



13 January 2015

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Dear Sir/Ma'am,

RE: Jemena Comments on the Regulatory Impact Statement and Proposed Electricity Safety (Electric Line Clearance) Regulations 2015

With reference to your (Dr Roanne Allan, Executive Manager Policy and Strategy) open letter dated 13 October 2014 Jemena is pleased for the opportunity to make comment on the Regulatory Impact Statement (RIS) and Proposed Electricity Safety (Electric Line Clearance) Regulations 2015 (proposed ELC regs), prepared by Energy Safe Victoria (ESV).

The enclosed table identifies the parts of the RIS or proposed ELC regs Jemena wish to and have commented on. For the parts not listed in the table Jemena support the principle or regulation in as far as we cannot foresee (at this point in time) an adverse impact on the administrative or operational function of Jemena's electric line clearance program.

A separate cost impact table is also enclosed which highlights that significant additional costs will be incurred to implement the proposed regulations. Although some of the activities may prove to overlap or the additional costs may prove to be conservative until further detailed estimation has been completed, Jemena suggest that even a modest cost increase would need to be justified against benefits to be gained by the customers.

Jemena suggest that some minor changes to the proposed regulation will preserve current good practices and minimise any cost increases to electricity customers.

If you require any further information or clarification to facilitate your assessment of Jemena's comments please do not hesitate to contact our Network Integrity & Performance Manager, Catherine Lee on (03) 8544 9568.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Johan Esterhuizen".

Johan Esterhuizen
General Manager Asset Strategy Electrical
Jemena Electricity Networks

encl.

Item	Comment
<p>Adoption of ‘AS 4373 – Pruning of Amenity Trees’</p> <ul style="list-style-type: none"> Reg 5 Definitions Definition of ‘AS 4373’ added Reg 9 Management plans (ELCMP) r 9(3)(i) – ELCMP to specify management procedures that the responsible person (RP) will adopt to ensure compliance with the Code including the method for determining additional distances for cable sag and sway r 9(3)(j) – ELCMP to specify procedures if it is not practicable to comply with AS 4373 while cutting a tree in accordance with the Code r 9(3)(o) – add reference to ‘inspection’ (refer to clause 4 of AS 4373). 	<p>Jemena already complies with this Standard in-as-far as the “cutting” is specified, e.g. When removing a branch, the position of the final cut should be a clean cut to the branch collar or, in the absence of a collar, to a position determined by the branch bark ridge. However the cutting required is not for the amenity of the tree it is to achieve a clearance space. Any cutting specifically for the amenity, health, or aesthetics of a tree would be performed by the owner of the tree. Although Jemena do wish to preserve the health of trees being cut for electric line clearance purposes the amenity value of a tree is secondary to electricity safety. If this were not the case trees would not be cut with a focus on electricity safety.</p> <p>Two areas which will add cost to the community through the adoption of AS 4373 are firstly, the use of a qualified arborists to inspect and cut trees rather than personnel under the direction of an arborist (the focus is amenity and not electricity safety).</p> <p>Secondly, in a small number of cases Jemena may need to employ the use of climbing spikes. To meet the requirements of AS4373, spikes may only be used on the parts of a tree not being retained. Therefore an EPV and traffic management will need to be added for these climbing cases. This section in the standard preventing the use of equipment that will wound the bark will make it difficult to use Jarraffs and other machinery designed to reduce climbing, improve safety and reduce cost.</p> <p>Jemena suggest that the current regulations be retained as they (and ESV) already require the Jemena ELCMP to reference AS 4373 and, that all references to AS4373 are removed from the proposed regulations.</p> <p>Jemena suggests that for Regulation 9 (3)(i) the 2 subclauses be removed and be changed to: “the management procedures that the responsible person is required to adopt for managing vegetation near power lines to achieve compliance with the Code.”</p>
<p>Exemption to minimum clearance space-insulated low voltage electric lines in low bushfire risk areas</p> <p>Clause 4, page 20</p>	<p>To maintain consistency with the 2005 Regulations, and past ESV exemptions, this clause in the Regulations should be amended to include ALL insulated cables, in ALL areas and at ALL voltages (refer to 2005 Regulations, page 16).</p>
<p>Enhanced notification and consultation provisions</p> <p>Clause 14 – (3)(c), (4)(b), (4)(c), (4)(d), (5) and</p>	<p>In the Jemena Electricity Network area the current notification and consultation is working well. To adopt the enhanced notification and consultation provisions proposed for the 2015 regulations would be very difficult to implement and onerous. Jemena could not identify any good reasons to increase customers costs by enhancing the notification and</p>

