



Jemena Electricity Networks (Vic) Ltd

Electric Line Clearance
Management Plan
2019-2020

Document No. JEN PL 0101



LIABILITY DISCLAIMER

This Electric Line Clearance Strategic Plan (the Plan) has been prepared to inform relevant stakeholders of the asset management approach, processes and strategies applied to Jemena Electricity Networks (Vic) Ltd (**JEN**). This Plan has also been prepared for the purposes of the Electricity Safety (Electric Line Clearance) Regulations 2015 (Vic).

Some of the information and statements contained in the Plan are comprised of, or are based on, assumptions, estimates, forecasts, predictions and projections made by JEN's annual Asset Management planning cycle. In addition, some of the information and statements in the Plan are based on actions that JEN currently intends it will take in the future. Circumstances will change, assumptions and estimates may prove to be wrong, events may not occur as forecasted, predicted or projected, and Jemena may, at a later date, decide to take different actions to those it currently intends to take.

Except for any statutory liability which cannot be excluded, Jemena will not be liable, whether in contract, tort (including negligence), equity or otherwise, to compensate or indemnify any person for any loss, injury or damage arising directly or indirectly from any person using, or relying on any content of, the Plan.

When considering any part of the Plan, persons should take appropriate expert advice in relation to their own circumstances and must rely solely on their own judgement and expert advice obtained.

March 2019

Foreword

Welcome to Jemena Electricity Networks (JEN) Electric Line Clearance Strategic Plan (the Plan), which has been prepared for the purposes of the Electricity Safety (Electric Line Clearance) Regulations 2015 (Vic) and to inform stakeholders of the asset management approach, processes and strategies adopted for line clearance management.

JEN is committed to providing a safe and reliable supply of electricity and to conduct its business in an environmentally responsible manner. JEN expects that the operation of its assets will meet or exceed the requirements of relevant Victorian and Federal legislation. JEN is committed to meeting its legislative, regulatory and duty of care obligations to provide a safe and compliant workplace. JEN's intentions regarding meeting its obligations are set out below.

- Comply with all current legislation requirements and regulatory obligations relating to occupational health and safety, public safety and environmental management by ensuring that an active compliance system is in place;
- Have systems in place to minimise the risk of breaches and prosecutions under the electrical safety act;
- Deliver Safety Management Schemes commitments and further enhance these Schemes to minimise risks; and
- Proactively manage the minimisation of network incidents by analysis of root causes to enhance the safety of employees and the public.

Significant effort is dedicated each year to update the Plan with careful consideration of comments received from various sources including internal and independent audits, the state's technical regulator Energy Safe Victoria, municipal councils, JEN's vegetation management contractor and the ever changing perception of the community. Page 3 contains a list of the main procedures that have been developed or altered this year.

The Plan aims to balance the non-negotiable safety aspect of trees in the vicinity of powerlines and the community's appetite for aesthetics. We hope you find this Plan informative and your comments are welcome on it or any other aspect of JEN's performance.

Comments can be emailed to customerrelations@jemena.com.au.

An electronic copy of this plan is available at the following location –
<http://jemena.com.au/about/document-centre/electricity/electric-line-clearance-management-plan>


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Signatories

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Date:

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Date:

Revision Log

Issue	Comments	Date Issued	Prepared by
1.0	Original for the 2019-2020 regulatory period.		

Notes/Changes

This Plan sets out the policies and procedures that will be adopted by JEN to comply with the Regulations and Code.

The amendment of this Plan is monitored under the Annual Program of Activities in the Bushfire Mitigation Plan or under legislative changes likely to impact JEN's Electric Line Clearance activities. Review by all internal stakeholders and the Service Provider is sought before approval and publication.

Listed below is a summary of the significant changes made to this Plan from the previously approved Plan.

Section	Change from Previous
Throughout	Where appropriate reference is now made to the current plan period 2019-2020.
Section 8. Jemena Management Structure	Updated to current management structure.
Section 9.2.15 Tree and Maintenance Cutting Codes	Updated to current agreed tree and maintenance cutting codes.
Attachment D	Updated to current HBRA and LBRA vegetation management schedules.

Contents

Foreword	.....	1
Signatories	.....	2
Revision Log	.....	3
1 Regulation Compliance Summary	.....	7
2 Policy	.....	11
3 The Jemena Business Plan	.....	11
3.1 Purpose and Vision	.....	11
3.2 Values	.....	12
3.3 Objectives	.....	13
3.4 Key Success Measures	.....	13
3.5 Strategy	.....	13
4 Electric Line Management Clearance Plan	.....	13
4.1 Objectives	.....	13
4.2 Vision	.....	14
4.3 Mission	.....	14
5 Definitions	.....	14
6 References	.....	16
7 JEN Geographic Area	.....	17
7.1 Access to Electricity Asset Records	.....	18
8 Jemena Management Structure	.....	19
8.1 Responsible Persons – Contact Details	.....	21
8.2 Appointment of Contractor	.....	22
8.2.1 Scope of Work	.....	22
8.2.2 General Requirements	.....	22
8.2.3 Specific Requirements	.....	22
9 Management Procedure	.....	24
9.1 Selection of a Method for Maintaining Clearances	.....	24
9.1.1 Purpose	.....	24
9.1.2 Scope	.....	24
9.1.3 Procedure	.....	24
9.2 Maintenance of the Clearance Space	.....	26
9.2.1 Purpose	.....	26
9.2.2 Scope	.....	26
9.2.3 Procedure	.....	26
9.2.4 Code Compliance	.....	27
9.2.5 Clearance Space and Exceptions	.....	27
9.2.6 Regrowth Space	.....	27
9.2.7 Hazard Trees	.....	28
9.2.8 Cutting Cycle	.....	29
9.2.9 Planned Cutting in the Hazardous Bushfire Risk Area	.....	29
9.2.10 Urgent Cutting or Removal Works	.....	29
9.2.11 Cutting or Removal by Other Responsible Persons (ORP)	.....	30
9.2.12 Non-Compliance by Other Responsible Persons	.....	31
9.2.13 Service Lines	.....	31
9.2.14 Cost Recovery	.....	31
9.2.15 Tree and Maintenance Cutting Codes	.....	31
9.3 Responsible Cutting Practices	.....	35
9.3.1 Purpose	.....	35
9.3.2 Scope	.....	35
9.3.3 Procedure including Training, Qualifications and Experience	.....	35
9.3.4 Alternative Tree Management Proposals	.....	36
9.3.5 Overhanging Trees	.....	37
9.3.6 Long Term Strategies	.....	37

9.4	Important Trees	37
9.4.1	Purpose	37
9.4.2	Scope	38
9.4.3	Procedure	38
9.4.4	Species Identification	39
9.4.5	Trees of Significance Listed in a Planning Scheme	40
9.4.6	Trees of Cultural or Environment Significance	40
9.4.7	Habitat Trees for Threatened Fauna	40
9.5	Assistance to Responsible Persons and the General Public	41
9.5.1	Purpose	41
9.5.2	Scope	41
9.5.3	Procedure	41
9.5.4	Distribution of Information	42
9.5.5	Participation in Community Programs	42
9.5.6	ORP Follow-Up	42
9.5.7	Liaison with Municipal Councils	42
9.5.8	Electricity Safety Amendment (Bushfire Mitigation) Act 2014	44
9.6	Notification, Consultation and Negotiation	45
9.6.1	Purpose	45
9.6.2	Scope	45
9.6.3	Procedure	45
9.6.4	Notification for Cutting or Removal	45
9.6.5	Consultation for Cutting or Removal	46
9.6.6	Negotiation Process	46
9.7	Dispute Resolution	48
9.7.1	Contact Details	48
9.7.2	VMC Field Officer	48
9.7.3	Reference to VMC Program Leader	48
9.7.4	Reference to the Arboreal Advisers	48
9.7.5	Reference to JEN Senior Contract Coordinator	49
9.7.6	Reference to Team Leader Infrastructure Protection	49
9.7.7	Reference to JEN Electricity Maintenance Manager	49
9.7.8	Resolution	49
10	Monitoring and Auditing	51
10.1	Monitoring	51
10.1.1	Targets	52
10.1.2	Fault Investigation	53
10.2	Auditing	53
10.2.1	Pre-summer Inspection in Hazardous Bushfire Risk Areas	53
10.2.2	Inspection in the Low Bushfire Risk Area	53
10.2.3	Code Compliance Audit	53
10.2.4	Outcomes and Continuous Improvement	54
11	ELCMP Review Process	54
Attachment A1.	Customer Notification Letter	56
Attachment A2.	Customer Notification Letter – Service Lines	58
Attachment A3.	Customer Notification Brochure – Service Lines	60
Attachment A4.	POEL Brochure – Safety and Responsibility	61
Attachment A5.	Reminder Notice of Vegetation Near Your Overhead Service Line	64
Attachment A6.	Final Notice of Vegetation Near Your Overhead Service Line	65
Attachment B.	Record of Customer Negotiation	66
Attachment C.	Clearance Space Charts	67
Attachment D.	LBRA Cutting Schedule (2019)	76
	HBRA Cutting Schedule (2019)	78
Attachment E.	Important Trees Register Sample	79
Attachment F.	Hazard Tree Register Sample	80
Attachment G.	Agreed Performance Targets	81
Attachment H.	Vegetation Service Defect Register Sample	82
Attachment I.	Native and Exotic Vegetation in the JEN Region	83
Attachment J.	Engineering Solutions for Vegetation Issues	84

Attachment K.	JEN Fault Investigation Form	86
Attachment L.	Councils within JEN Network Area	88
Attachment M.	Notice to Owners of Contiguous Land	89
Attachment N.	Urgent Tree Cutting or Removal Work near Powerlines	90
Attachment O.	Notification of Pruning or Removal of Hazard Trees near Powerlines within your Property	91
Attachment P.	Notice of Vegetation Management Works Near Powerlines	92

1 Regulation Compliance Summary

The purpose of this section is to provide assistance to quickly identify the specific items as required in Regulation 9 and 10 of the Electricity Safety (Electric Line Clearance) Regulations 2015.

Reg. 9	Requirement	Reference in this Plan
(1)	This regulation does not apply to a responsible person referred to in section 84A or 84B of the Act.	N/A
(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.	4.1 Electric Line Clearance Plan, Objectives, Page 13
(3)	A responsible person must ensure that a management plan prepared under subregulation (2) specifies the following –	
(3)(a)	the name, position, address and telephone number of the responsible person;	8.1 Responsible Persons – Contact Details, Page 21
(3)(b)	the name, position, address and telephone number of the individual who is responsible for the preparation of the management plan;	8.1 Responsible Persons – Contact Details, Page 21
(3)(c)	the name, position, address and telephone number of the person who is responsible for carrying out the management plan;	8.1 Responsible Persons – Contact Details, Page 21
(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;	8.1 Responsible Persons – Contact Details, Page 21
(3)(e)	the objectives of the management plan;	4.1 Electric Line Clearance Plan, Objectives, Page 13
(3)(f)	the land to which the management plan applies (as indicated on a map) ;	7. JEN Geographic Area, Page 17
(3)(g)	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 – (i) native; or (ii) listed in a planning scheme to be of ecological, historical or aesthetic significance; or (iii) a tree of cultural or environmental significance.	9.4 Important Trees, Page 37 (i) 9.4.3 Procedure, Page 38 (ii) 9.4.3 Procedure, Page 38 (iii) 9.4.3 Procedure, Page 38
(3)(h)	the means which the responsible person is required to use to identify a tree specified in paragraph (g)(i), (ii) or (iii);	9.4 Important Trees, Page 37 (i) 9.4.4 Species Identification, Page 39 (ii) 9.4.5 Trees of Significance Listed in a Planning Scheme, Page 39 (iii) 9.4.6 Trees of Cultural or Environment Significance, Page 40; and 9.4.7 Habitat Trees for Threatened Fauna, Page 40

Reg. 9	Requirement	Reference in this Plan
(3)(i)	<p>the management procedures that the responsible person is required to adopt to ensure compliance with the Code, which must –</p> <ul style="list-style-type: none"> (i) include details of the methods proposed to be adopted for managing trees; and maintaining a minimum clearance space as required by the Code; and (ii) specify the method of determining and additional distance that allows for cable sag and sway for the purposes of determining a minimum clearance space in accordance with Division 1 of Part 3 of the Code. 	<p>9. Management Procedure, Page 24</p> <ul style="list-style-type: none"> (i) 9.1 Selection of a Method for Maintaining Clearances, Page 24; and (ii) 9.2 Maintenance of the Clearance Space, Page 26 and Vegetation and Easement Management Assessment Procedure (Jemena Distribution) – VEM 20-50.
(3)(j)	<p>the procedure 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;</p>	<p>9.2 Maintenance of the Clearance Space, Page 26 and Vegetation Management Assessment Procedure (Jemena Distribution) – VEM 20-51.</p>
(3)(k)	<p>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;</p>	<p>9.3.4 Alternative Tree Management Proposals, Page 36</p>
(3)(l)	<p>the details of each approval for an alternative compliance mechanism that –</p> <ul style="list-style-type: none"> (i) the responsible person holds; and (ii) is in effect; 	<p>9.3.4 Alternative Tree Management Proposals, Page 36</p>
(3)(m)	<p>a description of measures that must be used to assess the performance of the responsible person under the management plan;</p>	<p>10. Monitoring and Auditing, Page 51</p>
(3)(n)	<p>details of the audit processes that must be used to determine the responsible person's compliance with the Code;</p>	<p>10.2.3 Code Compliance Audit, Page 53</p>
(3)(o)	<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;</p>	<p>9.3 Responsible Cutting Practices, Page 35</p> <p>9.3.3 Procedures – Including Training, Qualifications and Experience, Page 35</p>
(3)(p)	<p>notification and consultation procedures, including the form of the notice to be given in accordance with Division 3 of Part 2 of the Code;</p>	<p>9.6 Notification, Consultation and Negotiation, Page 44</p>
(3)(q)	<p>dispute resolution procedures.</p>	<p>9.7 Dispute Resolution, Page 48</p>
(4)	<p>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 of an electric line.</p>	<p>9.2 Maintaining the Clearance Space, Page 26 and Vegetation and Easement Management Assessment Procedure (Jemena Distribution) – VEM 20-50.</p>

Reg. 10	Requirement	Reference in this Plan
(1)	This regulation applies in relation to the management plan that a responsible person is required, under regulation 9, to prepare for a financial year.	
(2)	If the responsible person is a major electricity company they must, before 31 March in the year that the financial year commences, submit the management plan to Energy Safe Victoria for approval.	4.1 Electric Line Clearance Plan, Objectives, Page 13
(3)	The responsible person must provide a copy of the management plan to Energy Safe Victoria on request within 14 days or such longer period as specified by Energy Safe Victoria.	4.1 Electric Line Clearance Plan, Objectives, Page 13
(4)	The responsible person must, if requested to do so by Energy Safe Victoria, provide further information or material in respect of the management plan within 14 days or such longer period as specified by Energy Safe Victoria.	4.1 Electric Line Clearance Plan, Objectives, Page 13
(5)	The responsible person must amend the management plan if instructed to do so by Energy Safe Victoria within 14 days or such longer period as specified by Energy Safe Victoria.	4.1 Electric Line Clearance Plan, Objectives, Page 13
(6)	A responsible person must not contravene a requirement of the management plan if the management plan is approved by Energy Safe Victoria.	4.1 Electric Line Clearance Plan, Objectives, Page 13
(7)	A responsible person must ensure that a copy of the management plan is:	
(i)	published on the responsible person's Internet site; and	
(ii)	available for inspection at the responsible person's principal office in the State during normal business hours.	4.1 Electric Line Clearance Plan, Objectives, Page 13

The purpose of this section is to provide assistance to quickly identify the specific items as required in Schedule 1 – Code of Practice for Electric Line Clearance of the Electricity Safety (Electric Line Clearance) Regulations 2015.

Sch. 1	Requirement	Reference in this Plan
3	Responsible person must keep minimum clearance space clear of trees	Section 2 – Policy. Page 11
4	Exception to minimum clearance space for structural branches around insulated low voltage electric lines	Section 9.2.5 – Clearance Space and Exceptions. Page 27
5	Exception to minimum clearance space for small branches around insulated low voltage electric lines	Section 9.2.5 – Clearance Space and Exceptions. Page 27
6	Exception to minimum clearance space for structural branches around uninsulated low voltage electric lines in low bushfire risk areas	Section 9.2.5 – Clearance Space and Exceptions. Page 27

Sch. 1	Requirement	Reference in this Plan
8	Responsible person may cut or remove hazard tree	Section 9.2.7 – Hazard Trees. Page 28
9	Cutting of tree to comply with Standard	Section 9.2.4 – Code Compliance. Page 27
10	Cutting or removal of specified trees must be minimised	Section 9.4 – Important Trees. Page 37 Section 9.4.5 – Trees of Significance Listed in a Planning Scheme. Page 39 Section 9.4.6 – Trees of Cultural or Environment Significance. Page 40
11	Cutting or removing habitat for threatened fauna	Section 9.4 – Important Trees. Page 37 Section 9.4.7 – Habitat Tree for Threatened Fauna. Page 40
12	Restriction on timing of cutting or removal if notification is required	Section 9.6.4 – Notification for Cutting or Removal. Page 45
13	Restriction on urgent cutting of trees	Section 9.2.10 – Urgent Cutting or Removal Works. Page 29
14	Restriction on urgent removal of trees	Section 9.2.10 – Urgent Cutting or Removal Works. Page 29
15	Responsible person must provide notification before cutting or removing certain trees	Section 9.6.4 – Notification for Cutting or Removal. Page 45
16	Responsible person must publish notice before cutting or removing certain trees	Section 9.6.4 – Notification for Cutting or Removal. Page 45
17	Responsible person must consult with occupier or owner of private property before cutting or removing certain trees	Section 9.6.5 – Consultation for Cutting or Removal. Page 46
18	Notification and record keeping requirements for urgent cutting or removal	Section 9.2.10 – Urgent Cutting or Removal Works. Page 29
19	Dispute resolution	Section 9.7 – Dispute Resolution. Page 48
20	Duty relating to the safety of cutting or removal of trees close to an electric line	Section 9.5.7 – Liaison with Municipal Councils. Page 42
21	Duty relating to assisting to determine the allowance for cable sag and sway	Section 9.5.7 – Liaison with Municipal Councils. Page 42
22	Duties relating to management procedures to minimise danger	Section 9.5.3 – Assistance to Responsible Persons and the General Public Procedure. Page 41
23	Additional distance that allows for cable sag and sway	Section 9.2.3 – Maintenance of the Clearance Space Procedure. Page 26 Section 9.2.5 – Clearance Space. Page 27
24	Insulated electric lines in all areas	Section 9.2.5 – Clearance Space and Exceptions. Page 27
25	Uninsulated low voltage electric line in a low bushfire risk area	Section 9.2.5 – Clearance Space and Exceptions. Page 27
26	Uninsulated high voltage electric line (other than a 66,000 volt electrical line) in a low bushfire risk area	Section 9.2.5 – Clearance Space and Exceptions. Page 27
27	Uninsulated 66,000 volt electrical line in a low bushfire risk area	Section 9.2.5 – Clearance Space and Exceptions. Page 27
28	Uninsulated low voltage and high voltage electric lines (other than a 66,000 volt electrical line) in a hazardous bushfire risk area	Section 9.2.5 – Clearance Space and Exceptions. Page 27
29	Uninsulated 66,000 volt electric lines in a hazardous bushfire risk area	Section 9.2.5 – Clearance Space and Exceptions. Page 27

Sch. 1	Requirement	Reference in this Plan
31	Application for approval of alternative compliance mechanism	Section 9.3.4 – Alternative Tree Management Proposals. Page 36
32	Formal safety assessment of alternative compliance mechanism	Section 9.3.4 – Alternative Tree Management Proposals. Page 36
33	Approval of alternative compliance mechanism	Section 9.3.4 – Alternative Tree Management Proposals. Page 36
34	Amendment of approval	Section 9.3.4 – Alternative Tree Management Proposals. Page 36
35	Suspension or revocation of approval	Section 9.3.4 – Alternative Tree Management Proposals. Page 36

2 Policy

It is the policy of Jemena Electricity Networks (Vic) Ltd. (JEN), to achieve compliance with the Electricity Safety (Electric Line Clearance) Regulations 2015, thus achieving high levels of public safety and supply reliability through preventive and corrective maintenance programs.

This Plan is written from the perspective of JEN's legal and regulatory obligations and responsibilities with respect to electric line clearance. Similarly ORPs (councils/municipalities and land owners/occupiers) also have certain legal and regulatory obligations and responsibilities with respect to electric line clearance.

One of the demarcations of responsibility is the location of a tree relative to a power line. Figure 1.9 in Section 9.2.15 'Responsibilities for Trees near Overhead Powerlines' provides a schematic representation of the responsibilities. The 'Powerlines and Vegetation Management' brochure provides the summary of responsibilities for all persons and is available on the Victorian electricity and gas regulator's, Energy Safe Victoria (ESV) web site.

[Footnote: The brochure 'Powerlines and Vegetation Management' is available on ESV's website at <http://www.esv.vic.gov.au/For-Consumers/Gas-and-electricity-outdoors/Electricity-safety-outdoors/Managing-trees-near-powerlines>]

3 The Jemena Business Plan

This chapter provides a summary of the Jemena Business Plan. The business plan provides:

- Strategic direction for Jemena's Asset Management Policy, Asset Management Strategy and Objectives, and Asset Management Plan by detailing the corporate vision, values, objectives, policies, and key success factors; and
- A reference guide and a source of strategic direction for the electricity network to ensure the network strategy and objectives and the asset management strategic approach are consistent with the corporate strategy as a whole.

3.1 Purpose and Vision

Jemena's purpose and vision is supported by a series of strategy directives and measurements of success that are intended to provide concrete guidance for achieving its aims.

Our Purpose

Bring energy to life.

Our Vision

To be customers' first choice for world leading, sustainable and reliable energy solutions.

3.2 Values

Jemena’s values aim to support our vision to be recognised as a world class owner and manager of energy delivery assets. Figure 1.1 shows the five key elements that compose Jemena’s values: health and safety, teamwork, customer focus, excellence, and accountability. Working ‘the Jemena Way’ is about doing what we say we’re going to do and working as one team and following one way of doing things wherever possible.



Figure 1.1 Jemena’s Values

Health and Safety

We care; we are successful when we identify risks and seek out healthier and safer ways to work, encourage questioning and entertain doubt, care for the physical and mental wellbeing of our people and ensure health and safety is considered appropriately in our decision-making.

Teamwork

We act as one team; we are successful when we value diversity and treat all people with dignity and respect, individually understand how the business works and the role that we play, work together to achieve better outcomes, ensure decisions are based on what is best for the whole business and are willing to sacrifice our own goals for the benefit of Jemena.

Customer Focus

We consider our customers in everything we do; we are successful when we seek opportunities to engage with our customers, hear, listen and think to understand what our customers want, deliver exceptional customer service in and beyond our work areas, evaluate decisions in terms of the impact on our customers.

Excellence

What we do, we do well; we are successful when we are committed to benchmarking ourselves against the world’s best and set our standards accordingly, have an open mind to change, will look for better, simpler and a consistent way of operating, learn from our successes as well as failures and take active steps to improve performance.

Accountability

We do what we say we will do; we are successful when we do what we say we will do to meet deadlines and honour our commitments, encourage honest constructive discussions and are willing to learn from mistakes, are clear on roles and responsibilities and ensure our goals are SMART and we exercise appropriate initiative and judgment.

3.3 Objectives

Jemena’s vision is to be recognised as a world class owner and manager of energy delivery assets and plans to realise this vision through developing a corporate culture that achieves the following specific objectives for the electricity network:

- Deliver operational and financial efficiencies aligned to the business plan;
- Deliver energy services that are safe, reliable, affordable and responsive to our customers’ preferences;
- Grow scale to be an influential market leader with strong customer, regulatory, stakeholder and community relationships; and
- Deliver financial performance that is superior to industry peers.

3.4 Key Success Measures

The effectiveness of Jemena’s corporate strategy is measured via five key success measures, which are summarised in Figure 1.2.

KEY SUCCESS MEASURES				
Safe and Efficient Operations	Strong Financial Returns	Leading Asset Management	Proactive Customer & Market Engagement	Effective Regulatory Management

Figure 1.2 Jemena’s Key Success Measures

3.5 Strategy

The strategy for Jemena group details how Jemena plans to establish a strong foundation, become a leader in the energy delivery industry as a world class owner and manager, and extend the business to capitalise on new opportunities.

4 Electric Line Management Clearance Plan

4.1 Objectives

The objective of this Plan is to clearly define the management processes and procedures that will be adopted by JEN to ensure compliance with the requirements of the Electricity Safety (Electric Line Clearance) Regulations 2015, being:

- Management procedures for standards and practices to be adopted and observed in tree cutting or removal in the vicinity of electric lines and the keeping of the whole, or any part of a tree clear of electric lines;
- Management procedures to minimise danger of trees contacting electric lines resulting in fire or compromising electrical safety including electrocution; and
- Other matters for, or with respect to, the maintenance of electric lines.

It is acknowledged that JEN must prepare a management plan and submit it for approval to Energy Safe Victoria (ESV) on or before 31 March each year and must:

- Provide a copy of the management plan to ESV on request within 14 days or such longer period as specified by ESV;
- Provide further information in respect of the management plan on request within 14 days or such longer period as specified by ESV;
- Amend the management plan when instructed to do so by ESV within 14 days or such longer period as specified by ESV;
- Not contravene a requirement of a management plan approved by ESV; and
- Ensure that a copy of the management plan is available for inspection by the public at the responsible person’s principal office in the State during normal business hours.

The application of these objectives is throughout the JEN area (see Figure 1.3 JEN – Geographic Area) and involves a broad category of tree species, both native and introduced, throughout the region.

4.2 Vision

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

JEN will support this vision by instilling the following values:

- Use of skilled people and modern technology;
- Continue development and improve methods of environmental management and ongoing development of fire safe distribution assets;
- Implementation of training standards to provide the 'best practice' management of vegetation; and
- Provision of an excellent and responsive customer service.

4.3 Mission

To ensure that the tree clearance space is maintained in accordance with the Electricity Safety (Electric Line Clearance) Regulations 2015 by the implementation of this Plan.

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

- Ensuring public safety;
- Ensuring private property security;
- Ensuring continuity of supply;
- Delivery of a quality service;
- Responsible environmental management;
- Commitment to work place safety;
- Minimising of community cost; and
- Notification/consultation/negotiation with relevant stakeholders.

5 Definitions

Affected Person

Affected person, in relation to the cutting or removal of a tree, means an owner or occupier (including a person who is responsible for the management of public land) of contiguous land where the cutting or removal will affect the use of that contiguous land.

Area Manager (AM)

Person employed by the Vegetation Management Company (VMC) responsible for the oversight of the vegetation program including back-office support functions, documented policies and procedures, program efficacy through review and audit.

Assessor

Person employed by the VMC and trained in UET20312 Certificate II in 'ESI – Powerline Vegetation Control', including identification of plant species and UETTDRVC24A 'Assess vegetation and recommend control measures in an ESI environment' for local fieldwork which is currently the national unit of competency recognised by the Victorian Electricity Supply Industry. The assessor is employed to perform routine inspection for the vegetation management program.

Code

Code of Practice for Electric Line Clearance as defined in the Schedule of the Electricity Safety (Electric Line Clearance) Regulations 2015.

Declared Area

In regard to public lands, Section 84C of the Electricity Safety Act 1998 specifies that *"a council responsible for the management of public land in an area declared under section 81 of the Electricity Safety Act 1998 is responsible for the keeping of the whole or any part of a tree situated on the land clear of an electric line that is not a private electric line"*.

Electric Line Clearance Management Plan (the Plan)

This document, the Plan, prepared and submitted for approval to ESV in compliance with regulation 9(3) of the Electricity Safety (Electric Line Clearance) Regulations 2015.

