

Industry Readiness Approach

Enhancing Reserve Information & ST PASA Procedure and Recall Period

September 2024







Both initiatives require changes to bidding and NEM Reporting and impact common participants, so there is benefit in providing a combined view for the Industry Test Strategy, Q&A sessions and Industry Go-live Plan.

As a result of this decision, the draft readiness approaches and go-live criteria for both ERI and ST PASA Recall developed in consultation with NEM participants, have been combined into this final Industry Readiness Approach*.

Following industry feedback on the <u>High Level Implementation Assessment</u>** for ERI, AEMO intends to voluntarily begin publishing aggregated energy availability (i.e. state of charge in MWh) for grid-scale batteries each trading interval from 1 July 2025 in all NEM regions except Tasmania. The combined readiness approach incorporates this change.

The following slides outline:

- Purpose of the initiative readiness approach
- · Confirmed changes to be introduced by ERI Reporting
- Overview of the readiness approach framework for NEM Reform initiatives
- Readiness approach for ERI Reporting

*Combined Industry Readiness Approach will also be included in Final HLIA for ST PASA Procedure and Recall Period.

**including draft industry readiness and go-live criteria



Purpose of Initiative Readiness Approach

- To assist industry with their own planning and delivery activities to be ready for ERI and ST PASA as they are operationalised.
- To define the criteria against which go-live decisions will be made.
- Aligns to and supports the implementation approaches for both initiatives
- The combined Readiness Approach, once endorsed, will form the basis of participant readiness activities in line with the principles in the <u>NEM 2025 Industry and Business Readiness Strategy</u>.



Confirmed Changes for ERI - 1 July 2025

> Publication of state of charge of grid-scale batteries:

- Each 5-minute Trading Interval (TI), aggregated by NEM Region. Note that the relevant rules obligation on AEMO to publish this data commences on 1 July 2027 but AEMO will commence voluntary publication from 1 July 2025, except for Tasmania.
- At the end of each trading day, the state of charge for each facility by Dispatchable Unit Identifier (DUID) in each TI.
- Publication of aggregated daily energy limits (total availability) for scheduled plant as part of the pre-dispatch (PD) process, providing a forecast of total availability for each 30 minutes of the current trading day and next trading day. As part of implementing this change:
 - For all relevant BDU's, AEMO will cap energy availability by Maximum Storage Capacity. This includes pumped hydro who use the profiled energy limit model introduced under the IESS reform.
 - For relevant scheduled generators unable to submit NULL for their bid Daily Energy Constraint when not energy constrained, AEMO will reject bids larger than total capacity for each generator DUID
- Scheduled BDUs to provide Maximum Storage Capacity as part of Bid Validation Data. Data is collected at time of registration and from 1 July 2025 registered BDU's are required to include maximum storage capacity (MWh) in their annual schedule 3.1 data confirmation process.



Confirmed Changes ST PASA - 31 July 2025

- Development of ST PASA procedure to introduce a principles-based approach for how ST PASA is administered.
- > Publication of generator availability information at Dispatchable Unit Identifier (DUID) level
- Changes to bidding process where recall time for the associated PASA availability will be supplied by participants for each trading interval via the normal bids.
- Changes to modelling of WDR units and BDUs to be treated as a generator and disaggregate dispatch across nodes pro-rata to registered Maximum Responsive Component (MRC) for each NMI in that unit.



RISK & CONTINGENCY MANAGEMENT

INITIATIVE READINESS REPORTING & GO-LIVE CRITERIA MANAGEMENT

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READINESS AREA

INDUSTRY READINESS APPROACH – ERI and ST PASA Recall Period

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ERI - Initiative readiness criteria (rule commencement 1 Jul 2025)	Individual participant readiness approach	 Individual participant (or participant category) readiness is not a dependency for go-live. However, rule commencement may require impacted participants to make timely system/process changes to comply with rule commencement 1 July 2025.
	AEMO readiness criteria	 By the ERI rule commencement date (1 July 2025) AEMO's: solution needs to be updated and tested (Bidding, Dispatch, NEM Reports and Data Model changes) business needs to be ready to operate IT support needs to be in place.
ST PASA Recall Period - Initiative readiness criteria (rule commencement 31 Jul 2025)	Individual participant readiness approach	 Individual participant (or participant category) readiness is not a dependency for go-live. However, impacted participants are obligated to make system/process changes to comply with rule commencement 31 July 2025, noting technical go-live is planned for 1 July 2025 to align to the ERI rule obligation date
	AEMO readiness criteria	 By the ST PASA rule commencement date, AEMO's: solution needs to be updated and tested (Bidding, NEM Reports and Data Model changes) business needs to be ready to operate IT support needs to be in place
Industry Testing	Industry test strategy	 Industry test approach along with detailed timings will be confirmed with the issue of one Industry Test Strategy (31 Jan 2025*) Test release cycle for both ERI and ST PASA Recall Period will be combined as bidding changes required for both affect the same application AEMO will allow a 1-month period, from 21 May 2024*, to conduct industry testing. Note, for ST PASA this is approximately 2 months prior to the rule commencement date and 1 month before technical go-live. This will allow participants to simultaneously test for both ERI and ST PASA: Their bidding processes Their ability to ingest the updated data model and use the reports within their systems Capped energy availability by maximum storage capacity in Dispatch process (ERI only) Scoping and planning will occur in collaboration with industry.
	Test plans and coordination	 Test plans are to be developed independently by impacted participants appropriate to own requirements Industry Test Working Group (ITWG) sessions available for updates on testing progress and for additional support. Sign up <u>here</u>

