

Extending the RCBO prohibition

General response to submissions

The regulatory impact statement for the extension of the residual current circuit breaker with overcurrent protection (RCBO) prohibition notice was released for public consultation on 7 April 2020. ESV received five submissions in response which included a number of common comments and themes. This document sets out ESV's response to these comments.

Ongoing Coronial inquest—action should be delayed until the Coroner delivers findings

Energy Safe Victoria acknowledges that the Coroner is yet to deliver his findings with respect to the fatality which triggered ESV's investigation into the safety of RCBO's. However, this is not a reason in itself for ESV to delay taking action with respect to a safety issue that has broader consequences for the Victorian community.

ESV has a statutory obligation to ensure the electrical safety of electrical equipment and the issues identified with respect to some designs of RCBOs will remain regardless of the Coroner's findings. However, stakeholders can be assured that ESV will seriously consider any recommendations the Coroner makes when he releases his findings.

Installation issues associated with RCBOs are the primary cause of the problem

ESV accepts that the incorrect installation and testing of RCBOs and the circuits they are connected to are required in order to bring about the failure modes that are of concern to ESV. While education campaigns and enforcement activities can go some way towards improving this it is not an effective substitute for the proposed prohibition which requires the use of products that can withstand installation errors. This is especially so when such products are available at a similar cost.

In ESV's view, no amount of education and enforcement will eliminate the risk of human error or the commercial incentives to sometimes cut corners or ignore requirements. Notwithstanding this, ESV's response to this issue does include, and will continue to include, education campaigns directed towards both installers and the public regarding the need for regular testing of residual current devices (RCDs) and RCBOs and the benefits of having these devices installed.

The need for the additional testing requirements has been rejected by Australian and International Standards committees

ESV supports the adoption of Australian and International standards as part of Victoria's regulatory regime. The benefits of national and international consistency in regulatory standards are self-evident to both product suppliers and regulators alike.

But there may be instances when the committees overseeing these standards do not assess the risks in the same light as a regulator reflecting different perspectives and objectives, as has occurred in relation to the prohibited RCBOs.

As mentioned above, the adoption of Australian and International standards as part of Victoria's regulatory regime is supported by ESV but ESV cannot delegate its authority to determine what electrical equipment is, and is not safe, to supply to Victorian consumers to any Australian or International Standards committees.

ESV has taken action to protect the community. While such action is rarely needed, ESV will not hesitate to take similar action in the future if it is in the interests of the safety of the Victorian public to do so.

The prohibition is out of step with the requirements other Australian jurisdictions

With respect to statements that Victoria is out of step with the requirements of other Australian regulators ESV notes that given the national market for RCBOs the other Australian regulators do not necessarily need to take action in order to benefit from the additional safety provided by ESV's prohibition. As far as ESV is aware, regulators in other jurisdictions are supportive of the action ESV has taken.

Costs

Submissions have been made referring ESV to the fact that costs continue to be imposed on suppliers who need to run multiple lines of product in Australia due the prohibition. This does not seem to be occurring in the market to a great extent from what ESV has been able to observe. There are currently over 800 models listed on the ESV website that retailers can choose from and this has been in place for 24 months. There is no product re-design required with the extension of the prohibition. Products that comply with the requirements of the prohibition may also be supplied in other Australian jurisdictions.

AS/NZS 3000—Removal of an RCD testing exemption will address the safety issue

ESV supports proposed amendments to AS/NZS 3000 "the wiring rules" to remove the current exemption for verification testing requirements of newly-installed electrical systems if no power is available on the site. However, this change will not satisfactorily address the safety issue that is of concern to ESV.

Testing of RCBOs after installation does not eliminate the identified vulnerability that can be triggered later in the product's life. Especially if wiring errors are made when future electrical work is conducted at the premises where they are installed.

There should be a requirement to retro-fit RCDs/RCBOs in old housing stock upon sale or lease of property

ESV explored this proposal in 2017 and the RIS and found that policies based on requiring RCD to be fitted whenever dwellings are sold are costly and are limited in their effect by the fact that only a small proportion of the dwelling stock is sold annually.

A regulation implementing a requirement for RCDs to be fitted to rental properties was proposed by the Victorian Government in its draft Residential Tenancies Regulations 2020. This was estimated to reduce the number of properties without an RCD fitted by more than 25 per cent in one year. These regulations are due to commence on 1 January 2021 and include minimum standards for rental properties which includes the following:

On and from 1 July 2022, in relation to electrical safety, all power outlets and lighting circuits in the rented premises are to be connected to—

- (a) a switchboard type Circuit Breaker that complies with AS/NZS 3000 Electrical Installations as published from time to time; and
- (b) a switchboard type Residual Current Device that complies with—
 - (i) AS/NZS 3190 Approval and test specification—Residual current devices (current-operated earth-leakage devices), as published from time to time; or
 - (ii) AS/NZS 61008.1 Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs): Part 1: General rules, as published from time to time; or
 - (iii) AS/NZS 61009.1 Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCCBs) Part 1: General rules, as published from time to time.

ESV supports this initiative and believes that the prohibition will ensure that any RCBOs installed in response to these requirements will be able to withstand wiring and installation errors and, therefore, provide a higher level of safety than the prohibited RCBOs.

There should be education campaigns and incentives around the benefits of RCD and the correct installation, testing and use of RCDs

ESV currently has a number of advertising campaigns which specifically target testing of RCDs “Household wiring: Be on the right side of power safety” and “How to test your safety switch”.

ESV is also currently looking into the introduction of continuing professional development requirements for electricians and other electrical workers. As part of this, ESV will consider including training on the correct installation, testing of RCDs and RCBOs. A RIS on this and other proposals is due for release later in the year.

There should be increases in ESV's audit and enforcement activity

ESV notes that the RIS considered the option of increasing its education, compliance and enforcement activities as an alternative, where it concluded that this is less effective for reducing the identified safety risks than the current prohibition.

Recommendation

After considering the submissions received, ESV has not changed its position on the need for the RCBO prohibition to be extended for a further 10 years. As such, ESV has recommended that the Director of Energy Safety proceed with the extension of the prohibition.

Energy Safe Victoria

30 June 2020

Who we are

We are Victoria’s safety regulator for electricity, gas and pipelines.

Our role is to ensure that Victorian gas and electricity industries are safe and meet community expectations. We are also responsible for licensing and registering electricians, and educating the community about energy safety.

More information is available on the Energy Safe Victoria website: www.esv.vic.gov.au