

Hi, thank you for the opportunity to provide feedback on the proposed voltage standards changes described in the draft decision document.

Firstly, there is a brief mention about how the “REFCLs also changes the fundamental operating principles of that portion of electricity distribution system from a solid or restricted earthing system to that of a resonant earthing system.” What does this mean for the existing customer, does it change the design requirements so we need to review & assess all existing HV earthing systems as under fault conditions the previous phase-earth voltage limits could be exceeded (if fault was directly outside customers premises, a voltage could appear on the existing earth grid)? With higher phase to earth voltages, will this affect the design earth system impedances required to limit step/touch potentials as set AS3000?

My concern with saying that, under REFCL conditions the phase to earth voltage limits do not apply, it makes it difficult/impossible to design a system to comply with the unspecified. How do we ensure a system that is hardened/compliant with regulations that have removed the tolerances? If the REFCL operates to specific design parameters, why not put those into the voltage table 1A in the code rather than saying the phase to earth voltages do not apply? The changes need to include the required tolerances to comply with REFCL design requirements.

I understand (as it mentioned) that the manufacturers’ testing /commissioning are not aligned but how is the customer expected to manage the inconsistencies that these standard changes will cause. Be removing the values, we can’t even provide clear instructions to the manufacturer to enable compliance. It feels like the document says we know it’s an issue but it is not our problem.

It says it will amend clause 16 (c) to clarify that business customers must take reasonable measures to safeguard their own assets in the event of a REFCL condition. How can we protect against what you haven’t clearly specified the design conditions/tolerances are?

You have asked for submissions on whether REFCLs should be permitted to operate for other purposes including reliability, as long as they do not undermine the intent of the *Electricity Safety (Bushfire Mitigation) Regulations 2013 (Vic)*. This is an extreme system designed to improve safety which is the main reason to include it in at risk areas. It seems hard to justify these extra risks for distributors and customers for non-safety improvements. Obviously this will increase the cost impact on the customers. From our perspective, given the older age of most of our sites, we’d change from having 2 sites impacted to potentially having 7 which is a huge cost impact. So unless there was a proven and significant reliability or other improvement, it may not be something we’d want to pay for.

Is there any requirement (apart from good practice) on distributors for communicating the testing of REFCL’s to affected customers?

The code review discusses voltage variations’ “best endeavour obligations” is to minimise the frequency for periods less than 1 minute but annual testing is required to be for 20 mins. Is there a maximum duration that the RECL can take to operate? (as in specific parameters that can be used in specifying the design and if so, it should be listed in the code for design purposes).

Thankyou  
Nic

**Nic Castle**  
Project Engineer – Power  
Engineering & Project Management Office

*Saputo*

Saputo Dairy Australia Pty Ltd (formerly Devondale Murray Goulburn).



Southbank, Victoria / Australia / 3006

[www.mgc.com.au](http://www.mgc.com.au)

[www.saputo.com](http://www.saputo.com)