Electricity Safety (Electric Line Clearance) Regulations 2015 (the Regulations)

Include the Prescribed Code of Practice for Electric Line Clearance and:

- Prescribe standards and practices to be adopted and observed in tree cutting or removal in the vicinity of electric lines and the keeping of the whole or any part of a tree clear of electric lines;
- Prescribe management procedures to minimise danger of electric lines causing fire or electrocution;
- Other matters with respect to the maintenance of electric lines;
- Provide for management plans relating to compliance with the Code; and
- Provide for other matters authorised under the Act relating to electric line clearance.

These Regulations are made under sections 151, 151A and 157 of the Electricity Safety Act 1998.

ESV

Energy Safe Victoria (ESV) is Victoria's independent electricity, gas and pipeline safety and technical regulator.

Hazardous Bushfire Risk Areas (HBRA)

An area that a fire control authority has assigned a fire hazard rating of 'high' under section 80 of the Act; or an area that is not an urban area and has not been assigned a fire hazard rating of 'low' under section 80 of the Act.

Experienced Arborist (Arboreal Advisor)

Person with a minimum qualification of National Certificate Level IV in Horticulture and Arboriculture, which includes the 'Assess Trees' module, and has at least five years of field experience in assessing trees.

Jemena Electricity Networks (Vic) Ltd (JEN)

JEN is an electricity distribution company wholly owned by Jemena. JEN distributes electricity to the northern and western suburbs of Melbourne, Victoria. It is one of five licensed electricity distribution networks in Victoria. For the purpose of the Plan the terms JEN and Jemena may be used interchangeably. In general, for clarity and in context for certain usage, the term JEN may be used to refer to the distribution asset (i.e. pole and wires) and the name Jemena may be used to refer to the resource (people) managing those assets.

Field Crew – Cutter

VMC employee or subcontractor responsible for vegetation cutting or removal on JEN and holds the following qualifications:

- UET20312 Certificate II in ESI – Powerline Vegetation Control; and
- UETTDRVC24A Assess Vegetation and Recommend Control Measures in an ESI environment.
- A current certificate specifying satisfactory completion of a training course in tree clearing, approved by Energy Safe Victoria as specified in the Electricity Safety (Installations) Regulations 2009.

Field Officer

VMC employee responsible for local fieldwork on JEN and holds the following qualifications:

- UET20312 Certificate II in ESI – Powerline Vegetation Control; and
- UETTDRVC24A Assess Vegetation and Recommend Control Measures in an ESI Environment.

Refer to section 9.3.3 Procedure including Training Qualification and Experience for additional information relating to training, qualifications and experience.

Low Bushfire Risk Areas (LBRA)

An area that a fire control authority has assigned a fire hazard rating of 'low' under section 80 of the Act; or an urban area.

Other Responsible Person (ORP)

Refers to a person(s) (other than a distribution company) who are:

- (i) responsible for the management of public land and are therefore responsible for the keeping of the whole or any part of a tree situated on the land clear of an electric line other than a private electric line (for example, local councils or municipalities); or
- (ii) operate an electric line and are therefore responsible for the keeping of the whole or any part of a tree clear of the electric line (for example POEL).

Private Overhead Electric Line (POEL)

Refers to power lines that are privately owned. The owners have certain responsibilities for maintenance of their power lines.

Suitably Qualified Arborist

VMC employee with a minimum qualification of National Certificate Level IV in Horticulture and Arboriculture, which includes the 'Assess Trees' module, and has at least three years of field experience in assessing trees. As defined in the regulation this person is employed to perform inspections of the clearance space of hazard trees, exception trees and urgent trees.

Vegetation Management Company (VMC)

Specialist external company responsible for the management, coordination and supervision of all work associated with the delivery of the vegetation program. Zinfra is the company currently employed in this role and performs the Assessment of the Jemena Network then manages the subsequent powerline clearing operations. Zinfra has been performing vegetation management for Jemena since 2009. For further details on the VMC, refer to <http://www.zinfra.com.au/>.

Vegetation Management System (VMS)

The Vegetation Management System (VMS) is a database used by the VMC to record all vegetation management related data. It is also used for performance monitoring and reporting.

For other definitions refer to the Electricity Safety Act 1998, Electricity Safety (Bushfire Mitigation) Regulations 2013 and the Electricity Safety (Electric Line Clearance) Regulations 2015.

6 References

- Electricity Safety Act 1998.
- Electricity Safety (Bushfire Mitigation) Regulations 2013.
- Bushfire Mitigation Plan.
- Customer Complaints Procedure.
- Electricity Safety (Electric Line Clearance) Regulations 2015.
- Electricity Safety Management Scheme.
- Electricity Safety (Installations) Regulations 2009.
- JEN Field Services Agreement.
- Electricity Safety Amendment (Bushfire Mitigation) Act 2014.
- Australian Standard AS 4373 - 2007 Pruning of Amenity Trees
- Procedure for Achieving Electric Line Clearance through Engineering Solutions
– Document number: JEN PR0116.
- Access to JEN for Vegetation Management Work by Other Responsible Persons: JEN PR 1722
- Vegetation and Easement Management Assessment Procedure (Jemena Distribution)
– Document number: VEM 20-50.
- Management of Vegetation of Significance Vegetation and Easement Management VEM 20-53
- Customer Extra Services Required Vegetation & Easement Management
– Document number: VEM 21-01.
- Vegetation and Easement Management Hazard Tree and 56M Assessment Procedure
– Document number: VEM 20-01.
- Customer Installation Defect Management procedure: ELE PR 1408.

7 JEN Geographic Area



Figure 1.3 JEN – Geographic Area

Note: Figure 1.3 defines the network geographic area to which this Plan applies (see Section 4 – Electric Line Clearance Plan). Details of this area are maintained and available in the JEN GIS system. For public access to this material refer to Section 9.5.4 – Distribution of Information.

As displayed in the above map, the JEN franchise area predominantly covers the western and north western suburbs of Melbourne from:

- Williamstown and Newport along its southern boundary;
- Tullamarine to Gisborne South along its western boundary;
- Clarkefield to Craigieburn in the north; and
- Reservoir to Heidelberg and Coburg in the east.

The JEN franchise boundary is also shown as a wide orange line in Edition 41 (2014) of the Greater Melbourne street directory published by Melway – refer to Key Maps page 5 to page 9.

The JEN network, which covers approximately 950 square kilometres, consists of approximately 105,000 poles with over 4,500km of overhead power lines and 180,000 overhead service lines. JEN has electric line clearance responsibilities for about 390,000 trees.

The JEN area has been divided by the fire control authority into two categories, HBRA and LBRA in compliance with Part 8, Section 80 of the Electricity Safety Act 1998.

Specific asset standards and vegetation management requirements apply in these areas:	
Low Bushfire Risk Areas	Predominantly urban and making up approximately 37% of the JEN geographical area and containing approximately 99,000 poles
Hazardous Bushfire Risk Area	Predominantly rural and making up approximately 63% of the JEN geographical area and containing approximately 6,000 poles.

HBRA and LBRA Boundary Reviews

The boundary between the two fire areas (HBRA and LBRA) can only be updated by a fire control authority, namely CFA.

On a two-year basis an Asset Performance Engineer from Network Integrity & Performance shall contact the CFA Spatial Information Services department for any updates to the LBRA/HBRA boundaries. Local municipal councils impacted by these changes contribute to the decision process in determining boundary locations. Any changes determined by this process will be reflected within the JEN GIS. This automatically adjusts inspection zones and asset inspection cycles for the assets impacted by the boundary change.

Further information is available from the CFA website at:
<http://www.cfa.vic.gov.au/plan-prepare/electric-line-vegetation-clearance/>

A list of Councils within the JEN distribution area is listed in Attachment L.

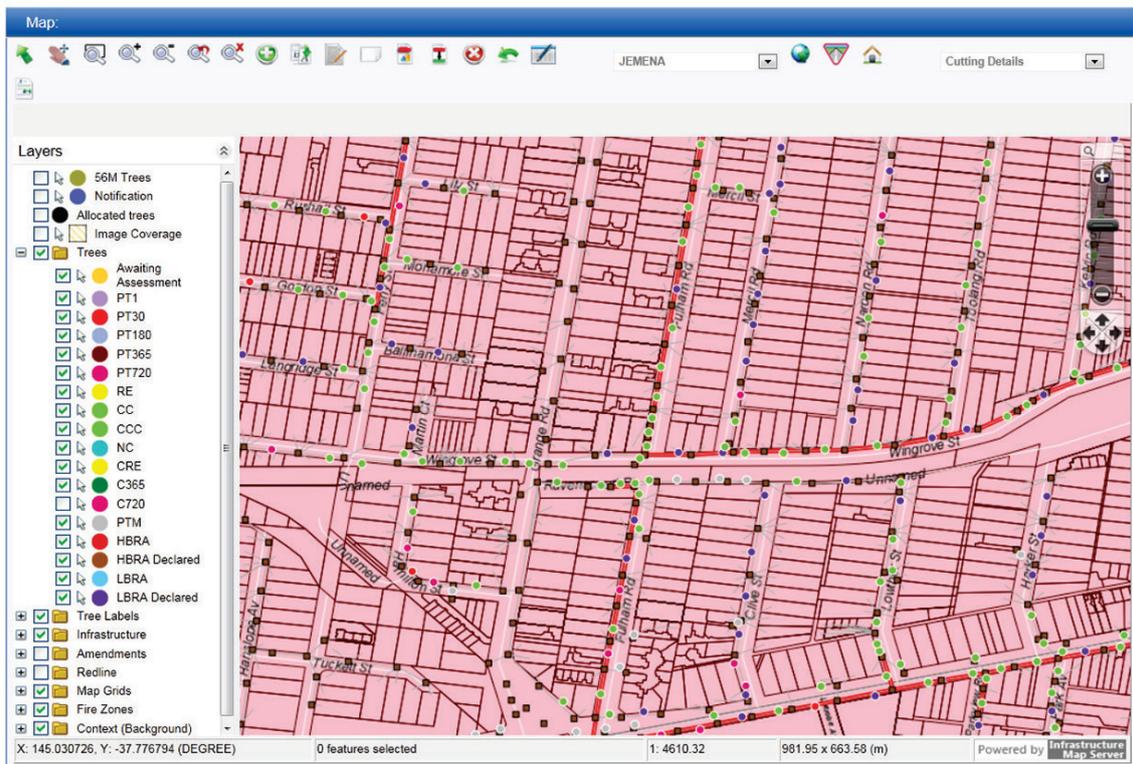
7.1 Access to Electricity Asset Records

As of January 2009, all vegetation related data is stored in the VMS. This database is also used to generate performance status and statistics on a monthly basis and is available to Jemena staff for monitoring and reporting functions.

The VMS is accessible to authorised personnel via a tiered security logon. Broadly the tiers range from Data Entry (full read write access) to Information only where only preset objects will be displayed without write permission.

Prior to being authorised personnel are provided with the required training. Extensive documentation and manuals are available as reference material.

Figure 1.4 shows a screen shot of the VMS and illustrates some of the information available in the VMS.



Legend					
Pink areas:	Low Bushfire Risk Areas	Light grey lines:	LV overhead lines	Colour Dots:	Various Tree Codes (refer Layers)
Brown squares:	JEN Poles	Red Line:	HV Feeder		

Figure 1.4 Screen shot of Zinfras' VMS.

8 Jemena Management Structure

The following management structure relates the Jemena Electricity Networks group which is responsible for the preparation, approvals and the submission of the Plan.

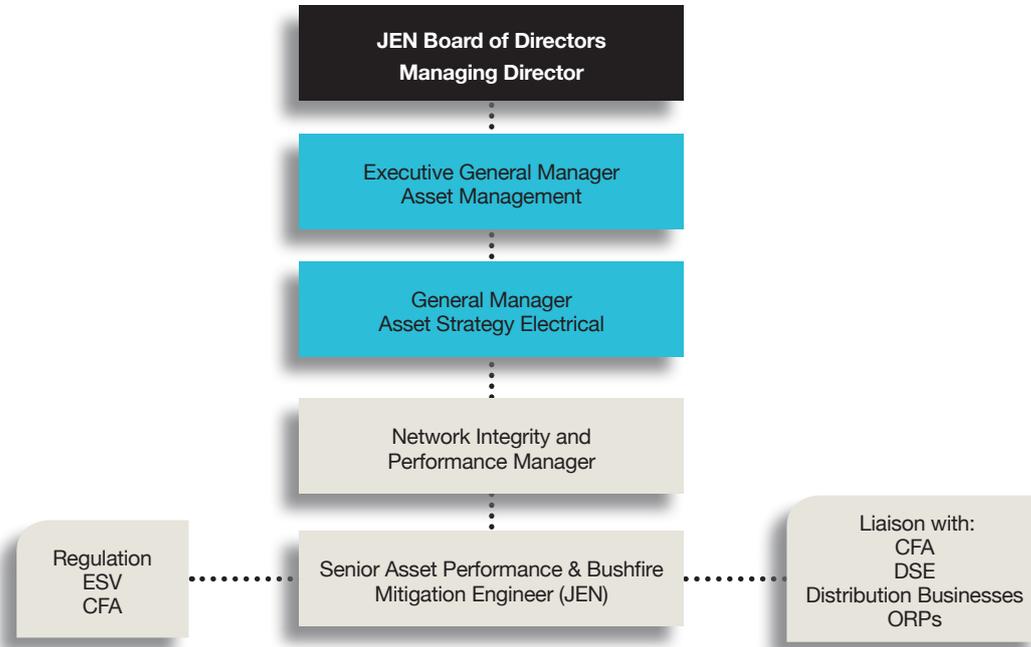


Figure 1.5 Asset Management Electric Line Clearance Responsibility Structure

High level role descriptions are provided below:

Board of Directors and Managing Director: have the responsibility of ensuring JEN is meeting its management responsibilities for the activities outlined in the Plan.

Executive General Manager Asset Management: has overall accountability of the performance of the JEN assets.

General Manager Asset Strategy Electrical: has overall responsibility for all activities relating to electricity network development and performance.

Network Integrity and Performance Manager: has the specific responsibility for the performance of the electricity network including the production, submission, endorsement and compliance of the Plan and is also responsible for performance of JEN including production of the Plan and oversees compliance and performance with relevant legislation.

Senior Asset Performance & Bushfire Mitigation Engineer: is responsible for assisting the Network Integrity and Performance Manager with the production of the Plan and oversees compliance with the Electrical Safety (Electric Line Clearance) Regulations 2015.

The following management structure relates to the Zinfra group which is responsible for carrying out the JEN Plan.

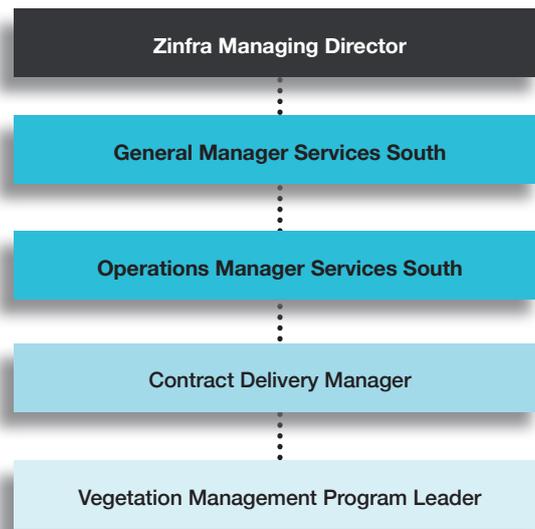


Figure 1.6 JEN – Zinfra Electric Line Clearance Responsibility Structure

High level role descriptions are provided below:

Zinfra Managing Director: has the responsibility of ensuring JEN is meeting its management responsibilities for the activities outlined in this Plan.

General Manager Services South: has overall responsibility for all activities relating to electricity network operational activities, including the carrying out of this Plan.

Operations Manager Services South: has the specific responsibility for the operational performance of the electricity network including the carrying out of this Plan.

Contract Delivery Manager: is responsible for the provision of all resources and systems to support JEN maintenance and works programs, including OH&S.

Vegetation Management Program Leader: is responsible for the co-ordination of all vegetation management program resources, including personnel and documented procedures, processes and plans. Tree cutting or removal is managed through the same structure as other JEN asset maintenance activities and the management structure provides the necessary framework for responsibility, authority and accountability.

JEN is the Responsible Person (see Section 8.1 – Responsible Persons – Contact Details) and as such is responsible for the compliance to the requirements of the Regulations. SD has appointed a specialist VMC (Zinfra) to manage all aspects of tree cutting and removal activities within the business for compliance. This company manages all tree cutting and removal resources and is subject to regular audits. The VMC reports directly to the Senior Contract Coordinator.

Refer to Section 9.3.3 - Procedure including Training, Qualifications and Experience and Procedure VEM 30-52 for additional information relating to assessing and cutting compliance audits.

8.1 Responsible Persons – Contact Details

For the requirement of regulations 9(3)(a) to (d) and 9(9), the following prescribed contact details are provided:

Regulation 9	Specification – Contact details
(3)(a) the name, address and telephone number of the responsible person:	<p>██████████ General Manager Asset Strategy Electrical Jemena Electricity Networks (Vic) Ltd Level 16, 567 Collins Street, Melbourne, VIC 3000 Phone: (03) 9173 7000 Email: ██████████</p>
(3)(b) the name, position, address and telephone number of the individual who was responsible for the preparation of the management plan;	<p>██████████ Primary Plant Distribution Systems Manager Jemena Electricity Networks (Vic) Ltd Level 16, 567 Collins Street, Melbourne, VIC 3000 Phone: (03) 9173 7000 Email: ██████████</p>
(3)(c) the name, position, address and telephone number of the persons who are responsible for carrying out the Plan:	<p>██████████ General Manager - Services South Zinfra Pty Ltd Level 26, 303 Collins Street Melbourne VIC 3000 Phone: (03) 9173 6500 Email: ██████████</p>
(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:	<p>Jemena Faults and Emergencies Phone: 131 626</p>
<p>(9) A responsible person must ensure that a copy of the management plan is</p> <p>(a) published on the responsible person's internet site; and</p> <p>(b) available for inspection at the responsible person's principal office in the State during normal business hours.</p>	<p>Information, including a copy of the Plan is available to be viewed by ESV or members of the public at JEN's office located at 567 Collins Street Melbourne, by appointment during normal business hours.</p> <p>A copy of the Plan is also available on the Jemena internet site at: http://jemena.com.au/.</p>

8.2 Appointment of Contractor

To meet JEN obligations as set out in the Electricity Safety Act 1998, Electricity Safety (Electric Line Clearance) Regulations 2015 and the Electricity Safety (Bushfire Mitigation) Regulations 2013 for all network assets and POELs, JEN has appointed a VMC, Zinfra, to perform the scope of work defined below. Additional information on the VMC is available in the Definitions section. VMC KPIs are documented in Attachment G – Agreed Performance Targets and details of VMC qualifications are provided in Section 9.3.3 – Procedure including Training, Qualifications and Experience.

8.2.1 Scope of Work

To inspect, manage and maintain clearance of trees from JEN network assets including notification, consultation and negotiation with Affected Persons in accordance with the Electricity Safety Act 1998, Electricity Safety Amendment (Bushfire Mitigation) Act 2014, Electricity Safety (Electric Line Clearance) Regulations 2015 and the Electricity Safety (Bushfire Mitigation) Regulations 2013 to the satisfaction of the Network Integrity and Performance Manager (JEN) with respect to Zinfra and tree related fault performance.

8.2.2 General Requirements

The VMC will provide for the inspection of all JEN areas:

- The recording of tree data, including customer notification (for notification to ORP refer to Sections 9.2.11 Cutting or Removal by Other Responsible Persons and Section 9.5 – Assistance to Other Responsible Persons and the General Public),
- Consultation and negotiation with Affected Persons,
- The carrying out of the cutting or removal of trees, mulching of branches, removal of regrowth, removal/disposal of debris and cleaning up of sites on completion of work
- Reporting of work progress.
- Mechanical slashing of undergrowth within existing easements and stump grinding together with the management of trees in other areas, may also be required.

This will be carried out along JEN established powerlines and/or cutting for new lines as may be ordered by, and to the satisfaction of, the relevant JEN employee with consideration to the specifications in the Code.

8.2.3 Specific Requirements

JEN requires the following work to be performed as a minimum each year of the contract by the VMC:

- Implement a cyclic program (biannual) within the HBRA for the inspection and cutting or removal of trees. This biannual program will include a separate ‘code cut’ component (refer to Attachment D – HBRA/LBRA Cutting Schedule) which aims to reduce the workload in the pre-summer part of the program. The pre-summer inspection, cutting or removal program for the entire HBRA is to be completed before and maintained after the declaration of the fire danger period or 1 November whichever occurs first. The decision to cut or remove trees to meet the requirements of the program is carried out at the inspection stage; see Section 9.1.3- Procedure.

This will also include the requirement to provide all tree related Bushfire Mitigation Index (**BMI**) data and complete whatever works are necessary to keep the index at zero during the declared fire danger period:

- Implement a two-year cyclic program within the LBRA for the inspection and cutting or removal of trees (50% of the LBRA network annually). In each year of this program, there is to be an inspection and cutting or removal of the other 50% of the LBRA network to action any unexpected re-growth. Therefore, 100% of the LBRA is assessed and cut every year - 50% by the ‘cyclic’ program and 50% by the ‘maintenance’ program;
- Identify locations where work is required to maintain the clearance space and record and maintain all data and upload data to their Vegetation Management System;
- Management of all customer liaison including notification, consultation and negotiation requirements;
- Management of all customer related enquiries;
- Management of payment to all subcontractors;
- Management, coordination and actioning of all reactive vegetation reports or issues;

- Where ORP trees are likely to burn, through contact with JEN assets or are likely to cause damage to JEN assets, the VMC will follow up the relevant ORP as a matter of urgency until the problem is rectified. If JEN is unable to resolve the issue and the ORP tree is likely to present an unacceptable safety risk including electrocution/shocks, fire starts or damage to JEN assets, Jemena will escalate to ESV. Jemena and the VMC are currently documenting this procedure which will be made available when complete;
- Management of, and liaison with ORP, other interested parties regarding all tree related matters, including areas within the HBRA, that are the responsibility of the local municipality (Declared Areas) in the lead up to and during the declared fire danger period;
- Any noncompliant ORP vegetation found during the declared fire danger period will be forwarded to the relevant ORP requesting them to clear the vegetation immediately and provide a response to Jemena advising of their intended actions; see Section 9.5.6 - ORP Follow-Up.
- Emergency response to tree related faults from storm damage.

This will include the cutting or removal of trees as directed by JEN for emergency purposes and may include ORP trees. The VMC must use its best endeavours to arrive at the specified fault within 60 minutes of the initial call:

- Investigate and report on all HV tree related faults reported on the internal JEN Daily Situation Report, refer to Attachment K – JEN Fault Investigation Form ;
- Monthly performance reporting including (see also Attachment G - Agreed Performance Targets and Section 10 - Monitoring and Auditing);
- Performance reporting for tree cutting work – progress against schedule (Attachment D – HBRA/LBRA Cutting Schedule);
- Number of customer complaints;
- Number of tree related fires;
- Number of customer enquiries;
- Performance of management issues such as response times to customer enquiries;
- Submission of reports and invoices by the due date;
- Health and safety statistics, training, plant inspection audit sheets;
- Productivity reporting;
- Audits on all facets of the contract including health, safety and environment;
- Summary of tree related faults (including but not limited to, number of, number by responsible person, number by zone substation, number by months since scheduled inspection/cut, number by species and number by cause e.g. dead limb, storm/wind, structurally unsound, rot, root problems, etc.);
- Attendance at monthly meetings;
- Management of switching operations (including suppression) to minimise requirement for JEN involvement including applications for electrical access and receiving of electrical access permits for internal and external work crews and ORPs when required;
- Monitoring of tree related faults and programming of work for consideration by the relevant JEN employee as a basis for re-allocation of priority of tree cutting activity;
- Maintain a register of Important Trees as described in Section 9.4 – Important Trees;
- Maintain a register of spans/trees that need to be monitored in relation to the Hazard Trees as described in Section 9.2.7 – Hazard Trees, including a documented procedure for the management of these trees (Hazard Tree and 56M Assessment Procedure – VEM 20-01); and
- Provision of information which brings to the attention of JEN, opportunities for capital solutions to vegetation management issues, refer to Section 9.3.4 – Alternative Tree Management Proposals.

9 Management Procedure

9.1 Selection of a Method for Maintaining Clearances

9.1.1 Purpose

To outline the strategy to be employed in choosing the method of maintaining clearances between powerlines and trees to achieve the most appropriate solution.

9.1.2 Scope

This procedure applies to the VMC and Jemena employees involved in the assessment and implementation of the Electric Line Clearance requirements.

9.1.3 Procedure

A detailed inspection of each site is conducted by the VMC Assessor to determine the most effective method of maintaining the statutory clearance space between trees and powerlines. For inspection cycles refer to Section 8.2.3 – Appointment of Contractor – Specific Requirements. Refer to Section 9.3.3 - Procedure including Training, Qualifications and Experience, for the VMC Assessor qualifications and experience.

Figure 1.7 outlines step by step evaluation and decision making process to be undertaken.

Step 1: Determine if it is appropriate to cut or remove tree

The VMC Assessor applies the same practice year on year to which the vast majority of Affected Persons recognise and accept. The Assessor applies the principals discussed in AS4373 - 2007 and is able to explain to the Affected Persons the type and location of the cut in terms of impact to the health of the tree. It is extremely rare for a tree to die due to Electric Line Clearance work, however if there is a risk the Affected Person is advised and the discussion about the benefits of removal ensue. No removals are carried out without consent from the tree owner/manager.

In making these evaluations, and before deciding on the most appropriate method for meeting the Prescribed Code requirements due consideration is given to the specific aspects of each site, including the following:

- The significance of the site as a natural habitat of rare or endangered species of both flora and fauna (for more detail refer to Section 9.4.7- Habitat Trees for Threatened Fauna);
- Areas determined by the relevant municipal council to contain culturally or environmentally significant trees, or specified in planning schemes to be of ecological, historical or aesthetic significance;
- Assessing the benefits of implementing available and practicable alternative line construction methods by considering potential savings in avoiding the recurrent costs of cutting;
- The reduction in risk to public safety and supply reliability;
- The significance and public value of the site's aesthetics;
- The impact on the tree's amenity and utility value if subjected to cutting versus removal;
- Opportunity to replace with a more suitable species over time (for more detail refer to Section 9.6 – Notification, Consultation and Negotiation);
- The environmental impact of proposed works;
- The site's suitability to accept more appropriate species as replacements; and
- Determination of the most appropriate method of dealing with the offending trees concerned.

The information gathered during these inspections forms the basis of the VMC's plan of action and allows:

- Appropriate planning and scheduling;
- Identification and quantification of equipment and accredited personnel required;
- Funding; and
- Community and customer consultation.

Where an area is identified as having a particular significance and has been accepted/registered by Heritage Victoria, the special conditions imposed will be recorded on the Important Tree Register (refer to Section 9.4 – Important Trees) and appropriately managed by the VMC and JEN. Typical conditions may include the requirement for the owner/manager of the tree(s) to be contacted before any cutting is performed.

Step 2a: Notification and Consultation of Proposed Removal or Cut**(i) Notify Affected Persons**

The notification procedure requires letters be sent to Affected Persons to advise of their responsibility to keep vegetation clear from their service line or in case of councils/municipalities to keep vegetation clear from JEN assets. This process is detailed in Section 9.5.5 – Participation in Community Programs.

(ii) Consult and Negotiate

If agreement is not reached through notification process the VMC will advise Affected Persons the negotiation process. For additional details relating to the notification, consultation and negotiation process and timeframes, refer to Section 9.6 - Notification, Consultation and Negotiation.

Step 2b: Consideration of Engineering Solution**(iii) Assign for Technical Consideration**

The VMC will propose locations on the network to be considered for engineering solutions. If a location is considered appropriate for the implementation of an engineering solution – for JEN responsible trees, JEN will develop a solution at JEN's cost. The solutions must pass the 'prudent and efficient' test which identified the least cost technically acceptable solution.

