

**ROYAL COMMISSION INTO HOME INSULATION PROGRAM****APPLICATION FOR LEAVE TO APPEAR****INTRODUCTION**

I, Malcolm Richard, in my capacity as Chief Executive Officer of Master Electricians Australia (MEA), wish to submit an application for leave to appear regarding the Royal Commission into the Home Insulation Program (HIP).

Master Electricians Australia (MEA) is a not-for-profit industry association representing electrical contractors. The organisation is the leading voice of contractors who operate in the electrical, data, communications and fire sector of the building and construction and domestic services industry throughout Australia. Originating as the Electrical Contractors Association in 1937, MEA has been active for over 74 years, making it one of the longest standing industry associations of its kind.

Given that the deaths under the HIP were deemed to be the result of electrocution, MEA, as a leading knowledge source for the electrotechnology industry, is in a position to provide valuable insight that will aid the Commission in their investigation.

**TERMS OF REFERENCE OF INTEREST**

The attached application form indicates the terms of reference that MEA is most qualified to comment on for the purposes of the Royal Commission. This submission will detail further the basis upon which MEA is seeking leave to appear.

**Industry warnings before and during the HIP**

While initially supportive of the Federal Government's Energy Efficient Homes Package when it was introduced in 2009, MEA did express concern about the inherent dangers associated with two types of insulation covered under the HIP rebate scheme, namely, metal based and woollen insulation. The incorrect installation of either of these products can lead to serious damage to lives and property.

MEA began warning government from as early as May 2009 about the safety risks that were likely to accompany the surge in demand for roof insulation after the announcement of the government rebate (see [Attachment one](#) for a media release dated 18 May 2009, *Insulation scheme prompts timely safety warning*). The massive demand generated by the HIP rebate scheme meant that traditional products such as batts or spray-in insulation were in short supply, and new installers turned to other products, including metal foils and blankets. From an electrical standpoint, it is highly dangerous to lay products such as metal sarking or insulation blankets with foil layers directly over electrical cables and staple them in place, as is required by these types of insulation. Safety issues arise as once these cables are laid, it is extremely difficult to judge where the cables are located when stapling the metal sarking or blankets into place.

We were particularly concerned that the rebate program had attracted a large number of new installers who, while registered with the government scheme, were not trained or experienced in dealing with the electrical safety issues associated with laying insulation. These issues include pre-existing faults in wiring in the roof space and faulty installation of insulation foil, which is a conductor of electricity. The competency based training that was implemented should have been satisfactory,

however the inconsistent delivery of this training, and the large amount of exemptions, meant that the training was not enough, particularly as many new entrants into the market had negligible experience to fall back on. Several Master Electricians actually reported an increase in repair jobs as a result of poor service providers installing insulation under the HIP. In light of the inherent risks of the HIP from the very outset, MEA called on government to introduce as a priority improved training standards for installers to ensure they were competent in the correct installation techniques when working around electrical cables, and the appropriate procedure for undertaking an electrical risk assessment. MEA was well aware that combining unskilled labour and electrical cabling could be a recipe for disaster. This was a direct safety warning from an expert industry body that was not appropriately heeded by government as the program was rushed out to consumers.

For the few months leading up to October 2009, MEA also received an increasing number of complaints from members who were arriving to undertake work at houses that had recently had foil insulation installed and found the roof to be “live”. This was caused by the foil insulation being stapled with metal fasteners to the trusses of the roof and through electrical cables, causing the entire area to become “live” and potentially deadly. The potential for the loss of life or severe injury in this situation was not just contained to the electrical contractor but anyone who ventured into the ceiling space at any time over the life of the building. Mr Fuller’s death in October 2009, more than five months after the risks of the program were identified to government, is a tragic example of what can happen when the dangers of electrical work are not taken seriously enough.

