

7 March 2025

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
ausgrid.com.au

[REDACTED]  
[REDACTED]  
NSW Department of Climate Change, Energy, the Environment and Water  
Email: [energy.consumerpolicy@dpie.nsw.gov.au](mailto:energy.consumerpolicy@dpie.nsw.gov.au)

Dear [REDACTED]

### **Ausgrid submission re NSW Emergency Backstop Mechanism and CER Installer Portal**

Ausgrid is pleased to provide this response to the NSW Department of Climate Change, Energy, the Environment and Water's (**DCCEE**) consultation paper on the proposed NSW Emergency Backstop Mechanism and Consumer Energy Resources (**CER**) Installer Portal (the **Consultation Paper**).

Ausgrid operates a shared electricity network that powers the homes and businesses of more than 4 million Australians living and working in an area that covers over 22,000 square kilometres from the Sydney CBD to the Upper Hunter. Our customers, like so many energy consumers across Australia, are continuing to invest in rooftop solar and other behind the meter CER, enabling them to save money and help our electricity system transition to net zero.

We strongly support efforts by the NSW Government, through its Consumer Energy Strategy, to further drive the uptake of CER and ensure everyone can benefit from, and participate in, the energy transition. Distribution Network Service Providers (**DNSPs**), like Ausgrid, can help facilitate many of the opportunities within this Strategy and support energy consumers to make the best use of solar and CER. For example, Ausgrid is:

- Rolling out community batteries, which allow communities to share the benefits of the cheap, locally produced solar electricity. To date, Ausgrid has deployed 19 community batteries, totalling 2 MW / 4MWh in capacity and by the end of 2025, this will grow to 34 community batteries totalling 42MW / 89MWh in capacity.
- Encouraging electric vehicles to soak up excess generation exported into the grid by facilitating the installation of kerbside chargers on our existing power poles; and
- Driving advances in DNSP-led CER services through the world-leading Project Edith, which shows the vital role DNSPs will play in removing barriers for CER to participate in energy markets.

Ausgrid supports an approach where consumers are incentivised to increase their demand during periods of high solar production. DNSPs have a limited ability to directly compensate our customers for increasing their load to address minimum demand risks. While we recognise the work already underway through the Consumer Energy Strategy, we believe there are opportunities to further explore potential ways to increase

load by DNSPs, energy retailers, government and market bodies working together. For example, we encourage NSW DCCEEW to consider whether programs such as the NSW Government's Peak Demand Reduction Scheme or AEMO's Reliability and Emergency Reserve Trader could be appropriately expanded to incentivise customers to use more power during emergency and minimum system load (**MSL**) events. Alternatively, the NSW Government could explore what powers it has to direct retailers under the *Electricity Supply Act 1997* (NSW). We would welcome the opportunity to come together with key stakeholders to share, explore and develop potential ideas further.

However, we accept that, in addition to enabling customers to manage their CER in a way that supports the system, a last resort mechanism will be required for those rare - but increasingly possible - events where the Australian Energy Market Operator (**AEMO**) is unable to otherwise maintain the security of the National electricity system. AEMO wrote to Ausgrid in August 2024 expressing the urgent need to implement "operationally effective emergency curtailment backstop capabilities by Spring 2025" to address potential MSL events in the National Electricity Market (**NEM**).

Since then, Ausgrid has actively been working with NSW DCCEEW, AEMO, Energy Networks Australia (**ENA**) and the region's DNSPs – Essential Energy and Endeavour Energy in NSW and Evoenergy in ACT – to understand the requirements for maintaining power system security and to ensure both a consistent and sufficient approach across the NSW-ACT NEM region. Together, we have also been collaborating with DNSPs in other jurisdictions with emergency backstop requirements and capabilities to harmonise with their technologies where possible and learn from their implementation processes. Ausgrid thanks the NSW Government for their efforts to date in collaborating with us on the development of solutions that minimise consumer impacts while adequately addressing AEMO's system security concerns.

We have responded to each of the Department's consultation questions in detail at **Appendix A**. Our detailed response broadly aligns to the five key points set out below.

#### **1. We support the use of CSIP-AUS but complementary backstop measures will be needed to meet AEMO's requirements**

The NSW Government notes that it intends to require DNSPs establish and operate Common Smart Inverter Profile – Australia (**CSIP-AUS**) services to allow for the curtailment of solar. Ausgrid supports the inclusion of this capability in a regulatory obligation mandating the Emergency Backstop. The technology will allow for more optimised and equitable responses to MSL events, with less consumer impact than other existing capabilities. We also strongly support the NSW Government's commitment to continue advocating for a nationally consistent solution through implementation of the National CER Roadmap.

However, the Emergency Backstop Mechanism must be designed to give AEMO the amount of capacity necessary for the safe operation of the electricity system. As noted in the Consultation Paper, this is approximately 400 MW in Spring 2025<sup>1</sup> and, according to AEMO, this need grows to 1.6GW by Spring 2027<sup>2</sup>.