The VMC is required to submit the Engineering Solutions for Vegetation Issues Form by following the process described in Section 9.3.4 – Alternative Tree Management Proposals (refer Attachment K – Engineering Solutions for Vegetation Issues).

Engineering solutions are available to ORPs at their cost. This provides another method for maintaining clearance between ORP trees and JEN assets. Councils have been informed of the process for requesting engineering solutions, the process for customers and councils to contact Jemena is well established. At least one of the councils overlapping the JEN area has been requesting and paying for engineering solutions since the mid '90s.

ORPs are required to fund their own technical solutions. The cost of implementing the alternative methods will be calculated on the basis of actual costs to be incurred with due allowance for future savings for cutting work that will no longer be required.

(iv) Engineering Solution

Alternative methods of maintaining clearances are engineering solutions such as:

- Line relocation, including offset crossarm construction,
- Installation of ABC systems,
- Undergrounding or applications of insulated covers.

Details concerning the engineering solutions have been provided to councils which includes the Procedure for achieving electric line clearance through engineering solution - JEN PR0116.

(v) Design

Engineering solution will undergo a design phase to scope and detail steps for achieving the proposed solution.

(vi) Action Construction

Engineering solution is implemented when all relevant approvals or permits have been obtained.

Step 3: Task Complete

JEN will implement the solution as determined through the steps outlined above.

Step 4: Audit

An audit will be conducted to inspect for quality and ensure full compliance has been achieved with the Code. Any non-compliance will be noted and actioned as described in Procedure VEM 30-52.

Selection of Method of Maintaining Clearance between Trees and Powerlines

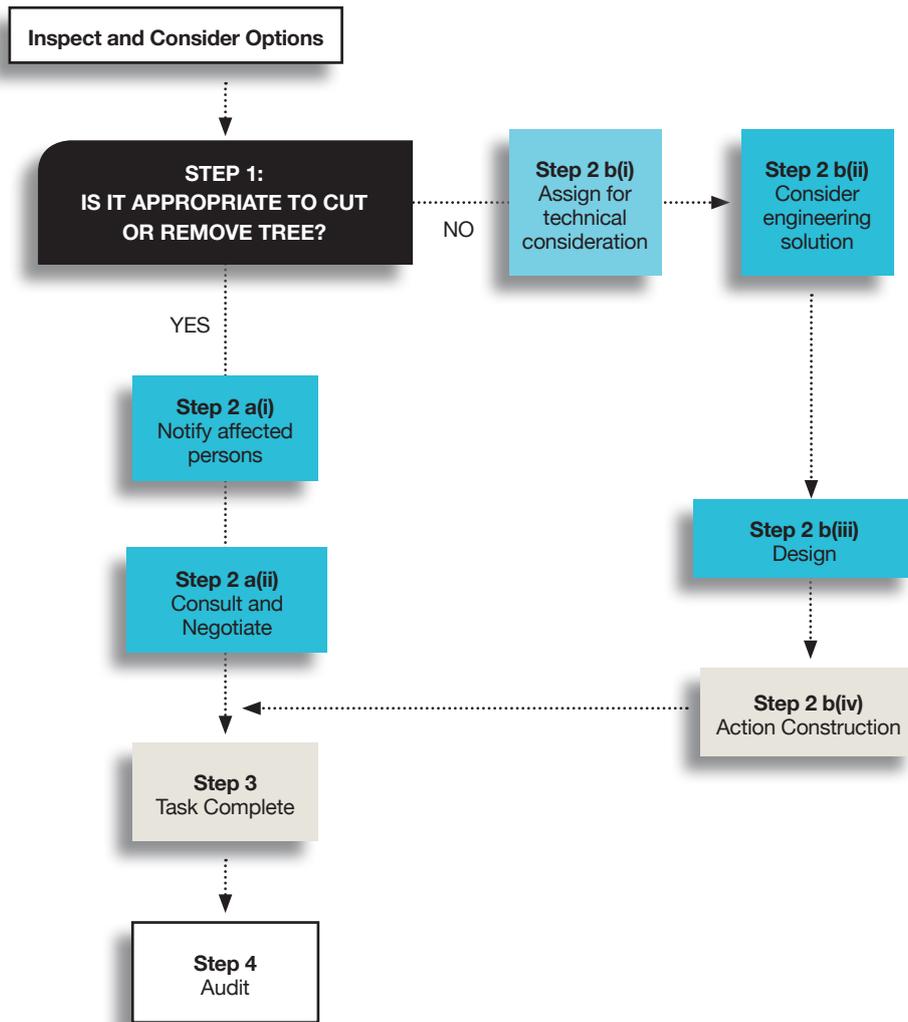


Figure 1.7 Selection of Method of Maintaining Clearance between Trees and Powerlines

9.2 Maintenance of the Clearance Space

9.2.1 Purpose

This procedure outlines the process to be employed in maintaining the clearance space between trees and electric lines.

9.2.2 Scope

This procedure applies to JEN staff and the VMC and all cutting crews.

9.2.3 Procedure

In determining the location where work will be required to maintain the clearance space, the VMC makes use of the following inspection programs:

- Routine cutting and removal cycles;
- Pre-summer inspection in HBRA;
- Reports from asset inspections;
- Audit of trees in declared areas; and
- VMC Quality audits (refer to Procedure VEM 30-52).

These are supplemented by reports from the public on areas of concern.

At each location the VMC will assess and where relevant recommend to JEN Management the most appropriate method of maintaining the clearance between trees and powerlines in accordance with the procedure described in Section 9.1 - Selection of a Method for Maintaining Clearances.

The appropriate clearance space dimensions are determined in accordance with the excerpts from the Electricity Safety (Electric Line Clearance) Regulations 2015 contained in Attachment C – Clearance Space Charts.

An allowance will be made for the sag and sway of spans, up to their design temperatures and 500Pa wind, where appropriate. Additional detail is available in the Vegetation and Easement Management Assessment Procedure (Jemena Distribution) – VEM 20-50.

9.2.4 Code Compliance

The VMC shall maintain the tree clearance space in conformance to current vegetation management procedures ensuring the clearance space is maintained in accordance with the Code.

Refer to extract from the Code in Attachment C.

JEN has adopted the amenity tree management standard AS 4373 - 2007, as required in the Electricity Safety (Electric Line Clearance) Regulations 2015. The standard provides guidance on the means of carrying out required pruning while maintaining the health and natural appearance of the tree as far as possible JEN determines the location to prune/cut in accordance with AS 4373 - 2007 and it is this cutting which delivers standardised amenity outcomes, i.e. the appearance of the cutting is consistent across the JEN area and acceptable to the community.

In instances where it is not practicable to cut to the amenities tree standard, the Service provider will address the vegetation as specified in section 4.2.5 of VEM 20-51 Vegetation Maintenance Procedure.

9.2.5 Clearance Space and Exceptions

The clearance space as referred to in regulation 9(3)(i)(i) requires JEN to have management procedures in place to maintain a space between electric lines and trees. Requirements to create and maintain the clearance space are described in the Code under Schedule 1 – Code of Practice for Electric Line Clearance, and the specific distances are detailed in Schedule 2 of the Regulations, Schedule 2 – Applicable distance for middle two thirds of a span of an electric line (refer to Attachment C for a summary of Schedule 2).

The VMC as part of the JEN routine cutting and removal cycle inspects the clearance space for trees that fall under JEN responsibility. This is performed as described in Section 9.2.3 – Procedure which is designed to ensure the clearance space is kept clear of trees at all times.

JEN does not allow exceptions to the minimum clearance space specified in Clauses 4 and 6 of the Code for JEN responsible trees. In instances where structural branches under the conditions in Clauses 4 and 6 cannot be addressed and is not an imminent risk to public safety and supply continuity, then a CAPEX solution is proposed. Where an imminent risk to public safety and supply continuity exists the process for urgent cutting will be followed.

JEN does not allow exceptions to the minimum clearance space specified in Clause 5 (i.e. light foliage inside the clearance space having been cleared within the last 12 months). Within the JEN distribution area all JEN responsible vegetation will be managed through the assessment procedure detailed in document VEM 20-50 and monitored via the VMS.

Responsibilities of land owners/occupiers are explained in Section 9.2.13 – Service Lines. Responsibilities of ORPs are explained in Section 9.5 – Assistance to Responsible Persons and the General Public.

9.2.6 Regrowth Space

The regrowth space is defined as the smallest space such that if a tree were cut or removed from that space, the tree would not grow into the minimum clearance space around that powerline between cutting times.

The VMC determines the regrowth space at each specific location by considering the following factors:

- The tree's species and likely vigour;
- The cutting schedule (Attachment D); and
- The prescribed clearance space (Attachment C).

While taking into account the health and aesthetic requirements of trees, when the re-growth space is calculated every effort will be made to prevent the requirement for urgent cutting or removal work as described in paragraph 9.2.10.

The regrowth is determined on a tree by tree basis by the Assessors. Calculations of re-growth space are not recorded however the majority of trees have already been 'trained' which makes the cut points obvious year on year. For new trees or unusual conditions the Assessor will refer to an Expert Arborist as described in Section 9.7.5 - Reference to the Arboreal Advisors.

9.2.7 Hazard Trees

A hazard tree defined in the Electricity Safety (Electric Line Clearance) Regulations 2015 – Clause 8 of the Code, is “...trees that are likely to fall onto, or come into contact with, an electric line...”. If left unmanaged, hazard trees can cause injury to people and property, interruptions to electric supply and threats to critical infrastructure.

The hazard tree assessment is a ground based visual inspection (performed by an Assessor) of the tree crown, trunk, trunk flare and above ground roots. The prevailing environmental conditions are also factored in to identify any trees that could become a hazard to the safety of the electric lines. Typical sources of prevailing environmental conditions include:

- Local knowledge, especially trees that were previously shaded from prevailing winds;
- Assessment of the land contours in the area e.g. valleys or saddles between hills, which may result in erosion causing tree stability issues;
- Observations and forecasts presented by the Country Fire Authority (CFA) in preparation for the fire danger period; and
- Features of a tree identifiable to qualified arborists or horticulturists.

While all trees in the vicinity of powerlines have the potential to contact conductors and therefore present a level of risk which may include hazard trees, it is not practical or environmentally acceptable to remove all trees in this category. Where hazard trees are identified, they will be actioned in line with other negotiation and cutting programs with an increased focus depending on the assessed urgency and risk.

In Jemena's experience there is no hazard tree situation which cannot be negotiated for a removal or significant cut for risk minimisation. To date JEN have not identified any hazard trees where the only consequence of failure is damage to JEN assets.

With some provisos, the 2015 Electric Line Clearance Regulations allow JEN to cut or remove a hazard tree. However liability for subsequent damage rests with the owner of the tree or such other third party whose actions have caused the failure of the tree. Liability for damages resulting from the failure of a hazard tree may require legal and/or court action to be apportioned.

A sample of the notification form issued to the customer when a hazard tree has been identified is shown in Attachment P Notification of Pruning or Removal of Hazard Trees Near Powerlines Within Your Property.

Dedicated Hazard Tree Management Program

The purpose of the dedicated hazard tree management program is to assess the likelihood of a tree or limb failure causing vegetation contact with electrical assets so that appropriate measures can be taken before failure occurs. This program will allow for the systematic identification of hazard trees in the HBRA on a two-year cycle. The identification phase includes a comprehensive assessment of hazard trees in the HBRA by an Experienced Arborist. The assessment will register these trees in the VMS database and allow for targeted implementation of measures to mitigate the likelihood of tree related fire starts in the HBRA.

Routine Hazard Tree Management Program

In addition to the dedicated management program, the routine hazard tree management program identifies hazardous trees in the LBRA as well as HBRA. The inspection cycle has been designed to evaluate any potential tree hazards within the vicinity of JEN assets and action accordingly.

Typically these would be:

- Dead and dangerous limbs;
- Physical defects in trees including splitting, root plate uplift; and
- Other trees or limbs outside the clearance space that may be unstable and could fall on the powerline under the range of weather conditions that can be reasonably expected to prevail in the locality.

Historical records show that in the routine program there were 50 removals and about 100 cuts annually. In the dedicated program (**HBRA**) 994 hazard trees were identified in the very first cycle. It is estimated in the next inspection cycle (two-year cycle) of the dedicated program only approximately 100 hazard trees will be identified.

If a person identifies a hazard tree, an Experienced Arborist will conduct an assessment of the tree, and if that assessment confirms the likelihood of contact with an electric line having regard to foreseeable local conditions, the tree may be cut or removed by the responsible person (i.e. JEN's VMC and in a timeframe specified in the Hazard Tree and 56M Assessment Procedure – VEM 20-01).

During the routine cutting and removal cycle, or under emergency situations, these unacceptable hazards will be addressed to ensure that the regrowth and clearance spaces remain free of foreseeable tree hazards.

Hazard trees assessed to need cutting or removal will be managed in conformance to section 9, in its entirety, of this Plan.

In addition, these trees will be listed and monitored in the Hazard Trees Register. Refer to Attachment F Hazard Tree Register Sample.

9.2.8 Cutting Cycle

The cutting and removal cycle will be as described in Section 8.2.3 – Specific Requirements.

The cutting cycle, where it may need an increase in frequency from the routine cutting and removal cycle, shall be determined at each locality by the VMC Assessor in consultation with JEN. The methods employed to determine these alternate cutting cycles will include the growth rates of the various species of trees, environmental conditions and clearances obtained after cutting as agreed with concerned persons. The VMS can record this at span level or tree level. Important trees (refer to Section 9.4 – Important Trees) which may include council trees, utilise this feature.

9.2.9 Planned Cutting in the Hazardous Bushfire Risk Area

Cutting and removal in the HBRA will be carried out prior to the declaration of the fire danger period to achieve powerline clearance for the duration of the fire danger period. Removal of any trees will be by individual negotiation with affected persons. Affected persons and authorities will be given notice in accordance with Section 9.6 – Notification, Consultation and Negotiation. Works will be monitored against the schedule drawn up at the start of each cutting cycle.

9.2.10 Urgent Cutting or Removal Works

Urgent cutting or removal will generally only occur where there is an imminent risk to public safety or the continuity of supply. Such cutting or removal is at the discretion of the VMC's Area Manager in consultation with the JEN Senior Contract Coordinator.

The following points dictate when urgent cutting or removal may be carried out:

- As a result of encroachment or growth of trees that were not anticipated in the management plan; or
- As a result of a tree falling or damage to a tree requiring the tree to be cut or removed to maintain the clearance space; or
- If an Assessor, under Clause 8 of the Code, confirms the imminent likelihood of contact with an electric line having regard to foreseeable local conditions; or
- Any vegetation identified with a potential to contact the line or enter the clearance space during the fire danger period declared under the Country Fire Authority Act 1958.

Where urgent cutting is necessary the extent of cutting shall be restricted to a maximum distance of one metre beyond the appropriate clearance space (including the distance allowed for the sag and sway of the conductors).

The cutting crews attending faults (see Section 8.2.3 – Specific Requirements) are instructed of this requirement however in practice it is never used on account that faulted branches are always outside the clearance space. These branches require complete removal if they haven't already broken off completely.

For council trees the crews attending faults are instructed to cut only enough of the tree to enable repair of the network to restore supply. The council is then advised and requested to complete the cutting. As JEN only use urgent cutting or removal post fault it is not known if the clearance (in the case of council responsible trees) was compliant before the failure and consequently not recorded.

Historically there are approximately 30 instances per annum where urgent cutting is required. The routine hazard tree process was introduced to minimise the number of code compliant trees being the cause of faults. Focus in this area is being increased to identify hazard branches as distinct from hazard trees.

Where JEN has undertaken urgent cutting or removal in accordance with Clause 18(2) of the Code, they must, as soon as practicable after completing the cutting or removal, give notice of that cutting and removal to:

- All Affected Persons; and
- The occupier of the land on which trees were cut; and
- The owner of the land on which trees were removed.

All details are to be recorded and kept for a period of no less than five years and include:

- Where and when the cutting was undertaken;
- Details of why the cutting or removal was required; and
- Details of the last inspection of that section of the electric line where the cutting or removal was required.

For the purpose of giving notice, for JEN and private responsible trees, described above, the Urgent Tree Cutting or Removal Work Near Powerlines form (refer to Attachment N) is issued. The VMC will use the Record of Customer Negotiation form (refer to Attachment B) to record the details described above.

If JEN is required to attend a fault (maybe with or without outage) resulting from a council tree failure, JEN will only cut the tree sufficiently to make safe and, Council will be notified in writing via email containing information in accordance with Clause 18(3) of the Code.

9.2.11 Cutting or Removal by Other Responsible Persons (ORP)

The VMC is required to liaise with ORP with a view to assist, monitor and report on progress and effectiveness of their vegetation management programs to the Senior Contract Coordinator.

As detailed in the Electricity Safety (Electric Line Clearance) Regulations 2015, JEN is required to provide councils with assistance on request. Assistance is to:

- Determine the additional distance by which the minimum clearance space must be extended to allow for sag and sway of cable spans. The chart which is used to determine where an allowance for sag and sway is required is made available to responsible persons in Schedule 2 of the Code. The VMC may provide this information to Councils with reference to the distances documented in the Vegetation and Easement Management Assessment Procedure VEM 20-50. In addition councils may request that the VMC provide specific calculations for difficult spans (e.g. terrain is very steep).

If Councils request assistance with other aspects of their Electric Line Clearance Programs, for example Jemena will assist in areas such as:

- Set safe limits of approach to electric lines for cutting/removing the tree; and
- Establish safe methods for cutting/removing the tree.

The VMC or JEN may perform the required work or electrical operations (at the ORP expense) where required, to allow ORP to complete the work safely, subject to network operational procedures.

Where non-compliant trees are identified which are a threat to the integrity of the network and are the responsibility of an ORP (generally municipalities and road authorities), the VMC will provide an initial notification to the ORP of the areas requiring attention and request the ORP provide feedback to these requests in a timely manner. Refer to sections 9.2.12 – Non-Compliance by Other Responsible Persons, 9.2.13 – Service Lines and 9.5.6 – ORP Follow-Up.

A list of the councils that exist within the JEN distribution network area is provided in Attachment L.

9.2.12 Non-Compliance by Other Responsible Persons

If there is no feedback or action in relation to the initial notification, VMC (on behalf of JEN) may issue a formal 'Notice of Failure to Maintain Lines' to the ORP subject to section 86(1) of the Electricity Safety Act 1998.

If there is no feedback or action in relation to the formal notice, VMC (on behalf of JEN) will refer these trees to ESV requesting their agreement (via certificate) for VMC (on behalf of JEN) to "... carry out the duties and perform any work necessary to ensure that the whole or any part of a tree is kept clear of the line" (refer Electricity Safety Act 1998, Section 86(5)). Councils are aware of their legal obligations including, this power vested in the distribution companies to effect certain clearance requirements.

When an issue is to be escalated to ESV and the ORP tree is likely to present an unacceptable safety risk, the VMC shall refer to procedure VEM 30-07 Electric Line Clearance and Escalation Procedure for Councils (JEN).

Where ESV or VMC (and JEN) considers the line to be in such a dangerous condition that urgent compliance with the notice is necessary within 14 days from the date of the notice (refer Electricity Safety Act 1998, Section 86(4)) or where there is an imminent risk to public safety or the continuity of supply, cutting or removal shall be undertaken in accordance with section 9.2.10.

JEN "may recover the costs of carrying out any work... from the ORP" to cut or remove these trees (refer Electricity Safety Act 1998, Section 86(7)). Refer to Figure 1.10 below

9.2.13 Service Lines

Land owners/occupiers are informed by Jemena about details relating to their responsibility for Electric Line Clearance. Land owners/occupiers are responsible for inspecting and keeping trees clear of service lines that service that land. Where a land owner/occupier seeks advice from JEN or the VMC, the VMC will attend and advise the land owner/occupier concerned.

Where the Assessor, as part of the routine inspection of JEN assets identifies a service line as having trees within the clearance space or light foliage is in contact with the service line, a brochure (see Attachment A3 – Trees, Powerlines and Your Property brochure) is placed in that customer's letterbox advising them of their responsibilities.

If a branch 10mm or more in diameter is in constant contact with the service line, and the insulation is still undamaged, the VMC will initiate the Vegetation Service Defect Notification and Reporting process (see Figure 1.8 below). An example of the notification letter is provided in Attachment A2 - Customer Notification Letter – Service Lines. The JEN 24 hour Dispatch and Control Centre will be notified by the VMC Field Officer when the insulation from a service line is identified as damaged by adjacent trees for immediate rectification.

9.2.14 Cost Recovery

JEN may be required to de-energise powerlines, do preliminary cutting or removal to enable safe access, or take other measures to ensure safety. JEN, at its discretion, may recover costs for this work.

9.2.15 Tree and Maintenance Cutting Codes

For each span assessed, the information in the following table is documented by VMC and reported to JEN monthly.

JEN Assessment Codes

Code	Definition	Action Required
PT1	<p>For pre-summer auditing purposes means a span that has:</p> <ul style="list-style-type: none"> Vegetation is within the clearance space as defined in the Electricity Safety (Electric Line Clearance) Regulations 2015 and is in contact with the conductors, or uninsulated assets with the potential to become live. <p>Or</p> <ul style="list-style-type: none"> Has been recently contacting the conductor due to sag or sway or environmental conditions, but is not physically in contact on the day of inspection. 	<p>All code PT1's identified from beginning of the audit to 10 October:</p> <ul style="list-style-type: none"> To be cleared by 15 October; All items identified after 10 October within five days of identification; <p>Or</p> <ul style="list-style-type: none"> Before a day of total fire ban.
PT30	<p>Vegetation is within the clearance space as defined in the Electricity Safety (Electric Line Clearance) Regulations 2015 but is not in contact with conductors or other electrical assets and unlikely to make contact within the next 30 days.</p>	<ul style="list-style-type: none"> In all areas, all code PT30s identified during the undeclared fire period must be cleared within 60 days of being identified or re-assessed within 30 days; Note: If not re-assessed within 30 days, the span must be cleared within 60 days of being identified. In the HBRA, all code PT30s that are either identified or outstanding after 1 November or the beginning of the declared fire danger period (whichever comes first) must be cleared within 30 days of being identified.
PT180	<p>Vegetation is outside the clearance space, but is likely to encroach upon the prescribed distance as defined in the Electricity Safety (Electric Line Clearance) Regulations 2015 within 180 days of being identified.</p>	<ul style="list-style-type: none"> In all areas, all code PT180s identified during the undeclared fire danger period must be cleared within 180 days of being identified or re-assessed within 150 days; Note: If not re-assessed within 150 days, the span must be cleared within 180 days of being identified. In the HBRA, all code PT180s that are either identified or outstanding after 1 November or the beginning of the declared fire danger period (whichever comes first) must be cleared within 90 days of being identified.
PT365	<p>Vegetation is outside the clearance space, but is likely to encroach upon the prescribed distance as defined in the Electricity Safety (Electric Line Clearance) Regulations 2015 within 365 days of being identified.</p>	<ul style="list-style-type: none"> In the LBRA, all code PT365s identified during the undeclared fire danger period must be cleared within 365 days of being identified or re-assessed within 365 days. In the HBRA, all code PT365s that are identified <ul style="list-style-type: none"> Before 1 November or the beginning of the declared fire danger period (whichever comes first) must be re-assessed within 60 days of being identified; or After 1 November or the beginning of the declared fire danger period (whichever comes first) must be re-assessed in the next scheduled inspection program.

Code	Definition	Action Required
PT720	Vegetation is outside the clearance space, but is likely to encroach upon the prescribed distance as defined in the Electricity Safety (Electric Line Clearance) Regulations 2015 within 720 days of being identified.	Non-Action Code, no action required.
RE	<p>For pre-summer auditing purposes means a span where:</p> <ul style="list-style-type: none"> • Is outside the clearance space as defined in the Electricity Safety (Electric Line Clearance) Regulations 2015; and • Where that vegetation 'may', although there is some uncertainty, encroach upon the clearance space prior to the end of the bushfire declaration period. 	To be cleared or re-inspected prior to 18 February in the year after assessment.
Hazard Tree	<p>For pre-summer auditing purposes means any tree outside of the clearance space that demonstrates a threat to the line as a result of:</p> <ul style="list-style-type: none"> • Weak connection to root systems (suckers); Being dead or dying trees; and • Major over-balance toward assets (ground lifting, poor root systems etc.). 	<p>To be cleared prior:</p> <p>Targets are set for each tree based on the severity of identified defects.</p>

Process for Vegetation Service Defect Notification and Reporting

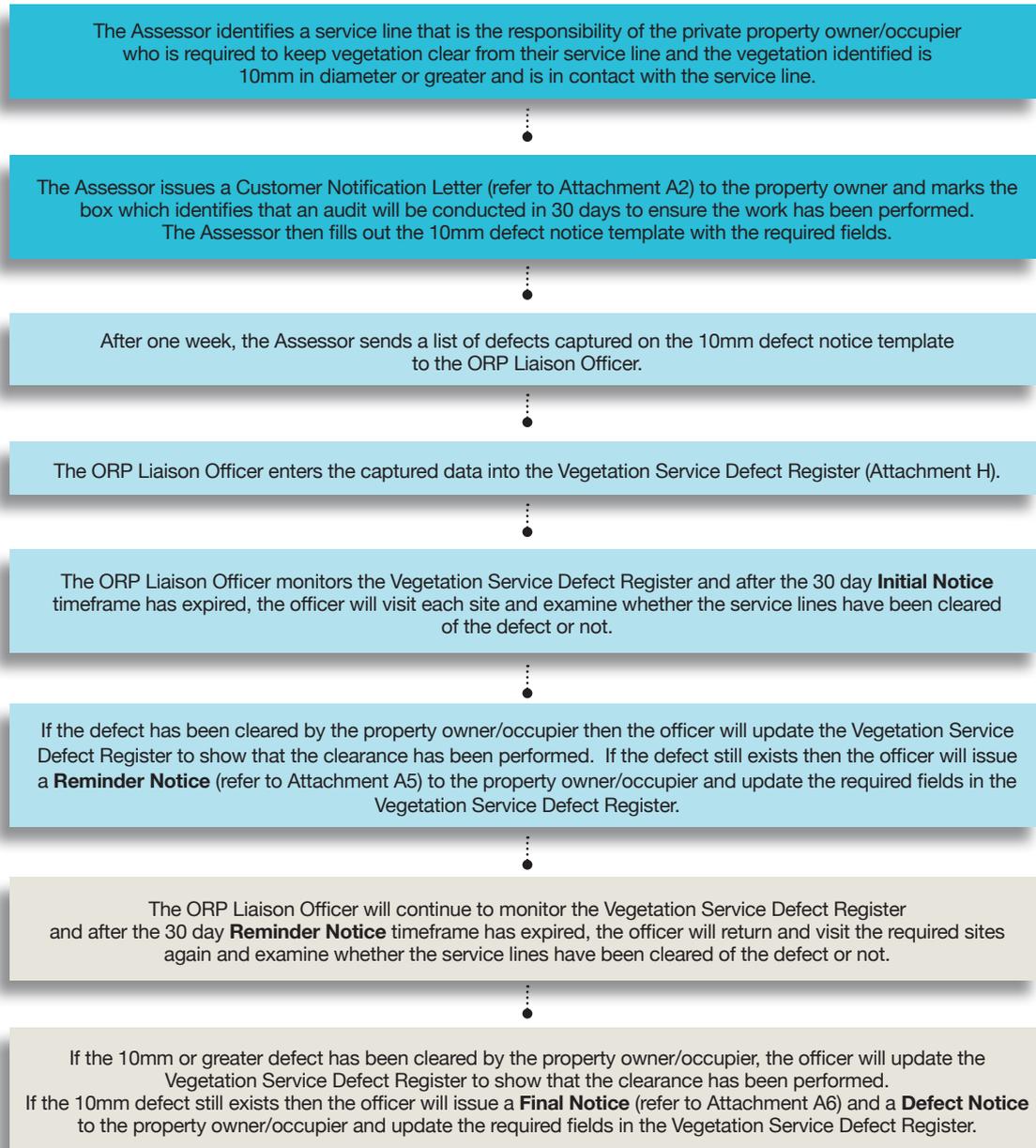


Figure 1.8 Process for Vegetation Service Defect Notification and Reporting

If a Final and Defect Notice were issued to the property owner/occupier then the ORP Liaison Officer will forward the information captured on the Vegetation Service Defect Register to Jemena’s Stakeholder Relations team.

