

Re: Public consultation – Making it easier to connect solar, batteries and EV chargers

Dear Energy Policy WA Team,

Thank you for the opportunity to comment on the issues paper, *Making it easier to connect solar, batteries and EV chargers*. This submission is made in my individual academic capacity. The views expressed are my own and do not represent the University of Western Australia.

I support the direction of Proposal 2 under Principle 1 and Proposals 5 and 4 under Principle 2. I do not comment on the other proposals, the adequacy of particular technical standards, or the proposed capacity thresholds.

The issues paper usefully identifies that better distributed energy resources (DER) data and easier connections are interdependent. The remaining design risk is that a reform intended to improve information quality creates another layer of data entry, verification and administrative hand-offs. I therefore suggest that the detailed design aim to improve a defined regulatory, planning or connection decision at the lowest practicable total information processing cost. This is not a case for less assurance. It is a case for directing assurance, standardisation and disclosure to where they change decisions and justify the burden they impose.¹

Proposal 2 – proportionate assurance for Western Power's data functions

I support new Western Power functions to collect, validate and share DER standing data. The policy question is not whether validation is required, but how to obtain sufficient assurance without requiring every participant to repeat the same proof. This approach would be consistent with the current DER Register framework, under which the Australian Energy Market Operator (AEMO) must weigh the reasonable costs of efficient compliance against the likely benefits when developing or amending the relevant Wholesale Electricity Market Procedure.² Empirical regulatory research supports targeted rather than uniform assurance. In a study of randomly allocated workplace inspections, Johnson, Levine and Toffel found that inspections materially reduced serious injuries and that directing inspections towards workplaces with the highest expected benefit could have produced substantially larger gains without increasing inspection volume.³ The setting differs from DER, but the transferable mechanism is clear: scarce assurance capacity should be concentrated where uncertainty or consequence is greatest.

I suggest that the Department of Energy and Economic Diversification (DEED) consider three design features:

1. Validate routine information through reliable existing sources. Where technically and legally appropriate, Western Power could use connection, commissioning, registration or machine-generated records to check routine data without asking an applicant or intermediary to submit the same evidence again.
2. Escalate exceptions and material cases. Additional evidence or manual review could be reserved for defined conditions such as missing or conflicting records, implausible values, material changes, or information with greater planning or operational consequences.
3. Measure assurance efficiency. The new function could be assessed using a small set of operational measures: repeated information requests, manual intervention, and correction or processing time. Data volume alone would not demonstrate performance.

¹ Department of Energy and Economic Diversification, *Making it easier to connect solar, batteries and EV chargers: Issues paper on connections and data quality for distributed energy resources* (20 July 2026).

² Electricity System and Market Rules (1 July 2026), cl 3.24.9(a).

³ M.S. Johnson, D.I. Levine and M.W. Toffel, 'Improving Regulatory Effectiveness through Better Targeting: Evidence from OSHA' (2023) 15(4) *American Economic Journal: Applied Economics* 30–67.

These recommendations concern the allocation of information processing effort. They do not prescribe data fields, tolerances, algorithms or engineering thresholds.

Proposal 5 – screening grade network capacity information

I support formal requirements for Western Power to publish forecast and historical distribution-network capacity information. The objective should be to improve an identifiable pre-application decision, not simply to publish more data.

Evidence from other markets shows that timely, location-specific information can reduce search and matching costs. Jensen's study of mobile phone access in South Indian fisheries found that improved access to market information reduced price dispersion and waste and improved producer and consumer outcomes.⁴ The direct context is different, but the relevant mechanism is the same: information creates value when it helps users redirect activity before incurring avoidable costs. At the same time, empirical work on public performance reporting shows that disclosure can produce unintended responses when users or providers act on indicators that do not fit the decision context.⁵ This supports a deliberately bounded form of capacity transparency.

I suggest that DEED consider three design features for Proposal 5:

1. Design the information for screening, not approval. It could help a business rule out clearly unsuitable locations, compare plausible alternatives, or decide whether detailed investigation is warranted before paying for design work and a formal application. It should not be represented as a connection guarantee.
2. Provide the minimum context needed for interpretation. The publication could identify the capacity concept, update date, intended use, and principal limitations or uncertainty, and be clearly linked to Western Power's existing network capacity and opportunity tools.
3. Measure avoided connection friction. Success could be assessed through avoidable preliminary enquiries, applications abandoned because of constraints that could reasonably have been visible earlier, and the time or cost required for initial site screening.