Given the gradual rollout of CSIP-AUS (Common Smart Inverter Profile - Australia) capabilities across new and replacement rooftop solar systems, it will take time before it can contribute an operationally meaningful contribution to the curtailment of solar. Consequently, relying on CSIP-AUS on new and

---

<sup>1</sup> NSW DCCEEW, NSW Emergency Backstop Mechanism and CER Installer Portal, February 2025

<sup>2</sup> AEMO draft status update Q4 2024: Supporting Secure Operation with High Levels of Distributed Resources, November 2024

replacement systems <200kW for the Emergency Backstop Mechanism alone will not be enough to mitigate the risk of outages, and this gap will be particularly acute in the short to medium term.

If a minimum operational demand event occurs during this period, Ausgrid and other NSW/ACT DNSPs would be forced to resort to 'reverse feeder shedding'. This high-impact measure requires the complete disconnection of large groups of customers to manage grid stability, which, like other forms of load shedding, or "rolling blackouts", poses significant safety and economic issues for customers and communities. In Ausgrid's view all reasonable steps should be taken to avoid the need for this type of disruptive intervention.

Given this, Ausgrid encourages the NSW Government to design a regulatory obligation that includes:

- A requirement for DNSPs to develop and expand complementary backstop capabilities, such as those identified in the Consultation Paper, sufficient to meet the MW solar curtailment and demand uplift capacity required by AEMO; and
- For devices above 200kW, a requirement for a management technology that offers Emergency Backstop capability to be enabled on all new or replacement systems.

## **2. Standardising the CER installation process is just one important part of broader reforms needed**

The NSW Government is also consulting on a CER Installer Portal to streamline installations through a single digital interface and improve visibility of these devices for DNSPs, government and other market bodies. We support this initiative. Increased visibility of CER in our network will help Ausgrid develop innovative products and services that further enable consumers to get more value from their devices, as well as provide the NSW Government with more accurate information on CER uptake.

However, the Portal is just one part of broader reforms needed to improve compliance with CER standards across the state. We note the NSW Consumer Energy Strategy commits the NSW Government to a 2035 target of 100 per cent compliance with safety standards for energy saving technologies. This target will be supported by \$15.8 million in funding for actions such as increasing the number of electrical safety inspectors and the development of a digital smart compliance system (including for the Certificate of Compliance for Electrical Work (**CCEW**) – which does not currently have a streamlined electronic process). Ausgrid welcomes these efforts and the leadership on compliance issues the NSW Government is committing to through these actions.

## **3. Efforts to implement the Backstop and Portal are already underway but deliverability is a concern**

We agree with the NSW Government that, to fully realise the benefits of CER, the right systems and supports must be in place to both maximise opportunities while managing risks to the grid. The Emergency Backstop Mechanism and CER Installer Portal are both integral parts of the Government's vision and, in Ausgrid's view, inherently linked.

In August last year, AEMO wrote to NSW and ACT DNSPs advising that our NEM region is at risk of MSL events by Spring 2025 and that effective Emergency Backstop capabilities must be implemented by this date. To ensure new and replacement solar inverters are being installed in a way that enables these capabilities, the CER Installer Portal must be delivered in parallel. All efforts should therefore be made to deliver the Emergency Backstop Mechanism and CER Installer Portal together by Spring 2025.

DNSPs are already working closely together to develop internal CSIP-AUS capabilities in a harmonised way. We are optimistic that the backend technologies (e.g. utility servers) required can be delivered by this date. However, based on progress to date, we remain concerned about the ability for supporting resources, such as DCCEEW IT systems for the CER Installer Portal, testing protocols, successful piloting, and training and engagement materials, to be in place within the required time frame.

Clear and specific project milestones must be agreed to as an immediate priority. Only once agreed can DNSPs and Government fairly assess the realistic deliverability date of these programs. However, if it becomes clear that the required milestones cannot be reasonably achieved by Spring 2025, Ausgrid would be supportive of a delayed commencement of both CSIP-AUS and the CER Installer Portal to ensure installer interactions with these new systems is smooth from day one.

Ultimately Ausgrid considers any concerns around the delivery timeline reinforces the need for a regulatory obligation that empowers DNSPs to invest and utilise adequate complementary measures to deliver AEMO's required curtailment and demand uplift capacity in the short term and limit impacts on customers.

#### **4. DNSPs need regulatory certainty on the Emergency Backstop and Portal as soon as possible**

Regardless of any potential change to the delivery timeline of specific capabilities, Ausgrid strongly recommends the NSW Government provide DNSPs with regulatory certainty as to what capabilities will be required as soon as possible. We support this certainty to be delivered, as proposed, through a single change in our licence conditions.

