



National Technical Regulatory Framework: Draft Prototype

Clean Energy Council Submission

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CER Taskforce
Department of Climate Change, Energy, the Environment and Water
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Submitted online via Have Your Say

Response to CER National Technical Regulatory Framework Draft Prototype

The Clean Energy Council (CEC) welcomes the opportunity to provide feedback to the Department of Climate Change, Energy, the Environment and Water's (DCCEEW) Consumer Energy Resources (CER) National Technical Regulatory Framework Draft Prototype.

The CEC is the peak body for the clean energy industry in Australia. We represent and work with Australia's leading renewable energy and energy storage businesses, as well as accredited designers and installers of solar and battery systems, to further the development of clean energy in Australia. We are committed to accelerating the transformation of Australia's energy system to one that is cleaner, equal, fair and transparent for all consumers.

The need for coordination of consumer energy resources (CER) technical standards, and the benefits of managing this coordination through a single National CER Technical Regulator, has long been a critical priority for the CER sector. CER is a critical part of Australia's energy mix. Rooftop solar remains on track to deliver its contribution to the national target of 82 per cent of electricity coming from clean energy sources by 2030. The Australian Energy Market Operator's 2024 Integrated System Plan expects that, by 2030, Australia will have approximately 36 GW of rooftop solar installed across the National Electricity Market¹. Based on current uptake, we expect Australia to have installed 37.2 GW of rooftop solar by June 2030, exceeding projections by 3.3 per cent².

The CEC is supportive of the proposed framework, reflecting the co-design process and depth of industry engagement that has been achieved to date. The proposed framework seeks to consider functions beyond an individual regulator and considers the challenge of CER integration and desired system outcomes.

We understand the timeframe for delivery of the National Technical Regulatory Framework has been prioritised under the National CER Roadmap,³ however establishment of the National CER Technical Regulator will not meet immediate and near-term requirements for national standardisation. Hence, transitional arrangements will need to be developed for existing and emerging Technical Requirements, surrounding Emergency Backstop Mechanism, batteries, Virtual Power Plants (VPP) and other national

National Consumer Energy Resources (CER) Roadmap Implementation Plan Update August 2025.docx



¹ AEMO | 2024 Integrated System Plan (ISP)

² cec_rooftop-solar-and-storage-report_jan_june2025.pdf

technical workstreams until 2027. These arrangements should seek to prioritise national consistency to ensure a harmonised transition when the National CER Technical Regulator is established and performing regulatory functions.

We raise for consideration the importance of clearly defined roles and responsibilities under the National Technical Regulatory Framework, aligned with industry feedback provided in the National CER Roadmap M3/P5 workstreams. The outcomes of the M3/P5 workstreams will clarify, formalise and standardise expectations around roles and responsibilities for the industry and should inform the governance structure around a National Technical Regulatory Framework.

Currently, there is no governance structure proposed within the draft prototype. As this workstream progresses, it will be critical to define and establish pathways for actors and actions across the entire industry and outline how enforcement arrangements will apply within the framework. Ideally, the governance structure should clearly illustrate how the National CER Technical Regulator will fit into the industry and ensure end-to-end conformance of CER products and services. It is essential to achieve national consistency that a full, group up approach to governance of the compliance regime is considered as part of the National Technical Regulatory Framework.

Key Recommendations

The definition and creation of Technical Requirements should be managed and coordinated by the National CER Technical Regulator

The draft prototype is missing discussion of the creation of Technical Requirements on Australian CER equipment and the ability for different entities to produce their own set of technical requirements and implementation timeline (e.g. AEMO, ERAC, ESV, DNSPs, State, Territory and Federal programs). The definition and creation of Technical Requirements should be managed and coordinated by the National CER Technical Regulator to ensure national coordination for industry to respond accordingly to development and implementation demand. This can be achieved through the proposed National CER Technical Code.

National Harmonisation is critical

This will require coordination across multiple workstreams within the National CER Roadmap (as previously outlined) and leveraging the work of the Energy and Climate Change Ministerial to ensure States and Territories are appropriately engaged in the process and implementation until 2027. This objective cannot be achieved if Distribution Network Service Providers (DNSPs) or State Regulators are able to modify or add requirements deviating from National CER Technical Code, reiterating the importance of a governance structure to support the National Technical Regulatory Framework. It is recommended the National CER Technical Regulator should play a role in ensuring CSIP-AUS requirements for backstops and Dynamic Operating Envelopes (DOE) are applied and interpreted consistently across DNSPs.