Item	Comment
<p>(8), page 29-31</p> <ul style="list-style-type: none"> • C 14, (3)(c) if the tree is on land that is contiguous to private property and the use of that property may be affected during the cutting or removal—an owner or occupier of that property. • C 14, (4)(b) the contact details of the person carrying out the intended cutting or removal on behalf of the responsible person, including the contact details for all enquiries regarding vegetation and the intended cutting or removal; • C 14, (4)(c) subject to subclause (8), details of the intended cutting or removal, including details of the impact of the cutting or removal of the tree and the actions to be taken to minimise that impact; • C 14, (4)(d) details of the dispute procedure to be followed for the independent resolution of disputes relating to electric line clearance, including the process, escalation process and contact details of all parties involved in the escalation procedure. • C 14, (5) A written notice given under subclause (2) must include the following additional information— with subclauses (a),(b) and (c) • C 14, (8) A notice given to an owner or occupier of private property in accordance with subclause (3)(a) must, if the tree is intended to be cut, include details of the impact of the intended cutting on the tree in a pictorial form that— <ul style="list-style-type: none"> (a) shows how the tree will be cut; and (b) includes an image of the tree; and (c) includes a representation of the electric line. 	<p>consultation provisions.</p> <p>Clause 14 – (3)(c), (4)(b), (4)(c), (4)(d), (5) and (8), page 29-31.</p> <p>C 14, (3)(c) page 29, (5)(c) page 30 It is not possible for Jemena to predict and detail the impact of the intended cutting on the use of the land by the owner or occupier of property that is contiguous.</p> <p>In addition to only one notice to the affected party, this may add five more notices, one to each side neighbour and three neighbours across the road. In some cases each customer in the street may receive six notices (their Letter of Intent plus a notice for each of their neighbours trees being cut), resulting in unnecessary additional costs to customers.</p> <p>Jemena suggests that clause 14, (3)(c) in the proposed regulations be removed or be amended to specify the “use” of the contiguous property, e.g. access only.</p> <p>Jemena suggests that clause 14, (5)(c) be changed to (similar to (4)(c)): “.an indication of the vegetation clearance required to achieve compliance with the Code, while minimising the impact on the tree(s), in a pictorial form”.</p> <p>C 14, 4(b): At the time of providing the notice to customers, the contact details of the person doing the cutting will generally not be known. In any case, only the responsible person has been assigned the authority to speak on behalf of Jemena. If a customer wants to talk to someone about the cutting, they should contact the responsible person, only. Jemena suggests that clause 14, (4)(b) be deleted, since clause 14 (4)(a) covers all the requirements.</p> <p>C 14, (4)(c): It is impractical to provide specific detail of the intended cutting or removal, and the detail of the impact of the cutting or removal of every tree and the actions to be taken to minimise the impact for every tree. Often there is more than one tree in a span. A single property may have 100 or more trees. Providing this degree of detail would be very difficult to implement and onerous, especially if the intent is to pictorially represent every cut on every tree and detail how Jemena intends to minimise the impact. This provision, if adopted, would add significant cost to customers given the current system already works well.</p> <p>Jemena suggests that the clause 14, (4)(c) be changed to: “.an indication of the vegetation clearance required to achieve compliance with the Code, while minimising the impact on the tree(s), in a pictorial form”.</p> <p>C 14, (4)(d) and (5)(a)(i) The Jemena ELCMP details the dispute procedure to be followed for the independent resolution of disputes relating to electric line clearance, including the process, escalation process and contact details of all parties involved in the escalation procedure.</p>