As acknowledged by the NSW Government in its Consultation Paper, the Emergency Backstop Mechanism and CER Installer Portal will require DNSPs to significantly uplift their capabilities and change internal processes.

Without a final regulatory obligation DNSPs have a limited ability to budget the costs of this work and identify cost recovery solutions. The Australian Energy Regulator (**AER**) approves DNSP expenditure forecasts every five years and any new spending that arises during this period must either be applied for as part of a cost pass-through application, or re-prioritised from existing approved projects.

A final regulatory obligation that provides a clear mandate for NSW DNSPs to deliver internal capabilities needed for both the Emergency Backstop Mechanism and CER Installer Portal is needed so that development and implementation of these programs can continue with confidence.

#### **5. The importance of harmonising both technologies, training and ongoing support should not be underestimated**

Ausgrid strongly supports the NSW Government's intent to harmonise the Emergency Backstop across the NSW / ACT region of the NEM. While a national approach is the best way to ensure equitable and consistent implementation which, in turn, results in lower costs and impacts for consumers, we recognise work will need to progress locally more quickly to meet AEMO's capacity requirements.

Ausgrid is already working closely with other NSW / ACT DNSPs, AEMO, and ENA to harmonise the development of our internal technical capabilities. For example, we are participating in the national efforts to establish a not-for-profit National Energy Public Key Infrastructure (**PKI**) to operate and manage authentication of communications with CER devices. An Australia-wide PKI solution for the

energy sector will accelerate interoperability and security of CER across states and territories and will also help lower costs for industry participants and ultimately Australian customers.

However, harmonisation and consistency in training and communications material is equally as important to promote compliance with the safety and technical standards across the State. While NSW and ACT DNSPs have strong working relationships, Ausgrid considers that NSW Government leadership is needed to coordinate clear, consistent and easy to understand materials for all affected stakeholders. Playing this coordination role would also align with two other Actions under the Consumer Energy Strategy, to increase the number of electrical safety inspectors (action 36) and conduct a review of the NSW electrical and gas safety regulatory framework (action 39).

We stress that both the Emergency Backstop Mechanism and CER Installer Portal represent significant change for solar system manufacturers and NSW solar installers. The experience of other jurisdictions reinforces the need for their implementation to be supported by simple, consistent and easy-to-access training, and ongoing live user support. Unless properly managed, the introduction of both these programs could exacerbate existing compliance challenges and erode energy consumer confidence. We thank the NSW Government for their engagement to date and look forward to contributing to a State-wide training package that puts all affected stakeholders in the best position possible to understand and comply with any new requirements.

We welcome the opportunity to discuss our submission further. Please contact [REDACTED]  
[REDACTED] for further details.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



## Appendix A: Ausgrid response to NSW Government consultation questions

| # | Consultation question   | Ausgrid Comments   |
|---|---|--|
| 1 | Do you support the requirement for NSW DNSPs to harmonise their implementation of the backstop mechanism? If not, please explain why. | <p>Yes. Ausgrid supports a harmonised approach to implementation of the NSW Emergency Backstop Mechanism. We are already working closely with other NSW and ACT DNSPs, AEMO and ENA to coordinate the design and implementation of required internal technical capabilities. To support this work, the NSW Government should consider:</p> <ul style="list-style-type: none"> <li>• broader efforts for state-wide harmonisation of technical and safety standards (see our response to Question 12 for further detail); and</li> <li>• Identifying specific efforts to harmonise technical and safety standards (in addition to the CER Installer Portal) through a clearly drafted regulatory obligation.</li> </ul>   |
| 2 | Are the scope and timelines for the Emergency Backstop Mechanism feasible? If not, please explain why.                                | <p>As noted in our cover letter, Ausgrid is concerned about the overall deliverability of all required resources by the proposed Spring 2025 deadline.</p> <p>While we are optimistic DNSPs can deliver the technical capabilities (e.g. utility servers) by this date, we note that there are a broad range of supporting resources that must be developed and rolled out before these systems can be formally implemented. For example:</p> <ul style="list-style-type: none"> <li>• Time must be allowed for technologies to be tested and piloted with a limited number of installers to identify technical or procedural issues;</li> <li>• Manufacturers must have certainty as approved inverters well in advance of an obligation to prevent unnecessary dead stock; and</li> <li>• Training and support procedures must be developed, and installers must have adequate time to familiarise themselves with new requirements, including exemptions and fall-back limits,</li> </ul> <p>Clear and specific project milestones on the delivery of technologies and support materials, such as those listed above must be agreed to as an immediate priority. Only once agreed can DNSPs and Government fairly assess the realistic deliverability date of these programs. However, if it becomes clear that the required milestones cannot be reasonably achieved by Spring 2025, Ausgrid would be supportive of a delayed commencement of both CSIP-AUS and the CER Installer Portal to ensure installer interactions with these new systems is smooth from day one.</p> |
| 3 | Do you agree with the order of the hierarchy of measures to increase load in the grid during MSL events? If not, please explain why.  | <p>Yes. Ausgrid agrees with the hierarchy proposed on page 21 of the Consultation Paper and supports all efforts to avoid reverse feeder shedding. DNSPs have varying levels of existing and projected future capability to deliver hot water load shifting, solar curtailment and emergency voltage management, and, as noted above, CSIP-AUS will take some time before it has operationally significant scale.</p>  |



