

Final High Level Impact Assessment (HLIA) Project EnergyConnect – Market Integration

November 2025

Wholesale Reform Delivery





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.

Important notice

Purpose

AEMO has prepared this document to provide an overview on how the changes to incorporate Project EnergyConnect into AEMO's market systems will be implemented.

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Version control

Version	Release date	Changes
1	19/12/2024	Initial version for release
2	25/11/2025	Final version

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Contents

1	Introduction	5
1.1	Providing flexibility around the distribution of negative inter-regional settlements residue (IRSR)	5
1.2	Document background and context	6
1.3	High Level Impact Assessment (HLIA) overview	6
1.4	Key implementation dates	6
1.5	Stakeholder engagement	7
2	AEMO summary of key impacts	8
3	AEMO procedure impacts	9
3.1	Modification of AEMO's dispatch systems	9
3.2	Integration of changes to allocation and distribution of IRSR	10
3.3	Amendments to the Settlement Residue Auction (SRA) Rules	11
3.4	Constraints Formulation Guideline	11
4	System impacts	12
4.1	Release 1 – August 2026	14
4.2	Release 2 – November 2026	14
5	Participant impacts	15
5.1	Publication of information for participants	15
5.2	Industry readiness approach	15
6	Implementation timeline	19
7	Delivery risks and issues	21
A1.	Description of AEMO's impact ratings	22
	Abbreviations	23



Tables

Table 1	View of key AEMO impacts	8
Table 2	Overview of impacted procedures and guidelines	9
Table 3	Directional interconnectors proposed to be included in SRA Rules	11
Table 4	AEMO System Impact – Summary for Release 1 and 2	14
Table 5	Participant change impacts	15
Table 6	Readiness approach assessment	17
Table 7	Indicative assessment of delivery risk and issues	21

Figures

Figure 1	Summary of impacts for PEC-MI	8
Figure 2	Release 1 and 2 – medium to low system impact for PEC-MI changes	13
Figure 3	Industry implementation approach PEC-MI	16
Figure 4	PEC-MI activity timeline	20

1 Introduction

1.1 Providing flexibility around the distribution of negative inter-regional settlements residue (IRSR)

Investment in low-cost renewable energy, firming resources and essential transmission remains the best strategy to deliver affordable and reliable energy, protected against international market shocks. AEMO supports Australia’s complex and rapid energy transformation towards net zero emissions, enabling low-cost firming renewable energy and essential transmission to provide consumers in the National Electricity Market (**NEM**) with reliable, secure and affordable power.

A transmission loop will be formed in the NEM when Project EnergyConnect Stage 2 (**PEC**) becomes operational. PEC¹ is a new 330 kilovolts (**kV**) electricity interconnector between Robertstown in South Australia and Wagga Wagga in New South Wales, with a short 220 kV spur from Buronga in New South Wales to Red Cliffs in north-west Victoria. At completion, the project will provide approximately 800 megawatts (**MW**) of additional transmission capacity between New South Wales and South Australia.

In February 2024, AEMO submitted a rule change request that sought to address certain market integration issues that would otherwise arise on the commencement of PEC because of the creation of a parallel interconnector configuration² between three adjacent regions (**transmission loop**). AEMO proposed amending the National Electricity Rules (**NER**) for inter-regional settlements residue (**IRSR**) arrangements for transmission loops.

The rule change consultation “Inter-regional settlement residue arrangements for transmission loops³” began on 25 July 2024 to assess these new settlement challenges for the NEM. The Australian Energy Market Commission (**AEMC**) made the *National Electricity Amendment (Inter-regional settlement residue arrangements for transmission loops) Rule 2025 (IRSR Rule)* on 25 September 2025. While the rule commenced on 2 October 2025, transitional provisions require AEMO to commence reflection of the transmission loop in dispatch no earlier than 1 October 2026 and changes to settlement methodology no later than 2 November 2026.

AEMO has commenced consultation on the relevant Procedures, including the Automative Negative Residue Management (**NRM**) which requires changes to incorporate a transmission loop.

This document sets out the high-level impact assessment implementation arrangements by detailing:

- changes to the NER from the AEMC’s Final Determination and Rule,
- integration of changes to AEMO’s systems to operate with a transmission loop,
- incorporation of the new interconnector into the Settlement Residue Auctions (**SRA**), and
- any impacts to industry.

¹ See Project EnergyConnect website, at <https://www.projectenergyconnect.com.au/>.

² Defined in the Draft Rule 3.18.1A, see <https://www.aemc.gov.au/rule-changes/interregional-settlement-residue-arrangements-transmission-loops>.

³ See <https://www.aemc.gov.au/rule-changes/interregional-settlement-residue-arrangements-transmission-loops>.

1.2 Document background and context

This High Level Impact Assessment (HLIA) outlines the implementation of the rule change and the development of other changes from the incorporation of a transmission loop into the AEMO systems. This HLIA supports stakeholders with their understanding of the IRSR Rule.

The purpose of this document is to provide information to participants on the changes AEMO will implement through the **Project EnergyConnect – Market Integration (PEC-MI)** initiative. This is to assist and inform participants in the development of their own implementation timelines and impact assessments as required.

1.3 High Level Impact Assessment (HLIA) overview

The HLIA is guiding AEMO’s development of:

- changes required for procedures and guides that are impacted,
- updates to the price scaling function and the automation of negative residue management process to incorporate a transmission loop, and
- changes to AEMO’s settlement processes arising from the new rule.

This HLIA does not discuss constraint formulation associated with PEC, rather this will be included in the updated Constraint Formulation Guideline changes (refer Section 3).

1.4 Key implementation dates

AEMO is working towards implementing the new interconnector into the NEM Dispatch Engine (NEMDE) on **1 October 2026**⁴. This is a separate activity to inter-network testing, which is currently expected to take approximately 15 months⁵. In line with the IRSR Rule, AEMO must also have the new settlement methodology for IRSR implemented and made effective by no later than 2 November 2026⁶. As defined in the IRSR rule, AEMO is currently working towards a *loop settlements start date* of **1 November 2026**, if not before, to align with start of settlements billing week⁷.