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	<p>To reduce the amount of information on the notice, the notice should include reference to the information being available in the ELCMP, which in turn is available on the website, or at Jemena’s head office. The purpose of loading it on the website is for customer information.</p> <p>The Jemena Letter of Intent (LOI) includes a section that covers consultation, complaints, dispute resolution and a contact phone number.</p> <p>Since ESV is part of the VESI dispute resolution process, ESV will need to provide all of the details required by this clause for inclusion in the ELCMP, and any notice to customers.</p> <p>Jemena suggests that clause 14, (4)(d) be changed to: "details of where a copy of the ELCMP can be located that details the dispute procedure to be followed...."</p> <p>Jemena suggests that clause 14, (5)(a)(i) be changed to: "details of where a copy of the consultation procedure that the responsible person will follow can be located"</p> <p>C 14, 8 page 31</p> <p>A generic representation of a tree is already included in the Jemena brochure to customers (included with the LOI), approved by ESV and published on the Jemena website, depicting a typical tree, typical tree cuts, and a typical electric line.</p> <p>Often there is more than 1 tree in a span, and a property may have 10 trees and in some cases up to 100 trees.</p> <p>Providing this degree of detail would be very difficult to implement and onerous, given the current system already works well.</p> <p>Any move to pictorially represent every cut on every tree together with details on how Jemena intends to minimise the impact will have a significant cost impact on customers.</p> <p>Jemena suggests that clause 14, 8 be changed to: "A notice provided to an owner or occupier of private property in accordance with subclause (3)(a) must indicate the vegetation clearance required to achieve compliance with the Code, while minimising the impact on the tree(s), in a pictorial form".</p>
<p>Publishing a notice in a newspaper</p> <p>Clause 15, page 31</p>	<p>ESV needs to clarify ORP (Council) vegetation clearance notice obligations.</p> <p>Newspapers are fast becoming outdated forms of communication and Jemena suspects ineffective for this customer notification purpose.</p> <p>Jemena seeks more information from ESV on the justification for this costly impost on customers. What is the purpose of the newspaper advertisement, who is the intended audience?</p> <p>Who will determine which newspaper(s) is to be used, even local newspapers have a very wide coverage (e.g.: Hume Leader).</p> <p>Publishing a notice in a newspaper specifying one or more days on which, or a period during which, the intended cutting or removal will commence, that is between 14 and 60 days from the date of the notice is onerous, impractical and appears to be of little value to a system that is already working well.</p> <p>Jemena is continually clearing trees across its distribution area. All affected persons are notified and specific details are provided to individual customers within the 14-60 day window.</p>

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	<p>It is totally unworkable to publish a written notice identifying all the trees located on public land that Jemena plans to cut, describing the planned cutting and the day(s) that the cutting is to take place. The notice would need to provide detail on thousands of trees.</p> <p>Jemena is investigating the use of other means to inform customers of planned electric line clearance work including the internet to display a map showing where cutting is planned for the coming month. Jemena suggests that the LOI would then refer the customer to the website for timing of the cutting in their area. Jemena suggests that clause 15 be changed to: “In accordance with subclause (3)(a), the responsible person, must provide the manager of public land a written notice indicating the vegetation clearance required to achieve compliance with the Code, while minimising the impact on the tree(s), in a pictorial form”.</p>
<p>A distribution company must assist Councils with safety concerns about electric line clearance</p>	<p>Clause 19 – page 36 This clause is ambiguous and requires legal review: “must assist” is open to interpretation, with various degrees of assistance. Who will determine if Jemena actually assisted? [with reference to the proposed regulations, r. 9(3)(i) on page 7 the NOTE: specifies “assist the Council”]</p> <p>Jemena will assist Councils when requested to do so, however, it is not Jemena’s role to ensure that another company (Councils) undertakes work safely: electrical or mechanical work. It is also not Jemena’s role to ensure that another company has established safe methods for tree cutting or removal: that is a role for government bodies such as the Victorian WorkCover Authority.</p> <p>Jemena suggests clause 19, (1) be changed to “If a Council has concerns about the ELECTRICAL safety of....., the Council MUST consult-“</p> <p>Jemena suggests clause 19, (2) be changed to: “An owner, operator or distribution company that is consulted by a Council under subclause will assist the Council to cut or removal trees safely.”</p> <p>Clause 20 – pages 36, 37 This clause is ambiguous and requires legal review: “must assist” is open to interpretation, with various degrees of assistance. Who will determine if Jemena actually assisted? [with reference to the proposed regulations, r. 9(3)(i) on page 7 the NOTE: specifies “assist the Council”]</p> <p>Jemena will assist Councils when requested to do so, however, Council is responsible for clearing the tree, and as part of that responsibility to determine the allowance for sag and sway, and then apply the allowance.</p> <p>Council needs to maintain an audit record of the process to substantiate Council compliance with the</p>
<p>Clause 19, page 36 Clause 20, pages 36, 37</p>	

