupier may choose to refer the case to Energy Safe Victoria or The Energy and Water Ombudsman, as appropriate, to assist. If the disputed work presents an immediate fire or safety risk, TOA/TOA2 may be obliged under Clause 14 of the Code, in accordance with Clause 13.2, to enter the property and complete the work.

Figure 10- Dispute Resolution process flowchart



If the landowner or occupier has any concerns with TOA/TOA2 vegetation management issues can be escalated by this dispute resolution process.

5 MONITORING AND AUDITING

The Primary Service Provider's Vegetation Management Strategy confirms;

- Details of the audits and the sample sizes
- The auditing process used to verify completion of inspection and rectification pruning in accordance with the plan.
- The use of corrective actions in the event of inadequate performance being identified

5.1 MONITORING

TOA/TOA2 undertakes regular performance and compliance monitoring of the Vegetation Service Provider. This is structured around monthly Operational Meetings and quarterly Strategic Management Meetings. A set of specific contract Key Performance Indicators (KPIs) and reportables have been established to monitor various critical performance outcomes and business deliverables. These measures are identified in the table below.

Key TOA/TOA2 performance measures include:

Performance Measures		
Transmission Line Compliance	All spans inspected prior to the fire season declaration date	>100%
Transmission Line Compliance	All non-compliant and current year vegetation priority codes shall be actioned within the current calendar year (prior to fire season declaration date).	>100%

5.2 AUDITING

TOA/TOA2 CEO has the overall responsibility for the Electric Line Clearance Plan implementation and the Manager Network Compliance is responsible for auditing the vegetation management process including compliance with the requirements of the ELCMP, the Code and the *Electricity Safety (Electric Line Clearance) Regulations*. The key risks associated with the delivery of the vegetation management service have been identified and mitigating controls developed. Using this information an annual audit schedule has been created; *2020 - 2021 Electric Line Clearance (Vegetation) Management Procedure- 9.2 Vegetation Quality Review Table.*

Audits are conducted by personnel who have suitable audit training and background. External specialist resources, with the appropriate experience and expertise are engaged to assist as required. Annual reviews involving the service providers, and TOA/TOA2 senior management are conducted.

Audits associated with, but not limited to, OH&S Systems, Environmental Management Systems, Quality Control and Traffic Management Procedures, are conducted. These are further supported by field verification and compliance monitoring audits.

The audit schedule is reviewed annually to address changes in business requirements, concerns from previous years, and the Service Provider's performance history.

There are broadly four different types of audits relating to;

- Health and Safety – Safe work methods (e.g. General work methods, working near powerlines and tree clearing methods), equipment vehicles and plant, inductions, training and authorisation, traffic management.
- Compliance – General inspection and cutting compliance with programs, hazardous trees, stakeholder and defect management.
- Procedure/Work Instruction – Policies, work instructions, procedures, customer notification, data management and accuracy, reporting and documentation.
- Environmental – Important or significant vegetation, chemicals, weeds, noise, pruning technique and quality.

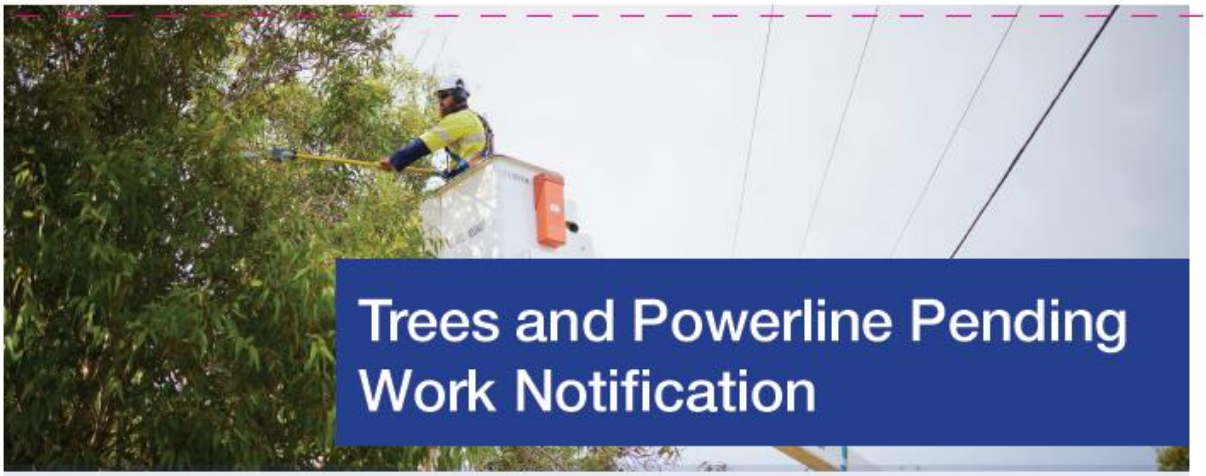
The audit process considers actual performance and actual output and then compares these against planned performance and expected outputs. Where a variation occurs the item is noted and followed through to ensure corrective actions are taken and improvement opportunities are factored into plans to enhance future performance.