For further information on implementation timing with respect to the settlement residue auctions, refer to Section 6.

⁴ In accordance with the IRSR Rule, <https://www.aemc.gov.au/rule-changes/inter-regional-settlements-residue-arrangements-transmission-loops>. For latest information regarding the *loop operations start date* and *loop settlements start date*, refer to the information sources provided in Section 5.1

⁵ Project EnergyConnect System Integration – April 2025 Industry Update, at <https://www.projectenergyconnect.com.au/moreInformation.php>.

⁶ The Amending Rule has the effective date as 2 October 2025. However, the Rule will come into practical effect when AEMO first reflects the transmission loop in dispatch, on the *loop operations start date*, which is to occur no earlier than 1 October 2026.

⁷ For latest information regarding the *loop operations start date* and *loop settlements start date*, refer to the information sources provided in Section 5.1.

1.5 Stakeholder engagement

AEMO has established a comprehensive stakeholder engagement program for the implementation of PEC and has included the PEC-MI⁸ project as a NEM Reform Program Initiative⁹ to promote effective consultation on changes to AEMO procedures and other documents. Any complementary changes to other AEMO procedures arising from this consultation will follow the appropriate consultation process.

AEMO intends to keep interested stakeholders up to date on the PEC-MI through the following ways:

- NEM Reform engagement will occur through the regular monthly forums that AEMO conducts as part of the NEM Reform Program, including:
 - the Program Consultative Forum (**PCF**),
 - the Electricity Wholesale Consultative Forum (**EWCF**), and
 - the Implementation Forum.
- The Settlement Residue Committee (**SRC**) will hold regular quarterly meetings¹⁰.
- The AEMO initiative webpage is <https://www.aemo.com.au/initiatives/major-programs/project-energyconnect-market-integration-project>.
- AEMO NEM Reform mailbox: NEMReform@aemo.com.au.

⁸ See <https://aemo.com.au/initiatives/major-programs/nem-reform-program/nem-reform-program-initiatives/project-energyconnect-market-integration-project>.

⁹ See <https://aemo.com.au/initiatives/major-programs/nem-reform-program/nem-reform-program-initiatives>.

¹⁰ See <https://www.aemo.com.au/energy-systems/electricity/national-electricity-market-nem/market-operations/settlements-and-payments/settlements/settlements-residue-auction/settlement-residue-committee>. AEMO will present outcomes from these meetings at the EWCF.

2 AEMO summary of key impacts

The diagram and table below depict the key impacts to AEMO’s systems and processes impacted.

Figure 1 Summary of impacts for PEC-MI

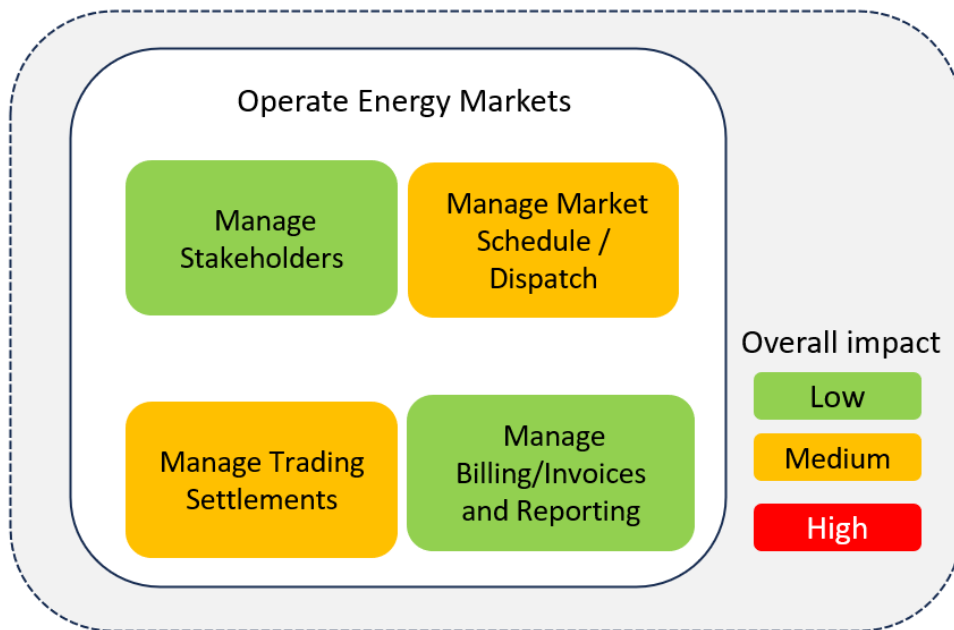


Table 1 View of key AEMO impacts

Focus area	Impact description	Description
Manage Market Schedule/Dispatch	Dispatch and Reports	<ul style="list-style-type: none"> Incorporation of transmission loop in NRM process Incorporation of transmission loop in price scaling function
Manage Trading Settlements	Calculation of settlement residue amount and related amounts	<ul style="list-style-type: none"> Calculate the amount corresponding to market transactions and issue billing/invoices based on the reconciliation of negative settlement residue amounts for transmission network service providers (TNSPs). Distribution of any settlement residue auction among the auction unit holders related to NSW-SA interconnector Facilitation of quarterly Settlement residue auctions, including new NSW-SA interconnector
Manage Billing/Invoices and Reporting	Billing/invoices to reflect new settlement calculations	<ul style="list-style-type: none"> Issue billing/invoices based on the reconciliation of negative residue amounts and distribution of settlement residue surplus Update Dashboards, reports, notices, and Procedures/Guides to reflect changes.
Manage Stakeholders	Consult and communication stakeholders	<ul style="list-style-type: none"> Consulting, communicating and reporting to the external stakeholder at different stages. External stakeholders include Coordinating Network Services Providers, SRC, Energy Wholesale Consultative Forum, Industry Groups etc.

