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Australian Energy Market Operator

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Via email: Forecasting.Planning@aemo.com.au

EVC Submission to 2025 Inputs Assumptions and Scenarios Report (IASR) consultation

With reference to this consultation, we ask that in addition to considering the feedback the EVC has provided to past IASR and ISP processes, the AEMO team consider the EVC's submission to the current AEMC rule change request prompted by Minister Bowen, with respect to forecasting around EVs and EV charging behaviour:

https://electricvehiclecouncil.com.au/submissions/evc-submission-to-enhancing-the-integrated-system-plan-to-support-the-energy-transition-improving-consideration-of-demand-side-factors-in-the-isp-erc0396/

With relation to the specific questions in the 2025 IASR consultation:

Since the 2023 IASR publication, what changes (such as environment, social, policy) do you consider most impact scenario development for the 2025 IASR scenarios?

NVES legislation relating to light vehicle efficiency has been passed. Significant analysis has been done relating to this, projecting credible numbers of BEVs and PHEVs in the vehicle mix over the near term. Further detail here:

https://electricvehiclecouncil.com.au/wp-content/uploads/2024/03/Electric-Vehicle-Councils-Response-to-New-Vehicle-Efficiency-Standard-Impact-Analysis-2024.pdf

V2G is part of the public narrative now, with Minister Bowen openly engaging on this topic in the media, ARENA support for domestic uptake of V2G through Amber announced, and explicit support for V2G in the immediate term in the National CER Roadmap. It's not credible to suggest that V2G will be insignificant until post-2030, per current AEMO forecasts, when it's clear that we'll have V2G in market in 2025 and that we have government highly supportive of it. A more plausible scenario analysis would include a variety of levels of V2G at 2030, with an upper bound of perhaps 10% of electric vehicles on road participating in V2G at that time.

Consumer behaviour around home EV charging is going to be heavily influenced by availability of retail tariff products that encourage and reward grid-friendly charging. Rapid uptake of retail offers designed specifically for EV drivers over the last 12 months (Ovo, Engie, AGL night saver, Origin EV plan, Powershop) demonstrates this. Scenario analysis should consider a high degree of consumers avoiding peak time charging at home, without handing over control, being a plausible outcome – because it's the probable outcome, based on the behaviour we're already seeing today.

Is AEMO's proposal as described above a suitable evolution of each scenario's parameters that will effectively support AEMO's functions in planning the transition?

What additional changes should be considered?

With respect to table 3:

"Consumer energy resource investments (batteries, PV and EVs)"

We note that 'step change' is generally treated as 'central case'. With this in mind, it would be appropriate to align forecast consumer investment in EVs in the step change scenario with existing state and federal government policy, which is generally designed to achieve 50% of light vehicle sales being a combination of BEV and PHEV at 2030. The current treatment of the "step change" scenario overstates expected EV uptake to an implausible extent.

Per our submission to the ERC0396 process, we specifically recommend that AEMO engage with a consultant or consultants competent in the transport sector to develop credible forecasts with respect to EV uptake.

"Coordination of CER (VPP and V2G)"

It's a consistent theme from AEMO that consumer loads must be orchestrated to secure system benefits.

With EVs, this is simply not the case. The bulk of the available benefit of associated with time shifting load can be achieved through simple ToU incentivisation. It's perfectly plausible that a proportion of V2G might operate in a similar mode, exporting in the afternoons, and recharging during off-peak periods, without engaging in a VPP. We note that >80% of home batteries operate this way today, charging during the day, discharging in the afternoon peak, without participating in a VPP – because the majority of consumers do not want to participate in a VPP, and do not need to in order to derive acceptable value from the investment they've made.

Many consumers will be reluctant to hand over control, because they do not trust that their interests will be prioritised. It is not difficult to see why, in a context where prices have gone up, and thousands of consumers have been pushed onto higher cost billing arrangements without advance notice. Per the AER's advice to ministers late last year, the right place to start with respect to orchestration is consent, before control. We note that the word "orchestration" appears in the ISP nine times, while the word "consent" does not appear once. It might be useful for some additional social science perspectives to be brought into the AEMO process.

The reason for noting this is that an assumption around “low or moderate long term co-ordination” does not necessarily automatically mean “bad outcomes for the energy system” – which is what we’d expect the narrative to be from AEMO, based on AEMO’s recent work. We’d suggest that if consumers generally respond to price signals with respect to EV charging and discharging, that will deliver the bulk of the available benefit. What’s going to be critical is ensuring that the retail tariffs are available, and that consumers are encouraged to seek them out.

If you have any questions on this submission, please contact Ross De Rango, Head of Energy and Infrastructure, at office@evc.org.au.

Thank you for your consideration of our submission.

Yours sincerely,

Samantha Johnson

Chief Executive Officer

Electric Vehicle Council