

STRUCTURE OF PARTICIPANT FEES FOR AEMO'S NEM2025 REFORM PROGRAM

June 2023

Draft Report and Determination





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 (Law) prevail over this document to the extent of any inconsistency.

This publication has been prepared by AEMO using information available at 30 June 2023.

Disclaimer

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Version control

Version	Release date	Changes
#1	30/06/2023	

Executive summary

The publication of this Draft Report and Determination (Draft Report) commences the second stage of the Rules consultation process conducted by AEMO to determine a Participant fee structure for the National Electricity Market (NEM) 2025 Reform Program declared NEM project.

The NEM2025 Reform Program has been established 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.

On 3 February 2023, AEMO published the Notice of First Stage Consultation and the Consultation Paper to determine a Participant fee structure for the NEM2025 Reform Program declared NEM project. AEMO received 13 submissions. Of the submissions received, there were mixed views on whether the existing Participant fee structures are appropriate to apply to the NEM2025 Reform Program versus a separate fee being established. There was strong feedback however that the existing fee metrics remain appropriate for the program and that cost recovery should commence from when an initiative goes live.

Some submissions raised concerns on the transparency of cost approval and governance framework around the NEM2025 Reform Program. While these issues are not a matter within the scope of this consultation, AEMO has provided some feedback in response to these concerns in this Draft Report.

In addition to the submissions, AEMO held its first Participant Fee Consultative Committee (PFCC) on 27 April 2023 that was attended by representatives from the Energy Networks Australia (ENA), Clean Energy Council (CEC), Energy Users Association of Australia (EUAA) and Australian Energy Council (AEC). The PFCC discussed stakeholder feedback related to the key issues of this consultation, as well as potential fee structure options for the NEM2025 Reform Program.

Key matters raised in submissions

The key matters for consultation, and the main themes from stakeholder submissions and meetings held, include:

- The Participant fee structure for the NEM2025 Reform Program – of the two options presented in the Consultation Paper, and from the submissions received, there was majority stakeholder support to establish a separate fee in order to improve cost transparency and to align more with the reflective of involvement principle when considering the Registered Participants to be charged for the program. Some stakeholders also noted that introducing recovery from Distribution Network Service Providers (DNSPs) would be difficult due to existing regulatory barriers that do not factor cost recovery of AEMO's fees from this participant category.
- The fee metric/s for the NEM2025 Reform Program – only one stakeholder specifically responded to this question, supporting the existing fee metrics.
- The recovery commencement date and period for costs of the NEM2025 Reform Program – of the stakeholders that did respond to this matter, the majority supported recovery commencing from each initiatives' go-live date. One stakeholder suggested commencing recovery as soon as practicable. Only one stakeholder provided a response specifically on the cost recovery period, proposing a 10-year minimum.

Further detail on the key points made in each submission, with AEMO's responses to these submissions, can be found in Appendix A1.

AEMO's draft determinations on the above matters

After consideration of stakeholder submissions and stakeholder meetings including the PFCC, and consistent with the fee structure principles and having regard to National Electricity Objective (NEO), AEMO's Draft Report, for stakeholder feedback, proposes the following approaches for each of the main issues identified above:

- To recover costs of the NEM2025 Reform Program declared NEM project as a separate fee allocated to Wholesale Participants (27.5%) and Market Customers (72.5%) charging the following fee metrics:
 - For Wholesale Participants: 50% is charged as a daily rate based on aggregate of the higher of the greatest registered capacity and greatest notified maximum capacity (of energy or Frequency Control Ancillary Service (FCAS) markets) in the previous calendar year of units from Wholesale Participants; and 50% is charged as a daily rate based on MWh energy, or in the case of Market Ancillary Service Providers (MASPs) / Demand Response Service Providers (DRSPs) the equivalent FCAS enablement, scheduled or metered (in previous calendar year).
 - For Market Customers: 37% is charged as a rate per MWh for a financial year based on AEMO's estimate of total MWh to be settled in the spot market transactions by Market Customers during that financial year. The rate is applied to the actual spot market transactions in the billing period; and 63% is charged on a per connection point basis per week.
- Commence the cost recovery period for the NEM2025 Reform Program from each initiatives' go-live dates^{1,2}, for a recovery period of seven years.

A detailed assessment and the rationale that led to the above draft proposal can be found in section 4.