Service Providers operate their own internal audit program which target the following key areas –

- Felling Techniques
- Tree Climbing
- Herbicide
- Tipper/Chipper Use
- Tree Clearing from EWP
- Vehicles (Pre-summer)
- PPE
- Hearing Conservation
- Limits of Approach
- Worksite Traffic Management
- Hazard Assessment Controls (HAC Sheet)
- Manual Handling

The results of these audits are provided to TOA/TOA2.

REFERENCE A:
Example Notification Letter



Trees and Powerline Pending Work Notification

Work location .....

.....

My name is .....

Phone .....

I am a CitiPower, Powercor representative contracted to carry out Vegetation Maintenance Inspections.

My inspection of the trees on and/or adjacent to your property on

..... / ..... / ..... at ..... has shown that:

- ○ No tree clearing works need to be undertaken from this inspection
- ○ Trees on/or adjacent to your property have grown so that they now require pruning to maintain compliance with the Victorian Government's Electricity Safety (Electric Line Clearance) Regulations 2015.
  These works may commence between 14 and 60 days from the date on this notice.
- ○ "Urgent Cutting- Urgent tree clearing/pruning is required. Trees on your property have grown too closely to or within the Clearance Space required around powerlines, as noted in the Electricity Safety (Electric Line Clearance) Regulations 2015 Part 2- Section 18 (Page 33), and as such the required 14 day notification period does not apply".

Previous inspection date: ..... / ..... / .....

There will be no charge to you for tree clearing works required around CitiPower, Powercor powerlines.

Please contact me as soon as possible so we can discuss the required works/if you have queries about the proposed works.

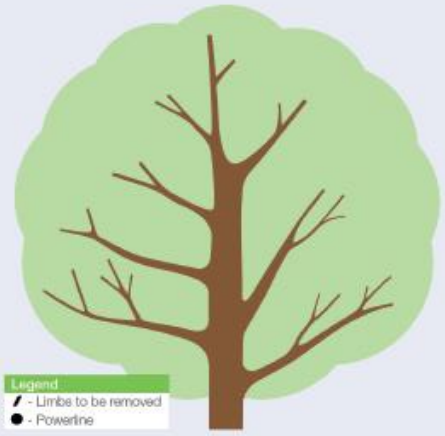
The works required at your property include:

.....

.....

.....

If you are not the owner of the property we request your assistance in forwarding this notice to the landowner, or contact me.



This is a representation of how your tree/s will be cleared when viewed along the line from pole

CitiPower, Powercor aims to remove all debris on the day of pruning, however in rural areas clean up can take up to five days. If you experience extended delays in clean up please contact me.

CITIPOWER Powercor AUSTRALIA

Works may be carried out using the following specialist equipment:

Elevated Work Platform

Ground Crew/ Tipper Chipper

Climbing Crew

Hedger

Mechanical Trimmer

Mulcher

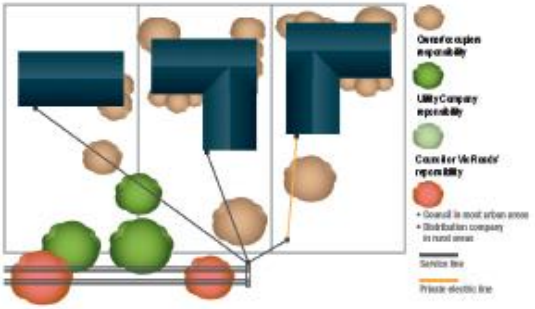
Who is responsible for maintaining vegetation?

