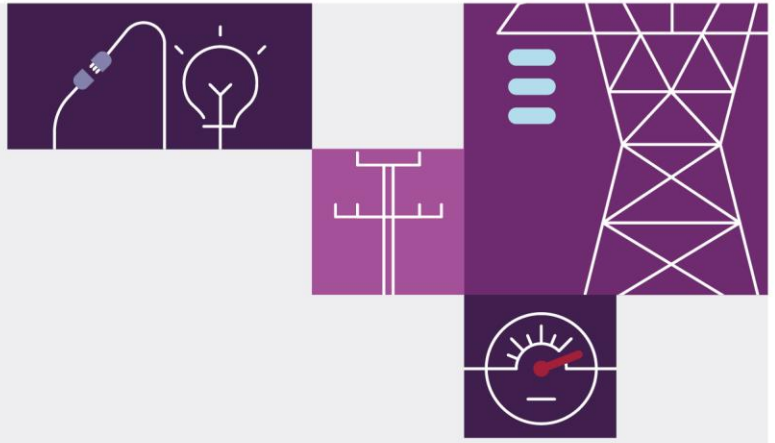


STRUCTURE OF PARTICIPANT FEES FOR AEMO'S NEM 2025 REFORM PROGRAM

February 2023

Consultation Paper





Important notice

Purpose

AEMO is consulting on the determination of the structure of Participant fees to recover costs for the National Electricity Market (NEM) 2025 Reform Program as a declared NEM project in accordance with clause 2.11 and clause 8.9 of the National Electricity Rules (Rules).

This document has effect only for the purposes set out in the Rules, and the Rules and the National Electricity (Law) prevail over this document to the extent of any inconsistency.

This publication has been prepared by AEMO using information available at 3 February 2023.

Disclaimer

This document or the information in it may be subsequently updated or amended. This document does not constitute legal or business advice, and should not be relied on as a substitute for obtaining detailed advice about the National Electricity Law or National Electricity Rules or any other applicable laws, procedures or policies. AEMO has made every effort to ensure the quality of the information in this document but cannot guarantee its accuracy or completeness.

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Version control

Version	Release date	Changes
#1	3 February 2023	

Executive summary

The publication of this Consultation Paper commences the first stage of the Rules consultation process conducted by AEMO to consider the structure of Participant fees to recover costs for the National Electricity Market (NEM) 2025 Reform Program which was determined a declared NEM project following a consultation process.

This consultation applies to the structure of fees, including the Registered Participants that will be charged the fee, and will also determine the start date for recovery and the period or periods over which recovery will occur. The actual amount charged will be determined through AEMO's budgeting processes.

On 29 September 2022, AEMO published its final decision¹ that determined the NEM 2025 Reform Program met all three criteria in the National Electricity Rules (NER) to be a declared NEM project, that is, pursuant to clauses 2.11.1(ba)(1), 2.11.1(ba)(2) and 2.11.1(ba)(3) of the NER. This allows AEMO to determine the structure of a separate fee to recover the costs for the NEM 2025 Reform Program until the next general Participant fee structure determination. The current general Participant fee structure determined by AEMO for electricity markets applies from 1 July 2021 to 30 June 2026.

The NEM 2025 Reform Program has been established in order to coordinate delivery of a suite of reforms recommended by the Energy Security Board (ESB) and endorsed by the Energy Ministers to meet the needs of the energy transition. Since the release of these recommendations in mid-2021, AEMO has been engaging with the industry and stakeholder representatives comprising the Reform Delivery Committee² (RDC or the Committee) to define an integrated delivery plan for the NEM 2025 Reform Program that aims to bundle and sequence initiatives with the aim of cost-effective delivery across AEMO and the industry. The comprehensive output, which includes the NEM Reform Implementation Roadmap (the Roadmap), was released in early September 2022 and is available to view at the Major Programs section of AEMO's website³.

A summary of the initiatives that comprise the NEM 2025 Reform Program and Roadmap, including a subset of AEMO foundational and strategic initiatives that are required to implement the NEM 2025 Reform Program and which were included in the declared NEM project determination is set out in Appendix A1.

Following feedback from our members, AEMO together with industry and the RDC have set out a reform implementation pathway that commits to the mandatory and no regrets initiatives⁴ in a timely way while also imposing implementation and investment disciplines whereby the draw-down of funds is subject to a progressive commitment process informed by rule changes and a stage gate process. The implementation pathway is supported by a Gate 1 business case that can be viewed on AEMO's website⁵ and a change management process. Section 2.1.2 of this consultation paper explains the implementation pathway in more detail.

Program cost estimates and cash flows over a 10-year evaluation period from 1 July 2022 was developed for the proposed implementation pathway. These costs are outlined in more detail in section 2.1.3 of this report.⁶

¹ Information regarding this final determination, including other consultation papers and submissions, is published on the AEMO website at: [AEMO | Declared NEM Project - NEM 2025 Reform Program](#)

² Representatives of the Reform Delivery Committee can be viewed on AEMO's website: [AEMO | Reform Delivery Committee](#)

³ [AEMO | NEM Reform Implementation Roadmap](#)

⁴ These initiatives are those covered by stage gate 1 in Appendix A3.

⁵ AEMO completed a Gate 1 business case which can be viewed on AEMO's website: [AEMO | NEM Reform Implementation Roadmap](#)

⁶ Further information on the cost estimates can be found in the Business Case available on AEMO's website: [NEM2025 Program \(aemo.com.au\)](#)

With the above in mind, the structure of the current core NEM Participant fees and its appropriateness relative to alternative fee structures (including for example establishing a separate NEM 2025 Reform Program fee) to be applied to recover the NEM 2025 Reform Program costs needs to be considered. Two options are considered in this paper, with each outlined in more detail in section 3.5:

1. Applying existing Participant Fees structures such as the core NEM fee, the DER program fee and/or Electricity Retail Markets fee.
2. Establishing a separate NEM 2025 Reform Program fee.

Stakeholders are invited to submit written responses on these options, as well as propose any alternative options that may be appropriate, along with responses to other issues and questions identified in this paper by 5.00 pm (Australian Eastern Daylight Time [AEDT]) on Friday 3 March 2023, in accordance with the Notice of First Stage of Consultation published with this paper. Alongside this consultation paper, AEMO has also published its stakeholder engagement approach.

AEMO acknowledges a number of issues raised by our members as part of the declaration processes and in the lead up to the release of this document. This included matters such as ensuring appropriate transparency and certainty of AEMO fees. These issues will be worked through as part of this consultation and work progressing through the Finance Consultative Committee (FCC).

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1 Consultation overview


The Australian Energy Market Operator Limited (AEMO) invites you to provide a submission on this Consultation Paper – Structure of Participant fees for AEMO’s NEM 2025 Reform Program.

1.1 Key information

Purpose	To provide stakeholders with the opportunity to have input into the development of the structure of Participant fees for AEMO’s NEM 2025 Reform Program												
Date applicable	To be determined in this consultation												
Electricity functions covered in this consultation	<ul style="list-style-type: none">• The National Electricity Market (NEM)• Distributed Energy Resources (DER) program• Electricity Retail Markets												
Timetable	<table border="1"><thead><tr><th>Milestone</th><th>Date</th></tr></thead><tbody><tr><td>Submission closing date for this Consultation Paper</td><td>Friday 3 March 2023</td></tr><tr><td>Publication of Draft Report</td><td>Wednesday 17 May 2023</td></tr><tr><td>Submission closing date for Draft Report</td><td>Wednesday 14 June 2023</td></tr><tr><td>Publication of Final Report</td><td>Wednesday 23 August 2023</td></tr><tr><td>Fee structure commencement</td><td>To be determined from this consultation</td></tr></tbody></table> <p>Subject to stakeholder feedback additional stages may be included as part of the consultation process.</p> <p>Please also refer to our stakeholder engagement approach released with this paper.</p>	Milestone	Date	Submission closing date for this Consultation Paper	Friday 3 March 2023	Publication of Draft Report	Wednesday 17 May 2023	Submission closing date for Draft Report	Wednesday 14 June 2023	Publication of Final Report	Wednesday 23 August 2023	Fee structure commencement	To be determined from this consultation
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Fee structure commencement	To be determined from this consultation												
Meetings	Stakeholders may request a meeting in their submission. Matters discussed at a meeting may be made available to other stakeholders.												
Submissions closing date and information	<p>AEMO prefers that submissions be forwarded in electronic format (both pdf and Word) as they will be published on the AEMO website.</p> <p>Please provide electronic submissions by 5.00pm AEDT Friday 3 March 2023 to reformdevelopmentandinsights@aemo.com.au.</p> <p>AEMO plans to publish all submissions on its website. Please identify any part of your submission that is confidential and you do not wish to be published.</p> <p>Respondents should also note that if material identified as confidential cannot be shared and validated with other stakeholders then it may be accorded less weight in AEMO’s decision making process than published material.</p>												

