2025 TPSS stakeholder feedback overview

The **Transition Plan for System Security (TPSS)** is an annual report focusing on maintaining power system security as the National Electricity Market (NEM) transitions towards lower emissions.

On 1 December 2025, AEMO released its second TPSS, outlining key transition points in the power system and the required collaborative actions for the energy sector to navigate the next decade of the energy transition.

2025 Transition Plan for System Security stakeholder feedback

AEMO's most recent *Transition Plan for System Security* (TPSS), published in December 2025, details the plan for system security needs in the next 10 years to support the energy transition.

Maintaining system security is a critical element of ensuring a reliable, secure supply of electricity for homes and businesses across the NEM. System security is also a shared responsibility across the energy sector and AEMO seeks to ensure that its TPSS is developed in collaboration with industry, governments and consumer representatives.

This document outlines the steps taken by AEMO to consult on the 2025 TPSS, summarises stakeholder feedback and 'closes the loop' on that feedback by articulating AEMO's response.

Engagement undertaken on the 2025 TPSS

AEMO seeks input from a wide variety of stakeholders to inform both its system planning role and its role operating Australia's energy system and markets through many mechanisms, including the 2025 TPSS submission period between December 2025 and February 2026.

During the submission period, AEMO hosted a publication webinar on 5 December 2025, attended by over 180 stakeholders, representing a broad range of the sector including market participants, network service providers, government agencies, market bodies and academia.

AEMO received seven formal submissions from the Australian Energy Council (AEC), CS Energy, Electrification and Energy Systems Network (EESN), Reactive Technologies, SMA Australia and Syncline Energy, as well as a submission from the AEMC's Reliability Panel as required under the NER[1]. These submissions have been published on AEMO's website[2].

[1] https://energy-rules.aemc.gov.au/ner/767/817641#5.20.8
[2] https://www.aemo.com.au/energy-systems/major-publications/transition-plan-for-system-security-tpss/2025-transition-plan-for-system-security

Consultation also included targeted engagement through AEMO's joint planning arrangements with network service providers, one-on-one discussions with industry, government and academic stakeholders, and market engagement activities on Type 2 Transitional Services[3], outlined in **Table 1**, in addition to regular meetings with the Reliability Panel.

Table 1: 2025 TPSS report consultation process and timeline

Consultation steps	Dates
Engagement to inform 2025 TPSS	February – November 2025
2025 TPSS publication webinar	5 December 2025
Submission period on the 2025 TPSS	1 December 2025 – 16 February 2026

Table 2 summarises key stakeholder feedback during the submission period and AEMO's high-level response by theme.

This engagement highlighted several key themes, including better visibility of system readiness as key transition points approach, more integrated system security approaches and readiness for transition points, more targeted technical engagement, and clearer essential system services (ESS) pathways as the system changes. Some aspects of ESS form part of a broader area of consideration beyond the TPSS.

Stakeholders also recognised positive aspects of the 2025 TPSS, particularly improvements in clarity, structure and its increasing maturity as a system security planning document. Several submissions supported retaining key elements of the current format, including the regional transition framework, and engaged constructively with the TPSS as a foundation to be built upon.

Feedback relevant to other matters

Additional feedback is captured separately where matters raised fall outside of the direct scope of the TPSS. In particular, this included feedback on strengthening alignment across AEMO planning and modelling documents.

AEMO appreciates the engagement and contributions from all participants. AEMO is still considering several items of feedback from stakeholders, and these will continue to be considered alongside other engagement activities to inform the development of the 2026 TPSS, which is planned for publication in December 2026.

Table 2: Summary of stakeholder feedback and AEMO's response by theme

Stakeholder feedback	AEMO's response
Theme: System operations and readiness	
SMA Australia supported continuation of the current TPSS approach in 2026. It also asked for clearer guidance on the evidence required to demonstrate GFM BESS system security capability, and regular updates on domestic and international progress and standards. **Reliability Panel** recommended greater clarity on when AEMO should begin planning operational interventions for each transition point. It also encouraged AEMO to continue stress-testing readiness across a range of system conditions, use Type 2 Transitional Services trials to actively support deployment of new technologies, and consider how the TPSS can better anticipate and prepare for emerging risks.	AEMO intends to use the Engineering Roadmap workplans, along with learnings from the Type 2 trials, to provide visibility on the work required to demonstrate GFM BESS capability, which is progressing across industry. This will be considered and communicated in the 2026 TPSS, including relevant international progress on GFM BESS and other emerging technologies. AEMO is also reviewing the broad range of scenarios and modelling that inform the 2026 TPSS, including emerging system security risks. AEMO is further revising its approach to communicate the potential need and circumstances for operational interventions. Type 2 Transitional Services will continue to be progressed in line with the National Electricity Rules (NER) to support the demonstration of new capabilities.

[3] Type 2 Transitional Services are procurement contracts introduced by AEMO to trial new technologies or new applications of existing technologies to maintain power system security as the electricity grid moves toward zero emissions.