The majority of customers (approx. 80%) advised of their non-compliance using this process actually follow-up and organise to have their trees cut. Where this process did not illicit the correct behaviour from the property owner/occupier, JEN applies the installation Defect Notice process (Customer Installation Defect Management Procedure – ELE PR 1408). This process generally reduces the volume of non-compliances by a further 18%. The remaining 2% of cases are addressed by escalating the case to ESV or either JEN provide an engineering solution or the customer contributed to an engineering solution.

If at any time during the Defect Notice process the insulation is damaged to the extent that conductor is bare the situation will be treated as a fault and the service disconnected from supply; reconnections will only occur after the situation has been made safe and compliant.

Notes: If the customer calls for an extension of the timeframe they have to prune their trees then the ORP Liaison Officer will consider each request and may issue an extension of pruning with a maximum of 30 days from the request date.

Responsibilities for Trees near Overhead Powerlines

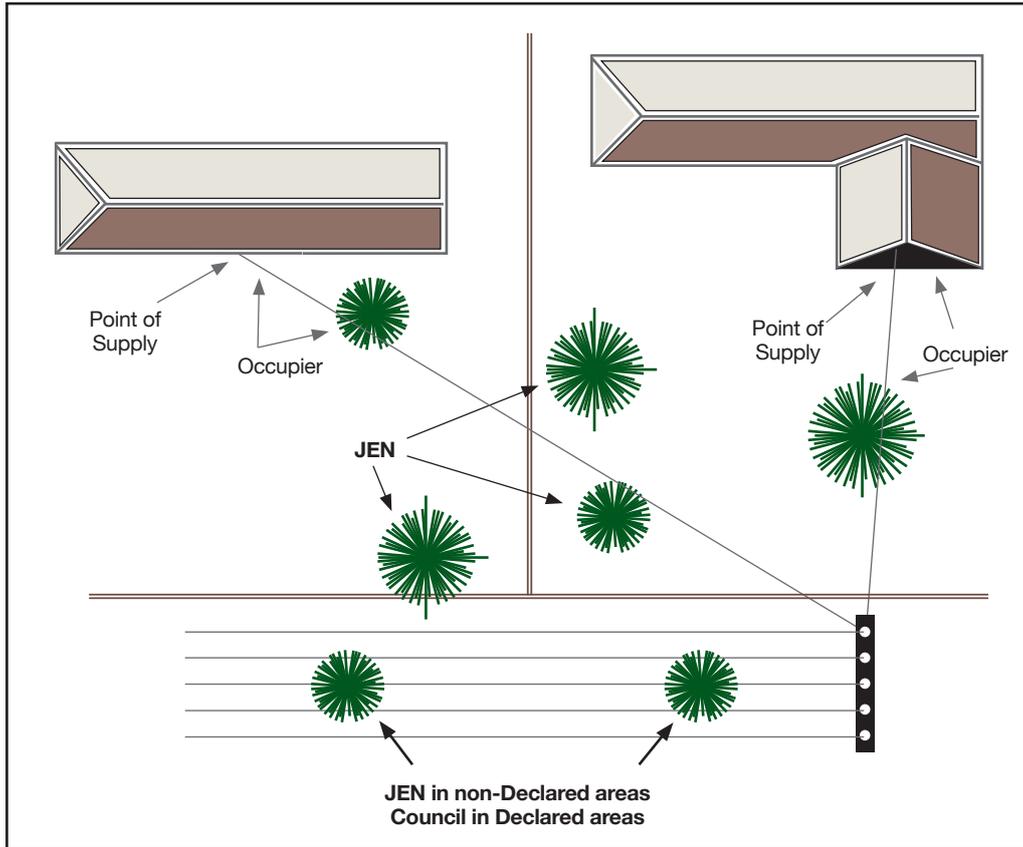


Figure 1.9 Responsibilities for Trees near Overhead Powerlines (Source)

Figure 1.9 is a diagrammatic representation of information contained in the Electricity Safety Act, the Electricity Safety (Electric Line Clearance) Regulations and, further clarification can be obtained in a pamphlet produced by ESV titled 'Powerlines and Vegetation Management – A Guide to Rights and Responsibilities' (for a copy refer to the ESV website).

9.3 Responsible Cutting Practices

9.3.1 Purpose

This procedure outlines the process to be employed to ensure that cutting or removal of trees is undertaken in a responsible manner.

9.3.2 Scope

This procedure applies to all persons associated with the vegetation management program.

9.3.3 Procedure including Training, Qualifications and Experience

The VMC shall conduct yearly a training needs analysis of their employees to ensure that the level of training, qualifications and experience is consistent with the requirements of the post.

Employees must have sufficient knowledge training, qualifications and experience to ensure that tree activities under their control are conducted in a safe and environmentally responsible manner. Employees identified as not having the appropriate training, qualifications and experience for the role to be performed will not be permitted to work on the JEN network.

The VMC shall ensure that all tree cutting and removal personnel (including subcontractors) known as Field Crew – Cutter, are appropriately trained and authorised. Personnel must hold the following qualifications:

- UET20312 Certificate II in ESI – Powerline Vegetation Control; and
- UETTDRVC24A Assess Vegetation and Recommend Control Measures in an ESI environment.
- A current certificate specifying satisfactory completion of a training course in tree clearing, approved by Energy Safe Victoria as specified in the Electricity Safety (Installations) Regulations 2009.

The VMC Assessor is required to be trained in:

- UET20312 Certificate II in ‘ESI - Powerline Vegetation Control’, including identification of plant species; and
- UETTDRVC24A ‘Assess vegetation and recommend control measures in an ESI environment’ for local fieldwork which is currently the national unit of competency recognised by the Victorian Electricity Supply Industry.

At present, practices make minimal use of herbicides, although ‘Roundup’ is used on scrub removal. This also applies to JEN contractors and subcontractors. Any change in this practice will be subject to negotiation between JEN and the VMC and will include the use of an appropriate handling regime.

The VMC Field Officer and the JEN Senior Contract Coordinator shall conduct regular inspections (refer to Section 10.2 – Audits) of work sites to ensure that cutting and removal is done in accordance with industry standards, including AS4373 - 2007 (Pruning of Amenity Trees) and that contractors continually demonstrate compliance with the prescribed safety and environmentally responsible aspects of the industry.

The VMC will monitor contractor performance by conducting trend analysis of inspection and audit results. The VMC shall have a system in place to document and implement actions to address non-compliances identified during the audit process– refer to Procedure VEM 30-52 for more detail on the audit process.

The VMC will document and manage all training and qualifications of its personnel in relation to ELC requirements including the:

- Use of RTOs;
- Management of a training matrix (indicating tasks specific to ELC) to ensure currency;
- Processes relevant to the management of training records (initial and refresher);
- Induction processes for new ELC personnel;
- Authorisation processes.

This VMC process is documented in procedure Service Provider Training Guidelines (refer to document: VEM 10-50).

9.3.4 Alternative Tree Management Proposals

Jemena does not foresee the use of the alternative compliance mechanisms provisions to achieve compliance in relation to trees for which it has Electric Line Clearance responsibility. Jemena will continue to cut to code or reconstruct lines using current construction standards which do not require approval under the alternative compliance mechanism provisions. If new technologies emerge Jemena may apply for an alternative compliance mechanism using the procedure outlined in the regulations. Councils and other affected parties may initiate proposals of alternative compliance mechanisms for Jemena to consider.

JEN may consider all reasonable proposals from affected parties, community groups or other organisations to reduce the necessity of tree cutting or removal. The consideration will involve JEN in calculating indicative costs for substantial proposals. A proposal will be considered reasonable if no laws or regulations are broken during and after completion/implementation of the agreed solution. The affected party plays a big part in deciding if a proposal is reasonable after consulting with Jemena. Several factors assist the affected party in making a decision, not least of which is the cost to implement an Alternative Tree Management solution. Jemena may also assist the affected party in the decision process by providing arboreal advice or suggesting less costly alternatives.

Process for the Consideration of Proposals

All proposals need to be forwarded in writing to Jemena for consideration. Any proposed alternative compliance can be made by emailing networkconnections@jemena.com.au

A Jemena representative will contact the applicant to explain the process for handling proposals. Where applicable, the applicant will be informed in general terms of possible financial arrangements and sources of funds, for example, local councils.

Where the applicant wants to continue with the proposal, then a formal offer shall be made based on time frames agreed between Jemena and the applicant.

9.3.5 Overhanging Trees

In relation to overhanging trees within the JEN area, compliance with the Electrical Safety (Electric Line Clearance) Regulations 2015, specifically in the Code, Clause 27(2)(b) in relation to 66kV and Clause 28(2)(b) in relation to all bare conductors in the HBRA will be through the following methodologies:

- Cutting – any JEN overhanging trees will be cut or removed (Section 9.3.5 – Overhanging Trees, provides further information); and
- Engineering Solutions – in certain specific locations engineering solutions may be adopted as a means of compliance to the regulations. The VMC is required to submit the Engineering Solutions for Vegetation Issues Form by following the process described in Section 9.3.4 – Alternative Tree Management Proposals (refer Attachment J – Engineering Solutions for Vegetation Issues).

9.3.6 Long Term Strategies

In addition to the carrying out of this Plan, to avoid trees growing into or encroaching on the clearance space as required by the Code, JEN has implemented a number of other strategies to minimise the risk to the safe operation of electric lines due to trees including:

- Installing insulated ABC conductors and undergrounding sections of line as applicable within the JEN business rules. Some of the rules include:
 - All new estates are constructed underground;
 - All new overhead substation work which requires reconstruction of the LV circuits – the LV will be ABC;
 - HV ABC will not be used in the HBRA; where multiple LV crossarms require replacement the mains may be replaced with LV ABC;
 - New services are encouraged to be installed underground; certain defective Private Overhead Electric Lines (**POEL**) must be undergrounded, as prescribed in the Electricity Safety (Bushfire Mitigation) Regulations 2013; and
 - All existing POELs are offered an incentive (of a free pit installation) to go underground.
- Installation and use of various electrical protection devices both within substation yards and at strategic points throughout the network; and
- Use of auto reclose suppression as deemed appropriate by Network Operations.
- The VMC is required to submit a Engineering Solutions for Vegetation Issues form (refer to Attachment J) where in the opinion of the Assessor (**VMC**), the location may benefit from an Engineering Solution design review.

9.4 Important Trees

9.4.1 Purpose

JEN recognises that there are some trees in its service area that are of special importance due to their:

- Species (native/exotic);
- Ecological (identified in planning schemes);
- Historical (identified in planning schemes);
- Aesthetic (identified in planning schemes);
- Cultural (identified in planning schemes/heritage registers);
- Environmental (identified in planning schemes/heritage registers); and
- Habitat – invertebrate/vertebrate fauna (Listed as threatened in accordance with section 10 in the Flora and Fauna Guarantee Act 1988).

The VMC will consult (for more details on the consultation process refer to section 9.6 below) with stakeholders to ensure that, where practicable, these areas or sites are subjected to special consideration (see Section 9.1) in relation to tree cutting or removal activities, except where public safety is threatened.

A register (see sample in Attachment E- Important Trees Register Sample) of important trees is actively being maintained by consultation with ORPs.

9.4.2 Scope

This procedure applies to all persons associated with the vegetation management program.

9.4.3 Procedure

At least once a year the VMC will determine/confirm the location of important trees by consulting:

- State and Local Government records;
- Planning Schemes and Overlays;
- Community Groups; and
- Land owners/occupiers.

The VMC, on behalf of JEN, extracts data from the groups listed above on the location of areas containing trees which may need to be cut or removed to ensure compliance with the Code. The information sources utilised by the VMC to identify these locations are:

1. Native trees (as per Regulation 9(3)(g)(i)) are identified in section 9.4.4 Species Identification below;
2. Listed in a planning scheme to be of ecological, historical or aesthetically significance (as per Regulation 9(3)(g)(ii)) are identified in section 9.4.5 Trees of Significance Listed in a Planning Scheme below; or
3. Trees of cultural or environmental significance (as per Regulation 9(3)(g)(iii)) are identified in section 9.4.6 Trees that are Culturally or Environmentally Significant below.

The VMC, on behalf of JEN, monitors the data contained in the Department of Environment, Land, Water and Planning (**DELWP**) Threatened Invertebrate/ Vertebrate Fauna listings (refer to Clause 11 of the Code) in accordance with section 9.4.7 Habitat Trees for Threatened Fauna below.

When identified, cutting or removal of trees with threatened fauna as described above must be undertaken outside of the breeding season for that species wherever practicable. If it is not practicable to undertake cutting or removal of that tree outside of the breeding season for that species, translocation of the fauna must be undertaken wherever practicable.

The VMC is required to assemble and maintain an electronic database of 'Important Trees' that will be provided to JEN when requested. The database will be consulted when vegetation management or augmentation work is planned.

The VMC shall consult (for more details on the consultation process refer to Section 9.6 – Notification, Consultation and Negotiation) with those responsible for important trees prior to commencement of works to determine the most effective way of protecting affected trees by restricting the cutting or removal of native trees and cultural or environmentally significant trees to the minimum extent necessary. Options utilised to minimise impact include reduced clearing cycles and engineering solutions.

In the event that important trees require removal, appropriate advice will be obtained from an Assessor.

The ability to correctly identify these areas or specific trees allows the notification officers to adhere to the requirements specified by the important tree register which may limit certain tree removal or require a specific form of notification/ consultation to/with the customer to mitigate the impact of the intended cutting or removal of this tree.

Some actions that may be utilised to mitigate the impact include:

- More frequent cutting (facilitated by JEN and funded by JEN if JEN has electric line clearance responsibility and the trees are listed in any of the government registers noted in Section 9.4.– Important Trees. In all other cases the stakeholder will fund the additional service); and
- Engineering solution (facilitated by JEN and funded by stakeholder, were JEN does not have electric line clearance responsibility for the trees).

This may lead to negotiations with the council or stakeholders to mitigate clearance issues by methods outlined in section 9.1 Selection of a Method for Maintaining Clearances of this Plan, but does not allow for breaches of clearance requirements specified in the Electric Safety (Electric Line Clearance) Regulations 2015.

Although this information is being provided by the relevant ORPs, the VMC will endeavour to seek reliable information from other sources during the inspection phase of the vegetation management program.

9.4.4 Species Identification

In the rural (**HBRA**) area of the JEN network, the two dominant categories of vegetation are 'Cleared, Non-native vegetation, Buildings' (all or most native vegetation removed) and 'Eucalypt open forest' (varying from 10m to 30m in height) – Source: National Vegetation Information Management (**NVIM**)¹.

As required in regulation 9(3)(h)) native trees are identified utilising the native vegetation mapping information on the following websites.

An NVIM map is accessible via the Australian Government, DELWP web site. Type in the URL <http://www.environment.vic.gov.au> and select National Vegetation Information Management.

A Biodiversity interactive map is also accessible via the above method. The Biodiversity Interactive Map allows the user to navigate throughout Victoria, zoom in on areas of interest and apply a variety of map layers. A screen capture using this tool can be found in Attachment I, illustrating the native and exotic vegetation in the Melbourne Region.

- Major Vegetation Groups in Australia - map (not reproduced in this Plan);
- Australia's Native Vegetation – booklet (not reproduced in this Plan); and
- Native and Exotic Vegetation in the Melbourne Region - map (Attachment I).

The predominant native species in the JEN urban area include:

Botanical Name	Common name	% of total (approx.)	Predominant Location
Eucalyptus spp.	Gum Trees	10.5	Throughout
Corymbia spp.	Gum Trees	9	Throughout
Acacia spp.	Wattle Trees	4	Throughout
Allocasuarina spp.	She-oak Trees	2	North-western region
Melaleuca spp.	Paperbark Trees	5.5	Western and Central region
Callistemon spp.	Bottlebrush Trees	2	Throughout
Pittosporum spp.	Pittosporum Trees	2	Throughout
Other	All other native genera	15	Throughout

The predominant exotic species in the JEN urban area include:

Botanical Name	Common name	% of total (approx.)	Predominant Location
Fraxinus spp.	Ash Tree	11	Throughout
Prunus spp.	Plum, Cherry, Apricot Trees	2	Throughout
Photinea spp.	Hawthorn	3	Throughout
Ulmus spp.	Elm Trees	2.5	Throughout
Liquidamber spp.	Liquidamber Trees	4	Eastern & Central region
Quercus spp.	Oak Trees	2.5	Eastern & Central region
Other	All other exotic genera	25	Throughout

The majority of urban areas within the region are categorised as 'Declared', as described in the Act, for which the local council or ORP is required to maintain the appropriate clearances between street trees and powerlines and/or trees on public land.

¹ The National Vegetation Information Management (NVIM) is a collaborative initiative between the Australian and state and territory governments to manage national vegetation data to help improve vegetation planning and management within Australia.

9.4.5 Trees of Significance Listed in a Planning Scheme

JEN has listings previously supplied by some municipalities of significant trees within their boundaries. The VMC on behalf of JEN (as required in regulation 9(3)(h)) will liaise with Municipalities, annually, to identify any trees contained within Planning Schemes and are deemed to be of ecological, historical or aesthetically significance to add to the important tree register as required.

9.4.6 Trees of Cultural or Environment Significance

JEN and VMC on behalf of JEN annually researches and compiles listings of trees deemed to be culturally or environmentally significant (as required in regulation 9(3)(h)).

For trees of cultural or environmental significance the following resources will be used:

- **Heritage Register.** The Victoria Heritage Register (**VHR**) is available by navigating the the Department of Environment, Land, Water and Planning (**DELWP**) website or by going directly to the register web site at <http://vhd.heritage.vic.gov.au>. From here click on 'Advanced Search »' and enter the word 'tree' in the field provided beside the criteria 'with the exact match', click 'Search' at the bottom of the page and the results will be listed on the screen under subheading 'Search Results'. In addition to 'tree' criteria of 'vegetation' and 'plant' has also been used to try and capture all vegetation related records in the database.

These reports are summaries of the information contained for each registered location and have been filtered for locations in the JEN geographic area – Victorian Heritage Database search results.

For completeness the register also lists trees with a status of Removed; obviously these locations are not considered for electric line clearance.

The VMC is required to check each of the records in detail and update the VMS with the relevant information required by the vegetation Assessor to identify the trees on site. The VMC will also check the VHR for variations at least once a year.

- **Victoria Aboriginal Heritage Register.** The Victoria Aboriginal Heritage Register is available at the DELWP website site <https://w.www.vic.gov.au/aboriginalvictoria/heritage/heritage-tools-and-publications/victorian-aboriginal-heritage-register.html>.

This register is available on a needs-to-know basis only due to the culturally sensitive information contained therein. The VMC is required to either maintain an authorisation to access the register as required or annually make an application to Aboriginal Affairs Victoria to obtain a report covering the JEN geographic area. The VMC will note variations in the report as produced from time to time.

- **The Threatened Plants List** published by the (**DELWP**) website <https://www.environment.vic.gov.au/>. The threatened flora list can be found by clicking on 'Conserving Threatened Species' then 'Threatened Species Advisory Lists' from the home page. The list is specifically referenced under, section 5 Definitions, of the Electricity Safety (Electric Line Clearance) Regulations 2015 and do not change often. Registration with the DELWP to receive automated email notices whenever a list is updated is not available for these lists. Therefore the VMC is required at least once every year to check for variations. The list current at the time of printing this plan is the Advisory List of Rare or Threatened Plants in Victoria – 2014.

9.4.7 Habitat Trees for Threatened Fauna

The VMC on behalf of JEN has implemented a process (refer to external reference Management of Vegetation of Significance Vegetation and Easement Management VEM 20-53) of annually researching and compiling listings of habitat trees containing fauna that is listed in the Threatened Invertebrate/Vertebrate Fauna List with a conservation status in Victoria of 'vulnerable', 'endangered' or 'critically endangered' (as required in regulation 9(3)(h)) by the following means.

The information sources utilised by the VMC to identify these locations are:

- **Flora or a Habitat of Fauna** listed as threatened is published by the DELWP on their website <https://www.environment.vic.gov.au/>. The list can be found in the Conserving Threatened Species section from the home page. The list is specifically referenced in Part 3 and section 10 of the Flora and Fauna Guarantee Act 1988 and does not change often. The VMC is required to register with the DELWP to get email notices whenever the list is updated. Registration details are available on the DELWP web site referenced above.

- **The Threatened Invertebrate Fauna List** and the **Threatened Vertebrate Fauna List** is published by the DELWP on their website <https://www.environment.vic.gov.au/>. The threatened fauna list can be found by clicking on Threatened Species Advisory Lists from the home page.

The three lists are available to download in Adobe Acrobat (.pdf) format from this web page under subheading 'Current Advisory Lists'. The VMC is required to check these lists at least once every year for variations. The list is specifically referenced under, section 5 Definitions, of the Electricity Safety (Electric Line Clearance) Regulations 2015 and do not change often.

Registration with the DELWP to receive automated email notices whenever a list is updated is not available for these lists. Therefore the VMC is required at least once every year to check for variations.

The lists, current at the time of printing this plan are:

- i. Advisory List of Threatened Vertebrate Fauna; and
- ii. Advisory List of Threatened Invertebrate Fauna in Victoria.

When identified, cutting or removal of trees with threatened fauna as described above must be undertaken outside of the breeding season for that species wherever practicable. If it is not practicable to undertake cutting or removal of that tree outside of the breeding season for that species, translocation of the fauna must be undertaken wherever practicable.

Notes:

The VMC will identify trees in the vicinity of overhead powerlines as defined in this section (9.4) and transfer them into the Important Trees register, refer to sample in Attachment E.

This list is currently populated by trees that have been identified under previous regulations that form an operational database and include trees where landowners/occupiers, community interest groups and government departments have indicated their importance.

9.5 Assistance to Responsible Persons and the General Public

9.5.1 Purpose

This procedure outlines the process to be employed to ensure that JEN, with the assistance of the VMC, is able to provide assistance to ORPs in carrying out their duties and to provide advice to the public about trees near powerlines.

9.5.2 Scope

This procedure applies to all persons associated with the vegetation management program.

9.5.3 Procedure

JEN shall inspect its overhead assets and POEL in accordance with the procedures set out in this Plan.

Subsequent to these inspections, ORPs are notified of any trees that infringe into the clearance space and present an immediate risk to network integrity. Follow up audits may be conducted where appropriate to ensure that action has been taken in accordance with the Code. The process outlined in Section 9.2.13 – Service Lines, defines when a follow up audit is required for persons with Electric Line Clearance responsibilities for the service line supplying the property they occupy. The process outlined in Section 9.5.6 – ORP Follow-Up defines when a follow up audit is required for councils with Electric Line Clearance responsibilities of street trees.

On request, the VMC assists ORPs (refer to item 3 in Section 9.5.7 - Liaison with Municipal Councils) to safely cut or remove trees near powerlines by providing advice on:

- Safe work practices;
- The de-energisation of lines;
- The suppressing of the auto re-closing feature on HV feeders; and
- A listing of authorised local service providers.

The VMC provides appropriate information to responsible persons and the public on the planting and the maintenance of trees near powerlines. The information provided may include a copy of the brochure reproduced in Attachment A3 in addition to more specialised arboreal advice.

JEN writes to owners of POEL each year to advise them of their responsibilities in relation to such lines. In accordance with the Private Overhead Electric Lines Procedure, BFM25 in the current JEN Bushfire Mitigation Plan the brochure reproduced in Attachment A4 is included in the mail-out to these customers.

9.5.4 Distribution of Information

A copy of this Plan, approved by ESV, will be available for inspection by appointment at Level 16, 567 Collins Street, Melbourne, during normal business hours. The availability for inspection extends to all material relating to Electric Line Clearance (subject to legal privilege) and the corporate systems (SAP and GIS) upon reasonable request for information regarding the location of electrical assets and excluding commercially sensitive material. A JEN officer authorised by the Network Integrity and Performance Manager is required to supervise all SAP and GIS inspections granted to the public.

The initial request should be made through the Network Integrity and Performance Manager (see section 8.1 for contact details) during normal business hours.

JEN will ensure that materials are made available to members of the public that seek advice or information on the JEN vegetation management program or on responsible tree planting near powerlines.

In addition, the JEN brochures (Attachment A3) have been updated to provide this information to landowners who have trees within the clearance space of their service line.

9.5.5 Participation in Community Programs

JEN may actively support responsible tree planting near its assets through involvement with community agencies and local municipalities. JEN will make available appropriate information and will direct the public to appropriate agencies. The VMC will support this activity.

9.5.6 ORP Follow-Up

As part of the above inspections (section 9.5.3), ORPs are notified of trees that infringe into the clearance space and threatens the integrity of the powerlines, and they are requested to satisfactorily cut these locations within 14 days. In the interest of public safety and integrity of supply, follow up audits must be conducted to ensure that the appropriate action has been taken in accordance with the Code. The 2015 Code prescribes certain exceptions to the clearance space, Jemena assumes Councils will avail themselves to these exceptions in every case. Therefore Jemena's assessment of Council responsible trees will always exclude spans where exceptions apply.

If the identified trees have not been cut or removed within the agreed period, the ORP must be notified in writing that locations not cut or removed within 14 days from the date of the letter may be cut or removed by the VMC. Costs accrued from the works will be forwarded to the relevant ORP. (See Figure 1.10 Process for Notification and Actioning of Other Responsible Persons Infringing Trees).

9.5.7 Liaison with Municipal Councils

JEN communicates regularly with all municipal Councils supplied by the JEN network. At an operational level councils are contacted at least once in every cycle – two years in the LBRA and annually in the HBRA. Those Councils that demonstrate some difficulty in maintaining compliance with the regulations are subject to additional liaison measures. In these cases, the VMC on behalf of JEN, will make contacts within municipal councils at a management level to assist these councils to achieve compliance by raising the profile of the requirements beyond the operational level of their organisations and highlighting the risk exposures and regulatory penalties.

The VMC on behalf of JEN will also enlist the assistance of ESV to assist municipal councils to comply with the Electricity Safety (Electric Line Clearance) Regulations 2015 and address identified issues in a timely manner – refer section 9.2.11.

It is Jemena's view that working in collaboration with ORP's is the best way to achieve the objectives of both parties. Two established activities (items 1 and 2 below) and two new initiatives are used to foster collaboration:

1. At least annually, Jemena formally brings together all municipal councils that overlap the JEN distribution territory and ESV. As well as providing information to local councils, the workshop is an open feedback session and an opportunity to share experiences and ideas.
2. It is a contractual obligation that Jemena's VMC organise two meetings annually with ORPs; and at least one of these must be on an individual basis. These meetings are aimed at providing another opportunity for ORPs to provide feedback on their cutting and removal challenges but also to learn from the management principles and practices employed by Jemena with respect to electric line clearance. JEN participates in at least one of the meetings with each of the councils through the annual workshops. Meetings are monitored in the monthly report and via a KPI, refer to Attachment G – Agreed Performance Targets (and KPI 13).
3. Jemena has a procedure, 'Access to Jemena Electricity Networks for Vegetation Management Work by Other Responsible Persons' (Document Number JEN PR 1722) which is aimed at defining a process for ORPs (and Jemena) to follow when they are required to perform electric line clearance work adjacent to JEN assets.

The procedure is designed to comply with ESV rules 'Electrical Safety Rules For Vegetation Management Work Near Overhead Powerlines by Non-Electrical Workers'.

