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26 March 2020

Ms Marnie Williams Director Energy Safe Victoria Level 5, 4 Riverside Quay SOUTHBANK VIC 3006

Dear Ms Williams

REGULATORY IMPACT STATEMENT FOR A PROHIBITION OF SUPPLY OF CERTAIN ELECTRICAL SAFETY EQUIPMENT

I would like to thank your staff at Energy Safe Victoria (ESV) for working with our team on the preparation of a Regulatory Impact Statement (RIS) for a notice to extend a prohibition of supply of electrical safety equipment under section 63(1) of the *Electricity Safety Act 1998* (the Act). The proposed prohibition notice is for certain RCBOs with a design vulnerability that makes them prone to failure. An RCBO combines two electrical safety devices: a residual current device (RCD) and a miniature overcurrent circuit breaker (MOCB). The current prohibition on these devices will expire on 30 June 2020. The proposed notice would extend the current prohibition by 10 years from 1 July 2020.

The Subordinate Legislation Act 1994 (SLA) requires the Commissioner for Better Regulation to provide independent advice on the adequacy of analysis provided in all RISs in Victoria. A RIS is deemed to be adequate when it contains analysis that is logical, draws on relevant evidence, is transparent about any assumptions made, and is proportionate to the proposal's expected effects. The RIS also needs to be written clearly so that it can be a suitable basis for public consultation.

I am pleased to advise that the final version of the RIS received by us on 11 March 2020 meets the adequacy requirements set out in the SLA.

Background

In the RIS, ESV explains that after the death of an electrical apprentice in August 2016 from a fatal electric shock, it undertook an investigation and found that the RCBO did not operate as intended. ESV identified a design vulnerability that makes some types of RCBOs prone to failure under certain conditions. Based on its investigation, ESV sought to change the Australian Standards for electrical safety switches, but was unable to secure the support of all jurisdictions. ESV then acted alone by banning the further supply into Victoria of RCBO models with the design vulnerability. ESV also initiated an education and public awareness campaign.

ESV issued a prohibition notice for a one-year prohibition from 1 July 2018 and then put in place another one-year prohibition from 3 July 2019.

Analysis

In its analysis in the RIS, ESV explains that its preferred option is to extend the current prohibition for 10 years. It discusses the expected benefits and costs of extending the prohibition relative to the prohibition expiring in July 2020 (which would mean that RCBOs with the design vulnerability would be allowed to enter the Victorian market). ESV explains that the benefits of extending the prohibition would include the following, but that they are difficult to quantify:

- a reduction in the number of fatalities from electric shocks;
- · a reduction in the number of serious injuries; and
- a reduction in property damage arising from structural fires caused by electrical faults.

ESV explains that the main potential costs of extending the RCBO prohibition are borne by:

- suppliers of RCBOs, whose products have to meet the additional testing and verification requirements before they can be approved for use in Victoria;
- users of RCBOs, who could potentially face higher prices for RCBOs than would be the case in the absence of the prohibition; and
- ESV, which must devote staff time and other resources to administer the prohibition and ensure compliance.

ESV explains in the RIS that the main costs of the prohibition are likely to impact on suppliers rather than users and ESV. The RIS is transparent in providing industry stakeholders' costs estimates along with ESV's own cost estimates.

The RIS states that the Australian Industry Group (AiG), a peak industry body whose members represent around 90 per cent of supply of RCBOs to the electrical market, has estimated that the prohibition had \$6 million in one-off costs and will have about \$2 million per year in ongoing costs if it is extended. Ongoing costs are most relevant to the decision about whether to extend the prohibition as the one-off costs have already been incurred. AiG's cost estimate covers ongoing compliance with ESV's additional testing and verification requirements as well as other costs (outlined in the RIS).

However, in presenting its own analysis of costs to RCBO suppliers of complying with ESV's additional testing and verification requirements, ESV explains that one test can cover a 'family' of different RCBO models with similar design specifications. It estimates that if 15 tests were carried out per year, the total cost to suppliers would be between \$6,000 per year and \$30,000 per year, depending on whether testing was done in-house or outsourced. ESV states that it is likely that fewer than 15 tests per year will be carried out across all suppliers. ESV notes in the RIS that the industry's cost estimates need to be examined carefully because it is concerned that they, in part, represent 'business-as-usual' activity unrelated to the prohibition, and/or reflect commercial decisions.

In examining costs for users, ESV commissioned independent market research that found that prices fell before and after the prohibition was introduced, so it does not expect prices to increase if the prohibition is extended. ESV also explains that it is likely to incur additional costs of only about \$50,000 per year as a result of extending the prohibition because, with the exception of administering the additional testing regime, activities related to the prohibition can be done as part of business as usual activities.

In the RIS, ESV presents a break-even analysis of extending the prohibition based on AiG's estimate of ongoing costs. ESV uses an estimate of \$2.25 million per year in additional



costs across suppliers, users and itself. ESV considers the benefits from reduced fatalities in this analysis. Using a value of statistical life of \$4.6 million, ESV explains that if extending the prohibition reduces fatalities by 0.49 deaths per year, then benefits would equal costs.

Four alternative options are discussed in the RIS. ESV explains that each of these alternative options is either less effective and/or more costly than extending the prohibition for 10 years.

Implementation and evaluation

ESV explains in the RIS that it does not expect that extending the prohibition will cause any further disruption to the market. It explains that extending the prohibition will be supported by continuing efforts by ESV to raise public awareness about electrical safety issues and compliance and enforcement activities. ESV also explains that it is considering other measures to help support the prohibition's objectives including:

- redesigning the Certificate of Electrical Safety so that registered electrical contractors and licensed electricians are prompted to check and test RCBOs while carrying out electrical work; and
- supporting amendments to Australian Standards to remove the current exemption for testing and verification testing requirements of newly installed electrical systems if electricity is unavailable on site.

ESV is also considering excluding some classes of portable residual current devices (PRCDs) because they are not prone to failure.

RCBOs are part of a suite of electrical safety measures. ESV explains in the RIS that isolating the contributions made by different safety measures is methodologically difficult, but it will evaluate the effectiveness of extending the prohibition through measures including:

- continuing to monitor data on electrical-related fatalities and serious injuries, investigating the causes of these accidents and examining the role played by safety switches such as RCBOs;
- continuing to include RCBOs as part of its electrical equipment safety audit activity, which helps to assess the effectiveness of the prohibition;
- · evaluations of the effectiveness of its public advertising campaigns; and
- using its regular education sessions with electricians to promote awareness of the prohibition among electricians.

ESV notes that it will continue to receive and consider stakeholder feedback about the prohibition through its regular ESV industry forums and meetings with individual industry participants.

Should you wish to discuss any issues raised in this letter, please do not hesitate to contact my office on (03) 7005 9772.

Yours sincerely

Anna Cronin

Commissioner for Better Regulation

