

Issue: 10 | Dec 2024

Welcome to our special end of year newsletter.

In this edition, we reflect on the significant achievements we have accomplished together in 2024 and provide a snapshot of initiatives scheduled for release in 2025.

Thank you to all our stakeholders for your ongoing commitment and collaboration with the National Electricity Market (NEM) Reform Program this year. One initiative at a time, we are strengthening the NEM for the future and advancing Australia further along the energy transition.

We wish you and your families a happy and restful break over the holiday period and look forward to recommencing our work together in 2025.

A reflection of 2024

As we close out our third year as a Program, we reflect on how instrumental your contribution has been in the implementation of many essential reforms.

2024 Initiative Delivery

This year, we have successfully implemented another 5 initiative releases, whilst mobilising and progressing many other initiatives.



2024 Initiative Highlights & Outcomes

MSATS Standing Data Review (MSDR) delivered a new automated metering exemptions process for Metering Coordinators to communicate with us when there are issues with meters. Metering coordinators can now notify AEMO via an automated workflow in MSATS.

Integrating Energy Storage Systems (IESS) June 2024 was the final release of the IESS project, marking the completion of a 3-year project enabling batteries and aggregate systems to play a much bigger role in the NEM. The June release introduced the following changes for participants with grid-scale batteries:

• Integrated Resource Provider (IRP) participant type: The new IRP is a near-universal participant type which has made it possible for batteries

- to be registered as a single facility, no longer needing to be identified as both a generator and customer.
- **Bi-directional unit (BDU)**: A new unit type enables participants to bid and dispatch as a single unit, simplifying operations by removing the need to operate as deemed separate generation and load units.

Together, these changes have simplified the registration, bidding and dispatch processes for grid-scale batteries. 26 existing grid-scale batteries have transitioned to the new BDU functionality this year. Additionally, changes to the non-energy cost-recovery (NECR) framework mean that costs are now distributed more fairly to participants based on the amount of energy used or consumed.

Retail Market Improvements (RMI) adjusted the way settlement bills are calculated in the wholesale market.

By automatically removing potential 'settlement spikes' in situations where the Net System Load Profile (NSLP) value crosses the zero axis, Retailers will now receive an even more reflective wholesale invoice from AEMO. Also, through the addition and amendment of Substitution Types and Reason Codes, recipients of substituted metering data will now have a clearer understanding of the exact reason and method used to support the provided meter value, thereby reducing the need for agreements amongst the relevant parties.

Frequency Performance Payments (FPP) Non-Financial Operations

FPP introduces economic incentives for generators and loads to have a helpful impact on system frequency in their real-time operations and investment decisions. The Non-financial operation (NFO) period began on 9 December 2024 and runs until June 2025. This period provides participants with visibility of how their units' performance will translate to incentive payments and penalties under the new arrangements.

Stakeholder Engagement

Thank you to everyone who has engaged with the Program in 2024. We value your ongoing participation and support.



2025 Plan

2025 is shaping up to be another exciting year for NEM Reform, with 6 major initiative releases scheduled to go live, and many more progressing through the pipeline.

SCADA Lite 2025

SCADA Lite will enable NEM non-NSP participants to establish a bi-directional connection to exchange operational information (telemetry and control) with AEMO. This expansion reduces the barriers to entry into the market for NEM non-NSP participants and provides these participants access to additional revenue streams. For more information, please visit AEMO | SCADA Lite

Frequency Performance Payments (FPP) Financial Operations 2025

Full go-live of the new FPP arrangements is on 8 June 2025, when financial settlement of FPP amounts will commence. The FPP reform is also changing the way Regulation Frequency Control Ancillary Services (FCAS) costs are allocated and recovered. The current 28-day Causer Pays arrangements will continue during FPP NFO, before being replaced by the new five-minute FPP performance calculations from 8 June 2025. For more information, please

visit AEMO | Frequency Performance Payments project.

Metering Services Review (MSR) 2025

Metering Services Review (MSR) is AEMO's consultation name for the Accelerating Smart Meter Deployment (ASMD) rule change. There are two overarching objectives of the rule:

- Accelerate the deployment of smart meters in the NEM, aiming for universal uptake by 2030.
- Enable the provision of power quality data (PQD) from smart meters to DNSPs.

Supporting these objectives are several B2B and B2M releases that are effective from 1 December 2025 along with the commencement of smart meter roll out. Power quality data is effective from 1 July 2026. AEMO is tasked with determining the specifications, formats and delivery mechanism for the new basic PQD service. The Final MSR rule was published by the AEMC on 28 November 2024. For more information, please visit AEMO Metering Services Review project page.

Enhancing Reserve Information (ERI) July 2025

To assist market participants and other stakeholders to understand the overall generation reserve position in the NEM, AEMO will begin to publish information on the availability of scheduled generators and the state-of-charge of grid-scale batteries, aggregated by region. This will enable participants to make more informed operational decisions, especially ahead of periods of anticipated low reserves or high wholesale prices. AEMO will publish state-of-charge of grid-scale batteries each trading interval from 1 July 2025 with the exception being Tasmania, which will be 1 July 2027. For more information, please visit <u>AEMO Enhancing Reserve Information project page</u>.

