



**AREMA SUBMISSION IN RESPONSE TO THE ENERGY SECURITY BOARD'S  
2025 MARKET DESIGN CONSULTATION PAPER  
19 October 2020**

**About AREMA**

Established in 1967, AREMA (the Air-Conditioning & Refrigeration Equipment Manufacturers Association of Australia) represents the interests of air-conditioning and refrigeration equipment manufacturers and importers active in the Australian market. Our members include leading companies involved in supplying over 80% of air conditioners to the Australian market and a large number of refrigerant equipment suppliers. We work with government and industry on policy formulation and regulation to achieve the best outcomes for our members and the wider community.

Our aim is to:

- Help reduce the environmental footprint of air conditioning and refrigeration in Australia
- Encourage members to design and manufacture energy efficient equipment
- Encourage our members to deliver real energy savings to consumers
- Reduce ozone depleting substances (ODS) and greenhouse gases in a safe and controlled manner
- Work closely with government to ensure the safe implementation of standards that will benefit end users and product designers
- Work with other local and global associations to ensure we adopt world's best practice
- Provide a unified voice for representation to government and industry on key issues
- Represent the air conditioning and refrigeration industry on key standards committees and, where possible, assist members to interpret these standards.

## ISSUES

### 1. Need for action and consultation

AREMA accepts the need for changes to the management and design of Australia's electricity grid to manage both shifting patterns of electricity generation as well as demand.

Air Conditioner manufacturers have worked diligently with Governments over the past 20 years to reduce their electricity demand. There has been a series of 5 separate MEPS over the past two decades and they have been highly successful. The most recent analysis conducted for the Government shows that equipment is 60% more efficient than it was in 2020. Improvements like that do not just happen. They have been possible through close consultation between government and industry that looks at what is possible and drives what is achievable in a cost-effective way.

AREMA is quite concerned about the pattern of consultation on demand response. Engagement has been top-down with little consideration of the view from equipment producers. Manufacturers of devices, including air conditioners, have not been actively included in consultation: there have been no conversations about what is technically possible, at what cost and over what time frame. This approach represents unnecessary risk, as will be described later.

#### Recommendation

- That ESB and other bodies begin targeted consultation with equipment manufacturers to develop DER solutions that are possible, cost effective and can be delivered in needed time frames.<sup>1</sup>
- An Australian specific approach

### 2. A decisive Australian approach

AREMA understands that Australia has a compelling rationale for quick action in relation to better managing the Australian grid. We accept that – for better or worse – the Australian grid will need to adapt rapidly. AREMA cautions, however, that there are potential perverse outcomes in relation to air conditioners that have not been canvassed in any of the discussion papers presented on DER to date. In a more general sense, we recommend that ESB actively engage with other national electricity grid regulators to ensure developments in Australia benefit from world class advice and, insofar as possible, approaches followed in Australia are consistent with what is attempted elsewhere.

---

<sup>1</sup> The consideration by COAG energy ministers which resulted in the policy direction to mandate AS/NZs 4755 (2014) is an example of failed consultation. The process was woeful and only lip service was given to engaging with device manufacturers. The result is a standard that no manufacturer can meet, cannot yet be called up in regulation and delivers neither certainty nor good will. Unfortunately for ESB, the experience of GEMs consideration of AS/NZs 4755 coupled with insufficient current consultation makes manufacturers of air conditioners highly concerned that their issues will not be fairly considered and has resulted in a lack of trust pervading current engagements. Active, serious and genuine consultation can overcome this barrier, but it needs to happen promptly.

There is an assumption in most of thinking on responses to DER that all models of devices currently available in Australia will be fitted with whatever demand response capacity is mandated without regard for the details. This assumption is likely false. Australia is a tiny market (about 0.5%) globally. Unless manufacturers had confidence that an approach followed in Australia would be replicated in major international markets, it is unlikely that the research and development of the response capacities would be worth the investment. This would directly impact on the number of manufacturers in the market resulting in reduced competition and higher prices.

Indeed it is likely that those manufacturers remaining in the market would simply focus on those models where the greatest numbers are sold and profit is made. These devices, unfortunately, tend to be the ones that just meet MEPS. Higher efficiency equipment would likely become significantly less available. Failure to engage manufacturers in genuine consultation would result in a reduction in the energy efficiency benefits Australia currently enjoys.

### Recommendation

- AREMA is working with EPEE (the European Partnership for Energy and the Environment – AREMA’s European equivalent) to commence a project working collaboratively with European companies on how they are going to meet EU DER requirements. AREMA proposes that this project be expanded to include ESB, or other Australian representatives. We would invite EPEE to do the same with the European Commission. Such an approach would ensure both better consultation and make it more likely that requirements between Australia and the Europe were aligned.

### 3. Other initiatives and observations

Essential services – AREMA notes that electricity is an essential service. We would also observe that provision of cooling and heating is essential for health, food and pharmaceutical safety, a broad range of industrial processes, maintaining productivity, as well as human comfort. It is imperative that any proposed solutions ensures that these outcomes are not jeopardised by an approach to DER that fails to adequately consider the outcomes.

Consumers – AREMA takes this opportunity to remind the ESB that the ultimate assessment of DER will be made by consumers. AREMA notes there has been little discussion about or engagement with consumers to assess what changes in performance they are willing to support. Without consumer uptake the result of DER initiatives is likely to be higher consumer capital cost with little impact on electrical demand. We recommend a far more considered process of engagement with consumers. In undertaking this work it will be necessary to include device manufacturers as consumers care far more about what benefits the provision of electricity provides than the electricity itself.

Elements of a DER approach – AREMA suggests that DER be rolled out in a staged approach that considers both where need is time critical (most likely solar inverters) and what other mechanisms such as smart meters and innovative pricing through smart phone apps and the like can be implemented quickly and at low cost. The need for a quick solution means that care must be taken to only roll out what is needed – failure of a poorly considered component of DER would likely have dramatic consequences.

Solutions – As a general point AREMA would reiterate that genuine consultation is difficult but leads to better outcomes. There must be a focus of working collaboratively to deliver outcomes that are practical, deliverable, and consistent with other policy initiatives like energy efficiency. We recommend that ESB consult with the Australian Building Codes Board and Low Emissions Trajectory work to ensure that policy initiatives are aligned across the Federal Government.