1.2 Guiding principles for the Electricity fee structure

AEMO consults on its proposed fee structure for Participants in accordance with clause 2.11 of the National Electricity Rules (NER, the Rules). Under the Rules, AEMO only has the power to recover market fees from Registered Participants. In determining the structure of Participant fees, AEMO must have regard to the National



Electricity Objective (NEO). In addition, the structure of Participant fees must, to the extent practicable, be consistent with the following principles, which are stipulated in the NER, referred to in this document as the Fee Structure Principles and set out in detail in Appendix A2:

- The structure of Participant fees should be simple.
- The components of Participant fees charged to each registered participant should be reflective of the extent to which AEMO's budgeted revenue requirements involve that registered participant.
- Participant fees should not unreasonably discriminate against a category or categories of registered participants.
- Fees and charges are to be determined on a non-profit basis that provides for full cost recovery.
- The structure of the Participant fees should provide for the recovery of AEMO's budgeted revenue requirements on a specified basis.

The Rules do not expressly indicate that one or another of these Fee Structure Principles should have greater weight than the others. However, where it is not practicable for AEMO to satisfy all of the principles or satisfy them all to an equal degree, AEMO may adopt a structure which is not equally consistent with all the principles. Therefore, meeting the requirements established under the NER typically requires a trade-off between principles. That is, an option to improve the fee structure against one principle may lessen the applicability of another principle.

For example, commonly competing principles are cost-reflectivity and simplicity. While cost-reflectivity in a fee structure could be improved through measures such as disaggregation of fees, markets or services, this would decrease simplicity of the fee structure, and the systems needed to manage the fees would become more complex.

AEMO's objective through this consultation process is to strike a balance between competing Fee Structure Principles, through careful consideration of the principles and stakeholder feedback on how any fee structure may impact various stakeholders. It is also relevant to note that the Participant fees should be sufficient to cover AEMO's budgeted revenue requirements of the NEM 2025 Reform Program.

1.2.1 Budget and Fee Structure

The operation of clause 2.11.1 of the NER also needs to be understood in the context of its surrounding provisions which deal with budgets and the payment of Participant fees.

Under clause 2.11.3, AEMO is required to prepare and publish its budgeted revenue requirements.

That budget must take into account and identify revenue requirements for the matters set out in clause 2.11.3(b).

Some, but not all of these matters are referred to in the components of Participant fees specified in section 2.11.1(c).

However, AEMO may adopt 'components' of Participant fees which are different to or more than those set out in clause 2.11.1(c).

Section 2.11.1(b)(2) of the NER provides that Participant fees should recover the budgeted revenue requirements for AEMO determined under clause 2.11.3.

Under section 2.11.2, AEMO may charge Registered Participants the relevant component of Participants fees in accordance with the structure of Participant fees.



Consequently, the scheme of clauses 2.11.1 to 2.11.3 of the NER is:

- To require AEMO to determine the structure of Participant fees according to certain rules;
- To require AEMO to determine AEMO's budgeted revenue requirements according to certain rules; and
- To empower AEMO to recover the budgeted revenue requirements through charging Registered Participants in accordance with the structure of Participant fees.

1.2.2 Fee structure for a Declared NEM project

Subject to consultation, the NER allows for AEMO to determine a separate fee to recover the costs of specific projects deemed to be a declared NEM project during the term of a Participant fee structure determination.

On 29 September 2022, AEMO determined the NEM 2025 Reform Program met all three criteria in the NER to be a declared NEM project, that is, pursuant to clauses 2.11.1(ba)(1), 2.11.1(ba)(2) and 2.11.1(ba)(3) of the NER.

When AEMO determines a project to be a declared NEM project under clause 2.11.1(ba), it must also determine :

- the structure of an additional Participant fee to be used in the recovery of costs;
- the Registered Participants that will be charged the fee;
- the start date for recovery; and
- the period or periods over which recovery will occur.

2 Background and Context

2.1 AEMO's NEM 2025 Reform Program

2.1.1 The ESB's Post 2025 Project

The ESB was tasked by the former Council of Australian Governments Energy Council (COAG EC), to advise on design changes required to transition the NEM into a modern energy system fit to meet consumers' evolving wants and needs.

The Post 2025 electricity market design work⁷ has been developed to address the change of expanding consumer choices, new technologies, and large-scale capital replacement as ageing thermal power stations exit the market. The speed of which the change is occurring requires immediate reform so that the benefits and opportunities from changes such as new technologies and other distributed energy resources (DER) can be delivered to consumers.

In July 2021, the ESB recommended a range of reforms under four major pathways to ensure immediate problems are addressed and the future direction of the NEM's investment and operation is clear:

1. Resource adequacy mechanisms and ageing thermal retirement.
2. Essential system services and scheduling and ahead mechanisms.
3. Integration of DER and flexible demand.
4. Transmission and access.

To complement the above four pathways, a Data Strategy for the NEM is also required to ensure delivery and implementation of the NEM 2025 Reform Program is seamless.


The four pathways outlined above will enable the NEM to:

- Allow consumers to benefit from rapidly changing technologies in our power system;
- Unlock the value of flexible demand and distributed energy resources;
- Work alongside government schemes which are delivering on their policy commitments including emissions reduction; and
- Provide clear signals for timely and efficient investment to deliver reliable, secure, and affordable electricity for consumers.

In October 2021, National Cabinet agreed that the ESB proceed with implementation of the recommendations. In making this decision, National Cabinet sought further advice from the ESB before agreeing to proceed with implementation of a capacity mechanism and congestion management mechanism. In December 2022, Energy Ministers endorsed the establishment of a Capacity Investment Scheme (CIS) – a national revenue underwriting mechanism supporting investment in clean dispatchable power.⁸ Further ESB advice on the congestion management mechanism is due early 2023.

⁷ [Energy Security Board | Post 2025 electricity market design project \(aemc.gov.au\)](https://www.aemc.gov.au/post-2025-electricity-market-design-project)

⁸ Department of Climate Change, Energy, the Environment and Water. Website: 'Capacity Investment Scheme to power Australian energy market transformation'. Available at: <https://www.energy.gov.au/news-media/news/capacity-investment-scheme-power-australian-energy-market-transformation>



An initial assessment of the impacts and implementation costs, associated with the delivery of the reforms was prepared by AEMO and formed part of the ESB's final advice to Ministers. The ESB similarly, completed a high-level, indicative evaluation of the benefits each reform pathway could be expected to deliver.⁹ The objective of doing this evaluation was to understand the general magnitude of benefits that could be expected from the Post-2025 Reform Program.¹⁰ As the benefits^{11,12}, estimated to be in the order of billions of dollars, far outweighed the costs, the ESB gained confidence for the case for change and for recommending the Post-2025 Reform Program.

One of the main enablers for the Post-2025 reforms is the development of changes to IT systems and business processes run by AEMO. The ESB's final advice called for further consideration of how to deliver these changes together with industry stakeholders as part of an integrated roadmap approach for NEM regulatory and IT system implementation.

2.1.2 Implementation of the NEM 2025 Reform Program initiatives

AEMO and the RDC identified the initiatives selected for inclusion in the NEM 2025 Reform Program (required to deliver the ESB's policy reforms via the four pathways outlined above) based on the initiative:

- Having multi-participant implementation actions; and
- Requiring investment in IT systems or business processes across AEMO and/or market participants.

The majority of these initiatives will be subject to the AEMC's rule change process. Appendix A1 provides a summary of the initiatives that make up the NEM 2025 Reform Program¹³ which form the basis for which a participant fee structure needs to be determined through this consultation.

