

## **SUBMISSION ON SMART DEMAND RESPONSE CAPABILITIES FOR SELECTED APPLIANCES**

**Email Submission by: Ted Woodley (27 August 2019)**

Having attended the information session in Sydney yesterday, I wish to support the introduction of 'smart' demand response capabilities for selected appliances, as outlined in the Consultation Paper.

In particular, I support Option 3 to "mandate the presence of DR capabilities in the products which contribute (or are likely to contribute) most to peak demand, and for the products where DR could help alleviate network and power quality problems".

Having had a career in the energy industry it is clear to me that we are facing unprecedented challenges in maintaining a secure and reliable electricity supply with the transition from base-load coal-fired generation to intermittent and disaggregated renewable generation.

Every means of responding to variations in generation and load will need to be employed.

And demand response is one of the most underutilised yet effective means of doing so.

History shows that relying on a voluntary approach for such proposals will have only a modest impact. And, even if mandated it will take many years before a significant proportion of appliances with the requisite response capabilities will be sold and in service, and hence before a significant demand response can be achieved. The sooner this program starts the sooner the benefits will be realised.

Whilst there is a cost for fitting the necessary communication equipment this is easily covered by the projected savings in new electricity infrastructure (generation, storage, transmission and distribution).

I was involved with the introduction of energy labelling in the early 1980's and aware of the scaremongering that opposed that initiative. Possibly there will be similar reservations expressed about demand response, but it promises to be of even greater benefit than labelling, particularly in the future when rapid variations in generation and load will become prevalent and equally rapid response mechanisms will be required.

And it is also relevant to note that ripple control of water heaters has been around for more than 50 years, so there is nothing revolutionary about the proposal. Though, of course this proposal is far more refined and flexible than the existing ripple control system.

An important feature of the proposal is that the application of demand response to appliances is entirely in the hands of the customer.

I note that the roll-out is limited to new air conditioners, electric storage water heaters, pool pump controllers and electric vehicle chargers. I would encourage the extension of the program to other appliances, which may well have a lesser impact, but are still worthwhile pursuing. Also, there may be scope to retrofit existing appliances, albeit at a higher per-unit cost.

I am delighted to see this proposal resurrected after the earlier attempt in 2013 and trust it proceeds this time.

I am happy to expand on my comments if needed.

Ted Woodley

0419 663 539