Trees on your Property

CitiPower, Powercor or your local council are responsible for maintaining trees affecting the main distribution powerline. Any privately owned electric lines on your property - and the service line to your property are your responsibility.

It is important for your safety that you hire a professional to carry out any tree clearing work near your powerlines.

If you are unsure of your responsibility please contact CitiPower, Powercor for clarification.



As your electricity distributor, CitiPower, Powercor owns and operates the largest electricity distribution network in Victoria. We deliver to you the power you buy from your electricity retailer. Our role is to develop and maintain the poles, wires and equipment on our electricity network to reduce the likelihood of fires or supply interruptions caused by trees and vegetation.

Each year, CitiPower, Powercor invests millions of dollars in bushfire mitigation and vegetation mangement programs to keep the power on and the community safe. CitiPower, Powercor employs expert vegetation management resources, to keep trees and vegetation a safe distance from our network assets.

For all enquiries regarding vegetation and powerlines, contact:

CitiPower
Call **1300 301 101** or **visit www.citipower.com.au**

Powercor
Call **13 22 06** or **visit www.powercor.com.au**

To monitor the level of your satisfaction with our vegetation service, CitiPower, Powercor or our agents may contact you after these works are completed. If you object to this, please contact me to advise.

* Note; This notice applies to Transmission Operations Australia and Transmission Operations Australia 2 assets. For Enquiries 13 22 06

If you have any concerns with our vegetation management, issues can be escalated via the dispute resolution process found in our Vegetation Management Plan. A copy of the plan can be obtained by calling **CitiPower** on **1300 301 101**; or **Powercor** on **13 22 06**.

CP3795 072019

CITIPOWER

Powercor AUSTRALIA

REFERENCE B:
TOA/TOA2 Significant Tree Register

TOA Significant Tree Register

Region	Pole Number	Tree Owner; Species; Reason of Significance; Remarks
Elaine – North side of Creek between Shelford–Mt Mercer Rd and Elaine-Mount Mercer Rd	Pole No.'s 24 and 25 on ELTS-MEWF 132kV line	Native Grass, minimise disturbance
Elaine – Mt Mercer Rd, Triangle	Pole No. 58 on ELTS-MEWF 132kV line	Native Grass, minimise disturbance
Elaine – Mt Mercer Rd, West	Pole No.'s 86 to 96 on ELTS-MEWF 132kV line	Native Grass, minimise disturbance
Horsehill Rd, East	Pole No.'s 98 to 99 on ELTS-MEWF 132kV line	Native Grass, minimise disturbance
Horsehill Rd, East	Pole No.'s 101 to 103 on ELTS-MEWF 132kV line	Native Grass, minimise disturbance
Horsehill Rd, West	Pole No.'s 117 to 118 on ELTS-MEWF 132kV line	Native Grass, minimise disturbance
Murphy's Rd	Pole No.'s 141 to 146 on ELTS-MEWF 132kV line	Native Grass, minimise disturbance
Government Rd, North	Pole No.'s 153 to 160 on ELTS-MEWF 132kV line	Native Grass, minimise disturbance
Adjacent to the corner of Government Rd, North and entry to Elaine Terminal Station (ELTS)	Pole No.159 on ELTS-MEWF 132kV line	Avoid Snowgum, DSE noted this tree as significant

More detailed information relating to local coverage can be found at the DSE Biodiversity Interactive website at the link: http://maps.biodiversity.vic.gov.au/viewer/?viewer=NatureKit which has been overlayed onto the Powercor Google Earth Enterprise application.