This summary also includes the subset of foundation and strategic initiatives required to enable the reform initiatives to be delivered. These initiatives have been included as they are considered to be a pre-requisite or co-requisite (foundation) that if not delivered may jeopardise delivery of one or more reform initiatives, or similarly may reflect an initiative where system uplift is required at some time in the future and AEMO concluded that this life-cycle type investment should be brought forward and delivered in the same timeframes as the reforms (strategic). They are included in the scope of this consultation because these initiatives will need to be implemented by AEMO before or not long after the reforms are implemented as legacy systems reach their end of technological life and to ensure AEMO maintains the capabilities needed to support its existing statutory responsibilities and functions, and the frameworks and markets that are to be established by the reforms, as the energy transition continues.

To implement all the initiatives efficiently and transparently, AEMO and the RDC developed the NEM 2025 Implementation Roadmap (the Roadmap)¹⁴. This Roadmap appropriately prioritises and sequences reform implementation considering interdependencies with a least-cost whole-of-system intent for the benefit of the

⁹ Energy Security Board. Post-2025 Market Design Final advice to Energy Ministers. Part A. 27 July 2021. Available at: [1629944958-post-2025-market-design-final-advice-to-energy-ministers-part-a.pdf \(aemc.gov.au\)](#)


¹⁰ Ibid.

¹¹ Essential System Service Modelling – a report prepared by Cornwall Insight Australia. Available at: [1629945889-part-c-5-1-cornwell-insight-australia-essential-system-service-modelling.pdf \(datocms-assets.com\)](#) and [1629948047-addendum-essential-system-service-modelling-report-cornwellfinal.pdf \(datocms-assets.com\)](#)

¹² Valuing Load Flexibility and Resource Adequacy Mechanisms in the NEM – a report prepared by NERA Economic Consulting. Available at: [1629945921-part-c-5-2-nera-economic-consulting-valuing-load-flexibility-and-resource-adequacy-mechanisms-in-the-nem.pdf \(datocms-assets.com\)](#)

¹³ The capacity mechanism and congestion management mechanism has not been captured as part of this consultation and will be picked up separately in the event a policy decision is made to proceed with these reforms.

¹⁴ Further information on the consultation of the Roadmap can be viewed on AEMO's website: [AEMO | Regulatory Implementation Roadmap](#)



consumer, and includes the initiatives that require a significant implementation effort across multiple industry participants.

Two Roadmap pathways were developed in consultation with the RDC to deliver the NEM 2025 Reform Program initiatives. Both options have the same scope but differ in the bundling, sequencing and timing of delivery:

- Option 1: Regulatory-led: This option enables 'day 1' capabilities by delivering the core functional elements of the NEM 2025 reforms built on top of existing systems. After the core reform elements are delivered, additional effort is required as and when AEMO progresses to new systems, so functionality deployed is enabled in those new systems; and
- Option 2: Strategic: This option sets the foundations for scalability and future-proofing of systems by undertaking a series of pre-requisite projects upfront on which reform capability is built. This ensures investments keep pace with rapid transition by delivering capabilities and support functions beyond 'day 1'.

The two Roadmap pathways were released for broader industry consultation in April 2022.

To aid in AEMO and the RDC's assessment of the alternative pathways, AEMO have completed a Gate 1 business case.¹⁵ The assessment provided for updated cost estimates of individual initiatives and a whole of life cycle comparison of the two alternative Roadmap pathways. This assessment was supported by a qualitative assessment of the impacts to AEMO and industry.

Having considered the feedback from stakeholders on the pathway options, as well as feedback from the RDC on the business case, the NEM 2025 Reform Program has adopted a hybrid pathway complemented by a stage gate process.

This approach commits to Option 1 (Regulatory-led pathway) to undertake mandatory and no regrets initiatives in a timely way. It also sets the NEM 2025 budget envelope to allow for the full scope of Option 2 (Strategic pathway) but imposes both implementation and investment disciplines whereby draw-down is subject to a progressive commitment process informed by rule changes and the stage gate process.

In developing the Roadmap, AEMO and RDC members noted the significant challenges and risks associated with delivery of the NEM 2025 Reform Program and the importance of an appropriate management and governance framework. As a result, a number of important governance and delivery elements will apply to the Program including:

- a change management process to manage and advise on impacts of new initiatives being added to the reform scope or changes in scope/timing of existing proposed initiatives,
- a stage gate process¹⁶ applicable to all initiatives to manage uncertainty and provide for appropriate implementation disciplines, and includes a cost/benefit analysis and industry consultation for AEMO strategic/foundation initiatives, and
- a progressive investment commitment process and draw down of funds that will be informed by regulatory determinations and the stage gate approach.

In publishing the Roadmap, AEMO has also published several supporting artifacts including the business case, participant impact assessments (drafted by the RDC members and used to inform development of the business

¹⁵ The business case can be viewed on AEMO's website: [AEMO | NEM Reform Implementation Roadmap](#)

¹⁶ While the stage gate process is not considered in scope for this consultation, AEMO acknowledges it is an important process in the implementation of the reform initiatives. More detail on the process and its link to this consultation can be found in Appendix A3.

case and roadmap), summaries of stakeholder feedback, an overview of the proposed governance and delivery approach, and an overview of the Program scope including briefs on each initiative that makes up the Program.

Each of the above-mentioned artifacts can be viewed on AEMO's website: [AEMO | NEM Reform Implementation Roadmap](#).

2.1.3 The NEM 2025 Reform Program cost estimates

Program cost estimates and cash flows over a 10-year evaluation period from 1 July 2022 were developed for both pathway options outlined in section 2.1.2, with Option 2 cost range as shown in Table 1 below.

Table 1 – Estimated total Program costs for Option 2^{17,18}

Cost component	Option 2 (Strategic pathway) \$m
Total capital costs	\$250 - \$350
Ongoing costs ¹⁹	\$170 - \$240
Total Program costs	\$430 - \$600
Net Present Cost	\$350

The lower costs under Option 2, which reduce the burden on participants, consumers and AEMO, are due to:

- Most initiatives (except three with immediate regulatory deadlines) are designed and delivered from the beginning based on target state systems, thus reducing the implementation effort across the program; and
- The overall program implementation period runs over a shorter timeframe, thus reducing delivery overheads such as program management costs.

Proceeding with the cost estimates for Option 2 results in periodic cadence of releases which is transparent to industry.²⁰ This periodic cadence also means that shared system impacts are considered and provide cost efficiencies through optimised implementation effort. The resulting program optimisation seeks to minimise disruption to industry and supports a more structured approach to balancing delivery and 'business as usual' initiatives.

Additionally, this option is best supported by a stage-gate approach for key strategic or foundational initiatives (those that would be deferred to a later date under Option 1) and/or those initiative with significant uncertainty.


The cost estimates target a +/- 40% level of accuracy to account for the early stage of estimation, the policy and design uncertainty that remains for some of the reform initiatives (and the corresponding increasing complexity

¹⁷ Numbers rounded for reporting purposes. The range represents the mid to high range of the estimates (including the 40% contingency amount) for those initiatives covered under this business case as this represents a more realistic outcomes for delivery costs. NPC mid-point shown for comparison purposes.

¹⁸ Scope of estimates does not include Capacity Mechanism, Congestion Management Mechanism and Data Strategy due to ongoing policy uncertainty at the time.

¹⁹ Ongoing costs are assumed to commence from the end of the implementation period for each Work Package until the end of the Program.

²⁰ While release cadence is critical to managing delivery under any delivery option and AEMO – both for its and industry's benefit – would seek to establish periodic release cadence where possible, such cadence opportunities are prioritised and easier to plan under Option 2. This is because Option 1 is regulatory-led and assumes that a release will be required to align with the rules' effective date. Where possible, other initiative releases will be aligned with these dates but there could be scenarios where effective dates (and therefore releases) occur within a period shorter than the desired period cadence.



and scope risks) and other risks such as delivery delays. This provides a range within which the Program's costs are expected to lie. Further refinements of costs will be undertaken as the program progresses aligned with the stage gates.

