

2026 Benchmark Technology Review

State Electricity Objective, emissions threshold and consumer DER

KEY RECOMMENDATIONS

1. Reconsider removal of the 0.55 tCO₂e/MWh emissions threshold, or replace it with an equivalent transparent mechanism that gives practical effect to the environmental limb of the State Electricity Objective.
2. Demonstrate how the long-term environmental costs to consumers are considered alongside electricity price, reliability and security.
3. Explain how rapid growth in residential and commercial batteries, VPPs, EV charging flexibility and other demand response is reflected in future peak-demand and capacity assumptions.
4. Give greater recognition to demand-side resources when considering how much additional firm capacity consumers ultimately need to fund.

About Electrify Everything WA

Electrify Everything WA (EEWA) is a volunteer, not-for-profit organisation advocating for widespread and equitable electrification of Western Australian households, businesses and transport to reduce energy costs and emissions. This submission is confined to high-level consumer and distributed energy resource (DER) considerations in the 2026 Benchmark Technology Review.

1. State Electricity Objective and the emissions threshold

EEWA recognises that the Benchmark Technology is a notional reference technology used to determine the Benchmark Reserve Capacity Price and does not prescribe the technology that will actually be built in the SWIS. Nevertheless, the choice of benchmark technology is important because it establishes the reference against which capacity costs are determined and reflects the assumptions being applied to the future electricity system.

EEWA is concerned by the decision not to apply the proposed 0.55 tCO₂e/MWh emissions threshold used in the 2025 Benchmark Technology Review. DEED explains that the threshold has not progressed sufficiently through the policy process and acknowledges that its removal makes several Single Cycle Gas Turbine technologies, including E-Class turbines, eligible for consideration when they were previously excluded.^[2]

EEWA accepts that the 0.55 tCO₂e/MWh threshold has not become a formal requirement. However, the absence of a formally adopted threshold is not sufficient reason to remove an emissions constraint without an equivalent transparent means of assessing the greenhouse gas consequences of the resulting Benchmark Technology.

The State Electricity Objective provides:

“The State Electricity Objective is to promote efficient investment in, and efficient operation and use of, electricity services for the long-term interests of consumers of electricity in relation to: (a) the quality, safety, security and reliability of supply of electricity; and (b) the price of electricity; and (c) the environment, including reducing greenhouse gas emissions.”^[1]

The structure of the Objective is important. The price of electricity and the environment, including reducing greenhouse gas emissions, are distinct considerations in determining the long-term interests of consumers. “Cost to consumers” therefore cannot reasonably be construed as financial cost alone. Consumers also bear the economic and social consequences of climate change and the future costs of inadequate or delayed emissions reduction.

DEED states that the environmental limb of the State Electricity Objective continues to be considered despite removal of the threshold. Given that removing the threshold materially changes which technologies are eligible for selection, EEWA considers that the Review should demonstrate much more clearly how the environmental limb has influenced the determination. At a time when governments are adapting policy and infrastructure to climate risk, consumers can reasonably expect electricity-system decisions to give practical effect to emissions reduction as well as affordability and reliability.^[2]

EEWA recommends that the 0.55 tCO₂e/MWh threshold be reconsidered or replaced with an alternative transparent mechanism that assesses greenhouse gas consequences and shows how those consequences have been weighed alongside price, reliability and security.

2. Consumer DER and demand response

EEWA considers that future capacity requirements should increasingly be examined from both sides of the electricity system. Reliability can be supported by constructing additional generation and large-scale storage, but also by reducing or shifting electricity demand during critical periods.

Household batteries, electric vehicles, smart charging and other flexible electrical loads are creating a rapidly growing source of demand flexibility. When coordinated through demand-response arrangements or Virtual Power Plants (VPPs), large numbers of relatively small consumer resources can collectively reduce peak grid demand or supply stored energy when it is most needed.

The scale and speed of this change is significant. The Australian Government's Cheaper Home Batteries Program passed 500,000 installations in August 2026, only around 13 months after commencing. The expanded program is expected to support more than two million battery installations by 2030, delivering around 40 GWh of additional distributed storage capacity.^{[3][4]}

This potential is also extending to commercial and industrial premises. Federal battery support is available to non-residential premises, while expanded support for commercial rooftop solar systems up to 1 MW will increase the number of factories, warehouses and businesses able to combine substantial on-site generation, battery storage and flexible demand. Aggregated through VPPs or other demand-response arrangements, these sites could become a significant source of flexible capacity.^{[5][6]}

EEWA is not suggesting that DER can replace all requirements for firm capacity. Rather, rapid growth in distributed storage and flexible demand can influence how much additional peak capacity consumers ultimately need to fund. The Consultation Paper includes Demand Side Programmes in its modelling, but it is not clear how the expected growth of residential and commercial batteries, VPP participation and flexible EV charging is reflected in future demand and capacity assumptions.^[2]

EEWA recommends that the Coordinator clearly explain how these emerging demand-side resources are represented and ensure that future capacity planning considers reducing and shifting peak demand alongside investment in additional supply-side capacity.

Conclusion

EEWA recognises the limited and notional role of the Benchmark Technology. Our concern is that the methodology used to select that benchmark should nevertheless be consistent with the State Electricity Objective and reflect the rapidly changing nature of the electricity system. We ask that the determination recognise the key elements of the energy transition: the explicit requirement under the State Electricity Objective to reduce greenhouse gas emissions, and the rapidly increasing ability of consumers and businesses to support system reliability through DER and demand response.

Submission approved by the EEWA Management Committee by circular resolution.

Sources consulted

[\[1\] Government of Western Australia, Electricity System and Market Rules, clause 1.2.1 – State Electricity Objective.](#)

[\[2\] Department of Energy and Economic Diversification, 2026 Benchmark Technology Review – Draft Determination for consultation.](#)

[\[3\] Australian Government, “Half a million cheaper home batteries bringing down bills for Australian homes and businesses”, 14 August 2026.](#)

[\[4\] DCCEEW, “Six months of the Cheaper Home Batteries Program”, 15 December 2025.](#)

[\[5\] DCCEEW, “Eligibility information for the Cheaper Home Batteries Program”, updated 1 May 2026.](#)

[\[6\] Australian Government, “Putting more roofs to work”, 5 August 2026.](#)