

20 January 2026

Mr Junayd Hollis
Group Executive, Network & Digital
Ausgrid
24 Campbell St
Haymarket NSW 2000
By email: [REDACTED]

Dear Mr. Hollis

Management of Minimum System Load (MSL) conditions

A secure power system is one operated safely within defined technical limits, with the ability to withstand credible disturbances, return to secure operation, and restart following a widespread outage.

The National Electricity Rules (NER) outline responsibilities for AEMO, network service providers (NSPs) and market participants to collectively ensure system security in the NEM through operation of the energy market and planning frameworks.

If system security gaps have not been met through planning and market operation, there is a limited hierarchy of operational controls and interventions to maintain system security, proportional to the risk in real time. Market interventions can result in significant costs and risks of interruptions to power supply, so it is critical the energy sector continues to collaboratively plan and navigate this path with consumers' interests at the centre.

Consumer Energy Resources (CER) are becoming increasingly central to system operation, and AEMO is taking steps to continue to encourage CER growth and ensure households and businesses can continue to have a meaningful impact on Australia's energy transition. This includes taking steps to address high output from rooftop solar, combined with low underlying demand, which creates minimum system load (MSL) conditions.

Since 2020, AEMO has been highlighting the need for emergency backstop to manage minimum system load (MSL) conditions, with an early focus on South Australia¹. In the *2021 Electricity Statement of Opportunities (ESOO)*, we assessed MSL challenges on a NEM-wide scale and identified distributed PV curtailment as a key foundation for system security under low demand conditions². In August 2024, I wrote formally to you on the 'Urgent need to implement emergency backstop curtailment capability for DPV installations' and noted that to maintain system security, DNSP works to implement operationally effective backstop should commence immediately as a priority. In December 2024, AEMO published advice on the need to establish emergency backstop capability in New South Wales and the Australian

¹ AEMO 2020, *Renewable Integration Study Stage 1 Appendix A: High Penetrations of Distributed Solar PV*, section A4.2, available: https://www.aemo.com.au/-/media/files/major-publications/ris/2020/ris-stage-1-appendix-a.pdf?rev=4d0ccbd5bfd24be1b6aebc64938c378e&sc_lang=en.

² AEMO 2021, *2021 Electricity Statement of Opportunities*, sections 6.1.2 to 6.1.4, available: https://www.aemo.com.au/-/media/files/electricity/nem/planning_and_forecasting/nem_esoo/2021/2021-nem-esoo.pdf?rev=c60cc2e02e004f7ea9f4df81e6afeb34&sc_lang=en.



Capital Territory (NSW/ACT) to manage MSL conditions³, followed by a report on industry learnings from emergency backstop implementation across Australia in July 2025⁴. Further building on this analysis, AEMO's recently released *Transition Plan for System Security (TPSS)*⁵ outlines findings and recommendations on management of minimum system load (MSL) conditions in NSW/ACT. Detailed analysis, information and recommendations relevant for NSW/ACT distribution network service providers (DNSPs) are found in Appendix A3.

This letter is provided as an addendum to analysis in TPSS Appendix A3, with a breakdown of operational demand increase requirements by DNSP⁶ (Table 1). This information is provided following our consultation with NSW/ACT DNSPs and has been agreed to be a sufficient amount of additional capability to manage plausible onerous conditions in coming years if costs to develop this additional capacity are prudent. AEMO recommends that your organisation use its best endeavours to ensure it develops and maintains control over a level of additional operational demand capacity sufficient to deliver the level of response specified in this letter.

Thank you for your continued support and effort to address issues associated with MSL conditions, and broader efforts to navigate key "transition points" — events and milestones that require material changes in the operational approach to managing power system security.

AEMO looks forward to continuing to work with your team to successfully integrate distributed energy resources into the power system.

Please do not hesitate to reach out should you, your team, or broader stakeholders relevant to your business desire further information or briefing on this matter. AEMO recognises this is particularly important given the shared accountabilities for system security between AEMO, DNSPs, TNSPs and generators, and the need to ensure consumers, their advocates, and key market bodies such as the AER are well informed.

If you have further questions, please contact Daena Ho, Engineering Technical Lead, who is coordinating this work

Yours sincerely,

Michael Gatt
Chief Operations Officer

cc: Ausgrid | Emma Vlatko, Yvonne Little, Alan Luc, Shannon Moffitt, Ron Whalen

Attachments: Estimated operational demand increase capability requirements by DNSP

³ AEMO 2024, *Supporting secure operation with high levels of distributed resources*, available: <https://aemo.com.au/-/media/files/initiatives/der/managing-minimum-system-load/supporting-secure-operation-with-high-levels-of-distributed-resources-q4-2024.pdf?la=en>.

⁴ AEMO 2025, *Learnings from industry implementation of emergency backstop mechanisms for distributed resources*, available: https://www.aemo.com.au/-/media/files/initiatives/der/managing-minimum-system-load/learnings-from-industry-implementation-of-emergency-backstop.pdf?rev=5e261f83f11b426cb086069ac86e8cee&sc_lang=en.

⁵ AEMO 2025, *2025 Transition Plan for System Security*, available: <https://www.aemo.com.au/energy-systems/major-publications/transition-plan-for-system-security-tpss/2025-transition-plan-for-system-security>.

⁶ Based on proportions from Distribution Annual Planning Report reporting for each DNSP and the total embedded generation connected to their network.

Table 1 – Estimated operational demand increase capability requirements^A, by DNSP

	% split by DNSP ^B	Oct 2025	Oct 2026	Oct 2027
Estimated total operational demand increase requirement (MW)		296	Up to 467	Up to 812
Estimated capability from active management via CSIP-AUS (MW) ^C		-	12	224
Estimated total additional emergency backstop requirement (MW)^D	-	296	455	587
Ausgrid	28%	83	127	164
Endeavour Energy	35%	104	159	206
Essential Energy	29%	86	132	170
Evoenergy	8%	24	36	47

^A Figures represent actual operational demand increase and are provided on a baseline of increase from 2025.

^B Percentage splits by DNSP are based on Distribution Annual Planning Report reporting for each DNSP.

^C Estimated based on 2025 ESOO forecasts of DPV installed capacity, to remain internally consistent with 2025 ESOO minimum demand projections. Trajectories of CSIP-AUS installation compliance are based on the most recent CSIP-AUS rollout, in Victoria.

^D Capabilities in this category may include curtailment of embedded generators, distribution network/community batteries, emergency voltage management and other capabilities outlined in the TPSS, however *exclude* CSIP-AUS capabilities since this is captured in the row above, with details as noted in footnote B.