ST PASA Procedure and Recall Period (ST PASA) July 2025

This rule change introduces a principles-based approach to give AEMO and industry more flexibility in updating ST PASA, an important system used by AEMO to forecast electricity reliability and security in the NEM. The project will implement the following by 31 July 2025:

Publish a ST PASA Procedure

- Include changes from the new NER 3.7.3, specifically
 - ST PASA publication timetable, and
 - definition of 'energy constraint' and PASA availability.

The project will also deliver the system changes associated with the recall time and unit level availability information. For more information, please visit <u>AEMO</u> ST PASA Procedure and Recall Period project page.

Important note: AEMO is separately integrating a new ST PASA system to replace the existing ST PASA system. This new system will involve significant changes to processes and procedures and will involve detailed engagement and consultation with participants. This will be completed through the <u>ST PASA replacement project</u> by AEMO's Operations Technology Program.

Improving Security Frameworks (ISF) Dec 2025

Essential system services (ESS) are critical to maintaining overall power system security and reliability by meeting core power system requirements. Historically, synchronous generators (such as large coal, gas and hydro generators) supplied ESS simply as a by-product of energy production. New non-synchronous generators (such as solar PV, wind and batteries) do not automatically provide these services.

Addressing this, AEMO is implementing the AEMC's <u>Improving security</u> <u>frameworks for the energy transition</u> rule change, made on 28 March 2024. Full enablement obligations and rules will commence 2 December 2025. For more information, please visit <u>AEMO Improving Security Frameworks project page.</u>

Looking further ahead

Market Interface Technology Enhancements (MITE) 2025-2026

Formerly known as the Foundational and Strategic initiatives, the MITE group of initiatives includes Identity and Access Management (IDAM), Industry Data Exchange (IDX) and Portal Consolidation (PC).

• IDAM: Implementing a unified identity and access management system to enhance cybersecurity controls.

- IDX: Developing unified data exchange standards for a secure, scalable, and centralised platform.
- PC: Consolidation project providing a unified stakeholder experience with secure access to AEMO browser services.

The MITE program is currently in the technical planning phase supporting IDX Foundation and IDAM. For more information, please visit <u>AEMO MITE project</u> page.

Flexible Trading Arrangements (FTA) 2026

The FTA rule includes two aspects. First, it enables consumers to use their CER devices to participate in the market by splitting passive consumption from their flexible consumer Energy Resources (CERs). Secondly, it provides the opportunity for previously unmetered loads, such as public light and street furniture, to be metered with new meter types. By enabling direct measurement, the rule delivers benefits such as reduced energy costs. The Final FTA Rule was published by the AEMC on 15 August 2024. For more information, please visit AEMO | Flexible Trading Arrangements project page.

Shortening the Settlement Cycle (SSC) 2026

The SSC rule reduces the time for NEM final statement settlement to nine business days after the billing week, with an additional revision at 20 days. This rule lowers prudential and credit support capital requirements, particularly for smaller retailers that are not vertically integrated, reducing barriers to entry, boosting competition and benefiting consumers with better prices, services and choice. The <u>Final SSC Rule</u> was published by the AEMC on 12 December 2024. For more information, please visit <u>AEMO | Shortening the Settlement Cycle project page</u>.

Integrating Price Responsive Resources (IPRR) 2027

The IPRR rule will enable a growing number of unscheduled price-responsive resources to participate in the NEM across residential, commercial, and industrial locations. This includes:

• Generation: rooftop solar, EV's

Storage: batteries, communal batteries

 Flexible demand: smart appliances (e.g. hot water systems, air conditioners, pool pumps)

Managed by aggregators and retailers, these assets respond to price changes but were previously excluded from scheduling. Integrating them improves market efficiency, balances supply and demand, ensures affordable and reliable energy for consumers. The Final Rule is expected to be published by the AEMC on 19 December 2024. For more information, please visit the <u>AEMO |</u> Integrating Price Responsive Resources into the NEM (IPRR)

Project EnergyConnect (PEC) Market Integration 2027

Project EnergyConnect (PEC) will create a parallel transmission loop between NSW, SA and Vic, introducing challenges in managing negative inter-regional settlement residues (IRSR) and changes the way Negative Residue Management operates. To solve the negative IRSR issues, the <u>AEMC draft rule</u> released in December 2024, proposes sharing negative IRSR across all looped regions based on annual electricity demand to reduce financial risk for Transmission Network Service Providers (TNSP) and consumers.

The final rule is proposed to commence on 3 July 2025. However, will not take effect until the transmission loop commences capacity release. AEMO will consult on relevant Procedures and update its systems to incorporate the required changes before capacity release on PEC, expected Q4 2026. For more information, please visit the AEMO | Project EnergyConnect (PEC) Market Integration project page.

Get involved

Please don't hesitate to contact the team at NEMReform@aemo.com.au if you wish to discuss approaches, potential impacts or to understand which Program forum may be relevant to your organisation. You can also stay in touch with us via the NEM Reform Program website.

Once again, thank you for your phenomenal efforts this year. We look forward to collaborating and continuing to work with you on the implementation of the NEM Reform Program in 2025.

Regards,

NEM Reform Program Team