3 AEMO procedure impacts

To facilitate the implementation of PEC-MI and meet the requirements of the IRSR Rule, AEMO will be consulting on existing documents to be consistent with the changes to NER 3.6.5 and 3.18.3.

Table 2 Overview of impacted procedures and guidelines

Type of document	Title	Content change	Consultation/Feedback	Timing
Guideline	Guide to the Automation of Negative Residue Management	Include transmission loop into automation of NRM process.	2 rounds consultation	Final published November 2025
Procedure	Methodology for the allocation and distribution of settlements residues	Include new calculations arising from rule change that relate to allocation and distribution of settlement residues for a transmission loop to reflect new NER 3.6.5(b) allocation methodology	Feedback	Commencing Q2 2026
Procedure	NEM Transmission Network Service Provider Negative Settlements Residue	Include changes from the rule change that relate to a new interconnector in the NEM. Worked examples to be updated (bundled with SSC reform).	Feedback	Commencing Q2 2026
Procedure	SRA Rules	Include the NSW-SA and SA-NSW directional interconnector as unit categories and relevant buy-back parameters as appropriate.	Expedited	Commencing late November / early December 2025
Guideline	Guide to the Settlements Residue Auction	Include changes to clauses 3.18.3 and 3.6.5. Reflect new calculations.	Feedback	Commencing Q2 2026
Procedure	Constraint Formulation Guideline	Address AEMO's policy on managing negative settlements residues (NER 3.8.10(c)(5)) and include PEC equality constraint.	Expedited	Commencing Q3 2026
Procedure	SO_OP_3705 Dispatch Procedure	Including changes to Section 17 which outlines the approach to managing negative settlements residues	Feedback	Commencing Q3 2026
Procedure	Spot Market Operations timetable	Include reporting updates to changes to clause 3.18.3.	Expedited	Commencing Q3 2026
Guideline	Price Scaling Guide (new)	Update to include section on transmission loop	No feedback	Publishing Q4 2026

3.1 Modification of AEMO's dispatch systems

NRM is the process AEMO uses to manage negative settlements residue and is applied under NER 3.8.1(b)(11). AEMO's policy for managing negative settlements residue is published as part of the power system operating procedures (dispatch procedure)¹¹. AEMO's Guide to Automation of Negative Residue Management¹² describes how AEMO applies that policy as an automated process in dispatch.

¹¹ As required by NER 3.8.10(c)(5). See AEMO, *SO_OP_3705 Dispatch Procedure*, Section 17: https://aemo.com.au/-/media/files/electricity/nem/security_and_reliability/power_system_ops/procedures/so_op_3705-dispatch.pdf?la=en.

¹² <https://www.aemo.com.au/energy-systems/electricity/national-electricity-market-nem/market-operations/policy-and-process-documentation>

The new interconnector is expected to cause more frequent accrual of negative IRSR than across 'radial' interconnectors (that is, the current regulated interconnectors that link two regions without forming an inter-regional transmission loop).¹³ This is due to the way power flows in a transmission loop, and how this interacts with the NEM's regional pricing model.

The costs of negative IRSR are currently passed on to consumers via transmission use of system (TUOS) charges, and AEMO currently limits the accumulation of negative IRSR through a process of 'clamping' counter-price flows.

To ensure benefits flow to consumers from constructing and energising transmission loops and related transmission infrastructure, AEMO will not 'clamp' looped interconnectors to limit negative IRSR when 'net' loop IRSR is positive¹⁴. Accordingly, AEMO has amended the automation of the NRM process to allow for the introduction of a transmission loop¹⁵.

3.2 Integration of changes to allocation and distribution of IRSR

As outlined in AEMO's PEC Market Integration Directions Paper¹⁶, positive IRSR occurs where power travels from a low to a high-priced region and is calculated as the difference between the regional reference prices (RRPs) in the importing and exporting regions, multiplied by the interconnector flow. Negative IRSR occurs where power travels counter-price, importing electricity to lower priced regions.

AEMO will be consulting on the documents outlined in Table 2 above to reflect the changes to the NER from the IRSR Rule. The final IRSR Rule included a change from the AEMC's draft rule, to net off IRSR in transmission loops. This means that all positive and negative IRSR on individual arms of the transmission loop is pooled together, then the remaining net loop IRSR:

- if positive, is distributed to the SRD unit holder, and
- if negative, is recovered from the Co-ordinating Network Service Providers (CNSPs) in the looped regions according to regional demand. 'Regional demand' is calculated using each region's total annual electricity consumption over the prior year and any unsold settlement residue distribution (SRD) will be allocated to the importing region's CNSP.

AEMO will assign IRSR to each arm of the transmission loop in accordance with the existing methodology before the netting off approach is applied.

While this approach is different to AEMO's rule change proposal¹⁷, it will be of a similar implementation complexity.

Radial interconnectors between Queensland/New South Wales and Tasmania/Victoria (if regulated) will be unaffected by the rule change and negative IRSR will continue to be allocated to the importing transmission network service provider (TNSP).

¹³ Modelling the settlement effects of PEC transmission loop discussed in AEMO's directions paper - https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2022/pec-market-integration-paper/directions-paper-for-consultation/pec-market-integration---directions-paper-for-consultation.pdf?la=en and ACIL market modelling report - https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2022/pec-market-integration-paper/directions-paper-for-consultation/modelling-the-settlement-effects-of-pec---final-report.pdf?la=en.

¹⁴ For more background on loop flow IRSR, see <https://aemo.com.au/consultations/current-and-closed-consultations/project-energy-connect-market-integration-paper>.

¹⁵ 2025 Automation of NRM for the implementation of transmission loops consultation <https://www.aemo.com.au/consultations/current-and-closed-consultations/automation-of-negative-residue-management-for-the-implementation-of-transmission-loops>

¹⁶ At https://www.aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2022/pec-market-integration-paper/directions-paper-for-consultation/pec-market-integration---directions-paper-for-consultation.pdf?la=en.