* Date tentative

READINESS AREA		INDUSTRY READINESS APPROACH Continued
Participant development support	Procedures	ERI: no procedure consultations required
		 ST PASA: Final rule obligates AEMO to publish ST PASA procedure by 30 April 2025, giving stakeholders 3 months to comply with the procedures prior to the rule commencing on 31 July 2025. AEMO intends to have completed the consultation and publish the procedure by 10 Feb 2025* Procedure consultation process is planned between Sep 2024 to Apr 2025 and will NOT result in any system changes as it has been confirmed to be purely an administrative process consultation
	Technical specifications	 EMMS data model changes expected to be delivered in DM v5.5 for both initiatives. Initial technical specification available from 31 Oct 2024 with monthly updates as required through to go-live. DM Preproduction release – 25 Mar 2025 DM Production release – 29 Apr 2025 For ST PASA only: EMMS Technical Specification with details of structural changes to bidding interfaces and generator availability for reporting available from 8 Nov 2024* through to go-live.
		Market Systems User Group (MSUG) sessions available for additional support. Sign up details
	Environment availability	 Preproduction will be available to support combined industry testing of ERI and ST PASA changes from 21 May 2025 for a period of 1 month. For ST PASA, there is a possibility that the test period may be extended if required, given test period commences 2 months prior to rule commencement. No additional development support environment deemed necessary for early testing as changes to AEMO's systems and data model requires only an incremental change to existing systems/data model. It is therefore expected that development support can be managed in the preproduction environment.
	IT development support	 High Level Implementation Assessments (HLIA) have been published on AEMO's public website for each initiative. <u>ERI HLIA</u> and <u>ST PASA HLIA</u> AEMO will run Q&A sessions during the Industry Test period to support participants. As the ST PASA solution will be deployed to Preproduction 2 months prior to rule commencement, allowing 1 month of industry testing, AEMO will review during the test period if support needs to be extended to support participant preparations or issue resolution. As required, AEMO will provide industry support via NEM Reform forums, information sessions, focus groups and daily stand-ups for affected participants. These engagements would be scheduled as the IT design and approach is formalised to support participants development.

* Date tentative

READINESS AREA		INDUSTRY READINESS APPROACH Continued
Transition and go-live	Transition plans	No obligated transitional requirements for rule commencements
	Go-live plan	 ERI and ST PASA will be deployed to the production environment as one combined release on 1 July 2025 to align to ERI rule obligation date. For ST PASA, this release represents technical go-live only. ST PASA industry go-live aligns to rule commencement of 31 July 2025. One Industry Go-live plan for production release of both initiatives, in consultation with industry, to confirm detailed deployment and capability availability timeframes in the lead up to respective rule commencements including: When data model will be populated with new/changed data and reports available For ST PASA, timeframes for when participant bids are to be finalised under current ruling and when participant bids will be required under new ruling Draft/Final plan to be published 13 May 2025 / 30 May 2025*
	Registration or accreditation plans	 ERI and ST PASA rule changes do not indicate changes to registration or accreditation frameworks For ERI, additional registration data required from scheduled BDUs was made available from 1 July 2024 (via IESS initiative). Ongoing requirement to maintain registration data via annual data confirmation process is currently managed under BAU Accreditation Plans are not required as there are no changes to MDP / MP requirements
Risk & contingency management		Will be developed in consultation with industry
Initiative readiness reporting & go-live criteria management		 Formalised participant readiness reporting is not required on the basis that there are no mandatory participant transition or preparation activities that if not performed will impact technical readiness for market or other participants AEMO will report to industry, progress against confirmed L1/L2 industry readiness milestones for the combined initiatives on a regular basis through NEM Reform forums AEMO will schedule formal checkpoints against go-live criteria for each initiative, 3 and 1 month prior to go-live, to provide assurance of implementation preparations, allowing time for finalising AEMO's and participants business preparations: 3 months – 11 Apr 2025* 1 month – 23 May 2025*