|   |   |   |
|---|---|---|
| 4 | <p>Are the design elements of the Emergency Backstop Mechanism appropriate and feasible? If not, please identify why and provide any alternative suggestions.</p> | <p>From our engagement with the NSW Government to date, Ausgrid is broadly supportive of the proposed designed elements. However, we would welcome to opportunity to work with DCCEEW to formally validate them. This requires agreement on three key processes that must be documented and agreed with stakeholders as a priority include:</p> <ol style="list-style-type: none"> <li>1. Connections Application Process, including key touchpoints and changes to existing processes;</li> <li>2. Installation Process, including key inputs from the connections process as well as interaction with key stakeholders such as DNSPs, AEMO, and other government entities; and</li> <li>3. The Emergency Backstop process itself including the roles played by key stakeholders such as AEMO, TNSPs, DNSPs, Retailers, and Customers.</li> </ol> <p>More specifically, we recommend that the purpose of design element four (<i>Management System</i>) be extended to include 'return-to-normal' processes. Namely, how a backstop trigger is ended and how DNSPs safely return the system to normal operation.</p>   |
| 5 | <p>Are the roles and responsibilities of each organisation appropriate and feasible? If not, please identify why and provide any alternative suggestions.</p>     | <p>We are comfortable with the roles and responsibilities proposed on pages 22 and 23 of the NSW Government's Consultation Paper. However, we have identified a number of additional functions that should be called out and explicitly assigned to a relevant organisation:</p> <ol style="list-style-type: none"> <li>1. Responsibility to provide ongoing support (i.e. call centres and webpage FAQs) to installers and manufacturers as they interact, in real time, with these new systems;</li> <li>2. Responsibility for customer notifications in the lead up to, initiation of, and conclusion of an event;</li> <li>3. Responsibility for the reliance on customer communications networks given that DNSPs have no influence over communication beyond the DNSPs Utility Server;</li> <li>4. Responsibility for manufacturers <i>Communication Network</i> connectivity;</li> <li>5. Responsibility for manufacturers' aggregator systems where CER is not directly interfacing with DNSP Utility Servers;</li> <li>6. AEMO and TNSP responsibilities in forecasting MSL events and proportioning an amount of backstop response required from each DNSP; and</li> <li>7. Responsibility for the development of general education materials and support for affected customers understand what backstop means for them.</li> </ol> <p>We are happy to continue working with the NSW Government to build out this matrix of roles and responsibilities to represent a more exhaustive list of functions relevant to the Emergency Backstop Mechanism and CER Installer Portal.</p> |

|   |  |  |
|---|--|--|
| 6 | <p>Do you support the threshold for the Emergency Backstop Mechanism using CSIP-AUS being 200kW and smaller? If not, please provide detail on what threshold you think is appropriate.</p> <ul style="list-style-type: none"> <li>Do you agree with the approach for systems above 200kW? If not, please explain why and provide any alternative suggestions.</li> </ul> | <p>Ausgrid supports the NSW Government's proposal to align with other jurisdictions and mandate CSIP-AUS for new and replacement solar systems which are 200kW and smaller. However, similar to the approach used in Victoria and South Australia, we consider that a regulatory obligation should also require DNSPs to develop Emergency Backstop capabilities for all new and replacement larger solar systems. Expanding the obligation to include larger systems will ensure households and small businesses seeking to install rooftop solar are not disproportionately affected by any emergency responses to MSL events.</p> <p>We agree with the Government's Consultation Paper that DNSPs should be free to determine which management technology is most suited for these larger systems. A regulatory obligation for the technology agnostic capability will provide DNSPs the certainty they need to develop and roll out these capabilities in a timely manner.</p>   |
| 7 | <p>Do you have any concerns or insights into using CSIP-AUS compatible inverters and an internet connection to control the backstop mechanism?</p>   | <p>Ausgrid has two main concerns relating to CSIP-AUS enabled compatible inverters and their reliance on internet connection to control the Emergency Backstop Mechanism.</p> <p>Firstly, we recognise there is a risk in any solution reliant on consumer internet connections (e.g. WiFi). From our discussions with other jurisdictions, we understand that due to connection issues a sizeable number of installations are going 'offline' for extended periods of time, resulting in customers being curtailed to the jurisdiction's agreed "fall-back" limit. This has the following consequences:</p> <ol style="list-style-type: none"> <li>risks the potential backstop capacity available at time of need;</li> <li>reduces the capacity of CER generation in the NEM (beyond MSL events); and</li> <li>broader impacts for NSW consumer experiences with their CER devices.</li> </ol> <p>In our ongoing discussions with the Government, we note a need to discuss what can be done to minimise this risk but also to agree on roles and responsibilities around managing and remediating lost connectivity more generally.</p> <p>Ausgrid is also concerned that threat modelling has not been conducted to assess the cyber-physical threats introduced by the Emergency Backstop Mechanism. Modelling is needed to consider the end-to-end system and its potential to impact the supply of electricity across the NEM.</p> <p>Particular cyber-physical threats that require further assessment as to the level of risk, likely impact and required mitigation measure from the NSW Government include:</p> <ol style="list-style-type: none"> <li><b>Threats vectors introduced by introducing centralised points of control:</b> Implementation of Emergency Backstop Mechanisms, specifically CSIP-AUS capability across the NEM will result in CER generation being controllable at several centralised points: <ol style="list-style-type: none"> <li>Manufacturer aggregators where CER is not directly interfaced with DNSP Utility Servers; and</li> </ol> </li> </ol> |