Consider a gradual implementation of regulatory functions

In the short-term, it may be difficult to enforce the requirement to update the Installed Device Register every time there is a remote update (e.g., software update or device settings). To best reduce the



likelihood of poor data quality and uptake, it is recommended to implement the Installed Device Register gradually, such as initially creating an obligation to collect information at the time of installation and servicing on-site. Gradual implementation would allow the first obligation to be collected with high compliance and data quality, prior to expanding to obligations surrounding servicing and updates. It is our recommendation that the Mandatory Updating of CER Connection Information (Regulatory Function 4) only be implemented after the relevant uplift of AEMO's DER Register and the data sharing arrangements (M2) workstream and associated projects are developed. This should also consider the responsible parties for direct input into the register and relevant access to information supplied.

The Framework should seek to streamline regulatory processes

The Framework should aim to reduce burden on industry to improve end-to-end conformance by upskilling and streamlining regulatory processes and removing duplication where possible. This should build on existing accreditation and listing pathways and support recognised programs (e.g. CSIP-AUS profile, conformance tests and reference utility server) to create streamlined definitions across industry. The CEC is agnostic on the need for a new dedicated entity or integration within an existing regulator; however, we emphasise the importance of attracting a skilled workforce with the right technical and stakeholder knowledge to streamline processes and provide educational and advisory functions.

It will also be critical to have appropriate resources put on drafting of new technical requirements. This is particularly important for requirements that are developed by Standards Australia. These are done by volunteer committees which results in long-project lead times. Ensuring that resources are available for drafting and running stakeholder consultation processes will speed up the development of new standards.

Support for Accredited Designers & Installers

The framework outlined in the draft prototype is critical to multiple stakeholders in the distributed energy and CER industry. Currently, the Small-scale Renewable Energy Scheme (SRES) Designer & Installer accreditation scheme is administered voluntarily and although Australian Standards and Technical Specifications are called up by all State and Territory Electrical regulators for the design and installation of CER, the interpretation of these Standards is not nationally consistent.

This has the potential to cause confusion amongst Accredited Designers & Installers. We note an emerging trend as CER retailers are beginning to conduct their businesses across multiple jurisdictions within Australian States and Territories; additional complexity arises with each State and Territory having its own bespoke view and interpretation of Australian Standards and Technical Specifications.

While the product standard has a single source of interpretation through the CEC listing process, the installation standard can diverge dependent on the DNSP or individual electrical inspectors. Hence, it is a critical responsibility of a National CER Technical Regulator to reduce "grey areas" in installation standards and govern this process to create a single source of truth.

The CEC is supportive of a National CER Technical Regulator that not only develops and enforces technical standards and specifications for CER; but that can also provide consistent training, and advice as this will ensure compliance is unilateral and mitigates misinterpretation between locales.



Currently, there is no provision of 'on-demand' technical assistance for CER installers, nor response pathways to written questions from professionals requesting technical advice. This has left industry peak bodies and other Electrical industry representative bodies to field questions and provide advice; albeit, without technical data or the ability to consult Electrical regulators formally in most State and Territories.

The National CER Technical Regulator should seek to resolve this issue by becoming the instrument to advise on approved installer training, including initial accreditation courses and continuous professional development (CPD) and disseminate accurate CER design and installation advice. Original Equipment Manufacturers (OEM) would also continue to develop instruction manuals and training materials that would refer and adhere to nationally consistent regulation, continuing to boost confidence in suppling products to the Australian consumer.

A national CER accredited workforce of designers and installers completing CER installation and servicing work on domestic and commercial premises would reduce gaps in current workforce shortages by enabling CER accredited persons to 'cross-borders' to perform these works, not only in high density populations, but also to regional and remote communities.

Defining System Outcomes

The CEC is generally supportive of the system outcomes outlined in the draft prototype as necessary elements of a functional CER system. We encourage consideration to be given towards an outcomes-based model when defining the successful development of these outcomes, utilising the indicators of success highlighted in the draft prototype.

CER is attractive for consumers

This is the current state and well demonstrated in the Australian landscape as over 4.2 million households and small businesses have invested in rooftop solar⁴. Continued attractiveness of CER will be reliant on payback periods, the cost of electricity and accessibility of products and services. As these indicators as less reliant on technical requirements, the linkage between this system outcome and the national technical regulation framework should be more clearly defined.

An additional indicator of success for this system outcome can arise from interoperability of CER, demonstrated post CER installation via data collection including the ability to switch and retain flexible exports or emergency backstop functionality after changing providers. Consumer-centric indicators are essential to measure the success of this outcome.

Supplying CER devices and services is economically attractive for business

A key consideration under this system outcome is balance of the appropriate regulatory settings with regulatory cost for industry. National consistency should aim to streamline cost, time for commissioning and time for approvals. This system outcome should also seek to promote the evolution and competitiveness of new entrants to support consumer-centred solutions, hence it may be relevant to consider indicators of success in relation to the M3/P5 workstream of National CER Roadmap.