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Stakeholder feedback	AEMO's response
Theme: Planning and modelling consistency	
Syncline Energy supported retaining Parts A, B and C of the TPSS and integrating the Engineering Roadmap. It also recommended developing Horizon 3 (10+ years) within future TPSS reports. **Reliability Panel** recommended adding a summary of changes since the previous TPSS. It also called for more information on studies and modelling, as well as ensuring the TPSS includes sufficiently detailed data to support stakeholder action, and for greater consideration of the role of distribution network service providers (DNSPs) in future TPSS iterations or other AEMO processes.	AEMO acknowledges feedback on the clarity and structure of the TPSS. AEMO will consider opportunities to more closely integrate the Engineering Roadmap into the 2026 TPSS. AEMO will also explore how to integrate Horizon 3 Engineering Roadmap considerations (e.g. future-back pre-conditions) in future iterations of the TPSS. AEMO will include a clear summary of changes in the 2026 TPSS. AEMO will also consider whether and how additional information on studies and modelling can be shared and will continue to ensure the TPSS includes detailed data to support informed stakeholder action. AEMO will consider how the role of DNSPs can be more substantively reflected in future TPSS iterations and other relevant AEMO planning processes, recognising the important role DNSPs play in ensuring system security.
Theme: Planning integration and investment signals	
Syncline Energy encouraged consideration of more integrated system strength solutions such as HVDC, BESS and data centre power infrastructure, noting that the TPSS does not consider these technologies and misses an opportunity to develop a 'smarter, lower cost' energy system. **Reliability Panel** recommended continued monitoring of transition point readiness, including reporting on the status of investments and the consequences if they are not achieved. It also encouraged AEMO to provide more specific information on the preparatory work required for each transition point.	AEMO will consider integrated system strength solutions through the Engineering Roadmap workplans, consistent with AEMO's broader planning and investment frameworks. Responsibility for selecting system strength solutions sits with the relevant regional system strength service provider. AEMO currently assesses and monitors transition point readiness and does so with detail for those in the operational horizon (0 – 2 years). While the status of investments is primarily indicated by proponents themselves, AEMO will continue to include the most up-to-date publicly available information and its relevance for transition timelines. AEMO will also continue to work with stakeholders to provide information on the preparatory work that is of most value.
Theme: Technical engagement and governance	
Syncline Energy supported earlier and more inclusive technical engagement, including greater involvement of project developers and OEMs. **SMA Australia** sought clearer delineation of roles between AEMO, DNSPs, transmission network service providers (TNSPs) and vendors in relation to protection equipment data and inventories. **ESSN** suggested the establishment of a representative technical working group to inform policy and standards in response to new technology. **Reliability Panel** encouraged AEMO to strengthen TPSS stakeholder engagement through broader communications and targeted stakeholder forums. It also recommended more structured, region-specific engagement and more tailored communications to help different stakeholder groups navigate and engage with the TPSS.	AEMO currently undertakes a range of targeted engagement activities with stakeholder groups across individual jurisdictions and with governments. AEMO is actively considering how to build on its engagement approach, including additional opportunities for the next iteration of the TPSS, ensuring engagement remains effective and delivers value. This includes gathering earlier feedback on technical matters and supporting greater clarity on stakeholder roles and responsibilities related to system security. AEMO will seek to support earlier engagement and improved visibility during the development of the 2026 TPSS, using existing forums where appropriate. The need for additional or new technical forums will be considered, in addition to direct bilateral engagement with interested stakeholders.
Theme: Essential system services (ESS)	
AEC and **CS Energy** supported expanding technical work to define the types and ranges of ESS needed, encouraged investigating multi-provider, multi-technology ESS delivery models that consider the NEM topology and called for moving beyond the current 'unit combination' approach to providing ESS. **SMA Australia** asked for clearer articulation of 'protection quality' fault current, including how it's determined and assessed, applicable standards and how existing protection devices would be treated. **Syncline Energy** supported greater use of functional requirements for system strength projects and the inclusion of acceptance criteria for any technology.	AEMO acknowledges feedback on ESS pathways and the relationship between system security requirements and the Engineering Roadmap workplans. AEMO is progressing this relationship through the 2026 TPSS and the planned integration of AEMO's Engineering Roadmap, along with learnings from the Type 2 trials which are supporting the demonstration of new system security technologies. AEMO supports the need for a fit for purpose planning and procurement framework that supports the future system, market and consumer needs. The timely delivery of resources that provide the required system security for transition points is essential to enable the energy system and market to continue to support the needs of consumers.

Stakeholder feedback	AEMO's response
Reliability Panel recommended continuing the move toward technology-neutral, performance-based specification of technical requirements for system security.	AEMO notes several active rule change requests are under consideration by the AEMC seeking enhancements to system security frameworks in the NEM, including the System Security Network Enhancement Rule Change for which AEMO is the proponent and the AEC / Clean Energy Council's joint rule change request to improve clarity and transparency in security frameworks. AEMO's detailed positions are articulated in both the rule change and our recent submission to the Enhancing Security Frameworks Rule Change. AEMO has been collaborating with industry on the matters raised in these rule changes and will continue to work with industry on opportunities to improve the framework's effectiveness at delivering the required resources in a timely manner.
Additional feedback	
AEC and CS Energy raised the need for greater alignment of assumptions, findings and methodologies across AEMO's planning documents to avoid conflicting investment signals. They also called for a structured operational plan, including investment requirements, for periods with limited or no synchronous units online. **ESSN** suggested establishing a national approach to electrification to accelerate the integration of inverter technologies, in addition to a range of proposals for electrification coordination. **Syncline Energy** encouraged stronger integration of system security design with transmission and load planning, including better incorporation of TPSS outcomes into the Integrated System Plan (ISP) process. It also supported providing longer term (5+ and 10+ year) functional requirements and locational signals to inform the ISP.	AEMO acknowledges this feedback, particularly the importance of clear alignment across AEMO's planning documents to support consistent investment signals. The ISP establishes the scenarios, forecasts and key parameters such as demand trajectories, development pathways, and timing of generator retirements, that provide a common foundation for subsequent planning processes. The TPSS builds on these inputs, utilising the ISP projections to assess system security needs, while TNSPs and other processes (such as RIT-Ts) use these outputs to inform detailed investment and operational planning. AEMO recognises the importance of reinforcing the interdependencies between these processes. Differences in assumptions across planning documents can reflect the range of system security risks, operational requirements, and policy uncertainties being considered. AEMO will continue to improve transparency in how these assumptions are derived from, and aligned with, the ISP planning framework.