

Dear Ms Collyer,

Thank you for the opportunity to make a submission to the Independent Review of the *Greenhouse and Energy Minimum Standards Act 2012*. The Energy and Technical Division of the Department of the Premier and Cabinet (Division) acknowledges the significant energy cost savings that the Equipment Energy Efficiency (E3) program continues to deliver to householders and to the Australian economy.

The Division also recognises that the current E3 work program will extend coverage of the program to most of the major energy users in the residential sector by 2022. As such the Independent Review provides an important opportunity to consider strategic future directions for the program beyond the current suite of products, including expansion into the commercial and industrial sectors, bespoke products and energy systems. The Independent Review should identify any changes that may be necessary to existing regulatory processes to facilitate this expansion.

The Division also notes the commentary in the Independent Review Discussion Paper (February 2018) regarding demand response interfaces for appliances. As stated in the Paper, significant uptake of the interfaces can reduce demands on network capacity and save network costs for consumers. The potential of E3 to capture cost savings in this area was quantified in the 'Smart Appliance' Consultation RIS in 2013. This work examined a proposal to mandate smart appliance interface capabilities in products which contribute most to peak demand. Even under the 'worst case' scenario, this modelling showed net benefits of over \$3,500 million, with a benefits/cost ratio of 6.8.

Although a Smart Appliance Decision RIS was drafted, it was not released, and this work stream has now lapsed (although, as noted in the Independent Review Discussion Paper, air conditioner manufacturers are required to disclose whether their products have this capability when registering under GEMS). The reasons for this work not proceeding are not fully outlined in the Discussion Paper, although it is our understanding that there has been some debate in the past about the ability of the GEMS legislation to provide an avenue for intervention into the energy market to address demand, and whether such interventions are provided for under the Act. This is a matter that the Review should specifically address and clarify.

The Discussion Paper does note some recent voluntary uptake of demand response capability in air conditioners, implying that the regulatory 'disclosure' requirement may be sufficient to facilitate demand response initiatives in the NEM. However, any uptake may have been driven by an expectation that government was intending to mandate this capability, based on the 'Smart Appliance RIS'; and the uptake might not be sustained in the longer term in the absence of a mandate. In addition, air conditioners are only one product able to provide effective demand response services. It is unclear what level of voluntary uptake there has been in other products such as pool pumps, water heaters, electric vehicle chargers and battery storage systems. As noted in the Discussion Paper, an Australian Standard for demand response, AS/NZS4755, has now been completed, which would offer a straightforward pathway for any regulatory requirement in this area.

The benefits of demand response have been demonstrated through initiatives over recent heatwaves. Programs such as the Energex's 'Peaksmart' program in Queensland provide compelling evidence of the benefits of demand management schemes to offset network infrastructure investment. In addition, with the increasing penetration of rooftop solar PV, the ability to activate products at times of excess rooftop solar PV capacity will become increasingly important to improve the security of energy supply. The importance of demand management

response programs in reducing peak demand is also recognised by the Finkel Review and has been nominated as a high priority of the recently-elected SA Government.

We consider a Demand Response Interface GEMS Determination, mandating compliance with AS/NZS 4755, should be re-considered to realise the significant network cost savings potential from demand response initiatives. While recognising that other aspects of the energy market regulatory framework may also be important drivers of these initiatives, an E3 Determination could provide the necessary national impetus towards more efficient, secure network management for the benefit of all consumers.