|    |  |  |
|----|--|--|
|    |  | <p>b. DNSPs Utility Servers.</p> <p>Through the Emergency Backstop capabilities, significant quantities of aggregate generation will be controllable at the above points that as it stands do not fall under any regulation at State or Federal levels akin to those that currently apply to conventional large scale generators as critical infrastructure operators. For DNSPs, whilst their network assets do fall under such regulations, it is not clear what regulation should apply to systems that manage and can control CER.</p> <p>2. <b>Threats introduced by reliance on public internet connections:</b> Ausgrid recommends that the NSW government work with relevant Commonwealth agencies and with industry and other stakeholders to identify opportunities to secure a portion of CER generation that it is not dependent on public internet connections. This could be implemented by using existing private networks offered by the NBN or Mobile Carriers.</p> <p>3. <b>Threats introduced by defaulting export limits to curtail generation during loss of communication:</b> To date, the focus has been on ensuring that in the event of loss of communication that CER inverters revert to default export limits which curtail generation. While this will support the management of MSL events, it fails to assess risks introduced in other scenarios such as introducing the prospect of an attacker effectively curtailing generation during periods of high system load by performing denial of service attacks on DNSP Utility Servers, manufacturer aggregators, or CER themselves.</p> |
| 8  | Is it appropriate for the Emergency Backstop Mechanism to be implemented using technologies and systems consistent with enabling the future use of flexible export limits? If not, please explain why. | <p>Yes. Ausgrid considers it appropriate and efficient for the NSW Government to enable flexible export limits in parallel with the Emergency Backstop Mechanism and CER Installer Portal. Flexible export limits are just one way NSW consumers can better access the commercial benefits of their home solar systems, while also giving DNSPs better visibility of how rooftop solar exports are impacting the grid. Enabling flexible exports will require Ausgrid to upgrade its technologies and update processes, which could be done more efficiently if progressed at the same time as developing internal backstop capabilities. We therefore encourage the NSW Government to consider including a requirement for DNSPs to develop flexible export capabilities within the proposed regulatory obligation.</p> <p>We note, this also aligns with action 34 of the NSW Government's Consumer Energy Strategy, in which the NSW DCCEE has committed to working with DNSPs to trial flexible exports.</p>   |
| 9  | Which, if any, existing test protocols should be considered for implementation as the consistent test protocol for NSW?  | Where appropriate, Ausgrid supports alignment with broader Australian market processes as a way to minimise the administrative burden on manufacturers and encourage compliance. For this reason, we support alignment with the draft CSIP-AUS 1.2 standard as proposed by the DER API Technical Working Group. The NSW Government should also commit to adopting future versions of this standard as it is updated.   |
| 10 | Do you think the conditions under which the Emergency Backstop   | Ausgrid supports an Emergency Backstop Mechanism that is strictly limited to use under the direction of AEMO, as a last resort, to protect the electricity system from risks of minimum operational demand events  |