¹⁷ AEMO's rule change Proposal, at https://www.aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2022/pec-market-integration-paper/february-2024/20240223-integration-of-project-energyconnect-into-the-national-electricity-market.pdf?la=en.

3.3 Amendments to the Settlement Residue Auction (SRA) Rules

Under NER 3.18.3, AEMO must develop the rules which govern the SRA in consultation with the SRC.

AEMO will consult on the SRA Rules to:

- include the new PEC directional interconnectors to the table in clause 4.2(a) (refer Table 3), and
- make any necessary amendments to clarify Settlement Residue Distribution Agreement (SRDA) termination rights for Victoria/South Australia, Victoria/New South Wales units purchased up to the September 2025 auction (for relevant quarters from Q4 2026).

Transitional clauses¹⁸ allow AEMO to amend the SRA Rules using the expedited consultation procedure (rather than the standard consultation procedure) in recognition of the limited time to implement the required changes.

Table 3 Directional interconnectors proposed to be included in SRA Rules

Unit category	Directional interconnector
SANSW	South Australia to New South Wales
NSWSA	New South Wales to South Australia

Note: Refer to SRA Rules, section 4.3(b), at https://aemo.com.au/-/media/files/electricity/nem/settlements_and_payments/settlements/2020/sra_settlements_residue_auction_rules_13_03_20-final.pdf?la=en.

Under the IRSR Rule, AEMO must make reasonable endeavours to conduct at least one auction to offer the new SRA units on or before 1 October 2026, accounting for any practical implementation challenges that may arise. The dates for settlement residue auctions are available on AEMO’s website¹⁹. AEMO will determine the number of units to be made available for the SRA for New South Wales – South Australia and South Australia – New South Wales (Project EnergyConnect) auctions in consultation with the SRC. This number could reflect either the interconnector’s full nominal capacity or its expected available capacity (starting at 150 units or PEC capacity from October 2026).

Auction fees will be apportioned to positive net allocation in loop interconnector transactions for the new interconnectors as per the existing methodology.

3.4 Constraints Formulation Guideline

Under NER 3.8.10, any constraint which occurs within a region or between regions must be included in the dispatch process, and this is managed through the Constraints Formulation Guideline. AEMO will include the “PEC loop flow equations” into the ‘Alternative Formulation’ section of this Guideline required for the transmission loop.

¹⁸ Transitional clauses 11.188.2 and 11.188.3 require AEMO to review, and update where necessary, the auction rules, the timetable and constraint formulation guidelines.

¹⁹ See <https://www.aemo.com.au/energy-systems/electricity/national-electricity-market-nem/market-operations/settlements-and-payments/settlements/settlements-residue-auction/auction-dates>.

4 System impacts

This section focuses on the system impacts associated with the implementation to the *loop operations start date*, which is to occur no earlier than 1 October 2026, and a *loop settlements start date* currently expected on 1 November 2026.

AEMO's impacted systems are the settlement systems and the dispatch system. While the degree of impact to each of these systems is low, the changes are required to be implemented during 2026 when the AEMO's release schedule is heavily congested. AEMO has designed the release schedule to allow for two Releases in relation to PEC-MI: Release 1 in August 2026 and Release 2 in November 2026.

This two-release approach has the following benefits:

- aligns the required changes with implementation timing of other initiatives within the Reform Program, delivering efficiency benefits,
- allows for implementation of NRM updates, to limit the accumulation of negative IRSR in the NEM when accumulation reaches or exceeds the threshold of -\$100,000 around the transmission loop,
- allows for implementation of updates to the price scaling function ahead of loop operation, and
- allows sequencing of system updates to manage transition to transmission loop operations and settlements, including reasonable endeavours to auction new SRA units before 1 October 2026.

