

NSW Emergency backstop mechanism and CER installer portal

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Gadigal Country



About the Justice and Equity Centre

The Justice and Equity Centre is a leading, independent law and policy centre. Established in 1982 as the Public Interest Advocacy Centre (PIAC), we work with people and communities who are marginalised and facing disadvantage.

The Centre tackles injustice and inequality through:

- legal advice and representation, specialising in test cases and strategic casework;
- research, analysis and policy development; and
- advocacy for systems change to deliver social justice.

Energy and Water Justice

Our Energy and Water Justice work improves regulation and policy so all people can access the sustainable, dependable and affordable energy and water they need. We ensure consumer protections improve equity and limit disadvantage and support communities to play a meaningful role in decision-making. We help to accelerate a transition away from fossil fuels that also improves outcomes for people. We work collaboratively with community and consumer groups across the country, and our work receives input from a community-based reference group whose members include:

- Affiliated Residential Park Residents Association NSW;
- Anglicare;
- Combined Pensioners and Superannuants Association of NSW;
- Energy and Water Ombudsman NSW;
- Ethnic Communities Council NSW;
- Financial Counsellors Association of NSW;
- NSW Council of Social Service;
- Physical Disability Council of NSW;
- St Vincent de Paul Society of NSW;
- Salvation Army;
- Tenants Union NSW; and
- The Sydney Alliance.

Contact



Website: www.jec.org.au

The Justice and Equity Centre office is located on the land of the Gadigal of the Eora Nation.

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1. Introduction

The Justice and Equity Centre welcomes the opportunity to respond to the NSW Department of Climate Change, Energy, the Environment and Water (the Department) NSW Emergency backstop mechanism and consumer energy resources (CER) installer portal consultation paper.

Improving the integration of CER into the grid and enhancing network visibility of these assets is essential to maximising the value of these resources for NSW consumers and the energy system. An Emergency Backstop Mechanism adds to the range of tools available to support energy security and safety during grid emergencies. It will also be increasingly critical as the amount of renewable generation grows, helping to allow more solar into the grid through enabling mechanisms such as flexible exports and dynamic pricing and greater demand and supply flexibility more broadly.

To realise these benefits, CER devices must be installed and configured correctly. Ensuring compliance with installation standards and proper registration with distributor systems is crucial for maintaining safety and grid stability, and ensuring all NSW households can get the most from installed solar systems. Additionally, these measures are key to unlocking new opportunities for integrating more solar and battery storage and optimising their use in the future.

We support efforts to implement an emergency backstop mechanism in NSW and welcome the development of a CER installer portal to improve compliance at the point of connection. We outline recommendations below to ensure that CER interactions are both predictable and reliable.

We see an urgent need for more comprehensive technical standards and encourage the Department to coordinate with other jurisdictions to facilitate the development of nationally consistent standards, testing protocols, and an associated compliance certification scheme.

2. Emergency backstop mechanism

The emergency backstop mechanism will give distributors the ability to temporarily reduce the generation and export of rooftop solar installed or upgraded after Spring 2025, when directed by AEMO to restore and maintain regional demand above required thresholds.

AEMO notes that the need for solar export curtailment to manage minimum system load would occur only in rare periods when low underlying demand and high solar generation coincide with abnormal system conditions such as network or unit outages restricting power flow between regions, regions becoming islanded, or at credible risk of separation.

We note that as renewable generation in the system expands, it is likely that periods of 'minimum system load' (MSL) will become more frequent. In this context, the JEC encourages the NSW Government to work with AEMO to review its framework for handling MSL and develop more efficient and transparent mechanisms to manage MSL without resorting to measures which increase costs for NSW consumers. Efficient household solar export curtailment should be a part of an energy system based on renewable energy, and market-based measures should be developed to enable it.

The backstop mechanism is intended as a 'last resort action', which would only be used after all other options are exhausted. These actions include:

- issuing market notifications on the forecast level of risk to secure a market response;
- recalling planned transmission outages;
- constraining and directing non-essential grid-scale generation; and
- increasing electricity demand by directing large consumers into service to absorb excess energy.

AEMO undertakes these system-level actions, which in most circumstances, are sufficient to avert the need for solar management. We do not agree that curtailment of household solar export should be regarded as a 'last resort'. We note that, where AEMO directions involve compensation to market participants, they should only be engaged after other more efficient, market-based solutions are employed. For instance, a 'voluntary' or market-based mechanism to curtail household solar export (with compensation) would be preferable to relying on measures which require the direction and compensation of market participants.

Distribution-level measures as part of more efficient handling of minimum system load

Where emergency solar management is necessary to avoid reverse feeder shedding, distributors are currently limited to using blunter responses such as disconnecting solar. Disconnection prevents NSW consumers with solar from self-consuming as it stops their solar system from generating electricity. This is not appropriate, particularly as the frequency of such events is likely to increase. The backstop mechanism would provide an alternative to such measures and should reduce the need for disconnection during minimum system load events.