Item	Comment
	<p>Regulations (subject to ESV audit). Record keeping of another company’s obligations is not Jemena’s role.</p> <p>Jemena could simply supply Councils with a copy of the sag and sway charts, with instruction on how to apply the charts.</p> <p>Jemena suggests clause 20 changes: “(1) If a Council...additional distance that allows for sag and sway, the Council MUST consult-“ “(2) An owner, operator or distribution company that is consulted by a Council under subclause (1) must will assist the Council to determine the additional distance.“ “(3) An owner, operator or distribution company that assists a Council to determine an additional distance under subclause (2) must keep a record of the additional distance under subclause (2) for at least 5 years.”</p>
<p>Alternative compliance mechanisms</p> <p>Clause 32, page 49</p>	<p>As part of the ELC Regulations, ESV may accept that an alternative compliance mechanism will achieve a comparable or improved safety outcome. This is not a compulsory requirement, but may provide a solution(s) to vegetation compliance issues.</p> <p>ESV has indicated that, as part of future ESMS submissions it will require Jemena to document their type approval process (product approval procedure) for ALL network products.</p> <p>ESV expects that having successfully followed the approved procedure ANY new product will have been type approved and as such acceptable for deployment in the network by Jemena.</p> <p>Jemena suggests adding a new clause: C 32, (1)(e) “the application of the alternative compliance mechanism will achieve a comparable or improved power line safety outcome.”</p>
<p>Minimum clearance space – Near pole</p> <p>Schedule 1, Part 3, Division 1, pages 39-46 Schedule 2 (Graphs 1-6), page 53-63</p>	<p>The distribution business representatives on the ELCCC report that the graphs were developed to “smooth” out the step changes in the vegetation clearance distances specified in the 2010 Regulations, without significantly changing the clearance distances. The graphs in the Regulations ignore the near pole clearance distances specified in previous regulations and as such are a significant departure from the 2010 Regulations.</p> <p>The “near pole” distances, currently prescribed in the 2010 Regulations, have been omitted, Jemena suspects inadvertently.</p> <p>Jemena supports the change to a gradual increase in the applicable distance as opposed to step changes. However, omitting the ‘near pole’ reduction in minimum vegetation clearance space results in an increase in</p>

Item	Comment
	<p>the applicable distance, near the pole. This will increase the degree of cutting required since the maximum clearance and any allowance for sag and sway is now applied to the whole span.</p> <p>Jemena suggests that, for all graphs (and commentary in PART 3 Division 1, commencing page 39):</p> <ol style="list-style-type: none">1. X-axis labels be changed from “Span Distance (m)” to “Distance from Pole (m)”2. X-axis distances be halved3. change must assist to will assist4. change SD (Span Distance) to DFP (Distance from Pole)5. include statement that near pole distance = 1/6 span distance for spans:<ol style="list-style-type: none">a. >120m: HV and LV insulated cable, all areasb. >135m: uninsulated HV, LV and 66kV in LBRAc. >132m: uninsulated HV, LV and 66kV in HBRA

Cost increases associated with changes to the Regulations

With the release of the exposure draft of the Electricity Safety (Electric Line Clearance) Regulations 2015, Jemena has reviewed the impact on vegetation management costs of the proposed changes to the regulations.

Using the greater level of detail now provided by ESV as the basis for a review, the impact of the proposed changes to the regulations on Jemena’s vegetation management costs will increase by \$26.7m as a result of the changes outlined in the exposure draft of the Electricity Safety (Electric Line Clearance) Regulations 2015. That is, the cost increase to Jemena customers, is estimated on the assumption that the proposed regulations will be enforced in their current draft.

Item Category	Sub Category	Comment	Cost INCREASE over 5 year regulatory period
Proposed AS4373 compliance	Certificate 3 Arborist for Inspection	Will add cost of \$15k per year per inspector. Total \$60k per year. Will take up to 2 years to train to this new standard for existing employees.	\$300k
	Certificate 2 Arborist for Cutting	Will add cost of \$7.5k per year per cutter. Total \$90k per year. Will take up to 2 years to train to this new standard for existing employees.	\$450k
	Non-use of spurs, spikes etc.	This will add costs to tree climbing activities and introduce additional safety risks. This will be an additional cost per case (including EPV and traffic management) of \$3.5k and annually \$175k.	\$875k
	Lopping and topping	These are unacceptable practices as part of AS4373. Costs associated with complying here are primarily to redesign the power line.	