Stakeholders should note that this consultation relates only to determining the Participant fee structure for the NEM2025 Reform Program. The actual amount charged for the program is subject to a separate process through AEMO's annual budget process.

Stakeholders are invited to submit written responses on the issues and questions identified in this paper to reformdevelopmentandinsights@aemo.com.au by 5.00 pm (Australian Eastern Standard Time [AEST]) on 28 July 2023, in accordance with the Notice of Second Stage of Consultation published with this paper.

¹ Subject to the program's funding approvals process and the AEMO budget process.

² With the exception of those initiatives (e.g. Fast Frequency Response, Increased MT PASA Information) that go live prior to 1 July 2024. Costs for these initiatives will be recovered from 1 July 2024 as clause 2.11.1(e) of the NER requires AEMO to publish Participant fee structures at least three months prior to implementation of the structure.

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1 Stakeholder Consultation Process

As required by the National Electricity Rules (NER, Rules), AEMO is consulting on a structure for Participant fees for the NEM2025 Reform Program (a declared NEM project) in accordance with the Rules consultation process in rule 8.9.

The NEM2025 Reform Program (the Program) has been established to coordinate delivery of a suite of reforms recommended by the Energy Security Board (ESB) and endorsed by the First Ministers in October 2021, to meet the needs of the energy transition.

AEMO's indicative timeline for this consultation is outlined below. Future dates may be adjusted depending on the number and complexity of issues raised in submissions and any meetings with stakeholders.

Table 1 – Consultation timeline

Deliverable	Indicative date
Consultation Paper and Notice of First Stage Consultation published	Friday 3 February 2023
First Stage Submissions closed	Friday 3 March 2023
Draft Report and Notice of Second Stage Consultation to be published	Friday 30 June 2023 ³
Submissions due on Draft Report	By Friday 28 July 2023
Final Report to be published	By Friday 6 October 2023

To support AEMO in its consultation on an appropriate participant fee structure, AEMO has established the Participant Fee Consultative Committee (PFCC) as one key mechanism to collaborate and engage with industry and consumers. AEMO will work collaboratively with the PFCC to refine its analysis of potential options for the fee structure and period, or periods, for recovery of its costs associated with the NEM2025 Reform Program, in addition to gathering broader stakeholder input on options through our formal consultation process.

AEMO held its first PFCC on 27 April 2023 that was attended by representatives from the Energy Networks Australia (ENA), Clean Energy Council (CEC), Energy Users Association of Australia (EUAA) and Australian Energy Council (AEC). The PFCC discussed stakeholder feedback related to the key issues of this consultation, as well as potential fee structure options for the NEM2025 Reform Program. Feedback received from this meeting has been highlighted in section 4.

Stakeholders should note that this consultation relates only to determining the structure for an additional Participant fee for recovery of the costs of the NEM2025 Reform Program, including the Registered Participants that will be charged the fee, as well as the start date for recovery and the period or periods over which recovery will occur. Therefore, stakeholders should not make submissions to this consultation that relate to the actual amount charged for the program.

³ This assumes that AEMO concludes that it is not desirable or necessary to hold any meetings under clause 8.9(f) of the Rules (If meetings are held, meetings must be held within a further 25 business days after submissions close, and this will then impact the consultation dates following the meeting)

2 Background

2.1 NER requirements

2.1.1 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 NEM2025 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.

2.1.2 Guiding principles for the Electricity fee structure


AEMO consults on its proposed fee structure for Participants in accordance with clause 2.11 of the NER. 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 A3:

- 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. 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.

2.1.3 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.

2.2 Context for this consultation


2.2.1 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 work⁴ 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. The National Cabinet agreed for the ESB to proceed with the recommendations in October 2021 under the following pathways:

⁴ [Energy Security Board | Post 2025 electricity market design project \(aemc.gov.au\)](https://www.aemc.gov.au/post-2025-electricity-market-design-project)

- 
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.⁵

To complement the above four pathways, a Data Strategy for the NEM is also required to ensure delivery and implementation of the NEM2025 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.

2.2.2 Implementation and costs of the NEM2025 Reform Program

AEMO and the Reform Delivery Committee (RDC) identified the initiatives selected for inclusion in the NEM2025 Reform Program (required to deliver the ESB's policy reforms via the four pathways outlined above) based on an 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 NEM2025 Reform Program⁶ which form the basis for which a participant fee structure needs to be determined through this consultation.

