



23/09/2019

The Government of South Australia

Via electronic lodgement

To whom it may concern,

'Smart' Demand Response Capabilities for Selected Appliances

Thank you for this opportunity to provide feedback on the proposal to mandate Australian Standard demand response capabilities for selected appliances.

As well as contracted transmission and distribution assets, Mondo deploys Distributed Energy Resources (DER), provides community-based energy services and is developing a market and network services offering that includes demand response. We strongly support the proposed mandating of demand response capabilities for selected appliances, which we believe will support the emerging role of Demand Response Service Providers (DRSP) and Distribution Markets.

The Need for Mandated Standards

A key barrier to the growth of demand response markets is the cost of recruiting and controlling devices. This barrier is more significant for household appliances where greater numbers of devices must be aggregated to supply meaningful volumes of demand response. Greater numbers of appliances result in higher integration costs (the cost of connecting and controlling devices). However, standardising and mandating capabilities through standards, will reduce integration costs. This is likely to result in more appliances being recruited and controlled by DRSPs, and ultimately a larger demand response market.

Mandating the proposed standard demand response capabilities, also facilitates open access to appliances by DRSPs making it easier for customers to switch between DRSPs and promoting competition. For this reason, standards are even more important, where smart home platforms develop significant demand response capabilities. Without a mandated standard, appliance manufacturers are likely to converge on particular brand aligned smart home platforms, which may lock customers in to preferred DRSPs. With the standard and open demand response capabilities mandated, customers will be able to choose how their appliance interacts with demand response markets.

Bright future.

Interface and Communications

The proposal includes two standards AS 4755.2 and AS 4755.3 and proposes that selected appliances must adhere to at least one of the standards. The standards differ with regard to the means of communication and control. AS 4755.3 requires that a Demand Response Enabling Device (DRED) can be physically connected to the appliance. AS 4755.2 requires an ability to communicate with appliances directly and without the need of a DRED, for example via WiFi.

Each standard has its own advantages. AS 4755.3 will allow DRSPs to select their own communication channels facilitating greater levels of local control and more rapid response. This may be needed in certain demand response applications. AS 4755.2 will facilitate remote integration of appliances into DRSP aggregation platforms, because there is no need to install a physical DRED. This will result in lower establishment costs and greater levels of demand response. Although this approach will have some limitations, it is likely to be suitable for many applications.

The cost advantages of remote integration are in fact likely to offer a significant business advantage. We note that there is a risk that this advantage is captured by closed 'smart home' platforms, acting in partnership with manufacturers. This arrangement would give the 'smart home' platform a substantial cost advantage over the integration of the affected appliances and thereby reduce competition from DRSPs, effectively locking-in customers to the appliance 'smart home' platform. We note that, under the proposed rule, the manufacturer would still be compliant, so long as they satisfied AS 4755.3. This could be done by simply enabling physical DRED access. Given the above, we would support an amendment of the proposed rule to require that manufacturers meet AS 4755.2 where selected appliances have the communications means to enable remote DRSP integration.

Further Steps

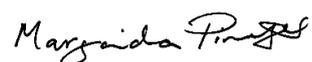
We understand that the standards are not currently being mandated for commercial cooling and refrigeration systems, or solar and storage inverters. However, we would support setting standards for these appliances. Where prescriptive standards are not feasible we would support the development of a requirement to provide 'open' access to important demand response functions.

Consultation and Standards Licence Conditions

We note that consultation on the draft AS 4755.2 standard closed recently. The draft standard, was made available for review during that consultation. However, recipients of that draft standard were required to agree to licence conditions which restrict use to just that consultation. Consequently, submitters to this consultation, are effectively prohibited from using the draft standard. This issue may be overcome by expanding the Australian Standard licence conditions to allow for consultation by any Australian government authority. Alternatively, we would also support moves to develop a more open licencing regime for Australian Standards.

Please feel free to contact Daniel Brass, our Market Insights Lead, (daniel.brass@mondo.com.au, ph:04 88135557) if you have any questions in relation to this submission.

Regards,



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