



Consultation on proposed demand response capabilities for selected appliances in South Australia

The Electric Vehicle Council is the national body representing the electric vehicle industry in Australia. Representing members involved in producing, powering and supporting electric vehicles, our mission is to accelerate the electrification of road transport for a more sustainable and prosperous Australia.

The EVC welcomes the opportunity to respond to the *Proposed Demand Response Capabilities for Selected Appliances in South Australia* consultation paper.

The electrification of transport in South Australia is imperative to reduce transport emissions which account for 30% of the state's emissions.¹ Transport electrification also delivers other important benefits, including improved air quality, lower vehicle running costs, improved fuel security, and opportunities for the electricity grid.

However, Australia is well behind the rest of the OECD when it comes to electric vehicle (EV) adoption. In 2020, a total of 6,900 EVs were sold nationwide, representing 0.7% of total car sales. South Australia represents a small subset of the national market; in 2019, just 412 electric vehicles were sold in South Australia (0.61% of the total vehicle sales).²

In order to achieve the South Australian Government's stated target of 100% EV sales by 2035, it is imperative that the Government urgently implements policies and regulations that encourage, not discourage, EV uptake.

If South Australia is to go it alone and mandate compliance with AS/NZS 4755.3.4 or AS/NZS 4755.2 by 2024, this will add costs to supplying EV chargers to the South Australian market and further disincentivise the EV industry from the already small South Australian market.

EV manufacturers already view Australia as a relatively risky market for EV sales given the absence of national EV policies, which results in limited model availability for consumers. If South Australia is to implement its own requirements on the EV industry, then many suppliers will have no choice but to pull out of the state's market altogether.

This proposal also comes on top of the South Australian Government's proposed EV tax which will increase costs for EV drivers. As a result, EVs will be placed out of reach for many South Australian consumers.

¹ Government of South Australia (2020) *South Australia's Electric Vehicle Action Plan*: https://www.energymining.sa.gov.au/_data/assets/pdf_file/0020/376130/201216_Electric_Vehicle_Action_Plan.pdf

² This figure does not include Tesla sales as Tesla does not provide regional sales.

EVC Recommendation

The Electric Vehicle Council does acknowledge the important, valuable and necessary role of demand-side participation by EV customers to enable EV charging demand while also meeting the energy system-wide objectives of security, reliability and affordability.

However, the Electric Vehicle Council does not support the South Australian Government's proposal to implement demand response (DR) requirements two years earlier with a yet-to-be designed standard for the below reasons outlined in this submission.

Instead, the Electric Vehicle Council urges the South Australian Government to work to the previously agreed timeline, aligning with other state and territory governments and working with the EV industry to identify equivalent developing international standards that can provide alternative viable compliance pathways for EV charging equipment manufacturers.

Insufficient benefits of acting early

The Electric Vehicle Council does not accept that bringing forward the implementation of DR requirements will deliver sufficient benefits to EV owners and other energy consumers to justify both the costs involved with complying with this requirement, and the subsequent impact that this will have on the South Australian EV market.

It is unlikely to deliver significant benefits because it will not result in adequate MW reductions for the following reasons:

- Without a significant step change in federal and state policy to offer large subsidies for buyers of EVs, it is impossible to conclude that there will be significant EV penetration in South Australia's vehicle fleet over the next 4-5 years.
- The pool for participating EV owners is even smaller because it will require them to use a DR-compliant charger (rather than a power point or non-compliant charger); have activated their EV charger to a DR scheme; and be charging their EV at home at the time that the DR request goes out.

EV charging is remarkably different to air-conditioners (in terms of use profiles, consumer preferences and technical capability) so the same assumptions should not be applied. The consultation paper does not include enough analysis of EV charging.

The costs of complying with expediting the DR requirement for EV charging must not be ignored. Ultimately these costs will be passed on to consumers who are already paying significant costs for an EV at a time when governments need to be minimising the costs associated with buying an EV in order to make EVs accessible to a greater number of consumers.

While EV sales are expected to increase significantly in the 2020s, there remains time to consider the best way forward to address peak demand issues arising from significant EV penetration. Therefore, the Electric Vehicle Council can see no justification for bringing the previously agreed timelines forward in one state alone.

This does not mean that we should delay discussions as we do not want to find ourselves with legacy issues of incompatible equipment; but it does mean that we have some time to

consider at a national level the developing international standards and work through what options are best for the EV industry, the energy market and energy consumers. The expedited timeframe proposed by South Australia does not allow this.

National, international and technological misalignment

The Electric Vehicle Council's feedback to Energy Ministers was that the proposal to require EV charging equipment to comply with DR 4755 could add an additional and unique burden to the Australian EV industry as DR 4755 in its current form is not fit for purpose for EV charging. Neither DR 4755.3 or DR 4755.2 which is currently under development, includes EV charging in its scope. Mandating compliance with this standard therefore feels premature.

Given Australia's role as a technology-taker in the EV market, it is vital that any Australian regulatory requirements align with international standards/conventions such as the *Open Charge Point Protocol* (OCPP), IEC 15118 and IEC 61850-90-8 which include smart charging functionality.

EV charging is an evolving marketplace with significant levels of technological and commercial innovations occurring and expected over the next five years at least. Placing a premature and unique standard in this market risks reducing the level of innovation in electric vehicle charging products available in the Australian market.

The agreement by the Energy Ministers to allow scope to determine an equivalent international standard that meets required outcomes is a sensible inclusion and provides a pathway to ensure that Australia will not go it alone and detract the EV industry's interest in the Australian market.

For the South Australian Government to now suddenly propose bringing forward the DR requirements in EV chargers ahead of national action adds to an already difficult operating environment for the EV industry and raises concerns about inconsistent regulations across states.

The decision to assign the South Australian Office of the Technical Regulator to determine an equivalent international standard will further exacerbate this risk. Instead, this important work should be happening at a national level in partnership with the EV industry as indicated in the Energy Ministers 2019 agreement.

Barrier to competition in a relatively new market and loss of choice for consumers

The claim stated in the report *Demand Response Capabilities for Selected Appliances – South Australia Specific Analysis* that there is 'low risk of supplier withdrawal' is incongruous with feedback from the suppliers themselves.

The Electric Vehicle Council's feedback to the Energy Ministers was that while Australian companies have made significant contributions to EV charging, we remain reliant on including international products to ensure a local competitive market that provides consumers with choice of EV charging products. Adding a specific Australian requirement to EV charging products will impact on competition in the local EV charging market.

Given the relatively small consumer market for EV charging equipment in Australia, it is likely that some manufacturers will opt not to augment their design and manufacturing processes to meet unique Australian standards and may instead withdraw from the Australian market.

In addition, many car manufacturers have international supply contracts in place with EV charger suppliers. This proposal could affect these contracts in Australia, impacting on the viability of supplying electric vehicles from these car manufacturers to Australia.

Adding an additional requirement to the Australian EV market would signal to car makers yet another barrier to supply EVs to Australia. In contrast, other jurisdictions around the world are making efforts not only to remove barriers, but to also provide incentives for EV adoption.

By South Australia moving alone to expedite DR requirements, the above risks are even greater. Both car manufacturers and charging manufacturers/installers have emphasised that bringing forward the timeline in South Australia will make it more difficult to serve this market, particularly in lieu of other policies targeted at bringing down the costs of EVs.

Conclusion

Thank you for the opportunity to comment on the *Consultation on: Proposed Demand Response Capabilities for Selected Appliances in South Australia*.

Please contact Larissa Cassidy, Manager of Policy, at Larissa@evc.org.au for further discussion.