Local coverage of nationally significant vegetation can be found using the Protected Matters Search tool at the Australian Government Department of the Environment website at the link:
http://www.environment.gov.au/topics/about-us/legislation/environment-protection-and-biodiversity-conservation-act-1999/protected

TOA2 Significant Native Vegetation Register			
Region Location	**ARWF-ARTS 132kV line Pole Number**	**Native Vegetation**	**Remarks**
Big Hill Road Warrak	Pole No.'s 11 - 12	EVC 20 - Healthy Dry Forest	Off-sets obtained - minimise disturbance (barricade area)
Allenders Road Warrak	Pole No.'s 23 - 24	EVC 68 - Creekline Grassy Woodland	Off-set obtained - no vehicle access required (no disturbance)
Buangor Ben Nevis Road Warrak	Pole No.'s 25 - 26	EVX 67 - Alluvial Terraces Herb-Rich Woodland	Off-set obtained - no vehicle access required (no disturbance)
Iron Pot Creek Road Warrak	Pole No.'s 40 - 41	EVX 67 - Alluvial Terraces Herb-Rich Woodland	Off-sets obtained - minimise disturbance (barricade area)
Iron Pot Creek Road Warrak	Pole No.'s 40 - 41	EVC 68 - Creekline Grassy Woodland	Off-set obtained - no vehicle access required (no disturbance)
Red Rocks Road Eversly	Pole No.'s 55 - 56	EVC 68 - Creekline Grassy Woodland	Off-set obtained - no vehicle access required (no disturbance)
Colliers Gap Road Eversly	Pole No.'s 67 - 68	EVC 68 - Creekline Grassy Woodland	Off-set obtained - no vehicle access required (no disturbance)
Pyrenees Highway Eversly	Pole No.'s 91 - 92	EVC 68 - Creekline Grassy Woodland	Off-set obtained - no vehicle access required (no disturbance)
Pyrenees Highway Elmhurst	Pole No.'s 100 - 101	EVC 68 - Creekline Grassy Woodland	Off-set obtained - no vehicle access required (no disturbance)
Pyrenees Highway Elmhurst	Pole No.'s 99 - 99	EVC 68 - Creekline Grassy Woodland	Off-set obtained - no vehicle access required (no disturbance)

References: source information from Planning Permit issued to ARWF developer Renewable Energy Systems Holdings Limited 'RES' Planning Permit

More detailed information relating to local coverage can be found at the DSE Biodiversity Interactive website at the link: http://maps.biodiversity.vic.gov.au/viewer/?viewer=NatureKit which has been overlayed onto the Powercor Google Earth Enterprise application.

Local coverage of nationally significant vegetation can be found using the Protected Matters Search tool at the Australian Government Department of the Environment website at the link: http://www.environment.gov.au/topics/about-us/legislation/environment-protection-and-biodiversity-conservation-act-1999/protected

Vegetation Management Policy

This Policy applies to the following entities:

- Powercor PAL)
- CitiPower (CP)
- United Energy (UE)
- Transmission Operations Australia Elaine (TOA)
- Transmission Operations Australia 2 Ararat TOA2)

To minimise the risk to the community and the environment caused through the interaction of trees and powerlines, CP, PAL, UE, TOA and TOA2 are obligated and committed to comply with the requirements of the current Electricity Safety (Electric Line Clearance) Regulations 2015.

The Electric Line Clearance (Vegetation) Management Plan, Vegetation Management Procedure and Vegetation Annual Execution Plan define the detailed programs to achieve our commitment to compliance, whilst allowing flexibility within the business to encourage innovation, continuous improvement and the efficient use of resources.

The Electric Line Clearance Management Plan and strategies are focused on maintaining a network where **no tree is inside the Minimum Clearance Space** within the CP, PAL, UE, TOA and TOA2 networks. It is acknowledged however that from time to time trees may be discovered inside the MCS and therefore CP, PAL, UE, TOA and TOA2 has processes in place to action these trees. CP PAL & UE has set out VP codes and timeframes to manage vegetation that may unexpectedly grow inside the MCS.