These rules provide Jemena and ORPs with a framework to engage in an activity where, otherwise, both parties have no legal or contractual relationship. The rules require ORPs to be responsible for their workers training and safety while Jemena is required to provide records of third party access to the space adjacent to its powerlines. The records utilise existing VESI systems and forms for stipulating conditions, precautions and limitations for third party access to this space.
4. An Electric Line Clearance Performance Report is produced monthly by the Network Integrity and Performance Manager and is distributed to the ESV and all municipal councils in the JEN territory. The purpose of this report is to monitor the impact of Jemena's and other authority's (Other Responsible Persons) vegetation management practices on Jemena Electricity Networks (**JEN**). This will enable all parties to become aware of the impact that the vegetation for which they are responsible for managing has on network safety and reliability.
5. The Electricity Safety (Electric Line Clearance) Regulations 2015 require JEN to assist, if requested, a Council that has concerns about the safety of cutting or removal of a tree for which the Council has clearance responsibilities, or concerns about determining the allowance for cable sag and sway, to:
 - Ensure the cutting or removal of the tree can be undertaken safely;
 - Set safe limits of approach to electric lines for cutting/removing the tree;
 - Establish safe methods for cutting/removing the tree; and
 - To determine the additional distance by which the minimum clearance space must be extended to allow for sag and sway of cable spans exceeding 100 metres.

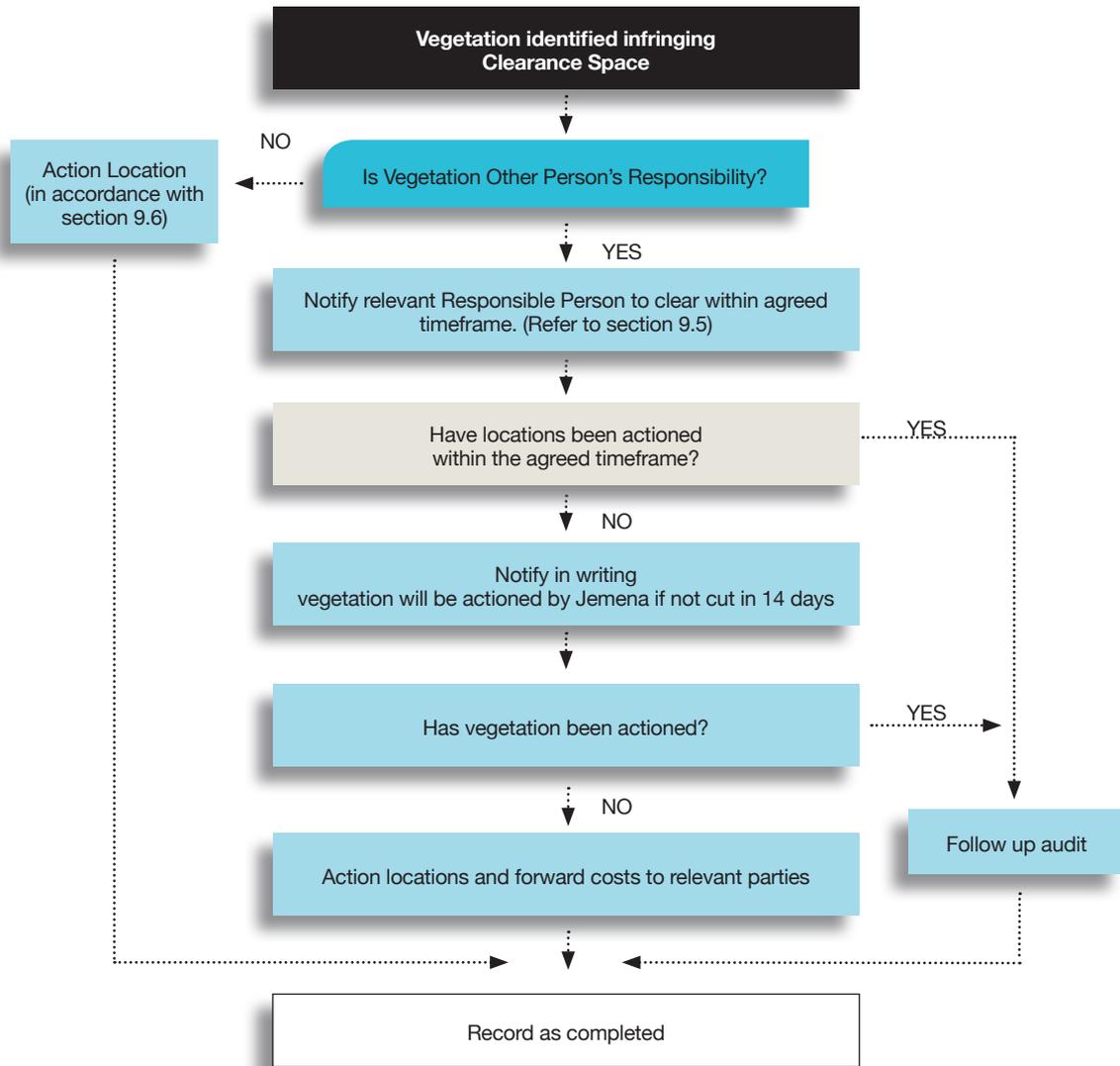


Figure 1.10 Process for Notification and Actioning of Other Responsible Persons Infringing Trees

9.5.8 Electricity Safety Amendment (Bushfire Mitigation) Act 2014

The Victorian State Government has prepared this Act with a purpose to amend the Electricity Safety Act 1998, the main changes in force from 1 April 2014 are as follows:

- (a) To provide that Councils which are managers of public land are responsible for keeping trees clear of electric lines in declared areas;
- (b) To remove the requirement for the Roads Corporation to keep trees clear of electric lines;
- (c) To modernise the provisions relating to requirements to keep trees clear of electric lines; and
- (d) To reduce the frequency with which major electricity companies are required to submit bushfire mitigation plans.

The change which presents the largest potential impact to Jemena is item (b). Jemena has surveyed the state of the Electric Line Clearance along routes formerly the responsibility of the Roads Corporation and actioned non-compliant spans to bring this clearance space up to Code.

9.6 Notification, Consultation and Negotiation

9.6.1 Purpose

This procedure outlines the process to be employed by the VMC to notify and where appropriate, consult and negotiate with, persons affected by tree cutting or removal activities.

9.6.2 Scope

This procedure applies to all persons associated with the vegetation management program.

9.6.3 Procedure

The Affected Person, as required under Clause 15 of the Code, shall be determined by the VMC as part of the work assessment at each location. At this point the VMC representative will determine whether to notify or consult with the affected person. To ensure that the correct affected person is consulted the Letter of Intent (refer to Attachments A1, A2 and P) clearly details the procedure for both the occupant and/or the owner on how to contact Jemena with their enquiries or concerns.

All urgent cutting or removal will be undertaken in accordance with section 9.2.10 of this Plan.

9.6.4 Notification for Cutting or Removal

Affected persons shall be notified, by giving a minimum of fourteen (14) days notice and not more than sixty (60) days notice before the intended cutting or removal is to occur in writing. If 60 days expires and the intended cutting or removal has not taken place, the affected persons shall be re-notified. The form of notice will contain specific detail such as images, sketches and impact statements as prescribed by clause 15(5) in the Code.

The content of the notice will contain details describing the cutting or removal that is planned; and specify the timeframe during which, the planned cutting or removal will commence as prescribed in clauses 16(4) and (5) of the Code.

In compliance with the new requirement in the Electricity Safety (Electric Line Clearance) Regulations 2015, clause 15(3)(c) of the Code, the VMC Assessor will notify owners or occupiers of land 'contiguous' to private property if determined that the use of that property may be affected during the cutting or removal of trees subject to these regulations. Refer to Attachment M for a sample of the notice 'Notice to Owners of Contiguous Land'.

Identification and Notification for Owners Corporation Properties

- Where an owners corporation property has been identified, all vegetation related notices applicable to the property shall only be placed in the owners corporation / managing agent mailbox.
- In the absence of a clearly labelled mailbox and where there is a managing agent identified then the VMC assessor shall make contact with the agent regarding the vegetation works notices that are applicable to the property.
- Where there are no visible signs of an owners corporation (no mail box etc.) then the VMC assessor is to make reasonable attempts to enquire with someone or to have a good look for any labelling at the property indicating that there is a managing agent.
- If the reasonable attempts are unsuccessful in identifying if the property is an owners corporation then the VMC assessor shall refer the matter to the ORP Liaison Officer who will undertake a search for the managing agent.

The notice shall convey the following essential information:

- An explanation of why compliance with the Code is essential;
- Why the proposed works are necessary;
- In general terms what works will be carried out by the VMC;
- An indication that the works are, in general terms, effectively the same as those performed during the previous tree cutting cycles;
- Name and telephone number of person to contact to discuss any matters of concern;
- Copies of typical notices are in Attachments A1 and A2;

- Information on tree(s) of cultural or environmental significance including the details of the impact of the cutting or removal of the tree and the actions to be taken to minimise that impact. Refer to Attachment A1; and
- The affected person is provided an adequate opportunity to comment on a proposal about which trees are to be cut prior to work commencing. The affected person is invited to contact the VMC office during business hours within 14 days of the notice.

9.6.5 Consultation for Cutting or Removal

If the tree intended to be cut or removed is the responsibility of JEN and within the boundary of a private property, VMC must consult:

- With the occupier of the property if the tree is to be cut; or
- With the owner of the property if the tree is to be removed.

The interpretation of consultation, adopted for the purposes of this Plan, is to utilise the above process in section 9.6.4 to invite any consultation with the occupier/owner before cutting or removal of a tree within the boundary of a private property.

9.6.6 Negotiation Process

During any negotiation process arising from the notification and consultation activities where agreement to the cutting or removal is not achieved the VMC shall advise the affected person of the procedures to negotiate alternative powerline construction arrangements to avoid or reduce the need for cutting or removal and the conditions that will apply to such arrangements.

When agreement is reached, the VMC shall prepare and maintain a signed agreement in triplicate of the proposed works and provide copies to all parties. Where agreement has been reached but the affected person refuses to sign, a copy signed by the VMC shall be provided to the affected person noting that agreement has been reached.

Copy of a typical notice and agreement document is shown in Attachment B.

If a dispute arises during the process of negotiations between property occupiers/owners and the VMC regarding proposed cutting/removal/alternative construction activities, it shall be resolved in accordance with the JEN Customer Complaint Procedure.

The JEN Customer Complaint Procedure is based on the resolution of the complaint at the lowest management level possible.

If the dispute cannot be settled at this level, then the process allows for stepping up to the next level of management. The preferred levels for stepping up complaints are:

- VMC Field Officer;
- VMC Program Leader;
- JEN Senior Contract Coordinator;
- JEN Electricity Maintenance Manager;
- JEN Electricity Networks Program Manager; and
- Energy and Water Ombudsman (Vic) (**EWOV**).

If the dispute cannot be resolved in line with the process outlined in section 9.7 Dispute Resolution, the complainant may contact the EWOV as detailed in section 9.7.8 of this Plan to reach resolution.

Notwithstanding the nature of the dispute and the need to resolve the dispute in accordance with procedures, the duty of JEN to maintain the clearance space at all times shall not be compromised.

The VMC must decide how to maintain clearance between powerlines and trees so that the clearance space remains free of trees in accordance with section 9.1 Selection of a Method of Maintaining Clearances. However, this does not preclude affected persons from negotiating conditions under which other solutions may be used in accordance with section 9.3.4 Alternative Tree Management Proposals.

Affected persons shall be notified in writing by a notice placed in a letterbox, left on site, posted or hand delivered giving a minimum of fourteen (14) days notice in advance of the works taking place. Work may only commence prior to the elapse of the fourteen (14) days from notification date if a written agreement signed by the affected person has been effected. Refer to Figure 1.11 Notification / Consultation / Negotiation Process below.

Notification / Consultation / Negotiation Process

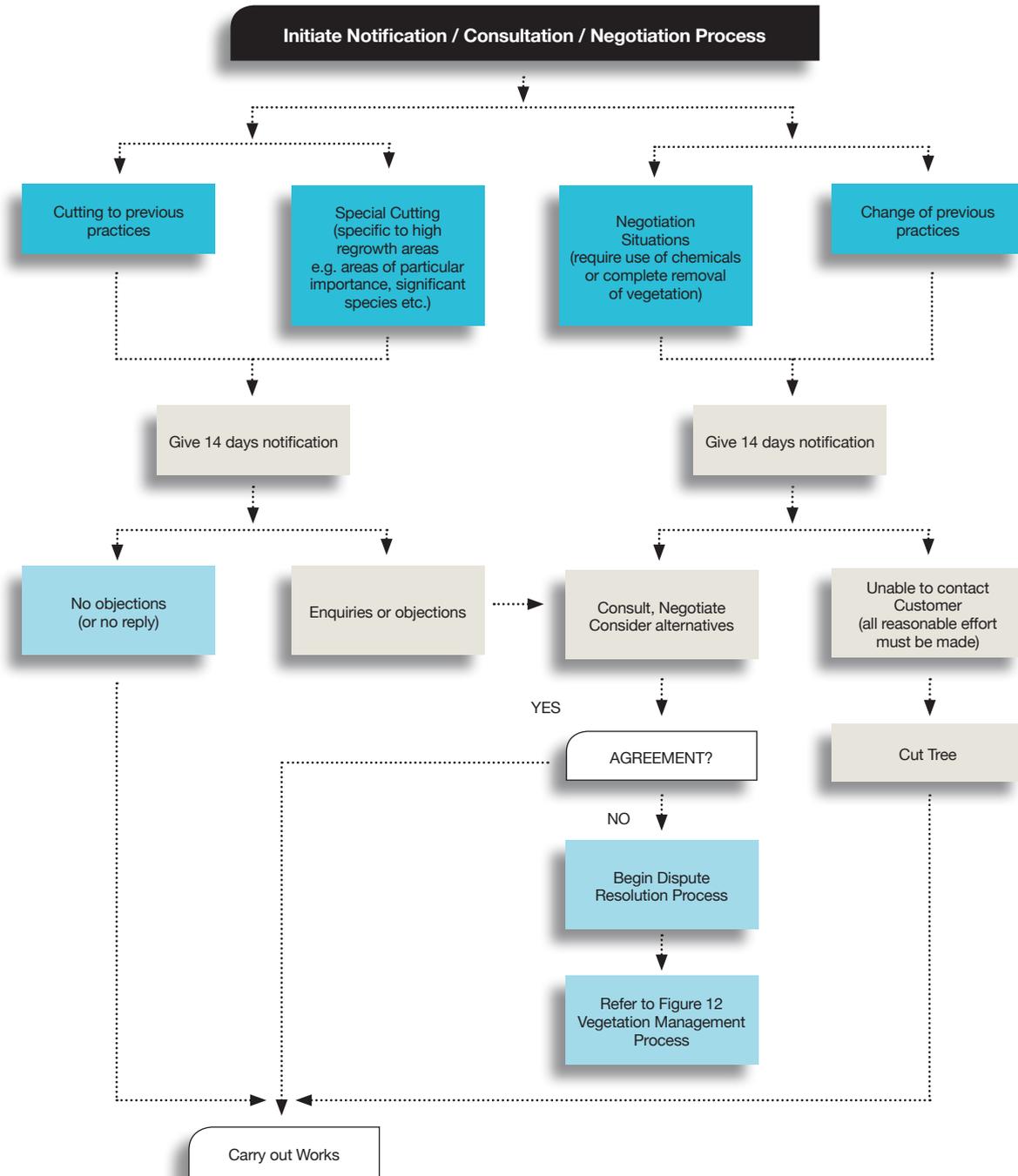


Figure 1.11 Notification / Consultation / Negotiation Process

9.7 Dispute Resolution

9.7.1 Contact Details

For the purposes of dispute resolution the following personnel employed by the VMC may be contacted in conformance with the requirements set out in this section.

Position	Contact Details	
Vegetation Field Officer	Name:	Neil Macintosh
	Address:	Unit 1 \ 1 International Drive, Westmeadows VIC 3049
	Tel:	(03) 9173 6500
	Email:	Neil.Macintosh@zinfra.com.au
Vegetation Management Program Leader	Name:	Shane O'Keefe
	Address:	Unit 1 \ 1 International Drive, Westmeadows VIC 3049
	Tel:	(03) 9173 6500
	Email:	Shane.O'Keefe@zinfra.com.au

9.7.2 VMC Field Officer

The VMC endeavours to resolve any disputes arising from the execution of their duties in a fair and reasonable manner. Disputes cost time and money and reflect poorly on JEN and the VMC's reputation. Disputes may be the result of a breakdown in negotiations prior to works or as a result of dissatisfaction with works.

Every attempt should be made to settle the dispute at the first point of contact to avoid unnecessarily escalating the incident. The Field Officer (**FO**) should explore all options within their authority (see section 9.6) in the consultation and negotiation phase of the process in attempting to avoid disputes. These options should include discussion on, and provision of, the Guide to Tree Planting near Powerlines booklet, the possibility of technical alternatives within JEN guidelines, the use of tree vouchers, and provision of mulch etc.

9.7.3 Reference to VMC Program Leader

Where agreement cannot be reached the FO will notify the Program Leader (PL) of the dispute and provide a detailed briefing of the negotiation to date. Any correspondence from the affected person will be logged in the VMC's quality system for response tracking (Refer to Attachment B). The PL will review the dispute and explore all practical options at their disposal. If, under the circumstances, the PL is able to offer any further alternatives to what has been offered, these will be presented to the affected person by the FO or the PL if it is considered appropriate.

If all options offered are unacceptable to the affected person, the PL, in consultation with the Senior Contract Coordinator, shall consider the risks associated with the tree subject to the dispute in determining the final resolution.

9.7.4 Reference to the Arboreal Advisers

While all FO's employed by the VMC are trained in tree identification, cutting techniques and tree physiology, some special situations may require greater expertise.

Advice may be sought from expert Arborists where the dispute requires an expert third party opinion on a matter relating to the tree or trees in question. The VMC refers to a number of expert Arborists who are widely respected in academia and industry.

Requests for this advice should be passed to the AM who can arrange advice or provide contact details. The advice may be based on photographs and description supported by specimen leaves and fruit of the tree or it may require a site visit by the expert Arborist. Copies of reports should be forwarded to the AM for compilation. The reports will be made available to FOs across JEN for reference.

The PL should authorise any requests for expert advice.

9.7.5 Reference to JEN Senior Contract Coordinator

The JEN Senior Contract Coordinator is responsible for the management of the JEN vegetation contract. The role will be to investigate any issue to ensure that notification, consultation and negotiation and the consequential cutting, has been conducted in accordance with this Plan. Issues that cannot be settled at this level will be referred to the Team Leader Infrastructure Protection.

9.7.6 Reference to Team Leader Infrastructure Protection

The Team Leader Infrastructure Protection is responsible for the deployment of this Plan and will audit the investigations already performed and ensure that activities have been conducted in accordance with the intentions of the Plan. Issues that cannot be settled at this level will be referred to the JEN Electricity Maintenance Manager.

9.7.7 Reference to JEN Electricity Maintenance Manager

The JEN Electricity Maintenance Manager is ultimately responsible for the carrying out of the plan within JEN. The majority of tree related issues should be resolved before reaching this level in the organisation. If an issue remains unresolved at this stage the customer may declare that they are in dispute with JEN.

9.7.8 Resolution

If agreement is reached then the agreed course of action shall be recorded in a negotiation agreement and signed by the affected person. In order to avoid any future dispute where the agreed action is to take place over a period of time a notation referring to the agreement should be made in the Important Tree register.

Any customers who consider they have been poorly treated under this process are welcome to approach the EWOV for recourse. The Ombudsman is the last industry advocate available to settle tree related disputes. Further recourse may be available through the legal system.

If the non-completion of the disputed work presents an imminent likelihood of contact with an electric line or if an Assessor confirms the imminent likelihood of contact with an electric line, urgent cutting or removal may be undertaken to maintain the clearance space.

- Energy and Water Ombudsman (Victoria) Ltd.
Reply Paid 469
Melbourne Vic 8060
Tel: 1800 500 509
Hours: 8:30am–5:00pm, Monday to Friday
Website: www.ewov.com.au

Vegetation Management Process

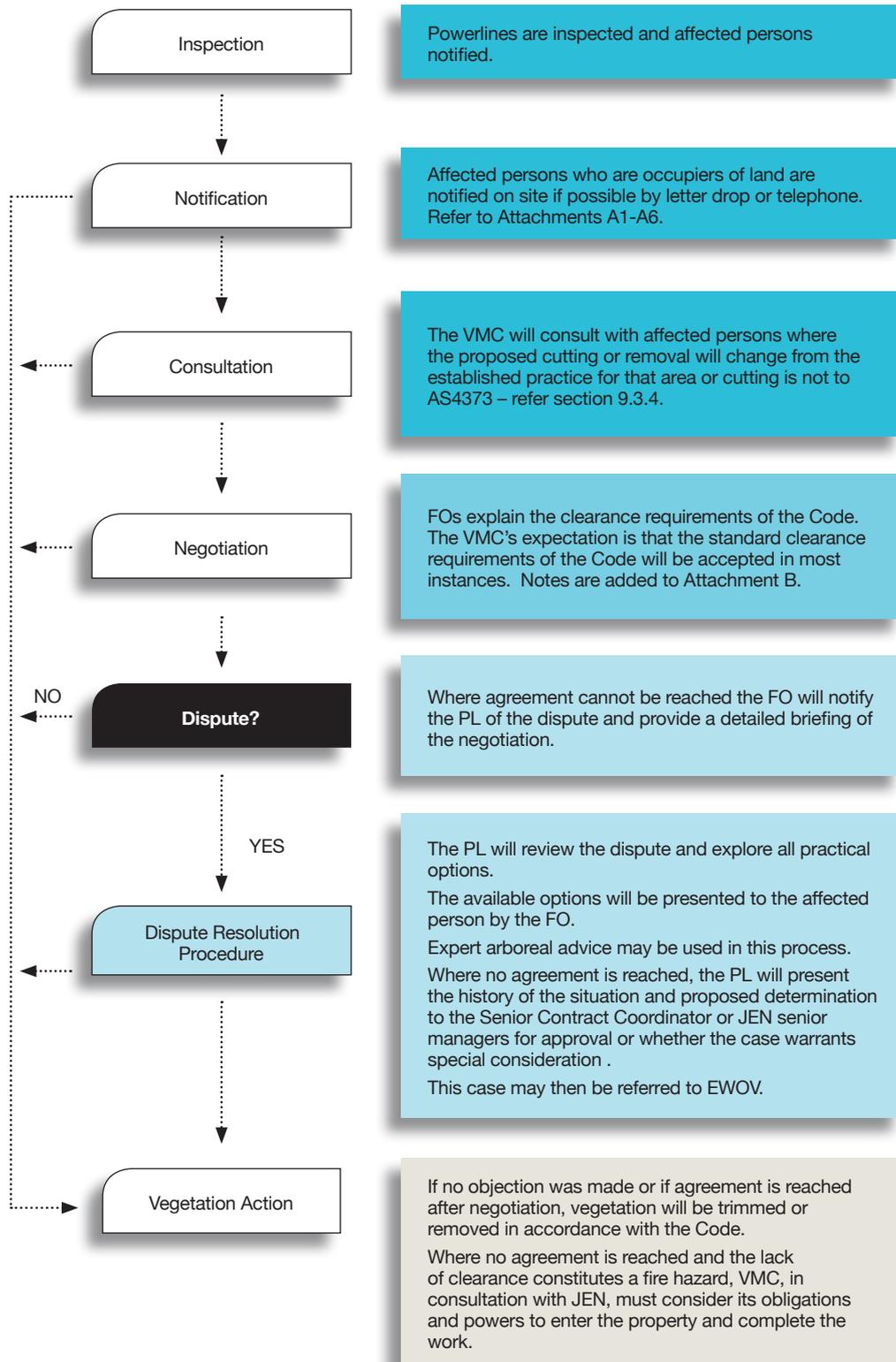


Figure 1.12 Vegetation Management Process

10 Monitoring and Auditing

10.1 Monitoring

This section is designed to monitor progress, identify deficiencies and implement changes to achieve a high level of compliance, safety and where necessary improvement.

As part of the vegetation management program, a set of Key Performance Indicators (**KPIs**) have been developed to monitor its overall performance. KPI targets are set each year and monitored and reported to senior management on a monthly basis. The bushfire mitigation status is monitored and reported monthly to Executive Management. The KPIs related to bushfire mitigation and vegetation management aspects, together with the proposed 2018-2019 measures are detailed below:

Category	Item	KPI
Program / Schedule	Low Bushfire Risk Area	Spans cut/removed. Monthly and YTD. Progress against Cutting Schedule.
	High Bushfire Risk Area	Spans cut/removed. Monthly and YTD. Progress against Cutting Schedule. Maintain a zero BFM index during the declared fire danger period.
	Contractor Management	Days worked (comment on days not worked). Crew configuration. Areas from Cutting Schedule worked on.
	Subcontractor Management	Subcontractor performance (rolling 12 months). Performance monitoring audits: Time sheets; Zinfra assessments; On site job sample; Attendance; Summer audits; Productivity / performance; Feeder inspection; Fire season preparation; Training matrix.
	ORP Management	Comment on any recent communications and general status of ORPs vegetation management program. Notices issued by ORP, zone substation, month and YTD; Notices actioned by ORP, zone substation, month and YTD; Report of routine meetings.
	Register Updates	Important Trees; Hazard Trees.

Category	Item	KPI
Occupational Health, Safety & Environment	Audits	Health, Safety & Environment audits: HAC Sheet Audit; Climbing; Spot Inspection; Safe Use of Elevating Work Platform (EWP) Limits of Approach; Personal Safety Equipment; Hogger Operation; First Aid Kit; Hearing Conservation; Traffic Management; Herbicide Use; Tree Felling; Chainsaw; EWP/Hogger; Motor Vehicle.
	OH&S Statistics e.g. LTIs etc.	The VMC and subcontractor workgroup.
Customers	Complaints	Number of complaints; Number of customers notified; Types of complaints received.
	Enquiries / Service Requests	Number of enquiries; Number of service requests; Number of VIP enquiries.
Contract	Timeliness of Service	Month report on time; Invoices on time; Customer follow-up; Urgent response.
	Faults / Fires Reliability of supply	Number of faults; Number by ORP; Number by zone substation; Number by months since scheduled inspection/cut; Number by species; Number by cause e.g. dead limb, storm/wind, structurally unsound, rot, root problems, etc.; Number of tree related fires; Tree related Customer Minutes Off Supply (CMOS).

10.1.1 Targets

Where appropriate, targets for the KPIs listed above will be agreed between JEN and the VMC and set at the start of each period, and monitored every month after. Targets are determined based on a combination of regulatory requirements, risk mitigation and historical workloads. The annual review and target setting of KPIs forms part of the service agreement between Jemena and the VMC.

All reporting of KPIs will be with reference to the relevant target, refer to Attachment G for a sample of KPI targets.

If required targets that are not met place the VMC’s monthly management fee at risk, i.e. a portion of the monthly fee is withheld.

10.1.2 Fault Investigation

All network faults resulting from vegetation contact with electric lines will be investigated. The JEN Senior Contract Coordinator will request an investigation and forward incident location details to the VMC. The VMC will report the investigation on the standard Fault Investigation Form, refer to Attachment K.

10.2 Auditing

All assessment and cutting performed by the VMC is subject to a dynamic audit regime; this includes progress against the annual schedule and work quality (e.g. clearance space, OH&S, AS 4373), refer to Procedure VEM 30-52. This audit regime requires a percentage of all work performed to be audited. A point score system is employed to identify any non-conformances which may result in rework. Audits conducted and results are reported monthly by the VMC.

The accountability for auditing of the VMC rests with the Team Leader Infrastructure Protection. The JEN Team Leader Infrastructure Protection is responsible for the regular auditing of the VMC to ensure that it complies with the requirements of this Plan and the Bushfire Mitigation Plan.

Responsibility for such auditing may be delegated to the JEN Senior Contract Coordinator.

Audits are conducted annually and include:

- Two Desktop Audits;
- Training Matrix Audit;
- HSE/Field Inspection/Quality Assessment Audit; and
- Vegetation Audit.