Figure 2 Release 1 and 2 – medium to low system impact for PEC-MI changes

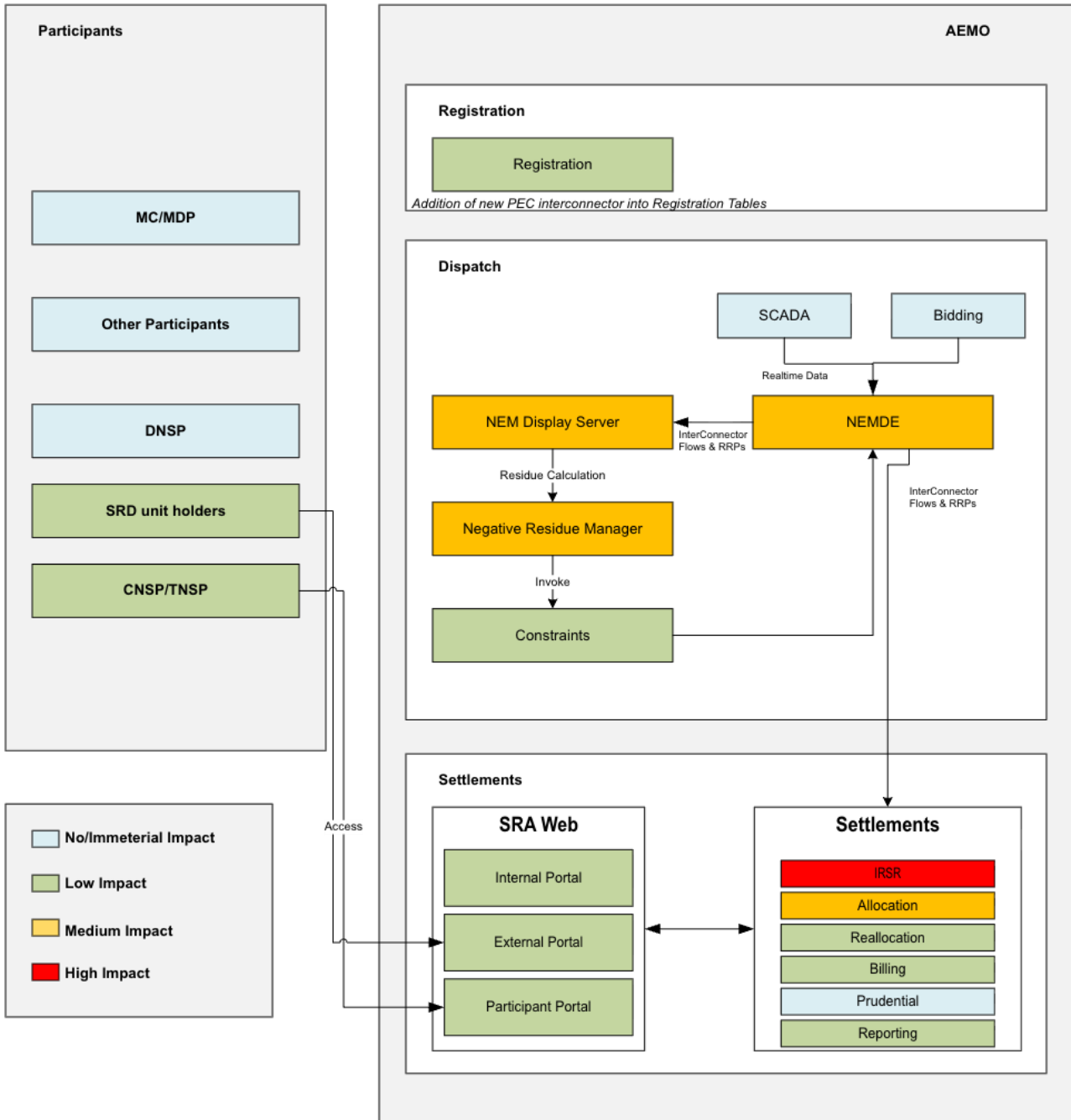


Table 4 AEMO System Impact – Summary for Release 1 and 2

AEMO System	Summary	Release 1 or 2	Impact
Registration	<ul style="list-style-type: none"> Addition of new PEC interconnector NSW1-SA1 into the Registration Tables. Configuration of interconnector identifiers to ensure alignment across dispatch, settlements, and constraint systems. 	Release 1	Low
NEMDE Solution Loader	<ul style="list-style-type: none"> Enhancement to ensure price-scaling logic applies consistently across all regions including when the transmission loop is in operation. Business logic updates to manage regional price revisions and ensure consistency in NEMDE solution processing. 	Release 1	Medium
Negative Residue Manager	<ul style="list-style-type: none"> NRM System to recognise and process the loop configuration comprising six directional interconnectors: <i>SA1-NSW1</i>, <i>NSW1-SA1</i>, <i>VIC1-NSW1</i>, <i>NSW1-VIC1</i>, <i>VIC1-SA1</i>, and <i>SA1-VIC1</i>. Treatment of negative residue calculations and constraint equations for loop-based interconnector configurations. Incorporation of a Loop NRM Flag within the NRM process, including new constraint equations and step sizes for PEC directional interconnectors. Replacement of 30-minute residue estimation with 5-minute calculations aligned to dispatch intervals. 	Release 1	Medium
Settlements	<ul style="list-style-type: none"> Inclusion of the PEC interconnector (NSW1-SA1) in SRA Web internal and external portals and related settlement reports (ready to receive data from <i>loop operations start date</i>.) 	Release 1	Medium
Settlements	<ul style="list-style-type: none"> Implementation of a new looped-interconnector allocation methodology for inter-regional settlements residue, adopting a netting-off approach across all arms of the loop configuration in accordance with NER clause 3.6.6. Settlement process enhancements to reflect the allocation of net residue amounts in looped interconnector arrangements, and associated reporting updates under NER 3.13.5A(a)(4), 3.13.5A(b)(4-6) and 3.13.5A(b1). 	Release 2	Medium

4.1 Release 1 – August 2026

The first release is planned for August 2026, prior to the *loop operations start date*.

Changes to the dispatch system will be implemented in this release, inclusive of updating the price scaling function and changes to the NRM process calculations.

Additionally, AEMO will introduce the new interconnector (EnergyConnect) into the SRA system which includes registration of the interconnector in AEMO’s systems.

Any changes to these applications that refer to or relate to a “transmission loop” will only become effective from the *loop operations start date*, from which AEMO includes the PEC interconnector in the ‘interconnector dispatch integration model’. This will allow AEMO to represent the PEC quantities as an interconnector in the dispatch algorithm (NEMDE). From the Release 1 implementation date, and before the *loop operations start date*, stakeholders may observe changes in AEMO’s systems, such as inclusion of the new interconnector in dispatch tables.

4.2 Release 2 – November 2026

All system changes for the updated IRSR methodology are scheduled for **Release 2 (November 2026)**.

5 Participant impacts

This section identifies the list of changes and AEMO’s view of the impact on different participant types, based on the overall design and new rule (Table 5). It does not address updates that participants may make within their systems to support business processes and given the diverse levels of system maturity and automation across participants, AEMO cannot predict the exact scale or nature of impacts for each participant. AEMO recommends that each participant perform their own detailed analysis based on the information in this HLIA.

Table 5 Participant change impacts

Impacted participant type	Change/update
Generators (Scheduled and Semi-Scheduled); Integrated Resource Providers	Updates to automated NRM process and price scaling function.
Coordinating Network Service Providers	AEMO will distribute or recover the portion of the IRSR attributable to directional interconnectors in accordance with NER 3.6.6 and 3.18. AEMO will implement its approach to clamping for the transmission loop, which is to clamp only when net IRSR for the loop is negative.
SRA participants	AEMO will include the new interconnector and units available into the SRA. AEMO will distribute or recover the portion of the IRSR attributable to directional interconnectors in accordance with NER 3.6.6 and 3.18. AEMO will include ability to terminate SRDAs for Vic/SA, Vic/NSW units purchased in or before the September 2025 auction.