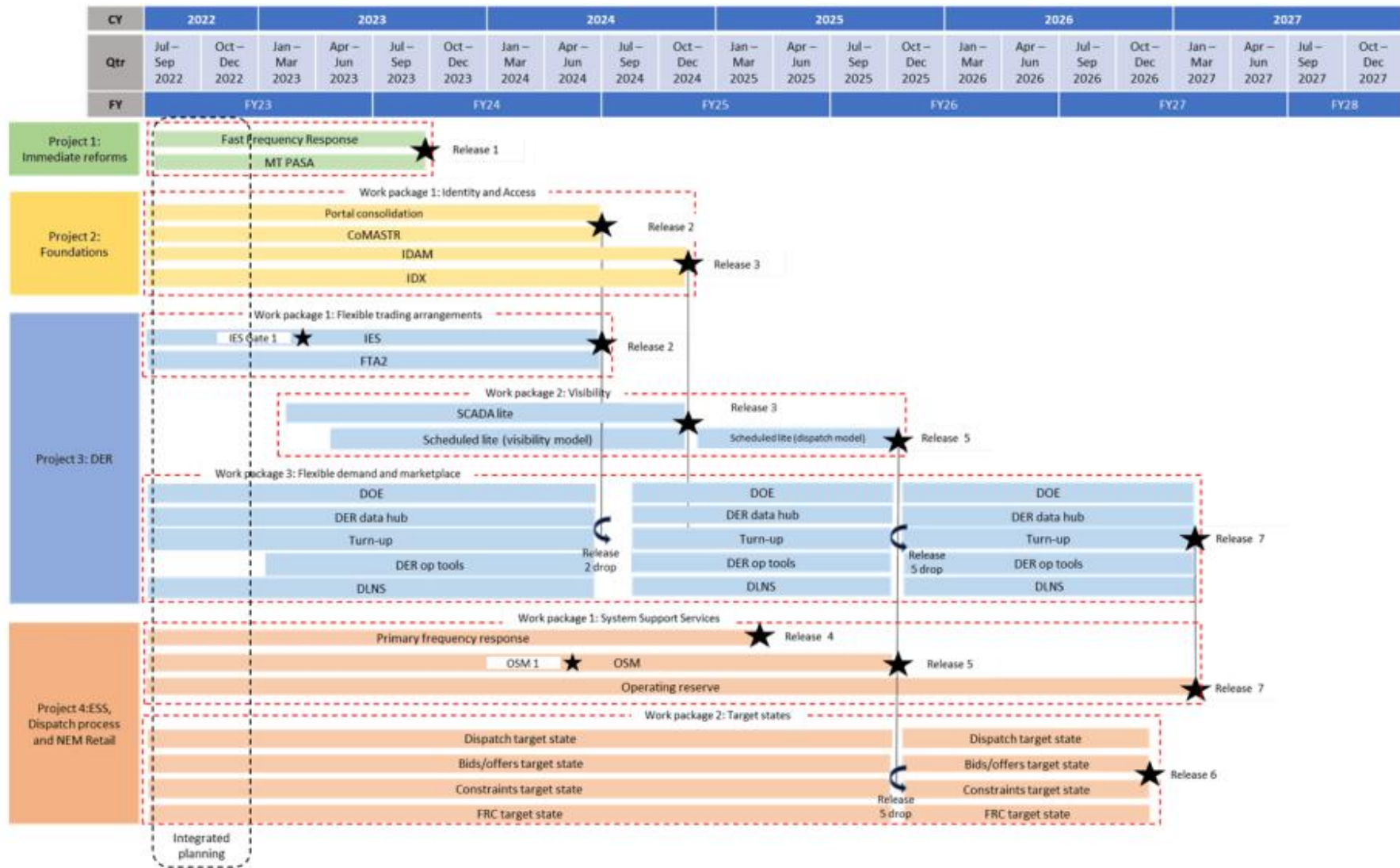
2.1.4 The NEM 2025 Reform Program timeline

While AEMO commenced early planning activities in relation to the NEM 2025 Reform Program in 2021, it has been assumed the NEM 2025 Reform Program would formally run over a period of approximately 5 years, commencing in July 2022. The NEM 2025 Reform Program delivery timeline is shown below in Figure 1.

The NEM 2025 Reform Program will be delivered through a series of Work Packages, with each Work Package representing a logical bundling of the in-scope initiatives. Delivery of the Work Packages has been sequenced to consider impacts on AEMO's systems and business functions, industry's capacity to absorb the level of change triggered by the NEM 2025 Reform Program and other significant projects that are occurring within AEMO. This delivery structure complements the stage gate process as it can be applied to individual initiatives or to Work Packages. The pre-requisite scoping and high-level design, consultation, and planning process for the approval mechanism allows for initiatives to be de-coupled from a Work Package if required, and for Work Packages to be reconsidered if synergies and impacts change or evolve.

AEMO will continue to work closely with industry to refine the optimal delivery of the NEM 2025 Reform Program through an integrated planning phase and supporting change management process to develop more accurate scope and cost estimates. This more detailed analysis will form the basis of the stage gate checkpoints. This stage gate approach is the proposed framework to guide the process for drawing down funds from the NEM 2025 Reform Program funding envelope as each Work Package commences. Specifically, approval and draw-down of the funds for each work package is subject to a progressive commitment process informed by rule changes and the stage gate process and will also require funding approval by the AEMO investment committee and Board. As a result, approval and draw down of funds will only be sought at the time when sufficient certainty exists, and the associated regulatory changes are well progressed.

Figure 1 – NEM 2025 Reform Program timeline and work package sequencing



3 Key matters for consultation

A Participant Fee structure for the NEM 2025 Reform Program

When a Participant fee structure is developed under clause 2.11.1 of the NER, the following aspects must also be determined:

- the structure of the Participant fee to be used in the recovery of costs;
- the Registered Participants that will be charged the fee;
- the start date for recovery; and
- the period or periods over which recovery will occur.

The sections below outline the requirements to be considered when determining each of the above aspects.

3.1 AEMO's existing Participant fees

Sections 3.1.1 to 3.1.3 provides details on the relevant existing Participant fees categories in the current Participant fee period.

3.1.1 AEMO's core NEM fee

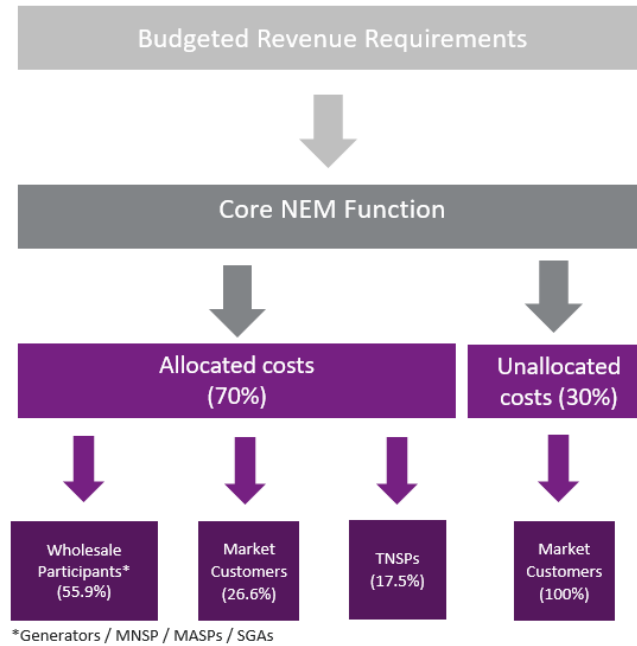
The current structure of Participant fees in AEMO's electricity markets commenced on 1 July 2021 for a duration of five years, ending 30 June 2026 (The final determination provided for a transition period, 1 July 2021 to 30 June 2023, for certain elements of the fee structure). The Final Report of the Structure of Participant Fees in AEMO's Electricity Markets was published on AEMO's website²¹ on 26 March 2021.

The core NEM fee structure from 1 July 2023 is presented below in Figure 2.

The fees for the core NEM function recover two types of costs, allocated (direct) costs and unallocated (indirect costs). The current apportionment of the budgeted revenue requirements is 70% to allocated costs and 30% to unallocated costs. Allocated costs are costs which can be readily allocated to either a particular function (e.g. system security and reliability functions), or to a participant category or class. Unallocated (indirect) costs are costs which cannot be readily allocated to a particular participant category or function (e.g. corporate overheads) and based on principles of economic efficiency having regard to the NEO, are fully recovered from Market Customers.