I do not recommend a particular network model, disclosure granularity, update frequency or safe level of public detail. Those matters require engineering, privacy, cybersecurity and critical infrastructure assessment.

Proposal 4 – a step removal test for standardised data

I support a standardised, lower-cost pathway for larger but relatively routine DER connections. Standardisation is valuable when it simplifies the underlying process; it should not convert fragmented administration into a larger standardised form.

Relevant empirical research offers useful support. Cotteleer and Bendoly's longitudinal study found that enterprise system implementation produced an immediate improvement in order-fulfilment lead time and enabled continuing process improvement.⁶ Rai, Patnayakuni and Seth, using data from supply chain and logistics managers, found that integrated information infrastructure supported cross-organisational process integration, streamlined complex work processes and improved operational performance.⁷ The national consumer energy resources data-sharing final report similarly emphasises harmonised asset registration and commissioning that avoids costly hand-offs and duplication while preserving implementation flexibility.⁸ The policy translation is not that DER connections need a new enterprise platform. It is that common information should be designed around process integration and measurable step reduction.

4 R. Jensen, 'The Digital Divide: Information (Technology), Market Performance, and Welfare in the South Indian Fisheries Sector' (2007) 122(3) *Quarterly Journal of Economics* 879–924,

5 D. Dranove, D. Kessler, M. McClellan and M. Satterthwaite, 'Is More Information Better? The Effects of Report Cards on Health Care Providers' (2003) 111(3) *Journal of Political Economy* 555–588.

6 M.J. Cotteleer and E. Bendoly, 'Order Lead-Time Improvement Following Enterprise Information Technology Implementation: An Empirical Study' (2006) 30(3) *MIS Quarterly* 643–660.

7 A. Rai, R. Patnayakuni and N. Seth, 'Firm Performance Impacts of Digitally Enabled Supply Chain Integration Capabilities' (2006) 30(2) *MIS Quarterly* 225–246.

8 Consumer Energy Resources Taskforce, *Data sharing arrangements to inform planning and enable future markets: Final report to progress M2 workstream of the National CER Roadmap* (Commonwealth of Australia, 2025) 55, 59.

I suggest that DEED consider three design features for Proposal 4:

1. Link every applicant facing field to a defined decision. A field should support a specified connection, validation, planning or operational use, rather than being collected because it may be useful at an unspecified future time.
2. Reuse reliable information and standardise the interface. Information already held through a reliable process could be reused where practicable. Standardisation could focus on necessary definitions and information interfaces, without unnecessarily prescribing firms' internal technologies or workflows.
3. Require an identifiable process benefit. A new or standardised field should normally remove or automate a repeated request, manual check or organisational hand-off. Where it does not, its incremental burden should be specifically justified. Performance could be assessed through repeated requests, rework and end-to-end connection time.

This recommendation supports the design principle only. It does not endorse particular capacity bands, communication standards or abbreviated technical assessments.

Implementation and conclusion

Before implementation, DEED and Western Power could consider establishing a lean baseline using existing administrative data wherever possible. After the first full year of operation, the three reforms could be reviewed against their stated decision purposes and burden measures. Requirements found to be unused, duplicative or more costly than anticipated could then be revised or retired. A staged approach would also be consistent with DEED's 2025 response to implementation time concerns, when commencement dates were revised and a grace period was provided following consultation.⁹

The academic evidence cited above supports the underlying mechanisms – targeted assurance, lower search costs and process integration – but does not prove that a particular technical design will work in the South West Interconnected System. Detailed rules and procedures could therefore be calibrated through consultation and practical testing with Western Power, AEMO, retailers, installers and representative business applicants.

The consultation materials set out a clear case for better data, greater capacity visibility and easier business connections. The key design challenge is to achieve these benefits without creating a new information burden problem. A practical way forward would be to validate routine data proportionately and escalate exceptions; use capacity information to support screening without implying approval; and ensure standardisation removes a step.

Thank you for the opportunity to comment on the proposals.

Yours sincerely,

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⁹ Department of Energy and Economic Diversification, Electricity System and Market Rules for Distributed Energy Resources – Roles and Technical Requirements: Consultation Summary Paper (December 2025) 8.