	Use of mechanical cutters such as Jarraffs	These devices are currently used to improve safety and productivity (particularly in rural areas with rows of trees). Use of these devices does not comply with AS4373. Additional costs are estimated at \$125k per year. (equivalent of an additional 250 spans to be cut at around \$500 per span)	\$625k
Schedule 1 Part 2 Division 3, Clause 14 –	(3)(c) if a tree is on land that is contiguous to private property and the use of that property may be affected during cutting or removal, ...	If the details and image are to be a representation of each specific tree and power line this will reduce the productivity described in 4(c) below further and likely to require an additional \$660k pa. If we are required to provide details for each tree to each adjacent neighbour it will reduce the productivity of the inspectors dramatically, (likely to be more than a 50% reduction in productivity increasing the inspection costs to \$1.32m pa)	\$6.6m
	4(b)...the contact details of the person carrying out the intended cutting or removal...	The actual cutting personnel are unknown at the time of advising the owner of the cutting that will take place. This will require a total change to the scheduling and allocation of cutting personnel. Productivity will be affected by as much as 10% since cutters will no longer be allocated to jobs based on availability. (10% of \$1.5m per annum = \$150k per annum)	\$750k
	4(c)...details of the intended cutting or removal including the details of the impact of the cutting or removal of the tree and the actions to be taken to minimise the impact..	A customer may have multiple trees that have varying cutting requirements and impacts. If we are required to provide details for each tree this will reduce the productivity of the inspectors dramatically, (likely to be more than a 50% reduction in productivity requiring a doubling of the inspection costs	\$3.3m

		annually)	
	8(a) shows how the tree will be cut (b) includes an image of the tree (c) includes a representation of the electric line	If the details and image are to be a representation of each specific tree and power line this will reduce the productivity described in 4(c) above further and likely to require an additional \$660k pa).	\$3.3m
Schedule 1, Part 2, Division 3, Clause 15 –	(3) The published notice must specify....	As the cutting is on a continuous program, advertisements will need to be placed at least weekly to advise the public of the intended areas and dates. Half page advertisement in say 3 local papers at \$2k per week per paper (for 5 months of the year in the HBRA, i.e. non-declared area) plus a full time resource to manage the activity. (\$270k pa)	\$1.35m
Schedule 1, Part 2, Division 4, Clause 19 –must assist Council to - . Ensure cutting or removal of the tree can be undertaken safely . Set safe limits of approach to electric lines for cutting or removing the tree . Establish safe methods for cutting or removing the tree	Whilst it is not agreed that a distribution company should undertake these activities, the time involved in servicing Councils to this extent could increase the time burden on distribution companies by up to 2 personnel per year. (at \$150k per person)	\$1.5m

<p>Schedule 1, Part 3, Division 1 – Schedule 2, Graphs 1-6 –</p>	<p>These new clearances require that the applicable distance (AD) plus sag and sway (if applicable) is applied to the whole span which removes the existing 1/6 allowance around poles and the graduated 'steps' before requiring the maximum clearance.</p>	<p>The effect of this is that trees near poles may require removal (as many metres can be added to the current distance requirements) and additional clearing is required in the current 1/6 space. Whilst a full survey of spans is required to accurately determine this impact, it is estimated that approximately 10% of the 9,000 spans requiring cutting will need trees removed near pole and 25% of these spans will require extra vegetation cutting in the previous 1/6th distance. Assuming 2 trees require removal in each of the 10% of cases, 1,800 trees would be required to be removed. At \$3k per tree this would equate to <u>\$5.4m</u> (one off cost). Additional tree pruning costs in the 1/6th space would equate to 900 spans of additional cutting at \$500 per span – a total of <u>\$450k</u> pa. This does not include the additional costs of negotiations and management of these activities, which would be substantial. It is important to note that these activities would take a number of years to complete so exemptions would be required whilst this activity was underway.</p>	<p>\$7.65m</p>
<p>Total (Assuming a literal compliance is achieved with the proposed ELC regulations 2015)</p>			<p>\$26.7m</p>