Vegetation management is also audited as part of the Bushfire Mitigation Management Audits. Audits into all facets of the Bushfire Mitigation Program are undertaken by managers to validate the efficacy of the JEN management process, program compliance and program relevance.

10.2.1 Pre-summer Inspection in Hazardous Bushfire Risk Areas

In the HBRA a pre-summer inspection will be conducted each year. This involves approximately 5,000 spans. The VMC, in consultation with the JEN Senior Contract Coordinator, will arrange for the inspection to be carried out to best enable powerline clearance to be achieved before the fire danger period is declared. Typically this takes three to four weeks to complete. For context and more detail on the pre-summer inspection program refer to the first dot point under Section 8.2.3 – Specific Requirements and, the HBRA Cutting Schedule in Attachment D – HBRA Cutting Schedule.

Periodic spot audits are to be carried out throughout the year, especially in the months before and during, the declared fire danger period. The VMC, JEN and independent auditors, who undertake a 100% inspection of the HBRA during the fire danger period, carry out these audits.

10.2.2 Inspection in the Low Bushfire Risk Area

Tree inspection will be performed in the LBRA to ascertain the location and status of trees in relation to JEN's responsibilities under the Code. This inspection will be completed in accordance with the detailed plan prepared by SD and adhered to by the VMC.

Additional inspections relating to powerline clearance issues may be carried out in response to reasonable requests directed to JEN or the VMC and the results recorded.

10.2.3 Code Compliance Audit

In addition to the audits carried out above by the VMC, a 'Code Compliance Audit' is conducted by JEN. This audit is designed to ensure JEN's compliance with the Code of Practice for Electric Line Clearance (the Code) contained in the Schedule to the Electricity Safety (Electric Line Clearance) Regulations 2015.

The focus of the audit is on the VMC's systems, records and processes that have been designed and are used to manage JEN's electric line clearance obligations. Compliance with the Code is strongly inferred by the tracking of the KPIs under section 10.1. The audit under this section is designed to explicitly determine the extent of compliance with the Code. Any non-conformances identified will be addressed within agreed timeframes and with agreed methods.

10.2.4 Outcomes and Continuous Improvement

Data is collected through the monitoring and auditing procedures, which are designed to identify progress and compliance with industry standards, Jemena requirements and applicable legislation as outlined in this plan. This data is analysed generating performance indicators (including key performance indicators). Variance from agreed performance measures shall have appropriate actions implemented.

This process identifies the affected persons and relevant stakeholders who are advised of the findings and are tracked to ensure conformance within nominated timeframes. These findings are documented in a monthly report which is tabled, for monitoring by the vegetation management committee, at the monthly operational meetings.

11 ELCMP Review Process

Reasons for review/amendment:

- Issues/Suggestions/Ideas raised throughout:
 - Service Provider correspondence;
 - Regulator correspondence;
 - Municipal Associations correspondence; and
 - Industry correspondence.
- Changes in regulatory requirements;
- Changes in standards;
- Changes in operating procedures; and
- Safety related incident resulting in serious injury to the public.

Monitoring:

- Jemena Compliance and Risk Systems (Annual);
- Lawlex Legislative Alerts;
- Bushfire Annual Program of Activities (Monthly via BFM report and BFM Committee Meetings);
- Vegetation Management Operational Meetings (Monthly); and
- BFM12 – Audit Procedure

Sign off:

- General Manager Electricity Networks;
- Network Integrity & Performance Manager; and
- Senior Bushfire Mitigation & Asset Performance Engineer.

Process:

1. Notification for the review of the ELCMP comes through to the Network Integrity and Performance (**NI&P**) team via:
 - a. Bushfire Committee Meeting per BFMC charter the APA is reviewed at each meeting with the development of next years' APA discussed in October;
 - b. Jemena Compliance and Risk System tracks the compliance obligation annually with a reminder sent out to the responsible persons; and
 - c. Regulatory changes from governing bodies that may impact the regulation and act is communicated via industry correspondence and on JCARS.
2. Through stakeholder consultation the current plan is reviewed and assessed to determine its ability to comply with the current regulation and acts. These involve consultations with:
 - a. The service provider;
 - b. Jemena Internal regulatory team; and
 - c. Industry regulator (**ESV**).
3. Amendments are made as required with a revision log being completed to address the major variances between the current accepted plan and the proposed plan.

4. Internal review occurs throughout between:
 - a. Jemena and its service provider; and
 - b. JEN's GM Asset Strategy and the Network Performance & Integrity team.
5. External review process from ESV occurs after the Plan is submitted by March 31.
6. Publication of the plan on the Jemena external website, its internal intranet and internal content management system after March 31 and subsequent revisions are also published.

ATTACHMENT A1. CUSTOMER NOTIFICATION LETTER



For all enquiries please contact our service provider Zinfra
T: 1300 434 401 E: JENVEG@zinfra.com.au



Jemena Electricity Networks (Vic) Ltd
PO Box 16182, Melbourne, VIC 3000
T: 1300 536 362
W: www.jemena.com.au

ATTENTION: NOTICE OF CUTTING OR REMOVAL OF TREES NEAR POWERLINES

Notice Date / /

Span ID _____

Address _____

Dear Customer,

Jemena Electricity Networks (JEN) supplies electricity to homes and businesses in Melbourne's north-western suburbs. JEN operates and maintains the poles and wires in your area and has a specific electric line clearance program which is managed by our business partner Zinfra.

JEN is responsible for maintaining the clearance of trees from powerlines that cross your property boundary, or trees within your property near the powerlines in the street (refer to the diagrams in the enclosed brochure).

Regular inspections are carried out to ensure electrical fire safety and powerline reliability. As a result of these inspections, **vegetation within or adjacent to your property has been identified as infringing on the clearances around powerlines / your neighbours' service line.**

The Electricity Safety (Electric Line Clearance) Regulations 2015 outlines these clearance requirements. The enclosed brochure 'Trees, Powerlines and Your Property' summarises the requirements of these regulations.

Pruning clearances

The pruning works will result in pruning the tree/s to allow for a minimum clearance distance above, below and to the side of the powerlines of approximately _____ plus an allowance of _____ for regrowth between pruning cycles.

Your property is situated in a:

- Low Bushfire Risk Area Hazardous Bushfire Risk Area (increased clearances apply)

Timing of works

These works are programmed to be carried out between / / and the / /

All endeavours will be made to complete the works within this timeframe and within one visit; however circumstances outside our control, such as inclement weather and mechanical breakdown, may affect our ability to comply with this timeframe.

No action is necessary by you. If you have any queries concerning the works please contact our service provider **Zinfra on 1300 434 401** within 14 days of the issue date of this notice.

Network Integrity & Performance Manager
Jemena Electricity Networks

VEM 20-50B

OTHER INFORMATION**Costs**

These works are carried out **free of charge**.

Trees of Cultural or Environmental Significance

JEN has a process to identify a tree/s of cultural or environmental significance located within its geographical area through consultation with local, state and federal government agencies. Where culturally or environmentally significant tree/s have been identified, JEN will consult with the affected landowner/occupier regarding the actions that will be taken to minimise the impact of the proposed cutting or removal works.

- If this check box is marked the tree/s on your property have been identified as having cultural or environmental significance, please contact our office to arrange consultation regarding the proposed works.

Details of the impact of the proposed cutting or removal of the tree;

Details of actions to minimise that impact may include;

The insulated cable to your property

Ensuring trees on your property remain clear of the insulated cable that connects your house to the roadside powerlines is the owner/occupiers responsibility, see enclosed brochure 'Trees, Powerlines and your Property'. Further information regarding your responsibilities and safety in maintaining this cable is available by contacting Zinfra on the number below.

Rental properties

If you are a tenant you should notify your landlord or managing agent of this notice.

Council trees in urban areas

Trees located on nature strips, road reserves and in parks in **declared** areas (urban) is the responsibility of the local council. In these instances all enquires are to be directed to your local council or shire.

- If this check box is marked we have sought prior approval from your local council for the removal of tree saplings located directly beneath and 3 metres on either side of the powerline on lands managed by them in **non-declared** areas (rural).

Removal of debris

The branches of trees pruned or removed may not be removed from site on the day of cutting but will be cleared away as soon as practicable. Limbs that are too large to be mulched will be cut into manageable lengths and stacked neatly on site.

Identification of contractors

All personnel have been issued with identification cards identifying them as an authorised contractor.

Training of contractors

All cutting is carried out in accordance with the Australian Standard AS4373-2007 Pruning of Amenity Trees. The cutting techniques outlined in AS4373-2007 are designed to reduce the impact on the health of trees following pruning. Trees will be pruned to the most appropriate target point which is generally the trunk of the tree, see enclosed brochure 'Trees, Powerlines and your Property'.

[FOR ALL ENQUIRIES: Please contact Zinfra on 1300 434401.](#)

VEM 20-50B

ATTACHMENT A2. CUSTOMER NOTIFICATION LETTER – SERVICE LINES



For all enquiries please contact our service provider
Zinfra T: 1300 434 401 E: JENVEG@zinfra.com.au



Jemena Electricity Networks (Vic) Ltd
PO Box 16182, Melbourne, VIC 3000
T: 1300 536 362
W: www.jemena.com.au

Notice Date / /

Notice No:

Address _____

ATTENTION: NOTICE OF VEGETATION NEAR YOUR OVERHEAD SERVICE LINE

Dear Owner/Occupier,

Jemena Electricity Networks (JEN) supplies electricity to homes and businesses in Melbourne's north-western suburbs. JEN operates and maintains the poles and wires in your area and has a specific electric line clearance program which is managed by our business partner Zinfra.

A recent inspection undertaken by Zinfra has identified vegetation at this address which is in close proximity to or is contacting the service line supplying power to this address. Vegetation which is not maintained may cause an interruption to the electricity supply or in extreme situations may result in fire/electrocution.

The Electricity Safety Act 1998 – Section 84A (2) specifies that the owner/occupier is responsible for keeping vegetation located at this property clear of the service line; refer to the vegetation clearance diagrams on the back of this notice for guidelines on vegetation clearance responsibilities.

You are required to prune/maintain the vegetation at this property which is surrounding the services line to a minimum clearance of 300mm in all directions (900mm on service lines exceeding 40 meters in length). As a guide, clearing should be carried out before vegetation grows to within 1000mm of the service line.

DO NOT ATTEMPT TO CLEAR VEGETATION WHERE IT IS UNSAFE TO DO SO OR IF CLEARING MAY CAUSE CONTACT WITH THE SERVICE LINE.

Jemena advises that you engage a suitably trained person (i.e. from your local paper or business directory) who can safely undertake this work. You should arrange to have this work undertaken within 30 days from the date of this notice.

- If this box is marked, then the vegetation identified at this address poses an increased risk of causing an electrical fault and therefore Zinfra will conduct an audit at the expiration of this 30 day period to ensure that the work has been performed and the service line has been cleared.

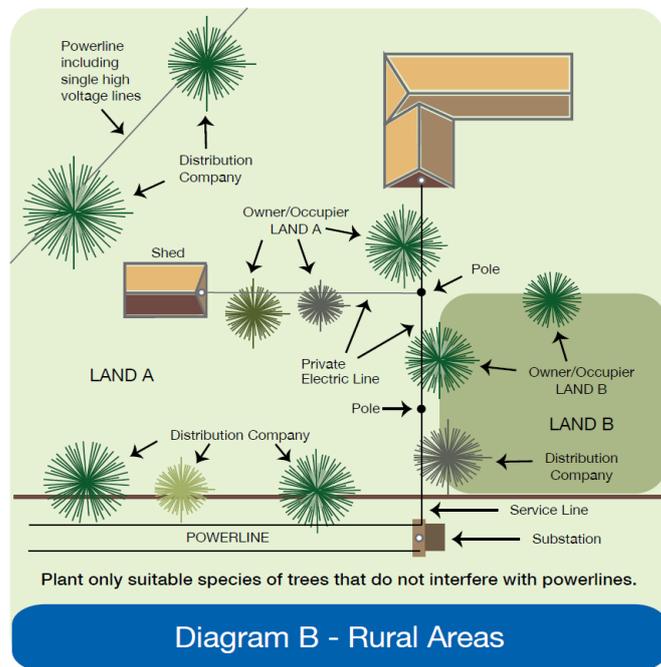
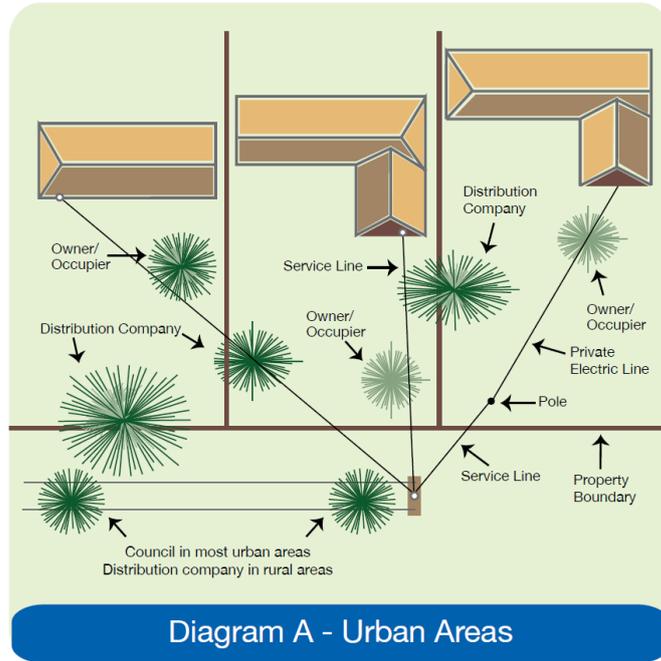
If you do not own the land or premise you occupy, please advise the landowner or managing agent of this notice as soon as possible.

To discuss aspects of this notice, please contact our service provider **Zinfra on 1300 434 401** or address: 194-198 Cheltenham Road, Keysborough.

**Network Integrity & Performance Manager
Jemena Electricity Networks**

Attachment A2. Customer Notification Letter – Service Lines (cont.)

VEGETATION CLEARANCE RESPONSIBILITIES



VEM 20-50D

ATTACHMENT A3. CUSTOMER NOTIFICATION BROCHURE – SERVICE LINES

IN THE HAZARD SPACE
Sound limbs they grow over the Clearance Space for powerlines up to 22kV
Trees shall not be removed without prior consultation

REGROWTH SPACE
2 Years + annual regrowth (2 years + Vegetation Management Cycle)
Free of vegetation at all times

Low Bushfire Risk Areas

Jemena cuts trees on a two-year cycle in the Low Bushfire Area and annually in the Hazardous Bushfire Risk Area. This requires trees to be cut beyond the minimum safety clearance to allow for vegetation regrowth.

Once the minimum safety clearance plus an allowance for regrowth is determined for each branch, it is then trimmed at the nearest collar (or growth point) outside the clearance zone. This is a requirement under Australian Standard AS4373. This protects the trees from infection or disease and reduces the development of weakly attached growth that can result from trimming trees mid-branch (see below).

LEGEND
● Limbs to be removed
● Powerline

Appearance of the trees after cutting

Trees, Powerlines and Your Property

JEN-SR-BAU-006

HAZARD SPACE
Trees shall not be removed without prior consultation

REGROWTH SPACE
1 Year + Vegetation Management Cycle
Free of vegetation at all times

Hazardous Bushfire Risk Areas

Jemena Electricity Networks (Vic) Ltd
ABN 82 064 651 083

Jemena Electricity Networks owns and operates the poles, wires and meters delivering electricity to homes and businesses across Melbourne's north-western suburbs.

www.jemena.com.au

JEN-SR-BAU-006

Tree Clearing

Victoria has well earned the reputation as the Garden State. It's in everyone's interests to help manage the growth and health of our trees. Trees growing close to powerlines can cause fires, blackouts and power surges. They also present a safety risk to people.

The Electricity Safety (Electrical Line Clearance) Regulations 2015 sets out the minimum clearances required between trees and powerlines. It also outlines the division of responsibilities between councils, power companies and residents in relation to trees and powerlines.

Your Property and Powerlines

You are responsible for keeping vegetation on your property clear of:

- The service line which supplies your property;
- Your own private electric line; and
- A private overhead electric line on an adjoining property (see diagram opposite).

The legislated clearance required varies according to the voltage and configuration of the overhead wires. However, the minimum safety clearance for bare overhead wires in residential areas is generally 1.5 metres.

If vegetation is not well clear of lines, or if any cutting may cause branches to fall over lines, do not cut them yourself. Contact an authorised powerline clearing contractor.

Never prune near high voltage powerlines

It is a distribution company's responsibility to maintain minimum clearances for trees near powerlines that cross your property boundary, or trees within your property near powerlines in the street (see diagram opposite).

Legislation allows for a distribution company or its contractors, such as Jemena to enter and inspect lines on your property and to clear vegetation as required.

Electricity Supply from Powerlines in the Street

Trees in your Street

In urban areas, local councils generally have the responsibility for maintaining vegetation that interfere with powerlines on road reserves. Jemena has responsibility for trees on road reserves in rural areas supplied by Jemena Electricity Networks (VIC) Ltd.

Our Commitment to You

- We will give at least 14 days and not more than 60 days prior notice when trees are to be cut (except in the case of emergencies).
- We will provide an opportunity for any concerns with the vegetation maintenance program to be addressed.

Planting Wisely

Cutting trees to ensure they are clear of powerlines is essential. The best way to prevent fire and supply interruptions is to remove inappropriate trees.

Jemena recommends that only appropriate tree species be planted near powerlines. For more information on trees safe to plant near powerlines contact our Customer Service Desk on 1300 131 871.

Appearance of the Trees

Vegetation must be kept well clear of powerlines at all times. It is not always possible to achieve an aesthetically pleasing result from tree cutting around powerlines due to:

- The type of tree that is planted;
- The position of the tree. It may have either been planted too close to the lines, or even planted directly underneath; or
- Poor quality of previous maintenance. In some instances, large amounts of the tree may be removed if the tree has not been maintained to appropriate standards in the past.

Jemena only uses vegetation contractors who are trained to cut trees using arboriculturally sound methods.

Powerlines on Rural Properties

Plant only suitable species of trees that do not interfere with powerlines.

ATTACHMENT A4. POEL BROCHURE – SAFETY AND RESPONSIBILITY

Legal Responsibility

Electricity customers have always been responsible by law for their private electric lines, either overhead or underground. To clarify this responsibility, the legislation was amended in June 2012.

The legislation defines the 'point of supply' and confirms your responsibility for maintenance of your private overhead electric lines including the need to keep vegetation clear of your lines.

A private electric line is described in the Electricity Safety Act 1998. Reference should also be made to the 'Victorian Electricity Supply Industry' Services and Installation Rules for construction and maintenance of private overhead electric lines.

If a fault in your electrical installation causes injury or property damage you could be involved in costly litigation.

In accordance with the relevant regulations, all electrical wiring work associated with the erection and maintenance of private overhead electric lines should be carried out by a Registered Electrical Contractor.

Energy Safe Victoria (ESV) may also be consulted for advice or clarification of your responsibilities.

ESV: (03) 9203 9700.

Jemena Electricity Networks (Vic) Ltd. (JEN) is the company licensed by the Victorian government to distribute electricity across Melbourne's north-western suburbs and is responsible for the operations and maintenance of the electricity poles, wires and meters in this area.

Jemena Electricity Networks (Vic) Ltd. (JEN)
ABN 82 064 651 083






Private Overhead Electric Lines

Safety and Responsibility



Are your Private Overhead Electric Lines Safe?

They are your responsibility to maintain.

Customer Service Centre
1300 131 871

Faults & Emergencies
131 626
www.jemena.com.au

Energy Safe Victoria (ESV)
(03) 9203 9700

Translator Services
131 450



Electric lines on your property are your responsibility

It is your responsibility to regularly inspect your private overhead electric lines, ensuring they are well maintained and clear of trees and branches. This will help ensure constant electricity supply and reduce the possibility of electrocution or bushfires.

Which are your electric lines?

You are only responsible for your **Private Electric Lines**.

Which are ours?

Private electric lines begin at the **Point of Supply** (see diagrams overleaf). After the point of supply all the wires, poles and any other electrical equipment on your property are your responsibility.

High Voltage Lines are the responsibility of JEN, even if they cross your property. We will keep them well maintained and free from vegetation.

If you are not sure whether your lines are private electric lines or high voltage lines please contact our Customer Service Centre on 1300 131 871.

Jemena Electricity Networks (Vic) Ltd. (JEN) is the company licensed by the Victorian government to distribute electricity across Melbourne's north-western suburbs and is responsible for the operations and maintenance of the electricity poles, wires and meters in this area.

Why you should keep private electric lines well maintained

To ensure a safe and continuous electricity supply to your property and to avoid potentially costly litigation if a fault in your electrical installation causes injury or property damage.

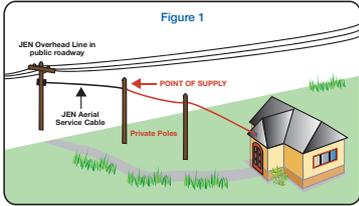
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July 2017

POEL Brochure – Safety and Responsibility (cont.)

Which situation applies to you?

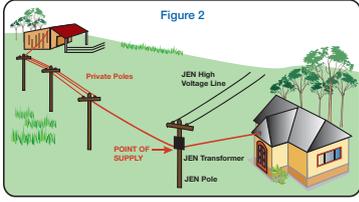
Figure 1



Jemena Electricity Networks (Vic) Ltd. (JEN) overhead line is in a public roadway. Where an overhead line is carried on to the land by private poles, the point of supply is the first private pole.

- **Private Overhead Electric Lines:** Vegetation clearing and maintenance is your responsibility.
- **JEN's Aerial Service Cable:** Maintenance and vegetation clearance on the public roadway is JEN's responsibility. Tree trimming on your property under the aerial service cable is your responsibility.

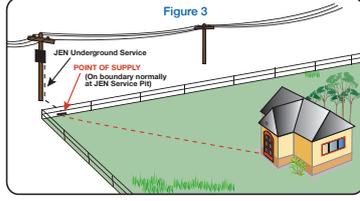
Figure 2



JEN's overhead line is on private land (most of JEN's lines have a transformer fitted near your building). The point of supply is where your lines are connected to JEN's pole.

- **Private Overhead Electric Lines:** Vegetation clearance and maintenance is your responsibility.
- **JEN's High Voltage Lines (attached above Transformer):** Vegetation clearance and maintenance is JEN's responsibility.

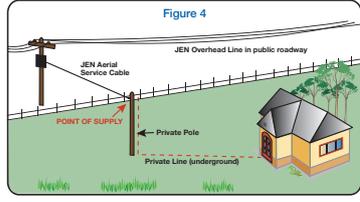
Figure 3



Underground cable from JEN's overhead lines is in a public roadway. The point of supply is at the service pit or where the cable crosses your property boundary.

- **Private Underground Electric Lines:** Maintenance is your responsibility.
- **JEN's Service (Underground Service Cable):** Maintenance is JEN's responsibility.

Figure 4



JEN's overhead line is in a public roadway. The overhead line is carried to a pole on private land. It then changes to an underground cable. The point of supply is where the aerial service cable is connected to the private pole.

- **Private Underground Electric Lines and Private Poles:** Maintenance is your responsibility.
- **JEN's Aerial Service Cable:** Maintenance and tree trimming in the public roadway is JEN's responsibility, however the vegetation clearance on your property under the aerial service cable is your responsibility.

How to look after Electric Lines.

1. Inspecting Lines

Inspect your private electric lines annually or ask a registered electrical contractor (electrician) to do it for you. Use binoculars or a telescope to inspect cable insulation (covering).

Warning: Under no circumstances climb a pole or approach the wires yourself. Contact with live wires can kill. Tree branches touching lines may also be live. Repairs MUST always be carried out by a registered electrical contractor.

2. Keep Trees Clear of Electric Lines

For trees which already exist near electric lines, advice should be sought from our Customer Service Centre on 1300 131 871 before you attempt to remove or trim them. Private overhead electric lines can be damaged by contact with trees and overhead limbs. Falling branches may cause the lines to clash or fall to the ground. This could start a bushfire or result in someone being electrocuted.

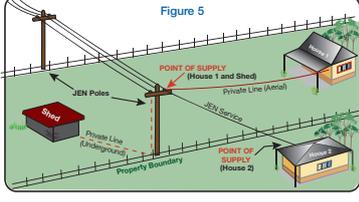
3. Minimum Horizontal and Vertical Clearance Required

In general, the minimum clearance space for vegetation required for private overhead electric lines is as per the table below:

Insulated Wires	1 metre
Bare Wires	2 metres

The exact minimum clearance space required for vegetation is as per the current Electricity Safety (Electric Line Clearance) Regulations. These can be viewed on the website of the Victorian Electricity Safety Regulator, Energy Safe Victoria (ESV) www.esv.vic.gov.au. Energy Safe Victoria may also be consulted for advice or clarification on (03) 9203 9700 or www.esv.vic.gov.au.

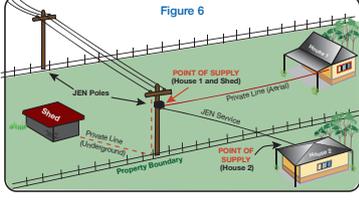
Figure 5



JEN's overhead line is on private land. The point of supply for the first house (and shed) is where the private lines are connected to the JEN pole. However, the second house is situated across a property boundary, so a JEN service is connected straight to the house. The point of supply is where the JEN service is connected to the house.

- **First House Private Overhead Electric Line and Private Underground Line (to Shed):** Maintenance and vegetation clearance is your responsibility.
- **JEN's Overhead Service to Second House:** Vegetation clearance is your responsibility. Maintenance is JEN's responsibility.

Figure 6

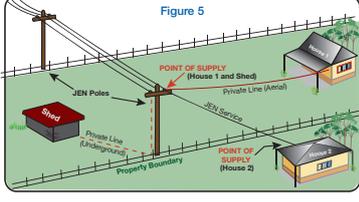


The only difference between this situation and the one above (Fig.5) is a transformer is fitted on the JEN pole. Same rules apply:

- **First House Private Overhead Electric Line and Private Underground Line (to Shed):** Maintenance and vegetation clearance is your responsibility.
- **JEN's Overhead Service to Second House:** Vegetation clearance is your responsibility. Maintenance is JEN's responsibility.

July 2017 2 July 2017

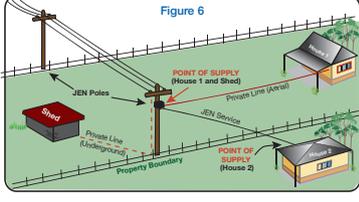
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- **First House Private Overhead Electric Line and Private Underground Line (to Shed):** Maintenance and vegetation clearance is your responsibility.
- **JEN's Overhead Service to Second House:** Vegetation clearance is your responsibility. Maintenance is JEN's responsibility.

Figure 6

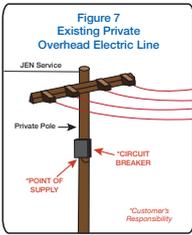


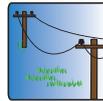
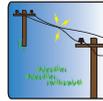
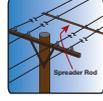
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- **JEN's Overhead Service to Second House:** Vegetation clearance is your responsibility. Maintenance is JEN's responsibility.

July 2017 4 July 2017

POEL Brochure – Safety and Responsibility (cont.)