²¹ Information on the final report, including other consultation documents and submissions, available on AEMO's website at: [AEMO | Electricity Market Participant Fee Structure Review](#)

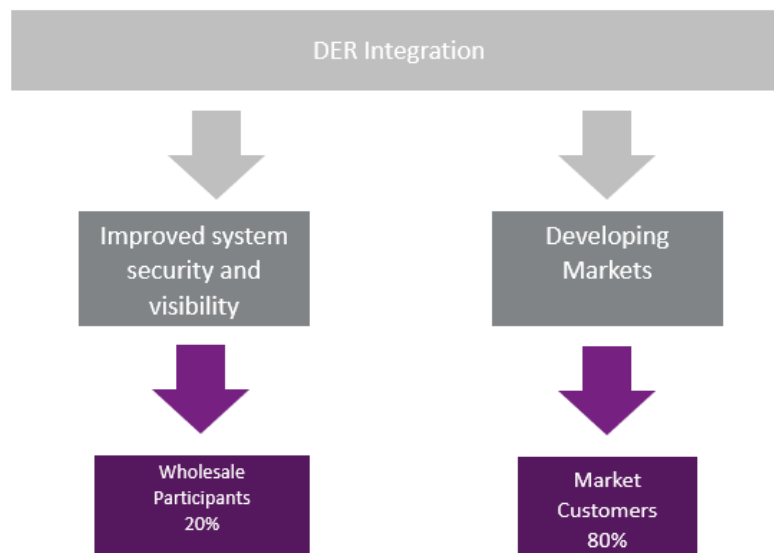
Figure 2 – Attribution of core NEM fee to participants from 1 July 2023 – 30 June 2026




3.1.2 AEMO’s Distributed Energy Resources integration program fee (the DER program fee)

It was determined for the current Participant fee structure, costs associated with projects related to the DER integration program are to be recovered via a separate fee as shown in Figure 3 below.

Figure 3 – Attribution of DER program fee to participants from 1 July 2021 – 30 June 2026



Initiatives included in AEMO’s DER program fee are those that AEMO is working in partnership with, including the ESB, market bodies, and stakeholders to design and implement technical integration of DER, which is considered an integral program to evolve the system for the future, particularly with the current and projected rate of uptake of



DER. These initiatives were grouped into five major workstreams²² with main objectives to either improve system security and visibility, or to develop markets with the relevant attributions allocated through the reflective of involvement fee principle.

AEMO notes that one of the NEM 2025 Reform Program pathways is the Integration of DER and Flexible Demand pathway. This reform pathway is designed to establish frameworks that enable consumers to be rewarded for their flexible demand and generation, facilitate options for how they want to engage and remain protected by a fit-for-purpose consumer protections framework. Consideration of incorporating the initiatives associated with this pathway into the existing DER program fee is relevant to this consultation.

3.1.3 AEMO's Electricity Retail Markets fee

The current Participant fee structure for the Electricity Retail Markets includes full recovery from Market Customers on a per connection point (\$/NMI) basis. This structure was determined based on the activities allocated to the Electricity Retail Markets category that encompass Full Retail Contestability (FRC), as well as platforms implemented as part of the Power of Choice (PoC) and Five-Minute Settlement (5MS) reforms. Such activities include:

- Managing data for settlement purposes;
- Support for retail market functions and customer transfers;
- Business to business (B2B) processes, including the B2B platform which utilises a Shared Market Protocol (as part of the PoC reforms);
- Market Procedures changes and project implementation; and
- Significant changes to Market Settlement and Transfer Solutions (MSATS) that resulted from the 5MS program.

It was determined the retailer 'market share' basis of recovery (\$/NMI) better reflects this function's purpose to the industry and consumers, as opposed to the MWh consumption basis of recovery, because AEMO's electricity retail markets capability is built to handle a total number of individual meters and the actual energy flowing through them is incidental.

3.2 Recovering Participant fees from Registered Participants

Pursuant to clause 2.11.1(a) of the NER, AEMO recovers costs from Registered Participants in accordance with the structure of Participant fees determined by AEMO.

The attribution of the allocated costs to each Registered Participant is based on AEMO's activities and outputs and the cost drivers associated with them and the extent of the involvement of the participants for each of the outputs and revenue requirements. In determining the extent to which the outputs and budgeted revenue requirement relating to a particular output involves a class of Registered Participant, AEMO relies on the experience and expertise of its general managers and staff, and considers factors such as the degree to which:

- the class of Registered Participant that interacts with AEMO in relation to the output;
- the class of Registered Participant that uses the output;

²² The five workstreams are Consumer data, Markets, Operations, Standards, and Demonstrations.

- the class of Registered Participant that receives the output;
- the class of Registered Participant that benefits from the output; and
- those revenue requirements are given rise to, or caused by, that class of Registered Participant's presence in the NEM.

Intending or new participants that are not yet Registered Participant categories under the NER cannot be considered for recovery through the current fee structure. New categories can only be considered for fee recovery once they are legislated in the NER/NEL, and the extent of their involvement with AEMO's revenue requirements can be determined.

Cost recovery metrics for new Registered Participant categories that enter the market during a fee period are sometimes determined via transitional arrangements specified in the Rules which gives effect to the new participant category. AEMO may make submissions on cost recovery for new Registered Participants as part of rule changes processes, however if cost recovery is not explicitly determined through the rule change process, then AEMO would either recover costs through the NEM fee (allocated if possible, or unallocated) or a declared NEM project consultation may be undertaken.

NEM 2025 Reform Program Participant Impact Assessments

As part of work undertaken on the NEM Reform Implementation Roadmap, AEMO, through the RDC, provided industry and stakeholders with an opportunity to submit a Participant Impact Assessment. Stakeholders were asked to identify the Registered Participant/s that they believed would be impacted by each of the core NEM 2025 Reform Program initiatives and the degree of impact from the initiative. Feedback received was published on AEMO's website on 16 September 2022 ([Participant Impact Assessments](#)) and provides an indication on the expected level of involvement from each Registered Participant category for each of the NEM 2025 Reform Program initiatives, but also on a general basis.

3.3 Existing fee metrics

3.3.1 Wholesale Participant fee metric

AEMO's Final Determination on its current Participant fee structure introduced the term 'Wholesale Participant' as a replacement to the previous determination's 'Generator' fee category, as AEMO believed this previous terminology did not adequately capture participants other than scheduled generators, e.g. Market Ancillary Service Providers (MASPs), Small Aggregated Generators (SGAs) and Semi-scheduled generators. Additionally, new participants such as Demand Response Service Providers (DRSPs) were emerging in the current fee period once the Wholesale Demand Response (WDR) mechanism was effective. As such, the revised 'Wholesale Participant' category captures all types of generators (excluding Non-Market Non-Scheduled Generators), Market Ancillary Service Provider (MNSPs), SGAs, MASPs and DRSPs, and recovery of costs from them.

For each of AEMO's fees within the current Participant fee period, Wholesale Participants are charged with an equal allocation to capacity and energy. That is, 50% of the daily rate based on the higher of the aggregate of either the greatest registered capacity and greatest notified maximum capacity and 50% of the daily rate based on MWh energy, or for MASPs/DRSPs the equivalent FCAS enablement, scheduled or metered, in the previous calendar year.

3.3.2 Market Customer fee metric

For each of AEMO’s fees within the current Participant fee period (other than the Retail Market fee), from 1 July 2023 Market Customers are charged with an equal allocation to a variable and fixed charging metric. That is, 50% on a \$/MWh basis for a financial year, based on AEMO’s estimate of total MWh to be settled in spot market transactions, and 50% on a \$/NMI basis per week. The Retail Market fee is charged to Market Customers with a retail licence and levied on a per connection point basis per week.

3.3.3 TNSP fee metric

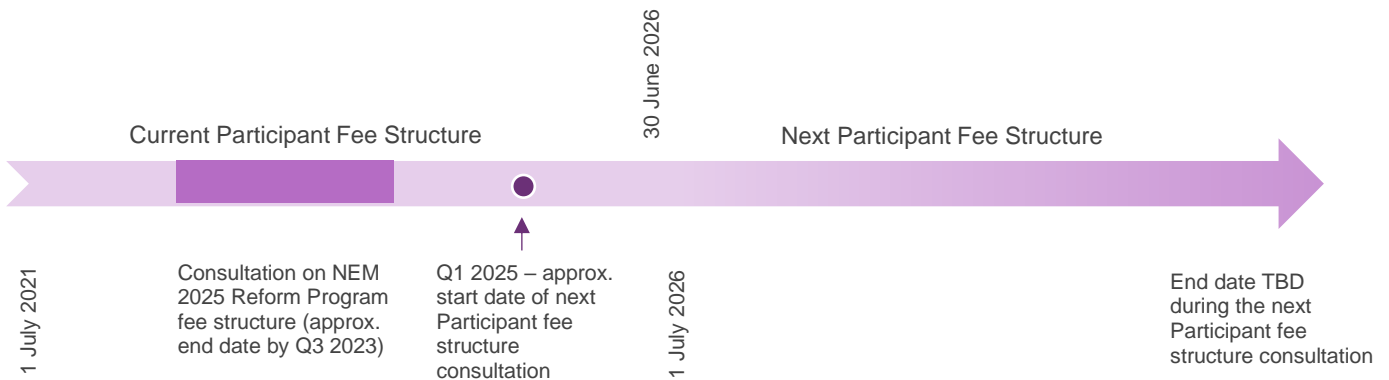
AEMO’s Final Determination on its current Participant fee structure concluded that TNSPs would be charged from 1 July 2023 through the core NEM fee on the basis of energy consumed for the latest completed financial year.