This summary also includes a subset of AEMO 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 will support the efficient and effective 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 Reform Implementation Roadmap (the Roadmap)⁷ shown in Appendix A2, which has been updated since AEMO's

⁵ The Transmission and access pathway is not within the NEM2025 Reform Program declared NEM project scope due to high uncertainty on the progression of its initiatives.

⁶ 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.

⁷ Further information on the consultation of the Roadmap can be viewed on AEMO's website: [AEMO | Regulatory Implementation Roadmap](#)

Consultation Paper. It shows, based on current assumptions on the progress of initiatives, that implementation for the NEM2025 Reform Program is now expected to be completed by the end of the second quarter of 2027.

The Roadmap seeks to minimise disruption to industry and supports a more structured approach to balancing delivery and 'business as usual' initiatives. It appropriately prioritises sequences, and bundles reform implementation considering interdependencies with a least-cost whole-of-system intent for the benefit of the consumers. The Roadmap, and the NEM2025 Reform Program more broadly, is also complemented by both implementation and investment disciplines whereby draw-down is subject to a progressive commitment process informed by rule changes and a stage gate process for key strategic or foundational initiatives and/or those initiatives with significant uncertainty.

The cost estimates for the implementation of the Program are shown in Table 2 below. Updates to the costs of the Program as each initiative progresses to an implementation stage will be transparently provided to Participants well in advance in accordance with the NEM2025 Reform Program governance framework, and through the Financial Consultation Committee (FCC) and AEMO's annual budget process.

Table 2 – Estimated⁸ total Program costs^{9,10}

Cost component	\$m
Total capital costs	\$250 - \$350
Ongoing costs ¹¹	\$170 - \$240
Total Program costs	\$430 - \$600
Net Present Cost	\$350

2.3 First Stage Consultation

AEMO issued a Notice of First Stage Consultation on 3 February 2023.

The objective of the Consultation Paper was to provide stakeholders with the opportunity to have input into the development of the structure of Participant fees to apply to the NEM2025 Reform Program declared NEM project, noting that the consultation does not apply to the actual amount charged for each fee.¹²

AEMO received 13 written submissions in the first stage of consultation. AEMO also held a video conference with the ENA on 6 April 2023¹³, as well the first Participant Fee Consultative Committee (PFCC) on 27 April 2023 that is part of the Engagement Plan published with the Consultation Paper. Members of this committee were nominated through the call for Expressions of Interest (EOI) and include the Energy Networks Australia (ENA), Clean Energy Council (CEC), Energy Users Association of Australia (EUAA) and Australian Energy Council

⁸ Targets 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 and scope risks) and other risks such as delivery delays.

⁹ 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.

¹⁰ Scope of estimates does not include Capacity Mechanism, Congestion Management Mechanism and Data Strategy due to ongoing policy uncertainty at the time.

¹¹ Ongoing costs are assumed to commence from the end of the implementation period for each initiative until the end of the Program.

¹² The latter is to be determined on an annual basis, via the AEMO budgeting process.

¹³ This meeting was requested by the ENA.



(AEC). AEMO also held a separate meeting with the ENA's second representative for the PFCC (from TransGrid) on 17 May 2023.

Copies of all written submissions have been published on AEMO's website at:

[AEMO | Participant Fee Structure for the NEM2025 Reform Program Declared NEM Project](#)

3 Summary of Key Issues for Consultation

3.1 Summary of key consultation issues

The table below provides an overview of the main issues to be addressed in relation to the key matters under consultation. It also highlights stakeholder views on the consultation matter.

Table 3 – Summary of consultation issues

Consultation Matter	Summary of key issues
1. Participant fee structure (including fee metrics and Registered Participants to be charged)	<ul style="list-style-type: none"> When AEMO determines a project to be a declared NEM project under clause 2.11.1(ba), under clause 2.11.1(bb) it must determine the structure of an additional Participant fee to be used in the recovery of costs associated with a declared NEM project until the next general determination of all Participant fees is made under clause 2.11.1(a) of the NER. AEMO proposed two options in its Consultation Paper for stakeholder feedback – to use the existing fee structures or to establish a separate NEM2025 Reform Program fee. There was support for both options, with majority of stakeholders supporting establishing a separate reform fee. Only two stakeholders commented that the existing metrics remain appropriate. Concerns were raised, in particular, to allocating costs to Distribution Network Service Providers (DNSPs) as they currently do not have a regulatory mechanism that allows them to recover AEMO’s fees. Consideration within this consultation of the new Integrated Resource Provider (IRP) participant category was also raised by one stakeholder.
2. Cost recovery commencement date and recovery period	<ul style="list-style-type: none"> Under clause 2.11.1(bb), AEMO must also determine the start date for recovery and the period or periods over which recovery will occur for the declared NEM project until the next general determination of all Participant fees is made under clause 2.11.1(a) of the NER. AEMO’s Consultation Paper proposed commencing recovering costs when the first initiative goes live with subsequent initiatives rolled into the fee structure as and when they are implemented, subject to the program’s funding approvals and AEMO’s annual budget processes. Majority of stakeholders supported cost recovery from each initiatives’ go-live dates. Only one stakeholder suggested a cost recovery period – a minimum of 10 years.

