

ST PASA Replacement

Pre-consultation information session 5 February 2025





This meeting will be recorded for internal AEMO purposes.



There is time set aside at the end of the session for questions.





We acknowledge the Traditional Custodians of the land, seas and waters across Australia. We honour the wisdom of Aboriginal and Torres Strait Islander Elders past and present and embrace future generations.

We acknowledge that, wherever we work, we do so on Aboriginal and Torres Strait Islander lands. We pay respect to the world's oldest continuing culture and First Nations peoples' deep and continuing connection to Country, and hope that our work can benefit both people and Country.

'Journey of unity: AEMO's Reconciliation Path' by Lani Balzan

AEMO Group is proud to have launched its first Reconciliation Action Plan in May 2024. 'Journey of unity: AEMO's Reconciliation Path' was created by Wiradjuri artist Lani Balzan to visually narrate our ongoing journey towards reconciliation – a collaborative endeavour that honours First Nations cultures, fosters mutual understanding, and paves the way for a brighter, more inclusive future.



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Agenda

- Project status
- Scope of ST PASA Replacement consultation 1 & 2
- Important target dates



ST PASA Replacement Project Status Update



AEMO PROJECT		FOR INDUSTRY PARTICIPANTS	
•	New engine delivered for standalone AEMO testingDeveloping software to integrate with existing systems		 Updating ST PASA Rule and procedures commence 31 July 2025 Procedure to be published end-February 2025
•	Performance testing and hardware requirements from April 2025		 Replacement project consultations Two stages of consultation: ST PASA Procedures (March 2025)
	Training and acceptance testing from August 2025.		2. Forecasting and reserve framework (November 2025)
		•	Data model draft technical specs from May 2025
		•	Industry testing from April 2026
			Go-live scheduled end of August 2026

Consultation 1 scope

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Commencing March 2025

Topics	Updates
Short Term PASA Procedure (for ST PASA Replacement)	ST PASA process description, definitions, concepts, features, inputs, process, and outputs.
Reliability Standard Implementation Guidelines (RSIG)	Update summary of processes that AEMO uses to implement the reliability standard and the interim reliability measure, so that frequency is consistent with Spot Market Operations Timetable.
	Detail of the reserve framework to be in the Reserve Level Declaration Guidelines (consultation from November 2025).
Spot Market Operations Timetable	Frequency of runs, provision of DUID availability/recall information.

Main features of ST PASA engine to be described in the procedure



Feature	Description
Objective	Create a generation profile that meets the demand at each node in the full network model.
Subject to	n-1 security constraints for any network configuration and set of transmission and generation contingencies.
Demand used	50% probability of exceedance plus uncertainty margin (UM) less estimated grid losses disaggregated to each node.
Supply side model	Security constrained economic dispatch (SCED), using spot market bid maximum availability and supply curve, or unconstrained intermittent generation forecast (UIGF), if appropriate, less uncertainty margin, less estimated auxiliary load. The economic dispatch model uses prices and volumes from spot market bids. Includes a bi-directional unit dispatch model. PASA availability used for recall run.
Network constraints	SCED will automatically produce thermal constraints each time the engine is run.
	Power system security constraints (such as for stability) will be taken from the constraints invoked for the central dispatch process.
Reliability measure	Deficit = demand (plus uncertainty margin) – supply (less uncertainty margin).
Components	The ST PASA engine iterates between a linearised network power flow and optimal dispatch.

Consultation 2 scope Commencing by November 2025

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	TOPICS
1.	 Reserve Level Declaration Guidelines (RLDG) Lack of reserve framework and market notice processes
2.	 SO_OP_ 3710 Load Forecasting Nodal forecasting method Uncertainty margins for demand and supply nodes
3.	 Data model and information to be published Aggregation method and data to be published
4.	SO_OP_3719 Procedure for Submitting Recall Information of Scheduled Generator Outages
5.	RERT guidelines



Topics carried from ST PASA Procedure and Recall project consultation

These topics were raised at the **ST PASA Procedure consultation information session on 30 January 2025** that are in scope for the updating ST PASA consultations.

- 1. Treatment of BDU with daily energy limit > one cycle.
- 2. Treatment of BDU capacity during periods of forecast scarcity for charge and discharge.
- 3. Treatment of hybrid plant.
- 4. Any unresolved regional aggregation of PASA availability issues.

Important target dates



Event	Target Date/s
Pre-consultation information session	Wednesday, 5 February 2025
ST PASA Replacement Consultation 1	Commencing beginning of March 2025 Written feedback on submission - end of March 2025
Data Model Update (v5.6)	First draft - May 2025 Published - September/October 2025
ST PASA Replacement Consultation 2	Commencing by November 2025 (depending on completion of consultation 1/required input analysis)
Industry Testing	April 2026
Go Live	End of August 2026

ST PASA Replacement project website



https://aemo.com.au/initiatives/trials-and-initiatives/st-pasa-replacement-project



Questions?





Thank you