3.4 Start date and period/s of fee recovery

Section 2.1.4 outlines the anticipated timeline of delivery for the NEM 2025 Reform Program. It can be seen from Figure 1 that implementation for the NEM 2025 Reform Program will continue until at least Q2 2027.

For reference, a timeline of AEMO’s Participant fee structure periods is provided in Figure 4 below and shows the period of time that a fee structure for the NEM 2025 Reform Program may be in place for this current Participant fee structure period and when consultation on the next Participant fee structure period is expected to commence. The fee structure determined for the NEM 2025 Reforms as part of this consultation will be considered in the general fee consultation. Through this consultation, the start date for recovery and appropriate period/s for fee recovery will also be determined.

Figure 4 – Timeline of AEMO’s Participant fee structure periods



3.5 Options for Participant fee structure for the NEM 2025 Reform Program

The table below presents two options for how to recover the NEM 2025 Reform Program. AEMO has also undertaken an indicative assessment of these options against the fee principles and the NEO. The assessment key is as follows:

	Meets the principle
	Some aspects meet the principle
	Does not meet the principle

We are seeking input on the options proposed, together with any other options to be considered, as part of this consultation.

Table 2 – NEM 2025 Reform Program fee structure options

Example	Description	Indicative assessment against Fee Principles and the NEO
1. Use existing Participant fees structures such as the core NEM fee and/or DER program fee and/or Electricity Retail Markets fee	<ul style="list-style-type: none"> Allocates each of the NEM 2025 Reform Program pathways to one or more of AEMO's existing Participant fees based on each of the pathways' objectives, or using a percentage allocation of the whole NEM 2025 Reform Program applied to one or more existing fee Attributions of allocated costs to Registered Participants would be as per the existing Participant fee that is applied to the Reform pathway Existing fee metrics for Registered Participant categories would apply Existing Participant fees to apply to the NEM 2025 Reform Program for the remainder of the current Participant fee period, i.e. until 30 June 2026 	Simplicity
		Reflective of involvement
		Not unreasonably discriminate
		Recovery of AEMO's budgeted requirements on a specified basis
		NEO
2. A separate NEM 2025 Reform Program fee	<ul style="list-style-type: none"> A new Participant fee structure to apply to the whole NEM 2025 Reform Program Requires determining the relevant Registered Participant/s to recover costs from as well as the attribution to be allocated to each Registered Participant Requires determining the relevant fee metric to apply to each of the Registered Participants The new Participant fee structure to apply until the end of the current Participant fee period (and which could then be determined to continue the separate fee) 	Simplicity
		Reflective of involvement
		Not unreasonably discriminate
		Recovery of AEMO's budgeted requirements on a specified basis
		NEO

3.6 Questions for stakeholder feedback

AEMO appreciates stakeholder feedback on the following questions, as well as any additional comments stakeholders may have in relation to the Participant fee structure for the NEM 2025 Reform Program.

Question 1

- a. Which option presented in section 3.5 is appropriate for the recovery of the NEM 2025 Reform Program costs? Why?
- b. Is there another fee structure that would be more appropriate for recovery of the NEM 2025 Reform Program?
- c. Which Registered Participant should the costs of the NEM 2025 Reform Program be recovered from and why?

Question 2

Are the fee metrics used for the existing Registered Participant fee categories appropriate to apply to the recovery of the NEM 2025 Reform Program costs? If not, what metric/s is/are more appropriate?

Question 3

- a. AEMO proposes the recovery commence when the projects go live. Do stakeholders consider this appropriate?
- b. AEMO proposes the recovery period commences when the first of the NEM 2025 Reform Program initiatives is implemented, with subsequent initiatives rolled into the NEM 2025 fee structure determined, as and when they are implemented, subject to the program's funding approvals process and the AEMO budget process (as outlined in Appendix A3). Do stakeholders consider this appropriate?

Question 4

Are there any other issues relating to determining a fee structure for the NEM 2025 Reform Program that need to be considered?

A1. Summary of NEM 2025 Reform Program initiatives

A1.1 ESB major reform pathways and their NEM 2025 Reform Program scope

Pathway	Objective	This means	NEM 2025 Reform Program Scope ²³
Resource Adequacy Mechanism²⁴	<ul style="list-style-type: none"> Establish new market-based arrangements to explicitly value capacity to provide an 'investable' and enduring long-term signal Establish market arrangements that support efficient allocation of investment risk between participants, jurisdictions, and consumers Establish tools that provide jurisdictions sufficient confidence that reliability will be maintained in a way that preserves market signals 	We have investment in the right mix of resources (generation, storage and demand response) in place prior to anticipated plant closures, and that plant exit does not cause significant price or reliability shocks to consumers through the transition	<ul style="list-style-type: none"> Increased MT PASA Information (Note other reforms are being considered through ESB policy considerations)
Essential System Services and Ahead Mechanisms	<ul style="list-style-type: none"> Establish new market-based arrangements to value the services needed to support the changing mix of resources in the NEM (frequency, inertia, system strength, and operating reserves) Establish new market mechanisms to support efficient scheduling and dispatch by AEMO Deliver a range of supply and demand-based technologies and resources with capabilities to deliver these essential services 	We have the resources and services when needed to manage the complexity of dispatch and to deliver a secure supply to customers	<ul style="list-style-type: none"> Fast Frequency Response Frequency Performance Payments (part of PFR Incentive Arrangements rule change) Operating Reserve Market Operational Security Mechanism
Integration of DER & Flexible Demand	<ul style="list-style-type: none"> Establish frameworks that enable consumers to be rewarded for their flexible demand and generation, facilitate options for how they want to engage and remain protected by a fit-for-purpose consumer protections framework 	We create new opportunities for consumers about how they receive and use energy and are rewarded for doing so flexibly	<ul style="list-style-type: none"> Integrating Energy Storage Flexible Trading Arrangements Model 2 Scheduled Lite Dynamic Operating Envelopes

²³ Further detail on the scope of the reform initiatives have been published on AEMO's website: [AEMO | Reform Delivery Committee](#)

²⁴ The Capacity Mechanism (CM) and Congesting Management Model (CMM) initiatives are not included in the scope of this consultation. If National Cabinet Energy Ministers approve a CM or CMM, a separate consultation to first determine these as declared NEM projects may be undertaken.

- Establish wholesale market arrangements that support innovation, the integration of new business models and a more efficient supply and demand balance
- Establish networks with the ability to accommodate the continued update of DER, two-way energy flows, and manage the security of the network in a cost-effective way
- Provide AEMO with the visibility and tools it needs to continue to operate a safe, secure, and reliable system, including maintaining system security associated with low minimum system load conditions

- Distribution Local Network Services
- Turn-up Services
- DER Data Hub and Registry Services
- DER Market and System Operator integration

A1.2 Foundational and strategic reform pathways and their associated initiatives

Category	Description	Initiatives
AEMO Foundational	Foundational dependency work to deliver an uplift to base capability on which reforms are dependent	<ul style="list-style-type: none"> • Identity Access Management • Industry Data Exchange • SCADA Lite
AEMO Strategic	Strategic dependency work to effectively futureproof capabilities and scalability of systems thereby avoiding investment in systems that will become end-of-life shortly after the reforms take effect	<ul style="list-style-type: none"> • Portal Consolidation • Consolidated Master Data Repository • Dispatch Target State • Bids / Offers Target State • Constraints Target State • FRC Target State