<p>Council Permits</p> <p>If tree pruning is necessary and your property is in an area where a council planning permit is required before you cut a tree, you will need to comply with these regulations first unless JEN serves written notice that urgent tree pruning is required.</p> <p>How JEN will help</p> <p>JEN may inspect your electrical installation (or any part of it) at any time. If a dangerous situation is discovered, we may disconnect electricity supply without prior notice. We may also check private poles and overhead lines. This will not reduce in any way the need for you to inspect and arrange necessary repairs and maintenance.</p> <p>Total Fire Ban</p> <p>On days of total fire ban, JEN may disconnect defective private overhead electric lines from its supply mains. This will further reduce the risk of fire. Reconnection will occur only after the severe weather conditions have subsided and charges may apply.</p> <p>Circuit Breakers</p> <p>When an electrician carries out maintenance on your private electric line, a CIRCUIT BREAKER must be fitted to your line. A circuit breaker is a switch installed at the start of your private electric line to switch off power whenever necessary, for example, during a high fire danger period.</p> <p>The circuit breaker will 'trip' (switch off automatically) only under the same conditions as a fuse would blow.</p> <div style="text-align: center;">  <p>Figure 7 Existing Private Overhead Electric Line</p> </div> <p style="text-align: center;">July 2017 6</p>	<p>A circuit breaker cannot be relied on for any greater electrical protection than a fuse. Should a circuit breaker 'trip', you may be able to restore electricity supply without waiting for a JEN representative to attend.</p> <p>CAUTION: Where a circuit breaker has been switched off to isolate supply for VEGETATION CLEARANCE, prove that the private overhead electric line has been isolated before starting work.</p> <p>Underground electric lines are a better choice</p> <p>Should your overhead electric lines be in a bushfire risk area and need substantial repair, JEN may direct you to replace them with an Underground Cable.</p> <p>An underground cable is far safer than an overhead line. It virtually eliminates the risk of starting a bushfire, and the danger of electrocution through contact with tractors and other farm equipment is minimised.</p> <p>Underground cables are more reliable, and are not damaged by storms or weather and may even improve the look of your property. Overhead electric lines continually need maintenance, whereas underground cables require no vegetation clearance. This saves time and money. For these reasons we recommend you make plans for the eventual conversion to underground electric lines in accordance with the Electricity Safety (Installations) Regulations 2009 - regulation 403.</p> <p>If electricity is supplied from a roadway outside your property, JEN will arrange for the installation of an underground cable to the 'point of supply' at your property boundary. (See Figure 3).</p> <p style="text-align: center;">July 2017 7</p>
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<p>Things to look for</p> <p>If you answer YES to any of the following questions, your electric line may be in need of urgent attention. Remove offending tree limbs and have a registered electrical contractor check the line and carry out repairs without delay.</p> <p>Tick the box to check where the dangers are on your property.</p> <p>1. If any section of your private overhead electric lines has more than one bare wire:</p> <div style="margin-bottom: 10px;">  <p>Is there any vegetation within 2.0m (7ft.) of any bare wire? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> </div> <div style="margin-bottom: 10px;">  <p>Is any wire hanging much lower than other wires in the same section? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> </div> <div style="margin-bottom: 10px;">  <p>Has anyone seen the wires clash together in high winds? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> </div> <div style="margin-bottom: 10px;">  <p>Are there any broken strands of wire? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> </div> <div style="margin-bottom: 10px;">  <p>Are any crossarms split, loose or not square to the pole? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> </div> <div style="margin-bottom: 10px;">  <p>Are the wires physically separated with spreaders? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> </div> <p style="text-align: center;">July 2017 8</p>	<p>2. If any section of your private overhead electric lines has only one insulated line:</p> <div style="margin-bottom: 10px;">  <p>Is there any vegetation within 1.0m of the insulated cable? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> </div> <div style="margin-bottom: 10px;">  <p>Are there any gaps, cracks or pieces missing from the insulation (covering) of the cable? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> </div> <p>3. For both types of private overhead electric lines:</p> <div style="margin-bottom: 10px;">  <p>Are any wires rubbing on metal edges of terminating structures, such as fascia, gutters or down pipes? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> </div> <div style="margin-bottom: 10px;">  <p>Are poles rotting at or just below ground level? (Dig carefully all around the pole to check, but beware of any underground wiring to the pole.) <input type="checkbox"/> Yes <input type="checkbox"/> No</p> </div> <div style="margin-bottom: 10px;">  <p>Are any poles leaning excessively? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> </div> <div style="margin-bottom: 10px;">  <p>Are any brackets pulling away from the pole(s) or buildings? Are any other fittings crooked or loose? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> </div> <div style="margin-bottom: 10px;">  <p>Are any stay (guy) wires loose or broken? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> </div> <div style="margin-bottom: 10px;">  <p>Are any wires not securely fastened to insulators? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> </div> <p style="text-align: center;">July 2017 9</p>
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ATTACHMENT B. RECORD OF CUSTOMER NEGOTIATION



For all enquiries please contact our service provider Zinfra
 T: 1300 434 401 E: JENVEG@zinfra.com.au



Jemena Electricity Networks (Vic) Ltd
 PO Box 16182, Melbourne, VIC 3000
 T: 1300 536 362
 W: www.jemena.com.au

Record of Customer Consultation

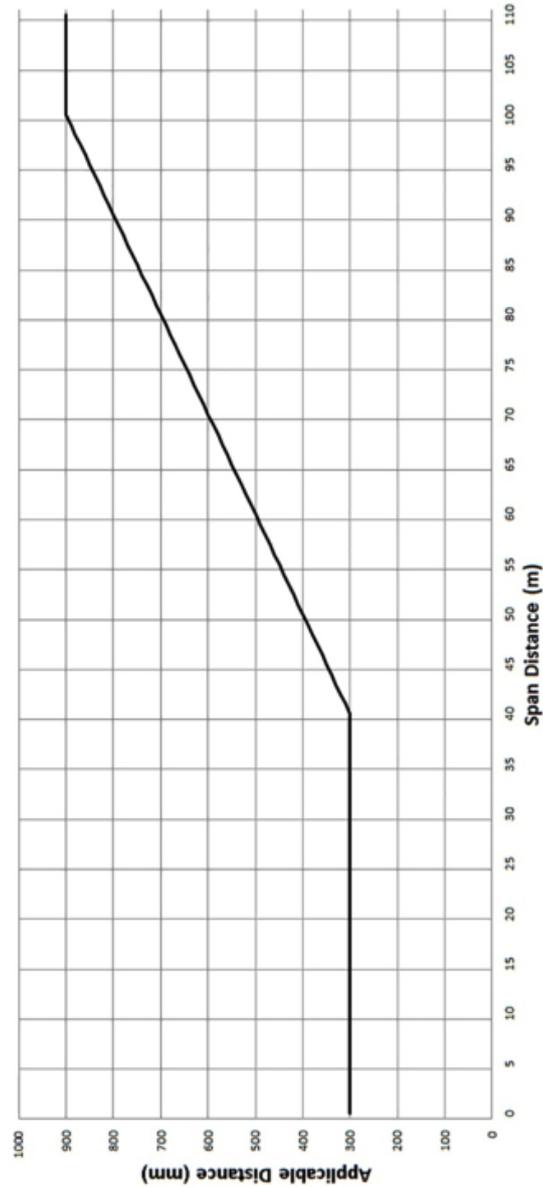
				Date	
Property Address					
Postal Address				Ph. B/H	
				Ph. A/H	
Feeder		Asset No		Pole No	
VMS No		Job No		Site Map Ref No	
No of Trees to be Removed		Herbicide Type		No of Trees to be Pruned	
Prior Notice	N <input type="checkbox"/> Y <input type="checkbox"/>	No of Days		Scrub Maintenance Method Required	N <input type="checkbox"/> Y <input type="checkbox"/>
Site Diagram					
 Compass					
Additional Requirements:					
Note: These works may be carried out by an authorised contractor on behalf of Zinfra					
Zinfra Representative	Print		Property Owner	Print	
	Sign			Sign	

ATTACHMENT C. CLEARANCE SPACE CHARTS

Extracts from: Schedule 2 – Applicable distance for middle two thirds of a span of an electric line in the Electricity Safety (Electric Line Clearance) Regulations 2015.

GRAPH 1 – INSULATED ELECTRIC LINES IN ALL AREAS

Clauses 3 and 24

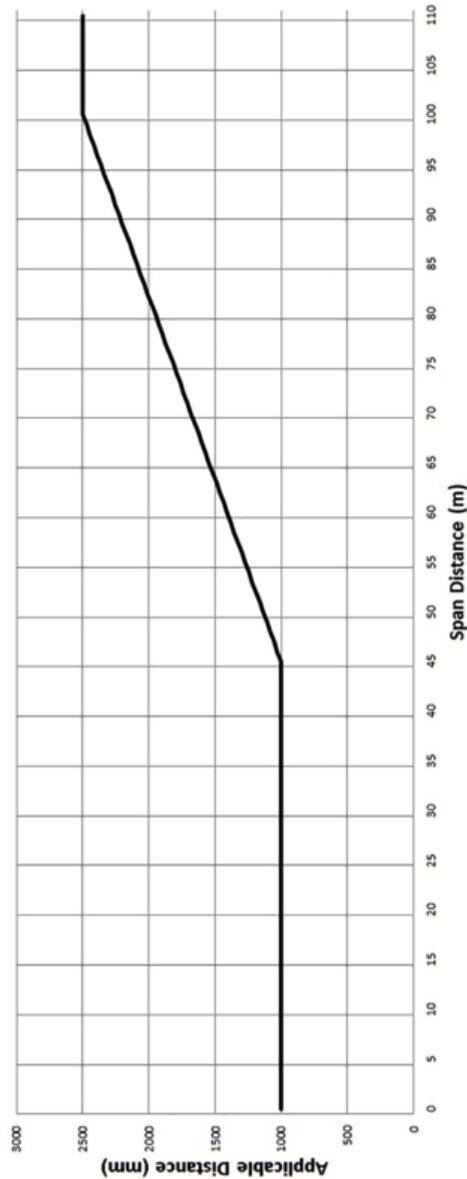


Notes to Graph 1:

- (1) The applicable distance includes allowances for sag and sway of the cable.
- (2) The minimum clearance space for a span of an electric line to which this Graph and clause 24 apply is partially illustrated in Figures 1, 2 and 3.
- (3) The applicable distance for the first and last sixths of a span of an electric line to which clause 24 applies is 300 millimetres.

GRAPH 2 — UNINSULATED LOW VOLTAGE ELECTRIC LINE IN LOW BUSHFIRE RISK AREA

Clauses 3 and 25

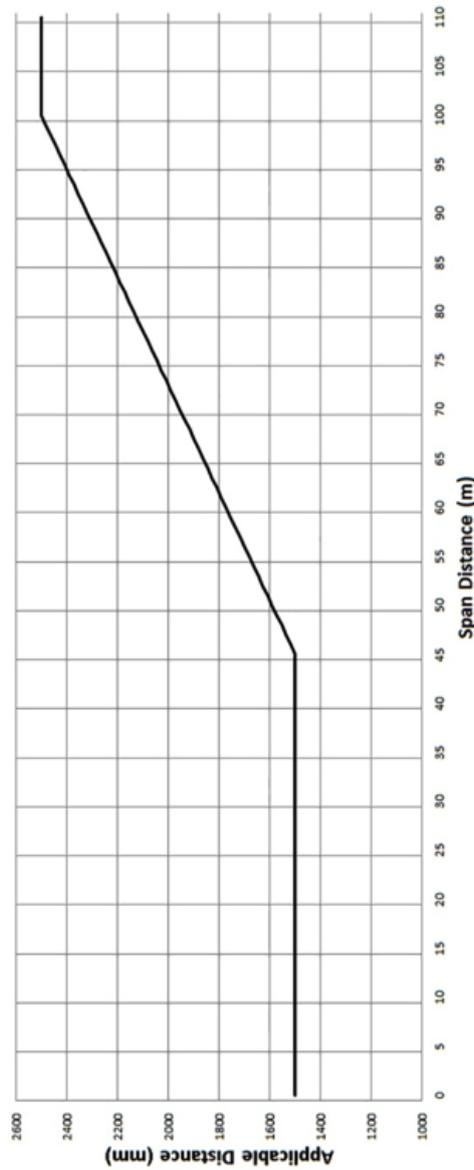


Notes to Graph 2:

- (1) The applicable distance includes allowances for sag and sway of the cable for a span up to and including 100 metres in length.
- (2) For a span longer than 100 metres, the applicable distance must be extended by an additional distance to allow for sag and sway of the cable. This is done by adding that distance to the applicable distance (see clause 25(2)(b)).
- (3) A distribution company, or an owner or operator of a railway supply network or a tramway supply network, must assist a Council, if requested, by determining the additional distance that allows for sag and sway of the cable (see clause 21(2)).
- (4) The minimum clearance space for a span of an electric line to which this Graph and clause 25 apply is partially illustrated in Figures 1 and 4.
- (5) The applicable distance for the first and last sixths of a span of an electric line to which clause 25 applies is 1000 millimetres.

**GRAPH 3 – UNINSULATED HIGH VOLTAGE ELECTRIC LINE
(OTHER THAN A 66 000 VOLT ELECTRIC LINE) IN LOW BUSHFIRE RISK AREA**

Clauses 3 and 26

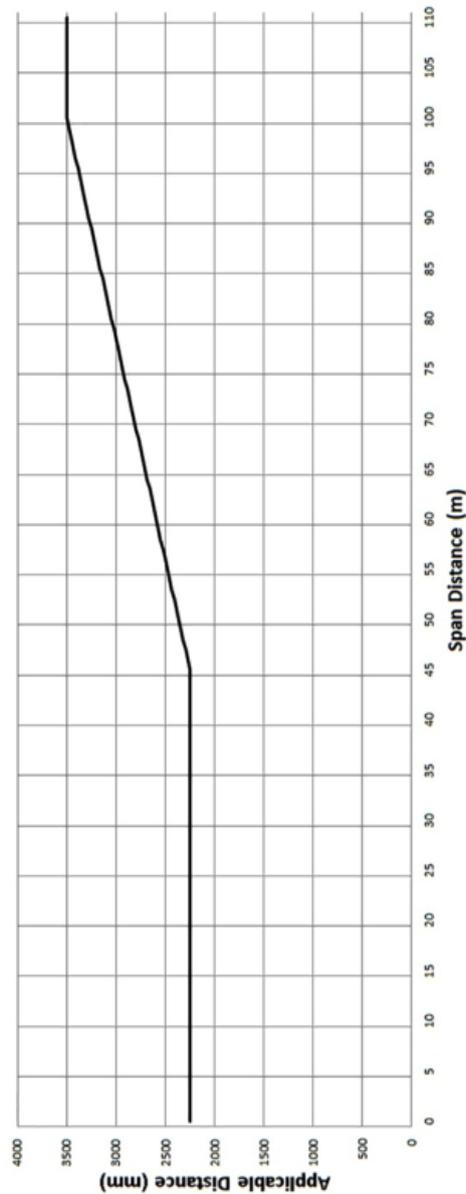


Notes to Graph 3:

- (1) The applicable distance includes allowances for sag and sway of the cable for a span up to and including 100 metres in length.
- (2) For a span longer than 100 metres, the applicable distance must be extended by an additional distance to allow for sag and sway of the cable. This is done by adding that distance to the applicable distance (see clause 26(2)(b)).
- (3) A distribution company, or an owner or operator of a railway supply network or a tramway supply network, must assist a Council, if requested, by determining the additional distance (see clause 21(2)).
- (4) The minimum clearance space for a span of an electric line to which this Graph and clause 26 apply is partially illustrated in Figures 1 and 3.
- (5) The applicable distance for the first and last sixths of a span of an electric line to which clause 26 applies is 1500 millimetres.

GRAPH 4 — UNINSULATED 66 000 VOLT ELECTRIC LINE IN LOW BUSHFIRE RISK AREA

Clauses 3 and 27

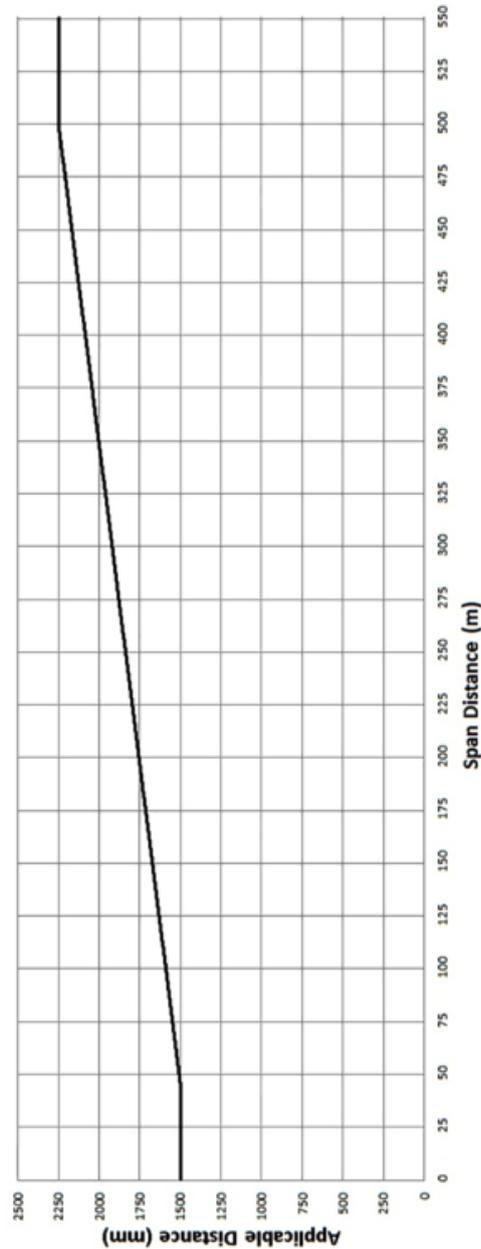


Notes to Graph 4:

- (1) The applicable distance includes allowances for sag and sway of the cable for a span up to and including 100 metres in length.
- (2) For a span longer than 100 metres, the applicable distance must be extended by an additional distance to allow for sag and sway of the cable. This is done by adding that distance to the applicable distance (see clause 27(2)(a)(ii)).
- (3) A distribution company, or an owner or operator of a railway supply network or a tramway supply network, must assist a Council, if requested, by determining the additional distance (see clause 21(2)).
- (4) The minimum clearance space for a span of an electric line to which this Graph and clause 27 apply is partially illustrated in Figures 1 and 5.
- (5) The applicable distance for the first and last sixths of a span of an electric line to which clause 27 applies is 2250 millimetres.

**GRAPH 5 – UNINSULATED LOW VOLTAGE AND HIGH VOLTAGE ELECTRIC LINE
(OTHER THAN A 66 000 VOLT ELECTRIC LINE) IN HAZARDOUS BUSHFIRE RISK AREA**

Clauses 3 and 28

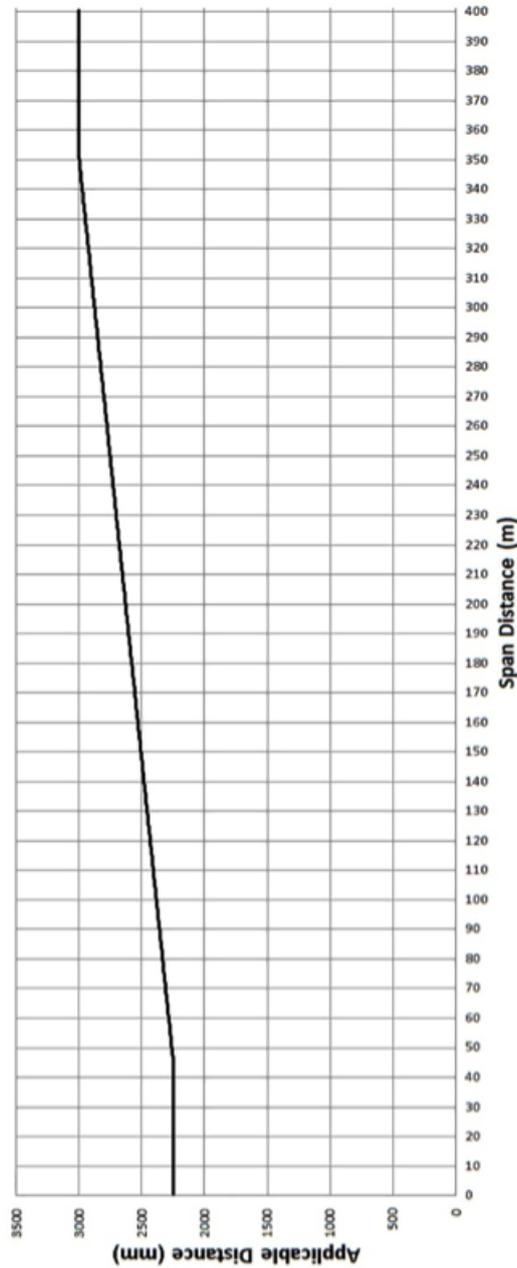


Notes to Graph 5:

- (1) The applicable distance must be extended by an additional distance to allow for sag and sway of the cable. This is done by adding that distance to the applicable distance (see clause 28(2)(a)).
- (2) A distribution company, or an owner or operator of a railway supply network or a tramway supply network, must assist a Council, if requested, by determining the additional distance (see clause 21(2)).
- (3) The minimum clearance space for a span of an electric line to which this Graph and clause 28 apply is partially illustrated in Figures 1 and 5.
- (4) The applicable distance for the first and last sixths of a span of an electric line to which clause 28 applies is 1500 millimetres.

GRAPH 6 – UNINSULATED 66 000 VOLT ELECTRIC LINE IN HAZARDOUS BUSHFIRE RISK AREA

Clauses 3 and 29



Notes to Graph 6:

- (1) The applicable distance must be extended by an additional distance to allow for sag and sway of the cable. This is done by adding that distance to the applicable distance (see clause 29(2)(a)).
- (2) A distribution company, or an owner or operator of a railway supply network or a tramway supply network, must assist a Council, if requested, by determining the additional distance (see clause 21(2)).
- (3) The minimum clearance space for a span of an electric line to which this Graph and clause 29 apply is partially illustrated in Figures 1 and 5.
- (4) The applicable distance for the first and last sixths of a span of an electric line to which clause 29 applies is 2250 millimetres.

FIGURE 1 – PLAN VIEW OF ELECTRIC LINES IN ALL AREAS

Clauses 24, 25, 26, 27, 28 and 29,
Graphs 1, 2, 3, 4, 5 and 6

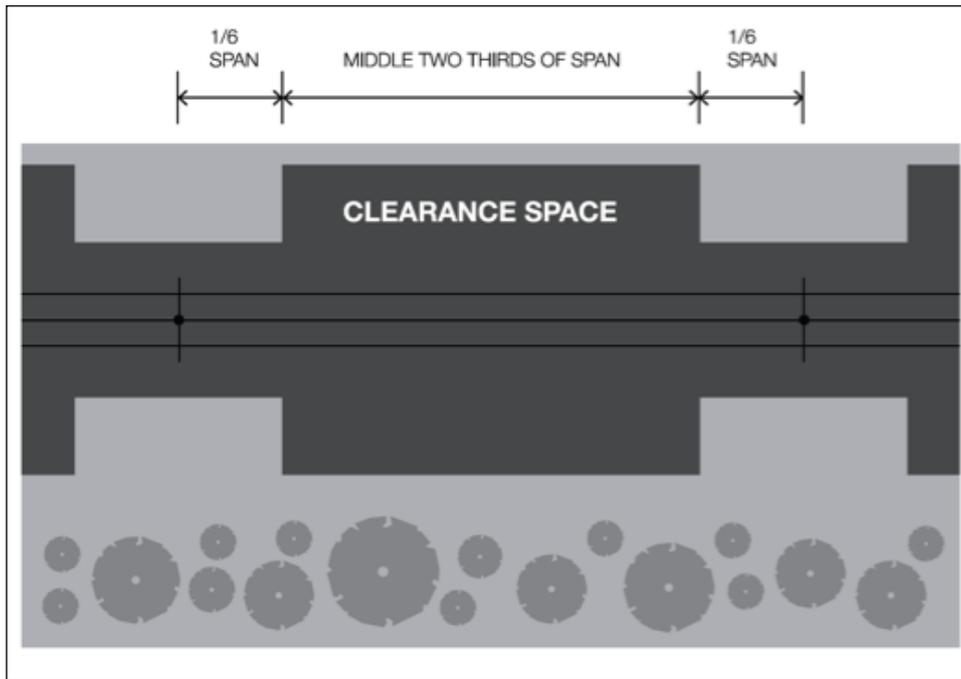
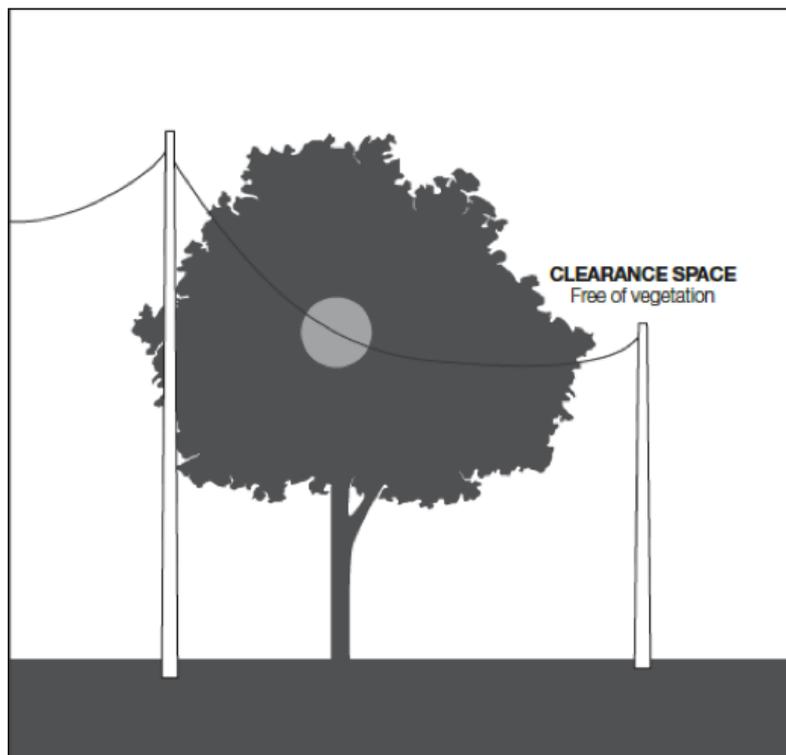


FIGURE 2 – INSULATED ELECTRIC LINES IN ALL AREAS

Clause 24, Graph 1



Not to Scale

FIGURE 3 – INSULATED ELECTRIC LINES IN ALL AREAS AND UNINSULATED HIGH VOLTAGE ELECTRIC LINES (OTHER THAN 66,000 VOLT ELECTRIC LINES) IN LOW BUSHFIRE RISK AREAS

Clauses 24 and 26, Graphs 1 and 3



Not to Scale

FIGURE 4 – UNINSULATED LOW VOLTAGE ELECTRIC LINE IN A LOW BUSHFIRE RISK AREA

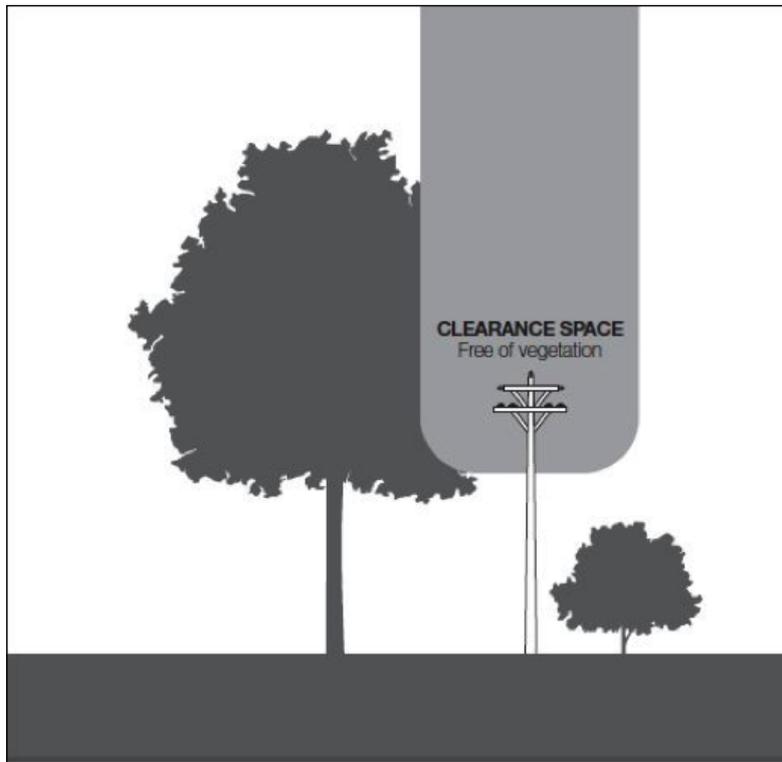
Clause 25, Graph 2



Not to Scale

**FIGURE 5 — UNINSULATED 66,000 VOLT ELECTRIC LINE IN A LOW BUSHFIRE RISK AREA
AND UNINSULATED ELECTRIC LINE IN A HAZARDOUS BUSHFIRE RISK AREA**