We support the requirement for NSW distributors to harmonise their implementation of the backstop mechanism and encourage the Department to cooperate with other jurisdictions to develop a nationally consistent approach. As noted above, we further recommend exploration of options to replace measures requiring AEMO direction and compensation of market participants, with more efficient mechanisms to enable more dynamic export management and the voluntary curtailment of household solar export.

The need to enable more load and demand flexibility measures

A priority of this, and related work, should be to maximise continuity of solar self-consumption by NSW households.

We broadly agree with the order of the hierarchy of measures to increase operational load in the grid during minimum system load events. However, Measure 1 could be expanded to include other forms of demand and load response. We note that distributors are designing controlled load tariffs to coincide with periods of surplus solar generation, however responsibility for providing this service is increasingly shifting to retailers and third parties.

As such, efforts should be made to integrate hot water load shifting with complementary measures such as permitting households to participate in the wholesale demand response mechanism and expanding access to flexible trading. These measures would help ensure consumers have access to innovative service offerings by opening the market up to greater

competition from aggregators and other third parties, and supporting the aggregation of other flexible loads such as pool pumps, air conditioners, batteries, and EV chargers.

We consider the design elements of the backstop mechanism broadly appropriate however we are concerned that limited internet connectivity in rural and regional communities may limit conformance with backstop requirements in those areas. The Department should accordingly consider the viability of other communication protocols to ensure all consumers have access to the benefits of CER flexibility.

Dynamic connections should complement backstop measures

The technical prerequisites to enable backstop capability and dynamic connections are similar. Dynamic connection offerings such as flexible export limits allow distributors to adjust export limits in real-time based on grid conditions. Unlike fixed export limits, which set a static cap on exports, flexible export limits allow for higher exports when the grid can accommodate more energy and lower exports when the grid is constrained. This allows consumers to increase the overall amount of solar they use and send to the grid and improves both network utilisation and the carbon intensity of the grid.

We understand NSW distributors are working to develop and bring to market dynamic connection offerings during the 2024-29 regulatory period. We encourage the Department to work with distributors where possible to help accelerate the delivery of these offerings to consumers.

More work must be done to bring existing solar and inverter systems into the mechanism

We are concerned that relying on new and replacement systems alone will be insufficient to deliver a robust emergency backstop response. We strongly recommend this process consider further measures to identify and support the reconfiguration and rectification of existing solar installations to enable their participation in the backstop, and other measures implementing more dynamic load, demand and generation management.

The Department should continue to engage with distributors, OEMs, installers, and other relevant stakeholders to explore pathways to facilitate backstop and dynamic connection compatibility across legacy installations. This should include:

- an assessment of existing installations according to their circumstances;
- identification of the range of rectification opportunities possible in different circumstances; and
- consideration of how rectification could be enabled (i.e. through distributor information provision or other direct government support).

Where relatively low-cost opportunities exist to rectify a significant number of existing installations, they should be recommended and supported as part of wider measures to improve installation compliance and enable more efficient management of MSL.

3. CER installer portal

We welcome efforts to develop a CER installer portal to improve compliance with standards at the point of installation. Improved CER standard compliance is essential to enabling consumers

to connect more CER to the network ensuring that all consumers, not just those with the requisite technology, benefit from these assets.

Ensure alignment with AEMO's DER register

The CER installer portal should be consistent with and complementary to the information recorded in AEMO's DER register and distributor connection portals. We encourage the Department to work with relevant parties to deliver a streamlined process for installers and avoid inefficient duplication of systems that may undermine utilisation and effectiveness. To this end, the portal should facilitate the automation of CER commissioning processes to the greatest extent possible.

Focus on maximising positive impact of the portal

The installer portal should, in the first instance, focus on improving compliance over enforcement. We warn against ascribing low levels of compliance to malicious intent. Instead, solar system installers should be provided with simple, consistent, and easy-to-access training before the requirement comes into force, and then ongoing access to support and information to meet the required standards.

Information at the point of installation is likely to be most effective at ensuring installers are aware of relevant system and setting requirements and can provide informed assurance they have been met. This will be critical to the effectiveness any future enforcement of compliance. We also recommend the Department work with the AEMC to implement the recommendations put forward as part of their Review into CER technical standards¹.

Asserting installer responsibility

Consumers are unlikely to be in a position to detect or remedy non-compliance and, where they have invested significant funds on the expectation of a level of service from their CER, should be supported to ensure those expectations are reasonably met. As such, we strongly agree that installers should be responsible for confirming capability and rectifying non-conformance with emergency backstop or other dynamic connection functionality.

4. Continued engagement

The JEC welcomes the opportunity to discuss these matters further with the Department and other stakeholders. Please contact [REDACTED]
[REDACTED]

¹ See AEMC [Review into consumer energy resource technical standards final report](#).