REFERENCE D: Environment Protection and Biodiversity Conservation (EPBC) ACT Referral Process

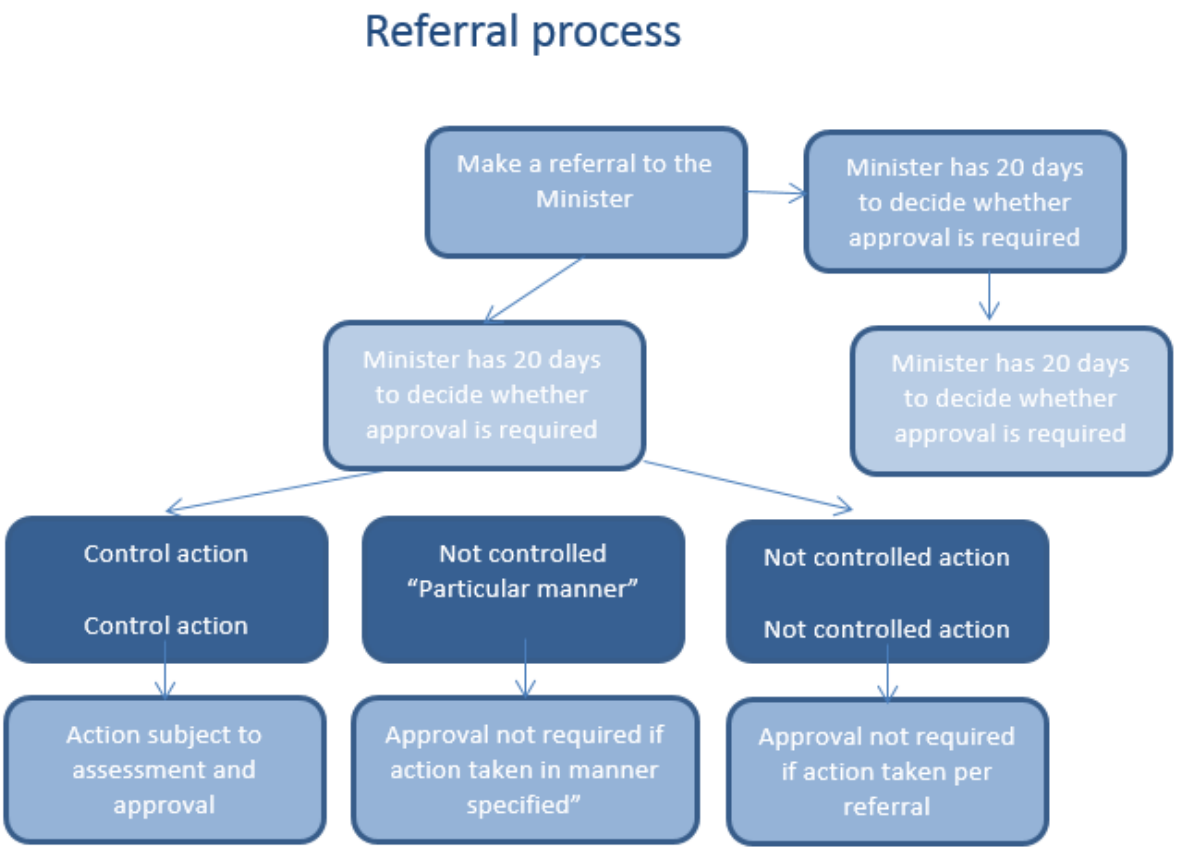
Referral forms are available from the departments website department's website at www.environment.gov.au/epbc/assessments/referral-form.html

The referral should include all available information about the proposed action, as well as any measures that will be put in place to reduce adverse impacts on those matters.

Examples of mitigating actions might include:

- minimising vehicle access points to avoid impacts of vehicle tracks on nationally protected grassland and low lying vegetation, particularly in wet conditions;
- pruning of trees outside of the breeding season for nationally protected species (for example listed migratory birds)

As part of the referral process there is a 10 business day public comment period. This means that the referral will be made available to the public on-line for their comment.



Is the activity a controlled action?

The Minister will consider the referral and decide whether the action is likely to have a significant impact on a matter of national environmental significance, and consequently whether it is or is not a controlled action.