5.1 Publication of information for participants

AEMO will release information for the implementation of PEC into AEMO’s systems via the PEC-MI project webpage²⁰. AEMO will link to relevant pages where participants can access the latest information such as SRA auction dates and consultation pages. AEMO will also keep the EWCF updated with the outcomes of SRC meetings via emails and through other forum channels. The full stakeholder engagement strategy is outlined in Section 1.5.

5.2 Industry readiness approach

This section shows AEMO’s confirmed view of the PEC-MI readiness approach based on information available from Project EnergyConnect and the IRSR Rule.

03 provides the view of the PEC-MI readiness approach, consistent with NEM Reform Readiness Framework. Note that Industry testing is only required for Release 2 - settlements (November 2026).

Table 5 provides commentary on each of the readiness elements.

²⁰ See <https://www.aemo.com.au/initiatives/major-programs/nem-reform-program/nem-reform-program-initiatives/project-energyconnect-market-integration-project>.

Note that 'Go-live' represents when the transmission loop has been incorporated into NEMDE by AEMO – on the *loop operations start date*. 'Go-live' will be communicated to participants through the stakeholder engagement strategy (see Table 5) and Readiness plan (see 0).

Figure 3 Industry implementation approach PEC-MI

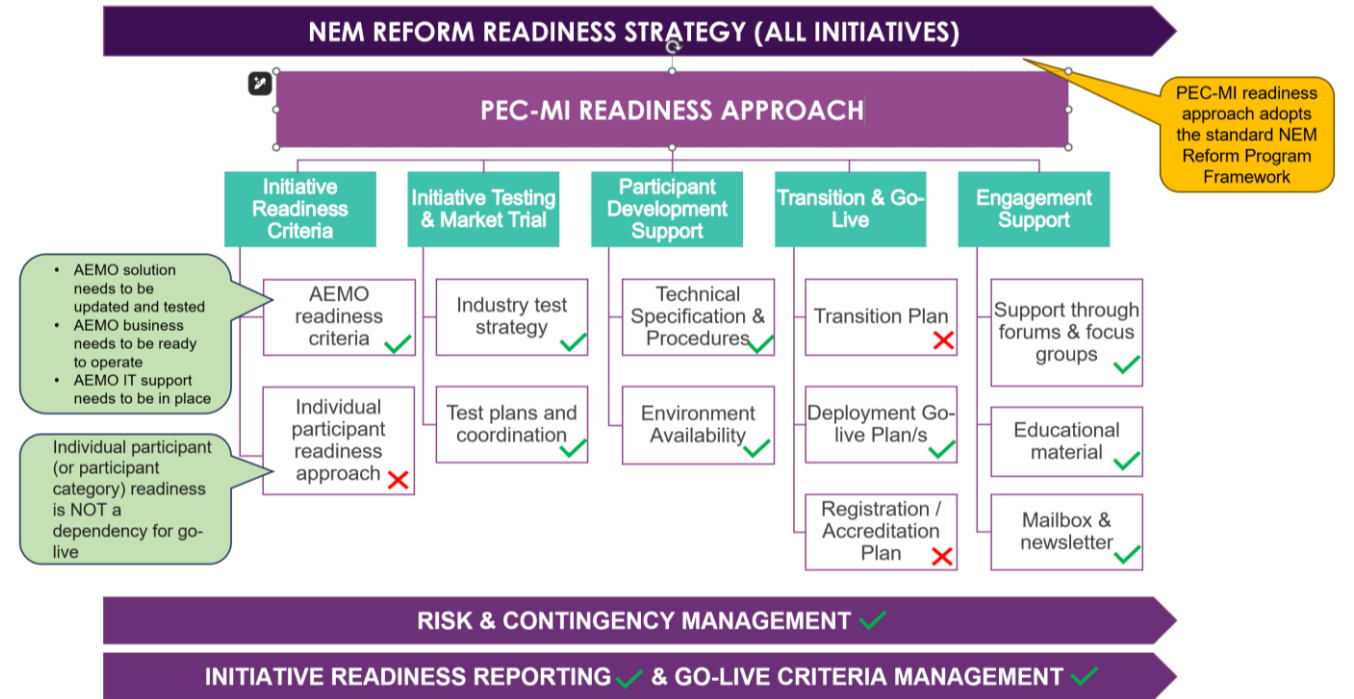


Table 6 Readiness approach assessment

Readiness area	Readiness element	Assessment
Initiative readiness criteria	Individual participant readiness approach	Individual participant readiness is not considered essential for the market commencement of PEC-MI. Introduction of PEC-MI is based on AEMO using an existing standard approach for dispatch and settlements.
	AEMO readiness criteria	<p>August 2026 Release</p> <p>By the PEC-MI Release 1 (Interconnector energisation October 2026):</p> <ul style="list-style-type: none"> • AEMO's solution needs to be updated and tested for: <ul style="list-style-type: none"> – Registrations - new PEC interconnector NSW1- SA1 – Dispatch - Inclusion of the new interconnector in dispatch tables – Negative Residue Manager - Updates to the coding for price scaling algorithms and NRM calculations – Settlement - changes to NEM weekly settlement calculations (mid-month) <p>November 2026 Release</p> <p>By the PEC-MI Release 2 commencement date:</p> <ul style="list-style-type: none"> • AEMO's solution needs to be updated and tested for: <ul style="list-style-type: none"> – Settlement changes: <ul style="list-style-type: none"> ○ for new looped-interconnector allocation methodology ○ Settlement process enhancements to reflect the allocation of net residue amounts in looped interconnector arrangements, and associated reporting updates • Business needs to be ready to operate. • IT support needs to be in place.
Industry testing	Industry test strategy	<p>The Industry Test Strategy will be developed in collaboration with industry and in consideration of other initiatives bundled into the August (Release 1) and November (Release 2) 2026 releases.</p> <p>AEMO's current understanding is that participants will not be significantly impacted by the changes introduced by the Release 1 (August 2026), as most changes will not take effect until a transmission loop is detected. However, the Pre-production environment will be available to participants to observe data changes introduced by the Release 1 and to assist participants in determining their own system change requirements.</p> <p>On this basis, AEMO will develop an Industry Test Strategy to support the industry test approach for the November 2026 Release.</p> <p>The Industry Test Period for Release 2 is anticipated to commence from September 2026.</p>
	Test plans and coordination	Test plans for the November 2026 Release will be developed in consultation with industry and in alignment with the Industry Test Strategy.
Participant development support	Procedures	<p>Refer to Table 2 for a full list of Procedures and guidelines to be released for feedback and final versions published.</p> <p>AEMO will look for opportunities to prioritise and/or bundle procedure consultations, including discussion of critical path consultations that may have dependencies with AEMO's and industry's development and testing.</p>
	Technical specifications	<p>AEMO will plan to publish technical documentation, such as technical specifications and the EMMS Data Model, to support a suitable timeframe for participant development.</p> <p>August 2026 Release</p> <ul style="list-style-type: none"> • EMMS Data Model v5.7 <p>November 2026 Release</p> <ul style="list-style-type: none"> • EMMS Data Model v5.7 • EMMS Technical Specification