3.2 Other issues raised

While not in scope of the consultation, some concerns were raised relating to the transparency and governance framework of the costs associated with the NEM2025 Reform Program. These concerns are highlighted in more detail in section 5 as well as in the responses to stakeholder submissions (Appendix A5) which raised these points.

4 Discussion of Key Issues for Consultation

This section discusses the issues outlined in section 3 in further detail; highlights the options considered to address those issues incorporating stakeholder feedback and an assessment against the NEO and the fee structure principles; and AEMO’s draft determination on each matter.

The principles assessment key is as follows:

	Most aligned with the principle
	Partially aligned with the principle
	Least aligned with the principle

4.1 A Participant fee structure for the NEM2025 Reform Program

4.1.1 Issues summary and stakeholder submissions

As outlined in section 2.1 of this Draft Report, the NEM2025 Reform Program was determined to be a declared NEM project under clause 2.11.1(ba) of the NER. As such, AEMO is to comply with the NER consultation procedures when making a determination for a Participant fee structure for the NEM2025 Reform Program, which includes determining the Registered Participants to be charged the fee.

The current NEM Participant fee structure period concludes on 30 June 2026, therefore consultation on the next NEM general Participant fee structure period will need to commence by Q1 2025. As such, any fee structure determined through this consultation for the NEM2025 Reform Program declared NEM project will be revisited in the consultation process for the next NEM general Participant fee structure.

In its Consultation Paper, AEMO proposed two options for a Participant fee structure (see Table 4).

Table 4 – Summary of Participant fee structure options

Example	Description
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 NEM2025 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 NEM2025 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 NEM2025 Reform Program for the remainder of the current Participant fee period, i.e. until 30 June 2026.
2. A separate NEM2025 Reform Program fee	<ul style="list-style-type: none"> A new Participant fee structure to apply to the whole NEM2025 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).



A number of stakeholders provided general responses to these two options as presented in the Consultation Paper – a summary of their responses is provided below.

Table 5 – Summary of stakeholder responses to options on a Participant fee structure

Option	Number of stakeholder responses	General comments
Use existing Participant fee structure for recovery of NEM2025 Reform Program costs	3	<ul style="list-style-type: none"> • Use existing fee structures (including the existing fee metrics) until the next general fee determination consultation. • DNSPs do not have an appropriate mechanism for recovering costs if they are charged before the next fee determination period.
A separate NEM2025 Reform Program fee	6	<ul style="list-style-type: none"> • A separate fee structure is more reflective of involvement e.g. those involved in the DER workstream are different to those involved in wholesale market dispatch initiatives. • AEMO needs to consider the impact of the introduction of the new IRP participant category and any transitional arrangements that may be required. • A separate fee will allow greater transparency of costs. • Existing fee metrics are appropriate.

NEM2025 Reform Program Participant Impact

When determining a fee structure for the NEM2025 Reform Program declared NEM project, the level of involvement of Registered Participants (existing and new) resulting from the reform must be considered. When considering the attribution of the allocated costs to each Registered Participant, AEMO bases this on 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, that is:

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

Table 6 shows that the reforms involve many participant types, who will each have different levels of involvement depending on the reform initiative. While AEMO must, to extent practicable, consider the reflective of involvement principle, it must similarly consider the other fee structure principles outlined in section 2.1.2 as well as the NEO to strike a balance between them. This may mean that an option to improve a fee structure against one principle may lessen the applicability of another principle.

For example, competing principles are often *reflective of involvement* and *simplicity*. While reflective of involvement in a fee structure could be improved through measures such as disaggregation of fees, markets or services, this would reduce the simplicity of the fee structure, and the systems needed to manage the fees would become more complex.