A2. Fee structure principles

Fee Structure Principle	Requirement	Application and examples
National Electricity Objective (NEO)	<p>In determining Participant fees, AEMO must have regard to the national electricity objective.</p> <p>The objective of the NEL is to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to—</p> <p>(a) price, quality, safety, reliability and security of supply of electricity; and</p> <p>(b) the reliability, safety and security of the national electricity system</p>	<p>The Second Reading Speech to the National Electricity (South Australia) (New National Electricity Law) Amendment Bill 2005 makes it clear that the NEO is an economic concept and should be interpreted as such.</p> <p>The Speech gives an example that investment in and use of electricity services will be efficient when services are supplied in the long run at least cost, resources, including infrastructure, are used to deliver the greatest possible benefit and there is innovation and investment in response to changes in consumer needs and productive opportunities.</p> <p>The Speech goes on to state that the long-term interests of consumers of electricity requires the economic welfare of consumers, over the long term, to be maximised.</p> <p>If the NEM is efficient in an economic sense, the long-term economic interests of consumers in respect of price, quality, reliability, safety and security of electricity services will be maximised. Applying an objective of economic efficiency recognises that, in a general sense, the NEM should be competitive, that any person wishing to enter the market should not be treated more, or less, favourably than persons already participating, and that particular energy sources or technologies should not be treated more, or less, favourably than others.</p> <p>Since 2006, the NEO has been considered in a number of Australian Competition Tribunal determinations, which have followed a similar interpretation. See, for example, Application by ElectraNet Pty Ltd (No 3) [2008] ACompT [15]:</p> <p>“The national electricity objective provides the overarching economic objective for regulation under the Law: the promotion of efficient investment in the long term interests of consumers. Consumers will benefit in the long run if resources are used efficiently, i.e. resources are allocated to the delivery of goods and services in accordance with consumer preferences at least cost.”</p> <p>The NEO is clearly a relevant consideration where AEMO has to exercise judgment or discretion in reaching its determination, for example, if there is a number of Participant fee structures each of which can satisfy the Fee Structure principles, or where the relevant provisions of the Rules are ambiguous.</p>
Simplicity	<p>The structure of Participant fees should be simple</p>	<p>As “simple” is not defined in the Rules, it must be given its ordinary meaning as understood in the context of clause 2.11 of the Rules.</p> <p>The New Shorter Oxford English Dictionary’s definition of “simple” (in this context) is: “not complicated or elaborate” and “plain, unadorned”. Whether a fee structure fits these definitions is largely a matter of judgement.</p> <p>There is a wide range of possible fee structures. There is no single identifiable point where “simple” becomes “complicated”.</p> <p>It is clear from this provision that a certain degree of complexity was envisaged in that the structure of Participant fees may involve several components and budgeted revenue consists of several elements. The structure of Participant fees need not demonstrate absolute simplicity.</p> <p>The simplest fee structures are unlikely to be consistent with the other criteria. However, it is possible to find fee structures that, while consistent with the other criteria, are relatively simple, in comparison to alternative structures.</p> <p>Further, AEMO considers that the use of the word “simple” in this context also involves a degree of transparency.</p> <p>AEMO considers that the simplicity principle means that the basis of the fee structure and its application to various Registered participants should be:</p> <ul style="list-style-type: none"> • straight-forward • easily understood by participants

Fee Structure Principle	Requirement	Application and examples
		<ul style="list-style-type: none"> readily applied by Registered participants and AEMO foreseeable and forecastable in terms of impacts and costs.
Reflective of Involvement	The components of Participant fees charged to each Registered Participant should be reflective of the extent to which the budgeted revenue requirements for AEMO involve that Registered Participant	<p>In determining whether the extent to which the budgeted revenue requirement relating to a particular output involves a class of Registered Participant, AEMO relies on the experience and expertise of its general managers and staff, and considers factors such as the degree to which the class of Registered Participant:</p> <ul style="list-style-type: none"> (a) interacts with AEMO in relation to the output; (b) uses the output; (c) receives the output; and (d) benefits from the output. <p>AEMO also considers how the revenue requirements are given rise to, or caused by, that class of Registered Participant's presence in the NEM.</p> <p>AEMO must determine the structure of Participant fees "afresh".</p> <p>That is, it must freshly consider the application of the criteria in clause 2.11.1 of the Rules and the NEL to the facts and analysis available to it at this time.</p> <p>In doing so, however, AEMO will have regard to its previous determinations under clause 2.11.1 of the Rules, where appropriate.</p> <p>The principle of "reflective of extent of involvement" does not have a specialised meaning in economics. It is consistent with the economic notion of 'user pays' but as a matter of ordinary language, it indicates a degree of correspondence (between AEMO and its costs and participants) without connoting identity.</p> <p>However, this principle does not involve a precise degree of correspondence.</p> <p>Where fixed and common costs are involved, multiple registered participants may be involved with AEMO costs in relevantly similar ways. AEMO's analysis and experience shows that there are categories or classes of Registered Participants that share certain characteristics that mean that the way in which they interact with AEMO is likely to have the same or similar cost implications for AEMO.</p> <p>Where it is practical for AEMO to identify costs that are fixed or common in nature that can reasonably be allocated to a class or classes of Participants that share characteristics such that their involvement with AEMO's outputs is likely to have the same or similar cost implications, AEMO will seek to do so.</p>
Non-discriminatory	Participant fees should not unreasonably discriminate against a category or categories of Registered Participants	<p>In past Participant Fee determinations, AEMO (and its predecessor, NEMMCO) adopted the following definition of discriminate:</p> <p>"Discriminate means to treat people or categories of people differently or unequally. Discriminate also means to treat people, who are different in a material manner, in the same or identical fashion. Further, "discriminate against" has a legal meaning which is to accord "different treatment ... to persons or things by reference to considerations which are irrelevant to the object to be attained".</p> <p>This principle allows AEMO to discriminate against a category or categories of Registered participants where to do so would be reasonable.</p> <p>Where a degree of discrimination between categories of Registered Participants is necessary or appropriate to achieve consistency with the other principles in clause 2.11.1(b) of the Rules, or the NEL, the discrimination will not be "unreasonable".</p> <p>In considering a past fee determination, the Dispute Resolution Panel accepted that this principle is to be applied to the extent practicable and it is only unreasonable discrimination that offends.</p>
Comparability	In developing, reviewing and publishing, the structure of Participant fees, AEMO must consider other fee structures in	<p>Other relevant fee structures could include:</p> <ul style="list-style-type: none"> Other electricity market fee structures such as Western Australia or globally Gas markets operated by AEMO

Fee Structure Principle	Requirement	Application and examples
	<p>existence which it thinks appropriate for comparison purposes.</p> <p>Note that this is not strictly a principle but is included for completeness in describing the matters for which AEMO must have regard.</p>	

A3. The stage gate approach

The challenges and risks of the pathway described as Option 2 in section 2.1.2 mean that a ‘set and forget’ funding strategy that establishes a multi-year overall fixed budget is not appropriate for the Program, particularly due to the policy and regulatory, and therefore scope uncertainty. Accordingly, a hybrid pathway complemented by a stage gate process is to be adopted. This approach commits to Option 1 (Regulatory-led pathway) to undertake mandatory and no regrets initiatives in a timely way. It also sets the NEM 2025 budget envelope, approved by AEMO’s Board and Investment Committee, to allow for the full scope of Option 2 (Strategic pathway) but imposes investment disciplines whereby draw-down is subject to a progressive commitment process informed by rule changes and the stage gate process.

The stage gate process is undertaken for all initiatives that are part of NEM 2025 Program scope, to manage uncertainty and provide for appropriate implementation and investment disciplines.

