



The Hon Lily D'Ambrosio MP

Minister for Energy, Environment and Climate Change
Minister for Suburban Development

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Ms Michelle Groves
Chief Executive Officer
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Ref: MBR033735



Dear Ms Groves

AUSTRALIAN ENERGY REGULATOR HIGH-VOLTAGE CUSTOMER ALLOWANCE

I understand that the Australian Energy Regulator (AER) is currently establishing a reasonable allowance for AusNet Services and Powercor Australia to manage the issue of potential Rapid Earth Fault Current Limiter (REFCL) impacts on 22 kilovolt direct-connect, high-voltage customers (HV customers).

On 31 March 2017, both distribution businesses applied for contingent project funding to install isolation transformers at 37 HV customer connections for the first phase of the REFCL rollout at a proposed combined cost to consumers of \$35.8 million (ranging from \$823,000 to \$1.18 million per installation).

In line with my 8 May 2017 submission to the AusNet Services and Powercor Australia contingent project applications, I wish to reiterate that the Andrews Labor Government does not support this claim. I urge the AER to keep in mind the most cost-efficient technical means to safely control the potential risk to these customers and to make its determinations accordingly.

The Marxsen Report on High-Voltage Customers

The recent report commissioned by Energy Safe Victoria (ESV) and completed by Dr Tony Marxsen titled *Customer assets directly connected to REFCL networks: a preliminary risk survey* (Marxsen report) supports this position.

The Marxsen report maintains that although there is a risk to HV customer networks from REFCL operation relating to cross-country faults, and that given the right set of circumstances this risk may impact the effectiveness of REFCLs, it is of low likelihood. The report indicates that the "risk from customer assets represents a small increment (perhaps three per cent) of Victoria's total risk from cross-country faults." To manage this risk, the report recommends that distribution businesses commence working with their HV customers now to discover suitable network hardening technical mitigations.

Importantly, the report does not support the installation of isolation transformers to resolve this risk for any of the twelve sites surveyed for the study, maintaining that more cost effective hardening options can and should be discovered, negotiated and implemented.

The cost of works to protect HV customers and the distribution networks is likely to be far less than the isolation transformer option put forward by the distribution businesses. This is because many assets on HV customer networks are already rated to withstand voltage level displacements at the level likely to be experienced in REFCL fault suppression operation.

The Marxsen report also indicates that just 10 per cent of HV customer assets are likely to require immediate replacement to accommodate REFCL operation, 26 per cent should be tested and replaced if required, and 64 per cent of assets will require no treatment. Though the report involved a limited sample of sites, it is reasonable to extrapolate from the report that the same distribution of treatment requirements will be reflected across the full cohort of tranche one HV customers.

To further illustrate how the cost level of actual replacement works is likely to be constrained, the Marxsen report indicates that:

- only around 30 meters of 19 kilometres (installed pre 1980) of cable discovered on the 12 HV customer sites sampled by the report should be replaced now, and 13.7 kilometres should be tested for condition and only replaced if it fails to meet the required standard, the rest (installed from 2000 onwards) will require no treatment;
- other equipment, including metering voltage transformers and surge diverters may require replacement, but most should be in sufficient condition to withstand REFCL operation;
- some HV customers already have automatic protection and control systems which will function normally under very limited periods of REFCL voltage displacement operation under which the businesses state they intend to use REFCLs to treat sustained faults.

It seems likely therefore that targeted replacements of specific sub-network assets, will be the required solution and that this solution will be at a fraction of the cost of isolation transformers. For most customers, these works are likely to cost closer to the \$100,000 identified in the regulatory impact statement for the *Electricity Safety (Bushfire Mitigation) Amendment Regulations 2016*.

Electricity Distribution Code

I understand that the AER has obligations under the National Electricity Rules to provide a reasonable allowance to the distribution businesses in order for them to meet their regulatory obligations. I also understand that the upcoming review of the Electricity Distribution Code (the Code) will be a factor in the AER's decision for this allowance.

On 28 June 2017, John Hamill, Chief Executive Officer of the Essential Services Commission (ESC) wrote to you in response to the AER's letter of 19 May 2017. I understand that the AER had sought assurance from the ESC that the Code will be reviewed and amended to accommodate REFCL voltage variations. In his letter, Mr Hamill indicated that the ESC will be undertaking a review of the Code in the first half 2017/18 Financial Year. This review will include a review of the voltage variation section (4.2.2) of the Code to "ensure that it is fit for purpose and will support the distribution businesses meeting the requirements of the *Electricity Safety (Bushfire Mitigation) Regulations 2013*."

I strongly encourage the AER to take the timing and intention of this undertaking into account.

Timeline Extensions

I also note that the 1 May 2019 milestone date for the first tranche of REFCLs is an issue of concern for the AER in setting its allowance to the distribution businesses for the HV customer issue.

I must stress that the *Electricity Safety Amendment (Bushfire Mitigation Civil Penalties Scheme) Act 2017* allows timeline extensions for REFCL installation to be granted on a case-by-case basis, where there is evidence of circumstances that will delay delivery and which are beyond the control of the electricity distribution businesses. Where this is the case, ESV, upon consulting with me, may grant timeline extensions. These extension applications will be taken seriously and fair consideration will be given to alternative timelines provided where necessary.

On this basis the position taken by the distribution businesses that they will not have time to negotiate and implement cost efficient network hardening treatments with their HV customers is not sustained.

I am sure that the AER shares the concern of the Andrews Labor Government and the Victorian people that this important improvement to the safety of the State's electricity infrastructure should be funded in the most cost-efficient manner possible, in the interest of Victorian families and communities.

If you would like to discuss any of the points raised in my letter further, please contact Ashley Hunt, Director of the Powerline Bushfire Safety Program on 03 94124554 or ashley.hunt@delwp.vic.gov.au.

Yours sincerely



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