

Our Ref: SAC20_009

4 March 2020

RIS Submissions Risk, Regulatory Planning and Policy Energy Safe Victoria PO Box 262 Collins St West, Victoria 8007

REQUEST FOR COMMENTS REMAKE OF THE ELECTRICITY SAFETY (ELECTRIC LINE CLEARANCE) REGULATIONS 2020

Thank you for the opportunity to comment on the following documents associated with the remake of the Electricity Safety (Electric Line Clearance) Regulations 2020:

- Regulatory Impact Statement: Electricity Safety (Electric Line Clearance) Regulations 2020; and
- Exposure Draft Electricity Safety (Electric Line Clearance) Regulations 2020

CitiPower-Powercor (CPPAL) provides the following comments for ESV's consideration.

Regulatory Impact Statement (RIS): Electricity Safety (Electric Line Clearance) Regulations 2020

Section 2.2.2.1 Fires

The RIS makes reference to approximately 6% of fires caused by tree contacts are due to grow-ins and that the ELC Regulations, as part of a broader regulatory framework, have been effective in reducing the risk of fires caused by contact between trees and powerlines.

The remaining 94% of fires caused by tree contacts are due to fall-ins, i.e. trees falling across powerlines from outside the minimum clearance space.

The RIS acknowledges that only **grow-ins** are relevant to the ELC Regulations and the RIS.

REGISTERED OFFICE 40 Market Street, Melbourne VIC Australia Telephone: (03) 9683 4444 Facsimile: (03) 9683 4499 Address all Correspondence to: Locked Bag 14090 Melbourne VIC 8001 CitiPower Pty Ltd ABN 76 064 651 056 General Enquiries 1300 301 101 www.citipower.com.au Powercor Australia Ltd ABN 89 064 651 109 General Enquiries 13 22 06 www.powercor.com.au It is recommended that the mitigation of *fall-in* incidents should continue to be discussed at the Electric Line Clearance Consultative Committee (ELCCC), particularly for high consequence fire areas.

Electricity Safety (Electric Line Clearance) Regulations 2020

Clause 3(1) of the Code

With regards to the inclusion of Clause 3(1) of the Code of Practice as a prescribed offence for which infringement notices may be served, we suggesting the following.

In line with recommendation 9 of the Grimes Review, it is requested that ESV provide further guidance on their 'Compliance and Enforcement Policy' to provide greater understanding of ESV's 'compliance pyramid' model and how the addition of this prescribed offence will be applied in practice.

Applicable Distances for uninsulated electric lines in LBRA

There appears to be inconsistencies in the applicable distances (AD) and the minimum clearance space (MCS) requirements for uninsulated electric lines in LBRA:

- For spans < 45m long, the AD is constant and independent of span length, sag and sway has been included as a constant again independent of span length, and the MCS = AD
- For spans 45m-100m long, the AD is a function of span length, with sag and sway included, and the MCS = AD
- For spans > 100m long, the AD is again constant and independent of span length, sag and sway have **not** been included and need to be added, and the MCS = AD+sag+sway. No allowance has been made for the conductor sag and sway which is included in the applicable distance for spans up to 100m long, resulting in an allowance for sag and sway being added to an applicable distance which already includes an allowance for sag and sway.



CPPAL suggests that for clarity the Code of Practice could be revised to provide two methods for the determination of minimum clearance space for uninsulated electric lines in LBRA:

- Minimum clearance which includes an allowance for sag and sway (spans <100m): employ the existing graphs 2, 3, and 4 (in schedule 2 of the code of practice) for spans up to 100m long, which include an allowance for sag and sway. This method shall only be used for electric line spans < 100m long, and the MCS = AD.
- 2. Allowance for sag and sway method: Specify a constant applicable distance to which an allowance for sag and sway must be added to calculate the minimum clearance space, MCS = AD+sag+sway

CPPAL suggests that the applicable distance for uninsulated electric lines in LBRA should be:

- LV 1000mm
- HV 1500mm
- 66kV 2250mm

Similar comments apply for the applicable distances for insulated electric lines in all areas.

Applicable Distances for uninsulated electric lines in HBRA

The AD for uninsulated electric lines in HBRA are shown below. As the MCS is determined by adding an allowance for sag and sway to this AD, it is not clear why the AD increases with span length.



CPPAL suggests that the applicable distance for uninsulated electric lines in HBRA should be:

- HV 1500mm
- 66kV 2250mm

RECOMMENDATIONS

For clarification, the AD should be defined as: the minimum distance between any vegetation and the nearest conductor at all times, at all points along the span.

The sag and sway allowance will determine the maximum conductor movement envelope.

CPPAL recommends that the Code of Practice be revised to provide two methods for determining the minimum clearance space for electric lines:

 Minimum clearance which includes an allowance for sag and sway (spans <100m): employ the existing graphs 1, 2, 3, and 4 for spans up to 100m long, which include an allowance for sag and sway. This method shall only be used for electric line spans < 100m long, and the MCS = AD. Allowance for sag and sway method (HBRA and LBRA): Specify the constant applicable distance based on line voltage/type, to which an allowance for sag and sway must be added to calculate the minimum clearance space, MCS = AD+sag+sway.

CPPAL recommends that the AD for uninsulated electric lines in HBRA and LBRA should be:

- LV 1000mm
- HV 1500mm
- 66kV 2250mm

For insulated electric lines in HBRA and LBRA the AD should be 300mm.

It is understood that comments to the Regulatory Impact Statement: Electricity Safety (Electric Line Clearance) Regulations 2020 and the Exposed Draft – Electricity Safety (Electric Line Clearance) Regulations 2020 will be discussed at the ELCCC prior to the finalisation of the Electricity Safety (Electric Line Clearance) Regulations 2020.

Thank you again for the opportunity to comment on the Regulatory Impact Statement and the Exposed Draft – Electricity Safety (Electric Line Clearance) Regulations 2020.

Please contact me on	should
you have any queries.	-

Yours sincerely



Network Safety Manager