It will also be applied to reform initiatives including Congestion Management Mechanism, Capacity Mechanism and those under the Data Strategy pathway once more information is available to inform scoping and cost estimates and AEMO will follow the Program governance process to identify changes to scope, timeline and forecast costs to include these additional reforms. This approach provides a mechanism to manage the uncertainty and establishes appropriate investment discipline. Stage gate checkpoints will occur after:

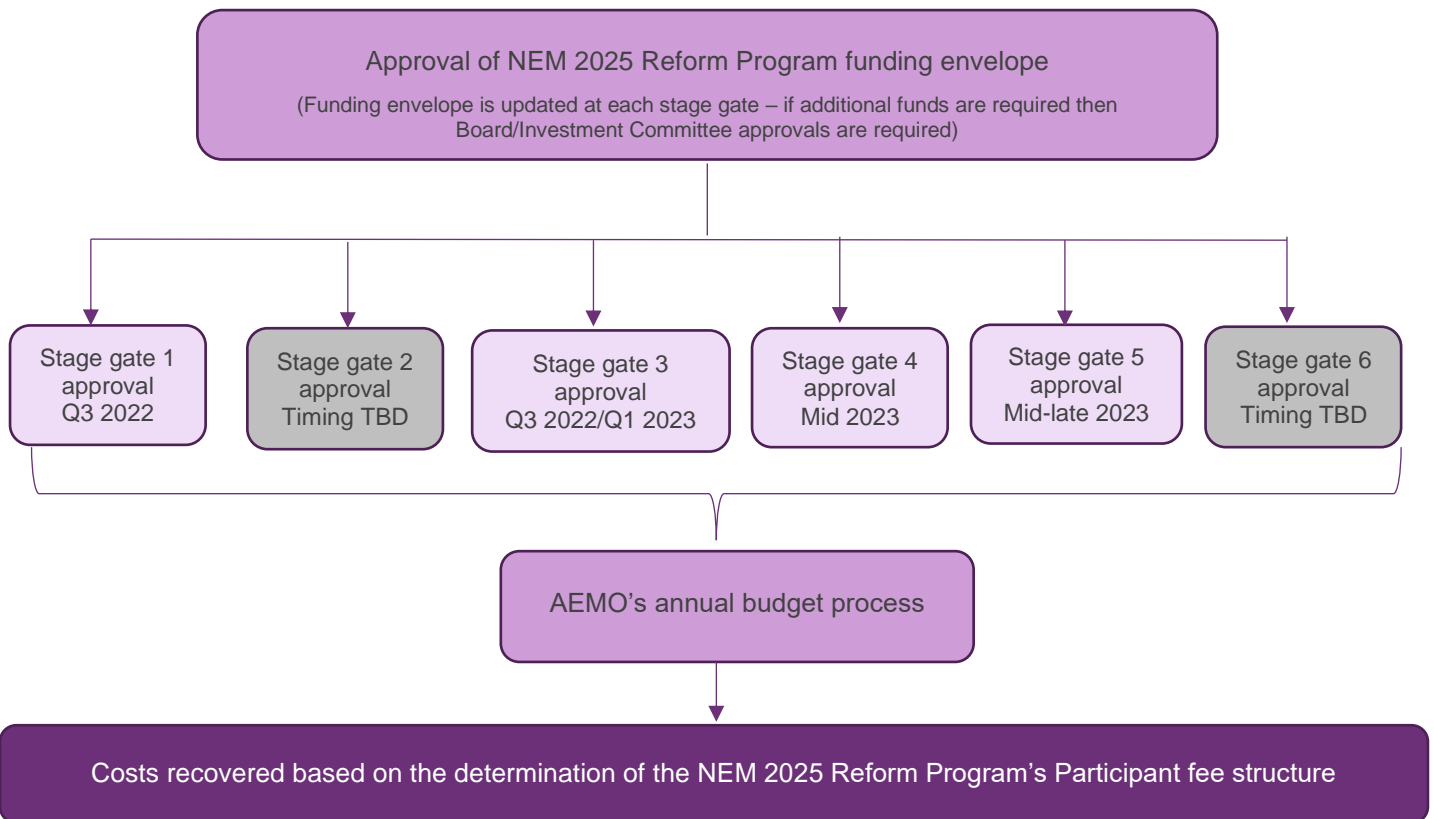
- An initiative has been properly scoped with a high-level design, and where participant consultation has been undertaken (where relevant) to determine industry impacts and support; and
- An initiative has been planned, including cost and resources, the timeline on the roadmap has been confirmed, and its deliverability has been confirmed.

The table below outlines the initiatives currently considered under each of the six stage gates their indicative timing.

Stage gate	Initiative/s	Description	Indicative Timing
1	Immediate reforms	<ul style="list-style-type: none"> • Mandatory initiatives for 2022 Rules Determinations (IESS, FFR, MT PASA, PFR and OSM) 	Q3 2022
2	Capacity Mechanism and Congestion Management Mechanism	<ul style="list-style-type: none"> • Stage Gate 2A: Capacity Mechanism • Stage Gate 2B: Congestion Management Mechanism Separated due to possible different policy timelines for each initiative	Subject to policy makers’ timing
3	Strategic pre-requisites	<ul style="list-style-type: none"> • Stage Gate 3A: Identity & Data bundle: IDA, IDX (noting pre-existing participant consultation should be leveraged), CoMASTR and Portal Consolidation • Stage Gate 3B: Dispatch Bundle (including dispatch, constraints and bids/offers target state) • Stage Gate 3C: FRC target state Integrated design, plan and cost/benefit to be prepared, industry engagement to be conducted	<ul style="list-style-type: none"> • Q1 2023 • Q3 2022 • Q1 2023
4	DER Flexible Demand and Marketplace (Project 3, Work Package 3)	<ul style="list-style-type: none"> • Stage Gate 4: Turn-up services, DOEs, DER Data Hub & Registry services, Distribution/local network services and potentially DER Operational Tools. Scope is subject to change once Policy/Trials complete (impacting budget, timeline and responsibilities).	Mid 2023

Stage gate	Initiative/s	Description	Indicative Timing
		Co-ordinated approach with DNSPs may be valuable, to ensure roles are clear and scope for each role is defined.	
5	Next Reforms	<ul style="list-style-type: none"> Mandatory initiatives for 2023 Rules Determinations (FTA2, Scheduled Lite & SCADA Lite, OR) 	Indicative mid/late 2023 (subject to Rules timing)
6	Data Strategy	<p>The four reform initiatives for the Data Strategy (Data Services, Bill Transparency, Electric Vehicles, Network Visibility) are at an early conceptual policy and stakeholder consultation phase. As such, it is not possible to make an informed cost estimate that properly takes into account responsibilities, timeline, and design.</p> <p>Commitment (approval to proceed) to enable mobilisation of project ready for execution.</p>	Indicative Mid 2023 (subject to policy development)

The figure below highlights the NEM 2025 Reform Program’s stage gate process and how AEMO’s determination of a Participant fee structure for the program is applied.



A4. Registered participants (current)

Participant category	Description	Registered participant class
Generators	Any person who owns, controls or operates a generating system connected to a transmission or distribution network	<ul style="list-style-type: none"> • Market Scheduled • Market Non-scheduled • Market Semi-scheduled • Non-market Scheduled • Non-market Non-scheduled • Non-market Semi-scheduled
Small Aggregated Generator	An SGA can supply electricity aggregated from one or more small generating units, which are connected to a distribution or transmission network. A small generating unit is owned, controlled and/or operated by a person who AEMO has exempted from the requirement to register as a generator.	<ul style="list-style-type: none"> • Market Small aggregated generator
Customers	A customer is a registered participant that purchases electricity supplied through a transmission or distribution system to a connection point	<ul style="list-style-type: none"> • Market customer • First-tier customer • Second-tier customer
Network Service Providers	A person who owns, operates or controls a transmission or distribution system	<ul style="list-style-type: none"> • Transmission network service provider • Distribution network service provider • Market network service provider
Special Participant	<p>A delegate appointed by AEMO to carry out, on AEMO's behalf, some or all of AEMO's rights, functions and obligations under Chapter 4 of the Rules.</p> <p>A Distribution System Operator who is responsible, under the Rules or otherwise, for controlling or operating any portion of a distribution system (including being responsible for directing its operations during power system emergencies).</p>	<ul style="list-style-type: none"> • System operator • Distribution system operator
Reallocator	Anyone that wishes to participate in a reallocation transaction undertaken with the consent of two market participants and AEMO	<ul style="list-style-type: none"> • Reallocator
Trader	Anyone who wants to take part in a Settlements Residue Auction (SRA), and is not already registered as a customer or generator	<ul style="list-style-type: none"> • Trader
Metering Coordinator	Has the overall responsibility for coordination and provision of metering services at a connection point in the NEM	<ul style="list-style-type: none"> • Metering coordinator
Market Ancillary Service Provider (MASP)	Delivers market ancillary services in accordance with AEMO's market ancillary services specifications, by offering a customer's load, or an aggregation of loads into FCAS markets.	<ul style="list-style-type: none"> • Market ancillary service provider
Demand Response Service Provider (DRSP)	<p>A person who offers and provides load as either or both:</p> <p>(a) wholesale demand response in respect of a wholesale demand response unit; and</p> <p>(b) a market ancillary service in respect of ancillary service load,</p>	<ul style="list-style-type: none"> • Demand response service provider