If the Minister decides that the activity is a controlled action, then the action will be subject to the assessment and approval process under the EPBC Act.

If the Minister decides that the activity is not a controlled action, then the Minister can state that approval is not required if the action is taken in accordance with:

- the "particular manner" specified; or
- the referral

There is a statutory time frame of 20 business days in which the Minister must make a decision, so unless there are requests for further information the CitiPower, Powercor and United Energy should usually be notified within 20 business days whether or not federal assessment and approval is required.

In most cases, it is likely that line clearance works would not be controlled actions, particularly where the works are undertaken in accordance with a referral which sets out an adequate analysis of the environment, proposed impacts and mitigating measures, or in accordance with a "particular manner" approval that is developed with the Department of the Environment.

However, if the line clearance works contemplate a wide scale or permanent impact on nationally protected vegetation or key habitats for threatened species, it is possible that the Department may decide that these activities constitute a controlled action which requires assessment and approval. For further information refer to *Reference E: Assessment and Approval Process for Controlled Actions.*

Reference E: Assessment and Approval Process for Controlled Actions

The information on assessment and approval of controlled actions in this reference, has been included in order to provide guidance to the 3 Networks, in the event that any line clearance works are determined to be controlled actions and assessment and approval is required.

The Department of the Environment, Land, Water and Planning has a range of options and methods for assessing controlled actions. The Department has the discretion to determine the most appropriate method of assessment.

Assessment methods include:

- accredited assessment (another government process is accredited as being adequate assessment such as state/territory environmental assessment processes);
- assessment on referral information (assessment done solely on the information provided in the referral form);
- assessment on preliminary documentation (referral form and any other relevant material identified by the minister as being necessary to adequately assess a proposed action)
- assessment by environmental impact statement (EIS) or public environment report (PER): and
- assessment by public inquiry.

The EPBC Act sets out the process and time limits for each of these types of assessment.

There is a Bilateral Agreement between Victoria and the Commonwealth under Section 45 of the EPBC Act. It provides for the accrediting of assessment under certain Victorian laws as being sufficient for EPBC Act purposes, in each case the Victorian assessment must also address the EPBC Act requirements. If the activity has been and/or will go through a Victorian assessment process, the CitiPower, Powercor and United Energy should consider whether the process addressed or will address EPBC Act requirements, and confirm that it is an accredited assessment with the Department of the Environment, Land, Water and Planning.

If an assessment is required, the Department will determine the assessment method. However the most likely assessment methods given the likely scale and impact of most line clearance works, are the processes for assessment on referral information or on preliminary documentation. A general outline of these assessment processes are provided below.

The general process for assessment on referral information is that:

- the Department of the Environment must prepare a draft recommendation report;
- the draft recommendation report is published for a 10 business day public comment period;
- the recommendation report is finalized and provided to the minister;
- the Minister must make a decision to approve, approve with conditions or not approve a proposed action within 30 business days of deciding on the assessment approach,

The general process for assessment on preliminary documentation is that:

- the Minister directs the proponent to publish the referral information for public comment;
- the public comment on the proponent's information;
- the proponent then has the opportunity to revise its information to take account of public comments, and gives a notice to the Minister with the revised information or a notice stating that no comments were received.
- within ten days the proponent must publish the revised information and comments, or if no comments were received, republish the relevant information;
- the Department of the Environment prepares a recommendation report and provides it to the Minister;
- the Minister makes a decision to approve, approve with conditions or not approve the proposed action within 40 business days of receiving finalized documentation from the proponent.

In deciding whether or not to approve a controlled action the Minister must consider:

- the principles of ecologically sustainable development;
- the results of the assessment of the impacts of the proposed action, including the relevant recommendation report from the secretary of the federal environment department;
- referral documentation;
- community and stakeholder comments;
- any other relevant information available on the impacts of the proposed action; and
- relevant comments from other Australian Government and state and territory government ministers (such as social and economic factors).

In deciding whether or not to approve a controlled action the Minister may also at his or her discretion consider the environmental history of the company taking the action, including the environmental history of the executive officers of companies and parent companies and their executive officers.