AEMO’s objective through this review and consultation process is to balance competing fee structure principles, through careful consideration of the principles and stakeholder feedback on how any fee structure changes impact various stakeholders.

Table 6 below outlines the proposed allocation of the reform pathways, along with AEMO’s strategic and foundational pathways, to Registered Participants expected to be involved in each of the initiatives within that pathway. The table also highlights the corresponding existing fee structure (if applicable) that may have been applied to the pathway had the NEM2025 Reform Program not been determined a declared NEM project and that AEMO has utilised to inform the involvement of Registered Participants.

Further, the table shows that TNSPs and DNSPs have not been included at this stage, however DNSPs in particular, and new participant types may be involved in the future (e.g. through the DER and Data Strategy pathways) which will be monitored by AEMO as initiatives progress. AEMO is also of the view that some initiatives within the Data Strategy, AEMO Strategic and AEMO Foundational pathways may also incorporate a different level of involvement from Registered Participants that are not currently reflected through existing fee structures.

The expected level of involvement of Registered Participants that AEMO has developed is discussed further in Table 8 and Appendix A4.

Table 6 – Reform pathways and the corresponding participants involved

Pathway	Initiatives	Registered Participants	Existing fee structure/s
Resource Adequacy Mechanism	Increased MT PASA information	Wholesale Participants ¹⁴ Market Customers	Core NEM fee
Essential Security Systems	Fast Frequency Response Frequency Performance Payments Operational Security Mechanism Operating Reserves Market	Wholesale Participants Market Customers	Core NEM fee
DER	Integrating Energy Storage Systems Flexible Trading Arrangements (Model 2) Scheduled Lite Dynamic Operating Envelopes Distribution Local Network Services DER Data Hub & Registry Services DER Operational Tools	Wholesale Participants Market Customers	Core NEM fee, DER Integration Program fee
Data Strategy	Data Services Bill Transparency Electric Vehicles Charging Standing Data Register Network Visibility	Wholesale Participants Market Customers	DER Integration Program fee, Electricity Retail Markets fee
AEMO Foundational	Identity and Access Management Industry Data Exchange SCADA Lite	Wholesale Participants Market Customers	Core NEM fee, Electricity Retail Markets fee, DER Integration Program fee

¹⁴ Wholesale Participants include Generators, Market Network Service Providers, Market Ancillary Service Providers, Small Generator Aggregators (until 4 June 2023 when SGAs must re-register as Integrated Resource Providers)



4.1.2 AEMO’s assessment on Participant fee structure options

AEMO’s Consultation Paper provided a preliminary assessment on the two Participant fee structure options proposed. For its Draft Report, AEMO has considered the two options originally presented in more detail, and have since developed Option 2 further producing two versions of this Option for consideration. Therefore, the following suite of options are considered in this Draft Report:

1. Use existing Participant fee structure for recovery of NEM2025 Reform Program costs.
2. Establish a separate fee structure for the NEM2025 Reform Program allocating costs to Wholesale Participants and Market Customers in a manner consistent with allocating costs in accordance with existing Participant fee structures on an individual initiative basis.
3. Establish a separate fee structure for the NEM2025 Reform Program recovering costs only from Market Customers.

A summary of AEMO’s assessment for the three Participant fee structure options is shown below in Table 7.

Table 7 – AEMO’s assessment on Participant fee structure options against the NEO and NER principles

Option	Principles and the NEO Assessment	General Comments
1. Use existing Participant fee structure for recovery of NEM2025 Reform Program costs	Simplicity	Pros <ul style="list-style-type: none"> • Simple as existing structures are understood by participants • Initiatives going live between now and FY2026 neatly align to existing fee structures of core NEM or DER program fees • Allows for a broader assessment to be conducted across all fee structures as part of NEM general Participant Fees consultation, including better understanding of reflective of involvement • Avoids having multiple fee structures for activities that are similar in nature e.g. DER program fee already exists and a number of NEM reform initiatives are DER-related. Cons <ul style="list-style-type: none"> • Reflective of involvement principle is potentially least aligned as allocation may over or understate the involvement or impact of one or more participant categories across the reform program • Could be seen to be discriminatory towards existing Registered Participants even though there are some new categories of participants
	Reflective of involvement	
	Not unreasonably discriminate	
	Recovery of AEMO’s budgeted requirements on a specified basis	