|    |   |  |
|----|---|--|
|    | Mechanism could be used are appropriate? If not, why? Please suggest any alternative conditions that should be considered.  | which – in rare situations – could lead to power system instability and ultimately large-scale black outs. The MSL framework within AEMO's Power System Emergency Management Plan is therefore the appropriate document to govern its use.   |
| 11 | Do you have any views on the proposed implementation pathway (variation of DNSP licencing conditions) or alternatives?  | <p>Ausgrid supports the NSW Government's proposed implementation pathway, a variation of DNSP licence conditions, for the Emergency Backstop Mechanism and CER Installer Portal. There will be many elements to this licence conditions that must accurately reflect technical systems and processes. The experience in other jurisdictions (e.g. confusion around the scope of the Victorian Emergency Backstop Mechanism) reinforces the need for the NSW Government to closely collaborate with DNSPs on the proposed wording of any regulatory obligation.</p> <p>For example, the licence obligation will need to establish requirements for DNSPs to have:</p> <ul style="list-style-type: none"> <li>• internal CSIP-AUS capability and, in turn, require it for all new and replacement connections of systems 200kW and smaller into their network;</li> <li>• an appropriate management technology for all new and replacement larger solar systems (i.e. over 200kW) connecting into their network</li> <li>• appropriate complementary backstop measures in place to meet AEMO's anticipated curtailment and/or demand turn up capacity needs</li> <li>• an appropriate exemptions and fall-back limits framework</li> <li>• testing protocols in place including notification and alert processes for affected customers</li> <li>• appropriate backend technologies and connections protocols in place in time to support the introduction of a NSW Government CER Installer Portal</li> </ul> <p>The above is not an exhaustive list but demonstrates the complexity of the regulatory obligation required. We thank the Department for their engagement with the NSW DNSPs on the obligation's drafting and we look forward to continuing these discussions.</p> |
| 12 | <p>What information will manufacturers, installers, customers and distribution networks require to implement the Emergency Backstop Mechanism?</p> <ul style="list-style-type: none"> <li>• Who is best placed to communicate this information to the different audiences?</li> </ul> | <p>Ausgrid strongly recommends that stakeholder engagement, communication and training efforts to support both the Emergency Backstop Mechanism and CER Installer Portal are driven and led by the NSW Government to ensure state-wide consistency. It is crucial for compliance purposes that information provided to all affected stakeholders is clear, consistent and easy to access. Engagement activities must also be tailored to cater to the differing needs of each stakeholder. For example:</p> <ul style="list-style-type: none"> <li>• Before an installer can comply with a CSIP-AUS mandate, <b>manufacturers</b> will need to ensure they are selling only compatible inverters. The Clean Energy Council maintains a list of all approved inverters with software communication clients. We do not think there is a need for NSW to replicate this list</li> </ul>   |

|    |   |  |
|----|---|--|
|    | <ul style="list-style-type: none"> <li>How should this information be best communicated to the different audiences?</li> </ul>  | <p>however, early communication is needed because, in practice, manufacturers are likely to be left with stock unsellable in NSW from Spring 2025.</p> <ul style="list-style-type: none"> <li><b>Solar system installers</b> must be provided with simple, consistent and easy-to-access training before the requirement comes into force, and then ongoing access to support. The Emergency Backstop and CER Installer Portal represent significant changes for installers at the point of installing and commissioning a solar system. Installers would benefit from consistent state-wide materials including short training videos and a written manual covering each step of the installation process, accredited training sessions, and easy to access webpages or call centres to address FAQs.</li> </ul> <p>While <b>NSW consumers</b> are unlikely to need explicit training, to prevent misinformation they must be engaged early to support their understanding of why an Emergency Backstop Mechanism and CER Installer Portal are necessary, and what these changes mean for them. For example, experiences in other jurisdictions suggest that some consumers may have privacy concerns about handing their personal WiFi details over to the solar inverter installer for connectivity purposes.</p> <p>We thank NSW DCCEEW for their efforts to date working with Ausgrid and other NSW DNSPs on a state-wide coordinated engagement and training approach. A regulatory obligation that clearly sets out the NSW Government's expectations of DNSPs in relation to both the Emergency Backstop and CER Installer Portal is the best way to ensure we are appropriately empowered and funded to continue these efforts throughout their development, initial implementation and ongoing roll out.</p> |
| 13 | <p>What CER should the Portal capture? Please explain the reasoning behind your answers.</p> <ul style="list-style-type: none"> <li>What types of technology?</li> <li>What size (capacity) of technology?</li> <li>What technology should be excluded? Why?</li> <li>Should the Portal align with the Emergency Backstop Mechanism in capturing only systems under 200kW?</li> <li>Should the Portal capture technology consistent with that recorded in AEMO's DER</li> </ul> | <p>Firstly, we note that, through action 44 of the Consumer Strategy, the NSW Government intends to "require installers of energy saving technologies to provide necessary information required under AEMO's DER Register". To achieve this action, we consider that all technologies that are required to comply with AEMO's DER Register should be covered through the Government's Installer Portal. Our response to Question 20 considers further the benefits to compliance rates that this approach would support.</p> <p>The primary driver of the CER Installer Portal needs to remain focused on the automation of CER commissioning (installation and compliance testing) processes. This is to streamline the Installer experience and eliminate the human effort of DNSPs in being involved in the commissioning process for high numbers of frequent CER installations. The Government's Portal, as compared to individual DNSP connections portals, should be only used for CER where automated commissioning is appropriate. Conversely, there will be a small set of connections where the commissioning process deviates from the common approach managed by the Installer Portal and associated DNSP systems. Such connections will require a tailored solution where the commissioning process is not performed via the installation portal. Ausgrid recommends that NSW DCCEEW and DNSPs work together to agree on the set of scenarios including but not limited to:</p> <ul style="list-style-type: none"> <li>Where due to network capacity constraints, a flexible connection agreement will be relied upon by the DNSP to manage the network within operational limits;</li> </ul>  |