	Environment availability	<p>At this stage AEMO proposes that Pre-Production will be available to support industry testing for the IRSR changes for 1 month before Release 2.</p> <p>Existing TNSPs already have access to pre-production for testing.</p>
	IT development support	As required, AEMO will provide industry support via NEM Reform forums. AEMO will call out any individual participant readiness activities if required, through the Implementation Forum. Forums occur monthly and remaining engagements will be scheduled as required to support participants development. These engagements would be scheduled as the IT design and approach is formalised.

Readiness area	Readiness element	Assessment
Transition and go-live	Transitions plans	No transitional plans for industry are required. Throughout the project AEMO will communicate project activities and project milestones.
	Go-live plans and criteria	Will be developed in consultation with industry to confirm AEMO deployment activities and capability availability timeframes in the lead up to go-live. August Release 2026 <ul style="list-style-type: none"> Go Live Criteria published 28 May 2026 Final go-live plan to be published 1 August 2026 November 2026 Release <ul style="list-style-type: none"> Go Live Criteria published 18 May 2026 Final go-live plan to be published 28 Oct 2026
	Registration or accreditation plans	There are no changes to registration or accreditation frameworks.
Risk and contingency management		Will be developed in consultation with industry
Initiative readiness reporting & go-live criteria management		Will be developed in consultation with industry. Readiness reporting will be consistent with the go-live criteria. August Release 2026 <ul style="list-style-type: none"> 3-month Checkpoint – 8 May 2026 1-month Checkpoint – 6 July 2026 Additional checkpoints as needed in the lead up to go-live November 2026 Release <ul style="list-style-type: none"> 6-month Checkpoint – 18 May 2026 3-month Checkpoint – 11 Aug 2026 1-month Checkpoint – 6 Oct 2026 Additional checkpoints as needed in the lead up to go-live Progress reporting against established milestones will be provided on a regular basis through NEM Reform forums.

5.2.1 Industry testing environments

AEMO provides a pre-production (preprod) environment for industry tests, market trials and general participant testing. Key features of the preprod environment are:

- All AEMO Market Systems can be tested in preprod. This includes test versions of AEMO's Retail and Wholesale IT Systems.
- Participants can interact with preprod via a test version of the Markets Portal and via AEMO's various interfaces.
 - The Market Systems applications in preprod are generally maintained to a high level. Generally, preprod is used as the final step for system changes for both business as usual (BAU) and projects prior to promotion to Production. Preprod is regarded as a production-like system, and any issues with preprod can be reported to the AEMO Support Hub.
- Data in preprod is a complete copy of the production Market Systems and is normally refreshed annually and is driven by project requirements.
 - Access to production and pre-prod is managed via the Participant Administrator (PA) role.

6 Implementation timeline

AEMO is working towards implementing the new interconnector into NEMDE on **1 October 2026** – the *loop operations start date*²¹. This is a separate activity to inter-network testing for PEC Stage 2, which is currently expected to take approximately 15 months after completion of commissioning²². AEMO must also have the new settlement methodology for IRSR implemented and made effective by no later than 2 November 2026. AEMO is currently working towards a *loop settlements start date* of **1 November 2026** to align with the start of a settlements billing week²³.

AEMO intends that all systems, including NRM and negative settlement residue allocation, are developed in advance and ready to be implemented as outlined above. AEMO will publish any updates to the implementation dates proposed in this HLIA alongside other relevant dates and communicate with stakeholders as implementation progresses across 2026.

It is proposed that arrangements be made for auction participants to terminate SRDAs for Victoria/South Australia, Victoria/New South Wales units purchased in or before the September 2025 auction (for relevant quarters from Q4 2026) if they wish to do so. AEMO will seek to clarify arrangements to facilitate orderly termination of any relevant SRDA after consultation with the SRC, and communicate these arrangements through the communication channels outlined in Section 5.1.

AEMO plans to update the SRA Rules as necessary to facilitate the activities outlined above – refer Section 3.3.