Option	Principles and the NEO Assessment	General Comments
	NEO	<p>introduced through the reform initiatives</p> <ul style="list-style-type: none"> • Not as transparent on cost allocation since the reform initiatives may be bundled with core NEM activities • Does not align with AEMO's budgeted pathway
<p>2. A separate NEM2025 Reform Program fee allocating costs to Wholesale Participants and Market Customers (see Table 8 on the development of these Participant allocations)</p>	Simplicity	<p>Pros</p> <ul style="list-style-type: none"> • Simple and understood by participants • Applies a similar concept of the existing fee structure allocations to determine allocations for the NEM2025 Reform Program as a whole • Allows for a broader assessment to be conducted across all fee structures as part of general NEM general Participant fees consultation, including better understanding of reflective of involvement • Acknowledges that initiatives that go-live prior to the next general fee structure and reassessment of the NEM 2025 fee structure (1 July 2026) do not involve NSPs • Allows for new Registered Participant categories to easily be allocated into the existing distinct Participant categories • Avoids issues regarding AEMO's budget process and ability to separately report Reform costs improving cost allocation transparency relative to Option 1 <p>Cons</p> <ul style="list-style-type: none"> • Reflective of involvement principle is only partially aligned as DNSPs are not charged even though they may have some involvement in future reform initiatives and TNSPs may benefit in a small way from some of the future initiatives that allow for better data/information provision • May be seen as discriminatory as Wholesale Participants and Market Customers pick up the share of costs that may have been allocated to TNSPs (or DNSPs)
	Reflective of involvement	
	Not unreasonably discriminate	
	Recovery of AEMO's budgeted requirements on a specified basis	
	NEO	
<p>3. A separate NEM2025 Reform Program fee allocating all costs to Market Customers only</p>	Simplicity	<p>Pros</p> <ul style="list-style-type: none"> • Simple and understood by participants • Allocates costs as close to the end users who are the ultimately beneficiaries of the NEM2025 Reform Program

Option	Principles and the NEO Assessment	General Comments
	Reflective of involvement	<ul style="list-style-type: none"> • Minimises overall transaction costs • The metric accounts for both large and small customers and is the same as the core NEM Market Customer charge • Establishing this approach now will reduce the time reviewing this structure in the NEM general fees determination particularly where new participant categories are introduced • Cost transparency is achieved • Existing means for Market Customers to pass through costs already in existence
	Not unreasonably discriminate	
	Recovery of AEMO's budgeted requirements on a specified basis	<p>Cons</p> <ul style="list-style-type: none"> • May set a basis for fee recovery for all major future reform programs • While consumers may benefit from the reform package overall, individual Registered Participants categories may similarly benefit from or be involved in the revenue requirements of single reforms initiatives (e.g. new revenue streams) implemented over the course of the program and not charging these individual participants separately may not fully reflect involvement and may be seen as discriminatory
	NEO	

Main themes of feedback from PFCC members on potential options for cost recovery included the following:

- TNSPs (and DNSPs) should not be charged AEMO's fees for the NEM2025 Reform Program, particularly before the next general NEM Participant fee structure period, as the initiatives that go-live before that time do not directly impact or benefit network service providers.
- DNSPs in particular should also not be charged as they do not have a regulatory mechanism in place to recover AEMO's fees.
- From a TNSP perspective, greater visibility and certainty on fees over a five-year period is sought for the Australian Energy Regulator's (AER's) revenue determination process if TNSPs are to be charged.
- Market Customers should not solely be charged AEMO's fees for the NEM2025 Reform Program as they are not the only participants to benefit from the program.
- An approach that allows a competitive market on prices to be incorporated in the process before fees are distributed to the end-use consumer is preferable to ensure charges are efficient i.e. allocating AEMO's fees directly to Market Customers would not meet this objective.

Registered Participant allocation for the Reform Program

If the NEM2025 Reform Program was not a declared NEM project, the costs of individual initiatives would be absorbed into one or more of AEMO's existing fee structures (e.g. Core NEM fee, DER Integration Program fee or

Electricity Retail Markets fee) at the time of their go-live date. AEMO, as part of its most recent NEM general Participant Fee structure consultation sought to update the allocation of costs across Registered Participant categories for its existing fees. This included allocating part of its Core NEM fee costs to TNSPs from 1 July 2023.