It must be acknowledged that government did take some action in response to the death of Mr Fuller. On 20 October 2009, the Minister in charge of the HIP, Mr Peter Garrett, met with MEA to discuss our concerns with the program including the poor training standards and use of metal based insulation. At a subsequent meeting in October, Minister Garrett met again with MEA and representatives from the insulation industry to seek advice on the required changes to the program to prevent further injuries and fatalities. These consultations led to an announcement by the federal government on 1 November 2009 withdrawing the insulation rebate for foil products held in place with staples or other metal fasteners. State regulatory bodies also issued advice banning the use of metal fasteners, even where work was not associated with the Federal Government’s rebate program. Government then committed to requiring covers to be placed over light fittings when any type of insulation was being installed.

While the above changes were welcomed by MEA as an initial step to eliminate the work health and safety risks associated with the HIP, the flawed nature of the program itself had not been properly addressed to ensure no further loss of life. Inexperienced operators were still able to participate in the program with unskilled workers still entering roof spaces to install insulation untrained and unsupervised. The subsequent deaths of Mr Barnes, Mr Sweeney and Mr Wilson demonstrate the inherent work health and safety risks of the program that government was made well aware of, but chose to ignore.

## **Safety Switches**

MEA firmly believes that a safety switch would almost certainly have saved the life of the young men killed under the HIP. Safety switches, also known as a Residual Current Devices (RCD), monitor the flow of electricity through a circuit. They automatically shut off the electricity supply when current is detected leaking from faulty switches, wiring or appliances, preventing the risk of current flowing to earth through a person and electrocuting them. A safety switch detects the loss of power from the circuit and cuts the supply of electricity in as little as 30 milliseconds. This response time is faster than the critical section of a heartbeat, and therefore significantly reduces the risk of death or serious injury.

In 2010, MEA launched *Project Safety Switch*, along with the research report, *Switch Thinking: Preventing Electrical Deaths in Australian Homes*, with the goal of forging a positive outcome from

the deaths that occurred under the HIP (a copy of this report is at Attachment two). The *Switch Thinking* report found that 15 people are killed in Australian homes every year, on average, in accidents that could be prevented if safety switches were fitted. Around 20 times that number of people are hospitalised with serious burns or other injuries from preventable incidents.

Safety Switches have been available in Australia since the 1970s with improvements in design and functionality occurring in the subsequent decades. The laws relating to safety switches have developed over time with differing safety switch requirements in each state and territory (please see Attachment three for the requirements in the respective states and territories). However, despite the information indicating the lives that could be saved by the installation of safety switches, **none** of the state/territory governments require safety switches on ALL capable circuits. The fitting of safety switches on power and lighting circuits only, while providing some protection against electrical shock, leave the circuits that support appliances such as stoves, ovens, hot water systems and air-conditioners, unprotected. A range of factors such as water ingress, screwing or nailing through live cables inside walls, and contact with damaged equipment can cause injury or death on circuits other than power and lighting. The deaths under the HIP are evidence of the tragic consequences of current laws that only require safety switches on power and lighting circuits. To achieve the highest level of protection for home occupants and tradespeople, every capable circuit in every Australian home needs to be retrofitted with a safety switch.

It is almost certain that a safety switch would have saved the lives of Mr Fuller, Mr Barnes, Mr Sweeney and Mr Wilson. These deaths prompt the question as to why, with the overwhelming evidence on the effectiveness of these life saving devices, government has not legislated to make the fitting of safety switches on all capable circuits compulsory in all Australian homes.

## CONCLUSIONS

The circumstances surrounding the deaths of Mr Fuller, Mr Barnes, Mr Sweeney and Mr Wilson serve as a tragic reminder that there is no excuse for complacency regarding electrical related injuries and fatalities. The failed Home Insulation Program demonstrates the need for absolute vigilance where electrical work is concerned as well as the need for government to heed the warnings of industry experts when implementing policies that could potentially harm the Australian public.

Having safety switches installed on every sub circuit in every Australian home will go a long way towards protecting other families from suffering the same loss of a loved one through electrocution. With the appropriate regulations in place and with strong support from government we can ensure the electrical safety of the Australian public and prevent any further tragedies.

I trust that the above is sufficient to approve my leave to appear before the Royal Commission into the HIP on behalf of Master Electricians Australia. If you require further information please do not hesitate to contact me.

Regards,



Malcolm Richards  
CEO

*Att.*