|    |   |   |
|----|---|---|
|    | register? Is there additional technology that should be captured?   | <ul style="list-style-type: none"> <li>- Installations of substantial capacity, such as 200kW and over;</li> <li>- Installations of significance where the use of CSIP-AUS or the broader system is inappropriate due to cyber security or other sensitivities relating to that particular installation; and</li> <li>- Other exceptional non-standard installations where, as part of the connection application processes, it is determined by the DNSP that automated commissioning is inappropriate.</li> </ul> <p>For connections not managed by the Installer Portal, DNSPs and NSW DCCEEW should work together to agree on the process and technology used to register such installations. This could be further developed and refined post delivery of the Emergency Backstop Mechanism.</p>  |
| 14 | Do you support the functions outlined for inclusion in the CER Installer Portal? If not, please explain why.    | <p>Overall, Ausgrid supports the functions proposed at pages 30 – 31 of the Department's Consultation Paper. We have specific comments in relation to some of the identified functions:</p> <ul style="list-style-type: none"> <li>• <b>Provide CER data to the government and market bodies directly:</b> Data should also be provided to DNSPs as a feedback loop and close out process, which should be considered through design of the required integration.</li> <li>• <b>Improving compliance with key standards:</b> In addition to promoting compliance with Emergency Backstop requirements, the Portal provides an opportunity to improve compliance with the following: <ul style="list-style-type: none"> <li>○ DER registration (including mandatory field validation and ensuring that the installation is closed out and completed in the AEMO DER Register within 20 days of installation)</li> <li>○ Grid technical standards for embedded generation including AS4777:2020, and smart metering requirements including a compliant Type 4 meter installation (and B-channel programming for bi-directional capability).</li> <li>○ Wiring and safety standards under the governance of NSW Building Commission. Installations must meet AS/NZS 3000 wiring rules and NSW Service &amp; Installation Rules.</li> </ul> </li> </ul> |
| 15 | Are there any additional functions you would like to see included within a CER Installer Portal?                | Please see our response to Question 14 above.   |
| 16 | Are there additional ways that the Portal should be designed to support installers?                             | Please see our response to Question 19 below.   |
| 17 | Do you agree that the party that applies for a CER connection should be responsible for ensuring the installers | Yes, Ausgrid agrees that the party applying for a CER connection should be responsible for the system's compliance. Our understanding is that this is likely to be the solar system installer. However, in the short term,  |

|    |  |  |
|----|--|--|
|    | they have engaged rectify non-compliance? If not, please explain why.        | it is the responsibility of the NSW Government and DNSPs to invest in adequate training and education for installers, so they understand the requirements being placed on them and feel confident to be able to comply.  |
| 18 | Do you have any other views on compliance and enforcement within the Portal? | <p>The immediate priority for the NSW Government and DNSPs is educating affected stakeholders on how to interact with these new systems and comply with the obligations placed on them. Enforcement should not be prioritised until a strong level of understanding and confidence among installers has been built up.</p> <p>Additionally, we note the NSW Government has an opportunity to align its design of compliance and enforcement measures for the Emergency Backstop and CER Installer Portal with other, ongoing reforms. For example:</p> <ul style="list-style-type: none"> <li>• Through the NSW Consumer Energy Strategy, the NSW Government has committed to conducting a review of the NSW electrical and gas safety regulatory framework (action 39). This review will be progressed in parallel with the implementation of the CER Installer Portal. Efforts should be made to investigate whether additional powers, through the <i>Gas and Electricity Safety Act 2017</i> (NSW), would strengthen the compliance and enforcement framework for all electrical work including CER installations in NSW. This review should also consider providing in-principle support for joining the Electrical Equipment Safety System (<b>EESS</b>). The EESS requires compliance by manufacturers, importers and suppliers with various standards for electrical equipment. All other jurisdictions have either implemented the EESS or are in the process of doing so.</li> <li>• The Australian Energy Market Commission's CER Technical Standards Review, completed in September 2023, suggested numerous compliance and enforcement activities across the value chain, many of which could support the NSW Government's efforts to support the CER Installer Portal, including: <p><b>Installation compliance:</b></p> <ul style="list-style-type: none"> <li>○ Supporting installers by mandating manufacturers to remove historical device settings and ensure the correct settings are set as default for installation in NSW/NEM (Region A);</li> <li>○ Mandating CER technical standards and installation training (for example, requiring installers to be accredited with the nationally appointed scheme administered by Solar Accreditation Australia), including training that contributes to the annual continuous professional development (CPD) points for maintain accreditation; and</li> <li>○ Improving availability of information for installers through state-based avenues including NSW electrical licensing – beyond the initial CER Installer Portal deployment to ensure ongoing engagement and training is required to maintain knowledge on compliance requirements.</li> </ul> </li> </ul> |