Clauses 27, 28 and 29, Graphs 4, 5 and 6



Not to Scale

ATTACHMENT D. LBRA CUTTING SCHEDULE (2019)

LBRA Cyclic and Maintenance Program (2019)																																																				
ID	Task Name	Duration (Days)	Start	Finish	ASSESSING																																															
					1	8	15	22	29	5	12	19	26	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	3	10	17	24	1	8	15	22	29	5	12	19	26
	JEN LBRA Assessing	228	05/12/18	22/11/19	-----●																																															
1	Heidelberg Feeders (HB)	12	05/12/18	20/12/19	-----●																																															
2	Fairfield Feeders (FF)	7	20/12/18	13/01/19	●-----																																															
3	East Preston Feeders (EP)	12	13/01/19	31/01/19	●-----●																																															
4	Preston Feeders (P)	5	31/01/19	07/02/19	●-----●																																															
5	Thomastown feeders (TT)	18	07/02/19	03/03/19	●-----●																																															
6	Coburg South (CS)	26	03/03/19	11/04/19	●-----●																																															
7	Sydenham Feeders (SHM)	15	11/04/19	05/05/19	●-----●																																															
8	Coolaroo Feeders (COO)	13	05/05/19	23/05/19	●-----●																																															
9	Sunbury Feeders (SBY)	18	23/05/19	16/06/19	●-----●																																															
10	Somerton Feeders (ST)	34	16/06/19	02/08/19	●-----●																																															
11	Broadmeadows Feeders (BD)	38	02/08/19	25/09/19	●-----●																																															
12	St Albans Feeders (SA)	5	25/09/19	02/10/19	●-----●																																															
13	Airport West Feeders (AW)	29	02/10/19	13/11/19	●-----●																																															
14	Tullamarine Feeders(AW)	3	13/11/19	15/11/19	●-----●																																															
15	Coburg North Feeders (CN)	31	09/01/19	21/02/19	●-----●																																															
16	Pascoe Vale Feeders (PV)	22	21/02/19	24/03/19	●-----●																																															
18	North Essendon (NS)	24	24/03/19	01/05/19	●-----●																																															
18	Essendon Feeders (ES)	25	01/05/19	05/06/19	●-----●																																															
19	Flemington Feeders (FT)	14	05/06/19	23/06/19	●-----●																																															
20	Yarraville Terminal Station Feeders (YTS)	10	26/06/19	07/07/19	●-----●																																															
21	Braybrook Feeders (BY)	13	07/07/19	26/07/19	●-----●																																															
22	Footscray West Feeders (FW)	16	26/07/19	17/08/19	●-----●																																															
23	Footscray East Feeders (FE)	17	17/08/19	08/09/19	●-----●																																															
24	Tottenham Feeders (TH)	5	08/09/19	14/09/19	●-----●																																															
25	Newport Feeders (NT)	16	14/09/19	06/10/19	●-----●																																															
26	North Heidelberg Feeders (NH)	32	06/10/19	22/11/19	●-----●																																															

ATTACHMENT E. IMPORTANT TREES REGISTER SAMPLE

Extra Service Required (ESR) Monitoring Report				
JEN	HB0-010			
ESR ID:	414		Phone (BH)	
Name	Heritage Victoria		Phone (AH)	
Address	40 Glenard Drive, IVANHOE EAST, 3079, VIC		Mobile Phone	
Description	Aesthetic Significance, location: Private. Pls consult & notify owner & SP prior to any work being undertaken. "Glenard Farm". Row of 3 of Cypress affecting service lines & LV open wire conductors on opp side of rd. A significant feature of H2103 the Heri			
NOTIFICATION				
No	Courtesy Call required to notify customer.	Do	Caution Required	
No	Phone customer prior to assessing			
No	Send Notification letter to			
No	Phone customer prior to entering ppty			
ACCESS				
No	Do not use Herbicides on or			
No	High Disease Risk Area. Vehicles must be cleaned prior			
No	Do not enter, contact owner before assessing,			
REFER TO				
No	Zinfra must be on Site at			
No	Do not enter ppty, SPAN Mgr to decide best			
No	Ombudsman Case - Do not speak to Customer.			
Significant Tree				
Yes	Significant Tree			
Details	Aesthetic Significance. Significant trees in span,			
Asset Details				
Camm No.	Pole	VMS	Job No.	
A112079			978404	
Prior Action Details				
Date of Action	Signed off By	Resolved?	Job No.	Action Taken

ATTACHMENT F: HAZARD TREE REGISTER SAMPLE

Span ID	Feeder Name	Camm No. / Pole No.	Road Address	Suburb / Town	Voltage	VMS Span Id	Assess Date	Assessed By	Span Comment	No. of Trees	Fire Zone	Shire	Map Ref	Entered By
11931	AW 02	45812	1 Brunton Crescent	Tullamarine	HL	945682	15/12/09	Murone A	Feeder AW2	1	LBRA Declared	Hume	15K11	Scotto P
14663	AW 03	85916	Unit 1 No.3 Tullamarine Park Rd	Tullamarine	HL	946958	25/09/12	Adams Grant	In Eliata Dr. Termination pole. On site Body Corporate contact is Robert Cullum 0407 234 457. VMS ID refers to 4 Eliata Dr as the address because that is the number on the nearest letterbox on site. First assessed A Simmonds 07/06/2010	1	LBRA	Brimbank	15E5	Scotto P
14664	AW 03	85909	Unit 5, No.5 Eliata Drive	Tullamarine	HL	946984	25/09/12	Adams Grant	Dobra motors. City of Brimbank confirmed tree is on private property 07/06. SP to negotiate tree removal works with owner Mick Dobra 9335 3463. Adrian Murone met with him 07/06/2010. He would like the tree removed but not willing to pay for any of works.	1	LBRA	Brimbank	15E5	Scotto P
12786	AW 07	95514	85 Arcade Way	Keilor East	LV	960715	07/05/10	Murone A	Reassessed Grant Adams rating 1.	1	LBRA Declared	Moonee Valley	27C2	Scotto P
11310	BD0-011	48956	153 View St	Glenroy	LV	1013444	22/04/09	Murone A	Job number 125 on Cut WO. Reinspection Grant. Adams Rating 0	1	LBRA Declared	Moreland	6 H12	Carden A
11451	COO 11	58402	Dirt Rd besides Rose Farm - Mickleham Rd	Attwood	HV	1013002	09/09/09	Maroney A	Go past air navigation facility, last 2 spans. Reinspection Grant. Adams 21/2/2011. Rating reduced from 3 to 1.	6	HBRA	Hume	5 A2	Cunningham R
12383	COO 11	72303	1 Humevale Ct	Meadow Heights	LV	939131	04/03/10	Tipping Dan	Tree shows signs of decline and has trunk inside 3m. Customer has requested assistance with removal of tree.	1	LBRA	Hume	6H1	Scotto P
22007	COO 11	22949	420 Wildwood Road South	Wildwood	HV	101227	01/10/12	stanke M	Last span in 420. Ring prior 9307 1421 0415 724 711. Enter through gate rhs of house	1	HBRA	Hume	38G 610	Symons A
22008	COO 11	22938	401 Wildwood Road	Wildwood	HV	935063	01/10/12	Stanke M		1	HBRA	Hume	384 B12	Symons A
22009	COO 11	22947	430 Wildwood Road South	Wildwood	HV	935055	01/10/12	Stanke M	Last span in 430 Driveway, 17m if dly	1	HBRA	Hume	384 B10	Symons A
22010	COO 11	16458	465 Wildwood Road	Wildwood	HV	935058	01/10/12	Stanke M		2	HBRA	Hume	384 A11	Symons A

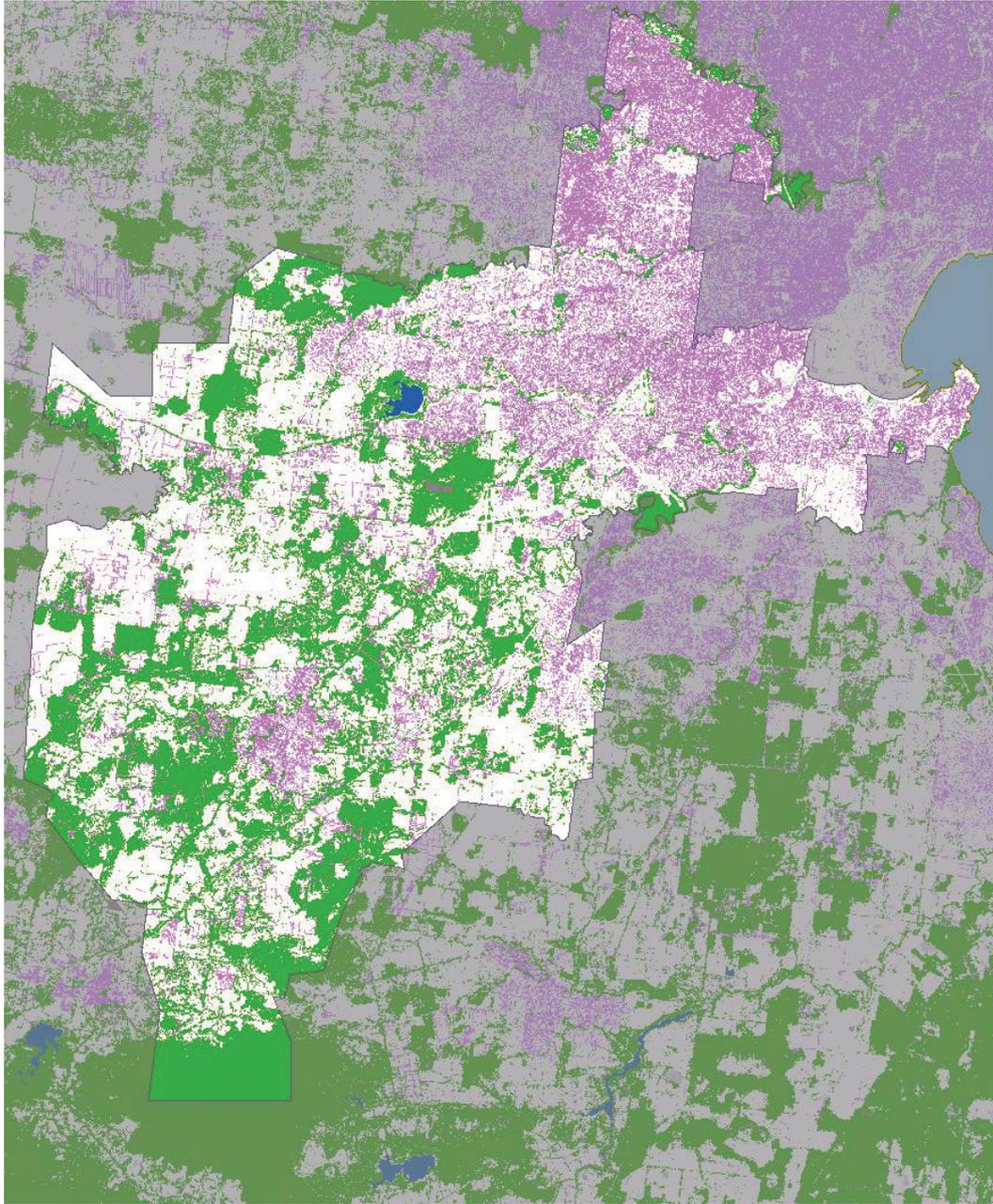
ATTACHMENT G. AGREED PERFORMANCE TARGETS

KRA No	Key Risk Area (KRA)	KPI Ref:	KPI	Performance Target
1	Safety	1a	Total Recordable Injury Frequency Rate (TRIFR)	≤8.8 TRIFR
		1b	Workers compensation Injury Frequency Rate (WCIFR)	≤3.3 WCIFR
		1c	Significant Environmental Incidents	0 Incidents
		1d	SWMS Control Implementation	3 inspections/individual service/ annum
		1e	Training (VESI)	100%
2	Customer	2a	Customer Complaints	≤8 substantiated customer complaints
3	Compliance	3b	Pre Summer Inspection (all trees PT1 and PT30 only) are cut, ie. No vegetation in the clearance space.	0 trees missed
		3c	Hazard Tree Program - Rating 5 Cuts	0 trees missed
4	Quality	3d	Hazard Tree Program - Rating 4 Cuts	100%
		4a	Work Quality – PT1s	≤10 trees identified
		4b	Work Quality – PT30s or PT30Ms	≤100 trees identified
		4c	Pre-Summer Code PT1 trees Identified – Quality Audit Program	≤1 trees
		4d	Pre-Summer code PT30 trees identified - Quality Audit Program	≤2 trees
5	Delivery Performance	5d	Vegetation -Compliance with the submitted and agreed works program"	100%
		5e	Emergency Response	100%

ATTACHMENT H. VEGETATION SERVICE DEFECT REGISTER SAMPLE

Status	Location of defect	Suburb	SPAN ID	ASSET #	Initial Defect Notice Ref #	Initial Issue Date	Work Completed (Audit Date)	Reminder Defect Notice Ref #	Reminder Notice Issue Date	Work Completed (Audit Date)	JEN Defect Notice Ref #	JEN Defect Notice Ref #	Issue Date	Comments
INITIAL	68 North Rd	Reservoir	973585	A033088	26310	22/03/2013	-							Jemena will shift line as it is too low. Shane said owner will cut. Site Visit 13/6/2013, 25/6/13, 5/7/13, 30/7/13, 12/9/2013, 19/12/2013, 29/1/14 Jemena have not shifted line yet.
REMINDER	71 Shirling Dve	Keilor East	948527	A081314	48734	14/11/2013	-	223	29/01/2014					25mm > still exists on Conifer (Re-issued FN)
REMINDER	5 Lenore Cr	Williamstown	1009200	A125505	51983/4	18/11/2013	-	220	20/01/2014					25mm > still exists on Tree
REMINDER	10 Florence St	Williamstown North	1009172	A034800	50641	21/11/2013	-	217	20/01/2014					25mm > still exists on Tree
REMINDER	38 Kanowna St	Williamstown	998657	A024715	48412	21/11/2013	-	219	20/01/2014					25mm > still exists on Ash
REMINDER	27 Park Cr	Williamstown North	1009099	A065755	52753	22/11/2013	-	218	20/01/2014					25mm > still exists on Tree
REMINDER	12 Castleton Rd	Viewbank	976686	A079945	56077	1/12/2013	-	222	29/01/2014					25mm > still exists on Evergreen Alda
REMINDER	12 Clovelly Ct	Viewbank	976676	A079969	56082	1/12/2013	-	221	29/01/2014					25mm > still exists on Cedar
REMINDER	43 McGowan Ave	Preston	992696	A068828	58297	15/01/2014	-	224	18/02/2014					25mm > still exists on Willow Myrtle
REMINDER	21 Jackson Pde	Coburg North	992642	A068469	58355	16/01/2014	-	225	18/02/2014					25mm > still exists on Photinia
INITIAL	14 Hillcroft St	Reservoir	989007	A101202	58401	20/01/2014								
INITIAL	424 Gaffney St	Pascoe Vale	1055143	A048548	58700	30/01/2014								
INITIAL	90 Edwardes St	Reservoir	990093	A058561	57689	30/01/2014								
INITIAL	682 Pascoe Vale Rd	Oak Park	950164	A093269	55833	3/02/2014								

ATTACHMENT I. NATIVE AND EXOTIC VEGETATION IN THE JEN REGION



Legend

Native Vegetation Extent (associated with Native Vegetation Clearing Regulation)

The extent of native vegetation is the area of land covered by native vegetation. A comprehensive and accurate picture of the distribution of native vegetation remaining across Victoria helps to efficiently invest in biodiversity programs, regulate land and resource use, and understand where further assessment or potential actions may be required or desirable.

Native vegetation extent includes largely-intact areas typical of parks and state forests, and remnant patches and scattered trees typical of rural and peri-urban landscapes. Remnant patches retain some level of native understorey and scattered trees are mature native trees that are in a location without native understorey.

- Native vegetation cover
- Natural waterbodies
- Exotic largely treeless
- Exotic tree cover
- Plantations, exotic and other
- Artificial impoundment

Mandates Reference:
 NV2010_EXTENT_V2

Native Vegetation Regulation 2013 data is produced by:
 Arthur Rylah Institute & Environment and
 Landscape Performance Division, DEPI, 27 September 2013

Map reproduced in accordance with terms and condition found at: <http://creativecommons.org/licenses/by/3.0/au/legalcode>

ATTACHMENT J. ENGINEERING SOLUTIONS FOR VEGETATION ISSUES

Location/Customer/Tree Details	
Date	
Customer Name (if available)	
Contact Details (Phone)	
Address	
LIS Number	
Feeder	
Inspector –Name/Mobile	
Mel Ref	
LBRA/HBRA	
Declared Council Area	
Important Vegetation	

Asset Information				
Serviceline	Y/N	LV Mains		HV
ABC Service		ABC		Copper
Property Crossing		Copper		Aluminium
Customer Responsible Tree		Aluminium		Steel
JEN Responsible Tree		JEN Responsible Tree		JEN Responsible Tree
Council Responsible Tree		Council Responsible Tree		Council Responsible Tree
Other - Provide Comments below				

Suggested Engineering Solution				
Serviceline	Y/N	LV Mains		HV
Replace Service (ABC)		Install LVABC		Install HVABC
Relocate on House End		Relocate Pole/s		Relocate Pole/s
Relocate on Pole End		Install Extra Pole/s		Install Extra Pole/s
Install Service Pole		Offset Crossarm/s		Offset Crossarm/s
Underground Service		Underground Mains		Underground Mains
Other - Provide Comments below				

Justification for Engineering Solution				
Serviceline	Y/N	LV Mains		HV
Customer Refuses Cutting		Customer Refuses Cutting		Customer Refuses Cutting
Trunk/Structural Limb		Trunk/Structural Limb		Trunk/Structural Limb
Important Tree/s		Important Tree/s		Important Tree/s
Property Crossing		Property Crossing		Property Crossing
Major Cutting Required		Major Cutting Required		Major Cutting Required
Major Removal Required		Major Removal Required		Major Removal Required
Access Issues		Access Issues		Access Issues
Other - Provide Comments below				

Photos



Diagram and Any Other Comments, Hazards, etc.



ATTACHMENT K. JEN FAULT INVESTIGATION FORM

Trouble Order Number:		Fault Date:	
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Location Details	
Address: (Street, Street No., Road, Area)	
Feeder:	
Pole No: (AXXXXXX):	
HBRA / LBRA:	
Tree Responsibility: (JEN, Council, Other Responsible Person)	
Tree Outside or Inside Required Clearance Space:	

Tree Details	
Species:	
Height:	
What happened? (broken branch, uprooted tree, bark)	
Distance from tree trunk to conductor:	
Foliage clearance from conductor:	
Size of any broken branches:	

Fault Details	
Fault Details	
Cause of fault: (wind, tree failure, customer related, unknown)	
Damage to Assets: (fire, damage to property, etc.)	
Other information:	

Field Officer:		Date Inspected:	
-----------------------	--	------------------------	--

Post Incident Review	
Location Details	
Reason for not meeting the Required Clearance Space:	

Recommendations/Actions	Closeout Date	Responsible Person

ATTACHMENT L. COUNCILS WITHIN JEN NETWORK AREA

Council Name

Banyule
Brimbank
Darebin
Hobson's Bay
Hume
Macedon Ranges
Maribyrnong
Melbourne
Melton
Mitchell
Moonee Valley
Moreland
Whittlesea
Yarra

ATTACHMENT M. NOTICE TO OWNERS OF CONTIGUOUS LAND

ATTENTION: POWERLINE VEGETATION CLEARING ON LAND NEAR OR ADJACENT TO YOUR PROPERTY

Dear Customer,

Jemena Electricity Networks (JEN) is the electricity distribution network owner in your area and distributes electricity to over 330,000 customers in an area over 950 square kilometers of north-west greater Melbourne.

As the distribution network owner, Jemena has legal obligations for maintaining the clearance of trees from powerlines. In this case the trees are on land contiguous to yours (i.e. your neighbours land or council land... not your land) and you have received this notice as the use of your property may be affected during these required tree cutting works.

A recent inspection has identified that vegetation requires clearing on land adjacent to yours and these works may affect the use of your land by the following:

- Your driveway access may be impeded during the works
- Access to your property is required to complete works or pick up debris

These works are scheduled to be carried out between / / 20 and / / 20 **Ref No: CL**



For all enquiries please contact our service partner Zinfra:
 T: 1300 434 401
 E: JENVEG@zinfra.com.au



Jemena Electricity Networks (Vic) Ltd,
 PO Box 16182 Melbourne VIC 3000,
 T: 1300 536 362
 W: www.jemena.com.au

ATTACHMENT O. NOTIFICATION OF PRUNING OR REMOVAL OF HAZARD TREES NEAR POWERLINES WITHIN YOUR PROPERTY



For all enquiries please contact our service provider Zinfra
T: 1300 434 401 E: JENVEG@zinfra.com.au



Jemena Electricity Networks (Vic) Ltd
ABN 82 064 651 083
PO Box 16182, Melbourne, VIC 3000
T +61 3 9173 7000
www.jemena.com.au

ATTENTION: PRUNING OR REMOVAL OF HAZARDOUS TREES NEAR POWERLINES WITHIN YOUR PROPERTY

Date of Works / / Feeder Name _____ Reference _____

Address _____

Dear Customer,

As part of Jemena's Vegetation Management Program, power lines are regularly inspected to maintain fire safety and powerline reliability.

A recent inspection has identified a hazardous tree(s) within your property that poses a risk to Jemena's Electrical Distribution Network and requires clearing as specified in the Electricity Safety (Electric Line Clearance) Regulations 2015.

Pruning required

Trees within your property have been identified as hazardous to Jemena Electrical Network assets and require pruning to mitigate the threat.

Removal required

Trees within your property have been identified as hazardous to Jemena Electrical Network assets and require removal to mitigate the threat.

Jemena requires you to **contact our service provider Zinfra** on the number below to arrange an appointment with one of their representatives to discuss the proposed tree clearing works T: **1300 434 401**

Please Note

An authorised service provider engaged by Zinfra will carry out this work. These works are provided at no charge to the customer.

VEM 20-52B

ATTACHMENT P: NOTICE OF VEGETATION MANAGEMENT WORKS NEAR POWERLINES



For all enquiries please contact our service provider
Zinfra T: 1300 434 401 E: JENVEG@zinfra.com.au



Jemena Electricity Networks (Vic) Ltd
PO Box 16182, Melbourne, VIC 3000
T: 1300 536 362
W: www.jemena.com.au

NOTICE OF VEGETATION MANAGEMENT WORKS NEAR POWERLINES

Notice Recipient	
Recipients Contact Details	
Anticipated Works Start Date	
Work Locations	

As part of the Jemena Vegetation management program, powerlines (and related electrical assets) are regularly inspected to ensure fire safety and electricity supply reliability. This program is managed by Zinfra on behalf of Jemena Electricity Networks (JEN).

Jemena's electricity distribution network traverses areas defined as either declared or non-declared in areas of land under your municipality's management. A recent inspection by Zinfra has identified vegetation as requiring clearing to ensure the minimum clearance distance between vegetation and powerlines is maintained in accordance with the Electricity Safety (Electric Line Clearance) Regulations 2015 in these areas.

This notice is to inform you that Zinfra will be undertaking vegetation management works on lands under your management where Jemena has the responsibility in accordance with section 84 of the Electricity Safety Act 1998 in 'Non-Declared Areas'.

In 'Declared Areas', where vegetation has been identified as your responsibility to manage in accordance with section 84 of the Electricity Safety Act 1998, Zinfra will provide you with separate notification containing the location details for your consideration and action.

Where vegetation situated on lands under your management has been identified as Jemena responsibility to manage, Zinfra will be applying the following management practices:

PRUNING

Pruning will be carried out in accordance with regulatory clearance requirements and to Australian Standard AS 4373-2007 'Pruning of Amenity Trees' where practicable. No action is necessary by you unless you have specific concerns.

VEGETATION REMOVAL

Whilst pruning is the preferred option in some cases it is not 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.

PROACTIVE VEGETATION REMOVAL

Naturally generated tall growing trees species within close proximity to overhead electrical assets can unnecessarily contribute to ongoing management activity and increase the potential for damage to these assets should tree failure occur. Naturally generated tree species that have the potential to encroach into the clearance space will be targeted for removal where their removal will not adversely impact on an adjacent land owner / occupier. The table below details how this proactive removal approach will be applied.

HAZARDOUS VEGETATION

Where vegetation poses an immediate threat to electrical assets, Zinfra or Jemena may undertake immediate preventative works without prior notice ^.

VEGETATION SITUATED ON LAND PRIVATELY OWNED

PRUNING

Pruning will be carried out in accordance with regulatory clearance requirements and to Australian Standard AS 4373-2007 'Pruning of Amenity Trees' where practicable.

REMOVAL

Whilst pruning is the preferred option in some cases it is not 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 the land owner / occupier.

OTHER RELEVANT INFORMATION

COSTS

All works stated in this notice are provided at no charge and undertaken only by trained personnel in accordance with Part 8 of the Electricity Safety Act 1998.

DEBRIS MANAGEMENT

Programmed Works - 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.

EMERGENCY / FAULT / STORM WORKS

Where vegetation has been removed as a result of an Emergency, Fault or Storm event, the owner of the vegetation (where it existed) has the responsibility to dispose of it. Where possible you will be advised of the locations where you are responsible for the disposal of vegetation that Zinfra or Jemena has actioned.

[^]Where vegetation exists in a hazardous state and poses a threat to electrical assets, Zinfra or Jemena may undertake immediate preventative works without prior notice.

Vegetation Scope & Type	<ul style="list-style-type: none"> • Vegetation situated on land under management by your municipality as well as land privately owned • Any sapling which that has the potential to grow into the clearance space or situated within 7 metres either side of a powerline or overhead electrical asset • Hazardous vegetation requiring immediate action • Native and exotic vegetation that can be expected to reach a mature height greater than 4 metres (generally trees) and that has the potential to encroach the specified clearance space relevant to an overhead electrical asset. Naturally generated saplings or coppice growth, generally vegetation within the <i>Acacia, Eucalyptus, Fraxinus, Melaleuca, Pinus, Populus and Salix</i> genera
Significant Vegetation	<ul style="list-style-type: none"> • Zinfra continually monitors significant vegetation within your municipality by reviewing planning overlays, roadside signage, heritage trees register and your municipality's significant tree register (where your municipality has made this available to Zinfra). Significant vegetation which requires pruning will be in accordance with AS 4373-2007 where practicable; should your municipality have questions concerning particular vegetation in the areas described on page 1 (work locations) please notify Zinfra within 7 days of receiving this notification • Further consultation may be sought by a Zinfra representative should pruning of significant vegetation be required that is beyond the minimum requirements under AS 4373-2007
Chemical Treatments	<ul style="list-style-type: none"> • Stumps will be treated (cut & paint method) with an appropriate herbicide at time of removal • A 'Drill & Fill' method may be used, particularly where a potential for weed spread is likely

IDENTIFICATION OF PERSONNEL

All personnel have been issued with ID cards identifying them as authorised Zinfra representatives.

TRAINING OF EMPLOYEES

All personnel involved in vegetation management works have been suitably trained in relation to the task they are performing. Zinfra utilises authorised and trained contractors to carry out these works.

William Few
ORP Liaison Officer
Zinfra



Jemena Electricity Networks (Vic) Ltd