⁴ Clean Energy Council Rooftop solar and storage report - January to June 2025 | Clean Energy Council



CER devices are installed, configured and connected correctly

This is an essential outcome to promote industry and consumer confidence. AEMO's Compliance of Distributed Energy Resources with Technical Settings: 2025 Update demonstrated that 80-90% of new DER inverters installed in early 2024 were correctly configured⁵, indicating this system outcome is already being achieved. When considering the role of a National CER Technical Regulator for this system outcome, the focus of success indicators should be around how compliance will be measured, resourcing and training for compliance enforcement.

CER devices connected to the grid are visible, coordinated and secure, and support system security

This system outcome aligns well with concurrent recommendations in the NEM Review Draft Report, promoting visible and predictable CER devices within the grid⁶. However, consideration needs to be given to current consumer preferences for self-consumption over participation in orchestration services, including consent, buy-in and co-operation.

Innovation and new risks are proactively managed

This system outcome is supported; success indicators need to encourage product and service innovation to reduce complexity and continue to make CER attractive for consumers.

Proposed Regulatory Functions

The five regulatory functions provide the appropriate foundation for a National CER Technical Regulatory Framework; the following section expands on relevant considerations.

Regulatory	Additional	Opportunities with
Function	Considerations	Existing Approaches
Establishing National CER Technical Requirements	 The function should not only specify Technical Requirements and Technical Standards but also manage the development process, interpretation and coordination of both national and international standards. The coordination of demand for Technical Requirements can be managed through requests from relevant bodies, allowing for streamlined prioritisation, development and implementation. The National CER Technical Regulator should create transparency for industry through the provision of a coordinated workplan across all CER Technical Requirements. 	Leverage existing Technical Standards and Requirements into a streamlined and coordinated pathway.

⁶ National Electricity Market wholesale market settings review



⁵ 2025-08-19-as4777-compliance-status-update.pdf

Mandatory Accreditation of CER Devices

- There needs to be greater clarity within the Draft Prototype that this function is preexisting, as all CER devices connected directly or indirectly to the grid are tested and certified, then listed by the Clean Energy Council.
- Additional listing occurs at the jurisdictional level and through State, Territory and DNSPbased rebate and eligibility scheme (e.g. Solar Victoria's use of Market notices, NSW Peak Demand Reduction Scheme and WA Residential Home Battery Scheme), resulting in the management of multiple listing processes for industry.
- The consolidation into a single listing process for a national market will reduce complexity and burden on OEMs and installers, reducing cost passed to consumers.
- Build on existing accreditation and listing pathways and support recognised programs (e.g. CSIP-Aus profile, conformance tests and reference utility server) to create streamlined definitions across industry.
- Ensure listing criteria and contained information is extended to cover requirements from multiple bodies.

Mandatory Installer Accreditation and Accountability

- The extension of installer accreditation should extend to all CER devices, regardless of installation under a rebate scheme or offgrid usage.
- As the obligations for installers to hold a valid electrical licence are pre-existing, this could be considered as an extension of an electrical licence to streamline processes for installers.
- This primary outcomes of this function should provide clear, fair obligations, easy ways to comply and receive communication of regulatory changes.

 Build on existing accreditation and listing pathways.

Mandatory
Updating of
CER
Connection
Information

- This function is missing consideration of the administrative burden and pathways to accountability for updating of CER connection information.
- Clear definitions should be provided surrounding actions that define or trigger updates to registration information. This includes consideration around responsibility for the entire lifespan of implementation or if validity expires at certain thresholds.
- Data will be provided from multiple sources (e.g. OEM, DNSP, retailer and consumer) requiring validation, however the creation of
- Integrate with existing DNSP connection portals and installer apps to establish national consistency, fast and integrated systems lead to better installer experiences and compliance.



accountability for installers may be complicated to set up.

Support CER System Integrity

- It is essential to consider interpretation and jurisdictional consistency of Technical Standards and Technical Requirements.
- As previously discussed, "grey areas" can lead to different interpretations by regions and DNSPs, creating complexity and additional cost for OEMs.
- Leverage current
 Technical
 Requirements into
 a single set of
 nationally
 consistent and
 universally
 interpreted
 requirements.

The Clean Energy Council welcomes further opportunity to discuss the recommendations in this response with DCCEEW. If you have any queries or would like to discuss the submission in more detail, please contact Maxime Di Petta (mdipetta@cleanenergycouncil.org.au).

Kind regards,

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Clean Energy Council