|    |  |   |
|----|--|---|
|    |  | <p><b>Asset lifecycle compliance:</b></p> <ul style="list-style-type: none"> <li>○ Requiring manufacturers to notify DNSPs when bulk firmware upgrades are made to devices;</li> <li>○ Supporting DNSP access to manufacturers' data to troubleshoot and investigate export issues including, investigations for non-compliance; and</li> <li>○ Clarifying roles and responsibilities to ensure ongoing device compliance including remote reconfiguration of non-complaint inverters.</li> </ul>   |
| 19 | Are there additional ways that the Portal should be designed to support installers?                        | <p>Ausgrid agrees with the five principles listed by the NSW Government, on page 32 of the Consultation Paper, that will guide the design of the CER Installer Portal. In the immediate term, we consider the first principle 'access and easy to use' the more crucial. In order for the Portal to be as accessible as possible, the NSW Government should prioritise two key actions:</p> <ol style="list-style-type: none"> <li>1. Enabling base functions to capture the data required to register a device and Emergency Backstop capabilities (CSIP-AUS) on the NSW Office of Fair Trading's CCEW and AEMO's DER Register; and</li> <li>2. Automating as much of the Portal's processes as possible. For example, the Portal should have easy log in functions, QR or barcode reading capability to avoid the manual entry of device serial numbers, and automatic application for small-scale technology certificates.</li> </ol> <p>Once these base functions have been implemented seamlessly, the NSW Government should consider how the Portal can streamline a greater number of processes, such as safety and wiring standards currently covered by the CCEW, so that compliance is uplifted for all electrical safety, technical standards across the State. We elaborate on the NSW Government's proposed phased approach below, in our response to Question 20.</p> |
| 20 | Do you agree with the phased approach proposed for the delivery of the Portal? If not, please explain why. | <p>Ausgrid supports a phased approach to the implementation of the CER Installer Portal, in particular, we strongly support the NSW Government's proposal to prioritise processes critical to the delivery of the Emergency Backstop.</p> <p>To encourage compliance, Government's priority should be to create an accessible and easy-to-use Portal. As noted in our response to Question 19 above, in practice, this means creating a Portal that acts as a 'one stop shop' for CER device installation forms and ensuring that one process is as automated as possible. It will also require robust backend processes and structures to be agreed and in place to provide live troubleshooting support for installers. The development of these processes should be led by NSW DCCEEW, but we note DNSPs will still need to dedicate a significant amount of time and resources to supporting installers during the early stages of the 'go-live'.</p>   |



|    |   |  |
|----|---|--|
|    |   | <p>It is crucial the Portal's base functions are operating seamlessly before it is expanded. For this reason, we recommend the NSW Government develop a more detailed framework to govern how future enhancements will be developed and rolled out through the Portal. This framework should include stakeholder consultation.</p> <p>We also consider it is therefore likely that more than two implementation phases will be required. As with any new IT system, the initial roll out of the Portal's base functions is likely to result in the identification unexpected and, in some cases, complex issues affecting the user experience. Instead of seeking to immediately expand the Portal's functions, "Phase Two" should instead be focused on resolving any identified user issues, harmonising connections processes and enhancing the overall user experience for the Portal's initial functions.</p> <p>Ausgrid notes that, as part of the Portal's roll out, DNSPs will make significant investment in improving their own connections processes. At this stage we do not see a need for the Portal's functionality to duplicate these functions. The NSW Governments continued focus on improving compliance and enforcement mechanisms such as increasing inspector numbers, development of training and support materials, and administering and maintaining broader safety and technical standards will be pivotal in improving the installer experience and encouraging compliance across the State.</p> |
| 21 | Do you think that there are any functions that should be included or excluded from the first phase of the Portal development? | Please see our response to Question 20 above.  |
| 22 | Do you support the proposed joint NSW Government-DNSP delivery of the CER Installer Portal? If not, please explain why.       | Yes. Ausgrid supports the proposed joint NSW Government-NSW delivery of the CER Installer Portal. We recognise and thank NSW DCCEE for the significant effort it has put into engaging with DNSPs on the design of the Portal to date. Moving forward, in order for DNSPs to invest in the ongoing backend capabilities needed to support a jointly developed CER Installer Portal, NSW DNSPs will require a clear regulatory obligation. In developing this obligation, we encourage the Department to consider its expectations of DNSPs in supporting and facilitating installer and manufacturers' compliance.   |
| 23 | What information will installers and any other stakeholders require to support the roll out of the CER Installer Portal?      | We consider the communication and training support required for the CER Installer Portal to be intimately linked to the roll out of the Emergency Backstop. Please see our response to Question 12 above.  |