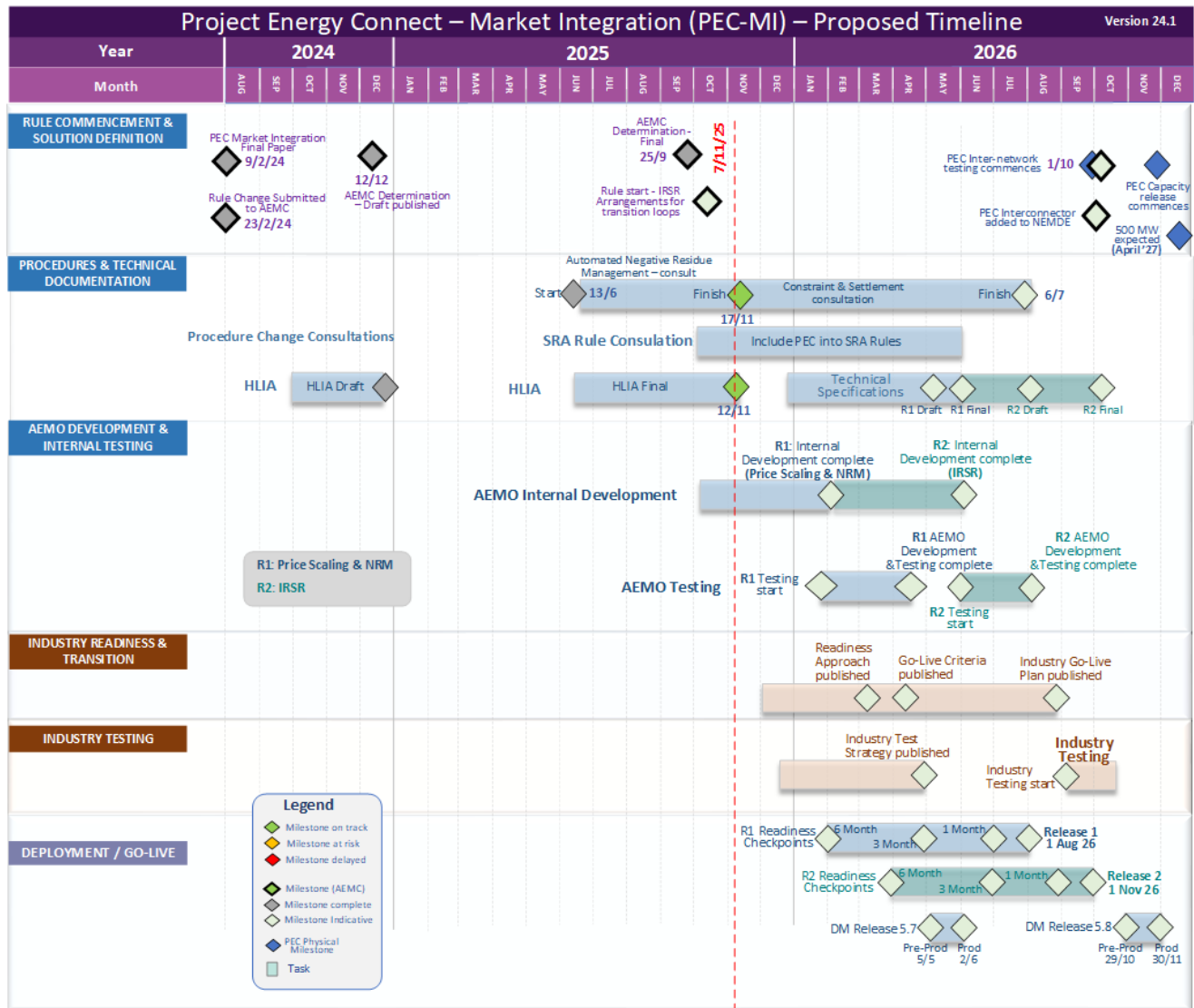
AEMO proposes the timeline in Figure 4 based on information available as at November 2025. For latest timeline information please refer to the information sources provided in Section 5.1.

²¹ For latest information regarding the *loop operations start date* and *loop settlements start date*, refer to the information sources provided in Section 5.1.

²² Project EnergyConnect System Integration – April 2025 Industry Update, at <https://www.projectenergyconnect.com.au/moreInformation.php>.

²³ For latest information regarding the *loop operations start date* and *loop settlements start date*, refer to the information sources provided in Section 5.1.

Figure 4 PEC-MI activity timeline





7 Delivery risks and issues

AEMO will identify, monitor and manage risks as the project progresses, and proposes to report these via the Implementation Forum.

Table 7 Indicative assessment of delivery risk and issues

Identified risk	Current risk rating	Mitigation strategy	Residual rating
Compressed timelines result in delay to AEMO’s market integration of PEC.	Medium	Commenced early project planning and scheduling. Regular activity tracking and assessment of likelihood of project on-track to identify issues early.	Low
Complexity associated with representation of transmission loop in AEMO systems results in delays to timelines for the representation of loop in NEMDE.	Medium	Commenced early development of scenarios for representation of transmission loop for testing in Q1 2026.	Low

A1. Description of AEMO's impact ratings

Impact rating	Description
No impact	No changes to AEMO or industry systems, processes, guidelines, or procedures. Stakeholder consultation not required.
Immaterial	Immaterial administrative changes to AEMO procedures and/or guidelines, purposes of consistency. Immaterial changes or additions to existing business processes and/or technology systems. Stakeholder consultation not required.
Low	Minor changes, additions, or updates to AEMO procedures and/or guidelines, purposes of consistency. Minor changes, additions, or updates to existing business processes and/or technology systems.
Medium	Material changes or additions to AEMO procedures and/or guidelines, Significant changes or additions to existing business processes and/or technology systems. Stakeholder consultation required.
High	Significant changes, additions, or creation of new AEMO procedures, and/or guidelines, Significant changes, additions, or the creation of new business processes and/or technology systems. Stakeholder consultation required.

Abbreviations

Term or acronym	Meaning
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator Limited
EWCF	Electricity Wholesale Consultative Forum
IRSR Rule	<i>National Electricity Amendment (Inter-regional settlement residue arrangements for transmission loops) Rule 2025 No. 9</i>
NRM	Negative Residue Management
NEO	National Electricity Objective
NER	National Electricity Rules ²⁴
PEC	Project EnergyConnect
SRC	Settlement Residue Committee
SRD	Settlement Residue Distribution
SRDA	Settlement Residue Distribution Agreement
SRA	Settlement Residue Auction
SRA Rules	<i>Auction rules (made under NER 3.18.3)</i>
TI	Trading Interval

²⁴ NER followed by a number refers to a rule or clause of the National Electricity Rules