The current allocation among Registered Participants across AEMO's existing fee structures provides a principled basis for considering the allocation of the overall NEM2025 Reform Program among participants. Table 8 highlights AEMO's mapping of the reform pathways, along with AEMO's strategic and foundational pathways, to one or more of AEMO's existing fee structures, depending on the reform initiatives that are part of each pathway. It builds on the information provided in Table 6 by including the weighted level of involvement proposed for each Registered Participant, which incorporates the existing apportionment of AEMO's budgeted revenue requirements for its Core NEM fee that recovers 70% from allocated (direct) costs¹⁷ and 30% from unallocated (indirect) costs.¹⁸ It should be noted that where the existing fee structure allocations include TNSPs, these were reallocated to Wholesale Participants and Market Customers consistent with their assessed involvement.

Appendix A4 includes the detail for which the below weighted involvement allocations were obtained, including cost estimates for each pathway which were applied for the weighted allocation.

Table 8 – Reform pathways and the corresponding weighted involvement of participants impacted

Pathway	Registered Participants	Weighted involvement (%)	Principle – Existing fee structure allocations applied ¹⁹
Resource Adequacy Mechanism	Wholesale Participants	44.6%	Core NEM fee
	Market Customers	55.4%	
Essential Security Systems	Wholesale Participants	44.6%	Core NEM fee
	Market Customers	55.4%	
DER	Wholesale Participants	30.7%	Core NEM fee, DER Integration Program fee
	Market Customers	69.3%	
Data Strategy	Wholesale Participants	31.1%	DER Integration Program fee, Electricity Markets Retail fee and other ²⁰
	Market Customers	68.9%	
AEMO Foundational	Wholesale Participants	21.3%	Core NEM fee, Electricity Retail Markets fee, DER Integration Program fee and other ²¹
	Market Customers	78.7%	
AEMO Strategic	Wholesale Participants	21.2%	Core NEM fee, Electricity Retail Markets fee and other ²²
	Market Customers	78.8%	

¹⁷ 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 (e.g. Electricity Retail Market fees)

¹⁸ Unallocated 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

¹⁹ In use of Core NEM fee structure as a basis for allocating costs (where costs are allocated to Wholesale Participants, Market Customers and TNSPs), costs that would have otherwise been allocated to TNSPs have been normalised across Wholesale Participants and Market Customers.

²⁰ Includes an initiative having even allocations across the categories of Participants impacted.

²¹ Includes an initiative having Participant allocations that reflects likely implementation.

²² Includes an initiative having Participant allocations that reflects likely implementation.

Leveraging this mapping exercise, and considering the cost estimates²³ for the initiatives that make up the NEM2025 Reform Program as a whole, AEMO has calculated a weighted average allocation across Registered Participant categories as shown in Table 9 below.

Table 9 – NEM2025 Reform Program weighted involvement of participants impacted

Registered Participants	Weighted involvement (%)
Wholesale Participants	27.5%
Market Customers	72.5%

AEMO’s assessment does not include allocation to TNSPs on the basis that this category of Registered Participant is not foreseen to have significant involvement in or benefit from the reform initiatives in the short-term (i.e., FY2024-FY2026).

Further, AEMO’s assessment does not include allocation to DNSPs at this time, consistent with our existing fee structures for which the calculated weighted involvement for Registered Participants in Table 9 is based on. However, AEMO will continue to monitor the progress of the implementation of the NEM2025 Reform Program to identify if there is a need to charge this Participant category in the future in line with the fee structure principles and NEO. Should a need be identified, AEMO will discuss with the DNSPs an approach to introduce a cost recovery mechanism, including transitional arrangements, in a similar way that was applied for the commencement of TNSP charging for the core NEM fee category in the general NEM Participant fee structure.

In its assessment AEMO considered the estimated implementation costs across each of the reform initiatives and the corresponding existing fee structure that the initiative could potentially be allocated to and applied its corresponding Market Customer fee metric. The total estimated costs attributed to each portion of the Market Customer charge, i.e. \$/MWh or \$/NMI, then resulted in an approximate new Market Customer fee metric for the NEM2025 Reform Program of 37% charged on a \$/MWh basis and 63% charged on a \$/NMI basis. Background on the calculation is provided in Appendix A4.

In terms of assessing whether IRPs should be charged for costs related to the NEM2025 Reform Program, and if so how, AEMO considered a number of factors against the fee structure principles and NEO, including:

- The different classifications of units that an IRP may register (as identified in Figure 1);
- IRP data available to AEMO and the impact on our systems;
- The volume of IRPs expected once the IESS Project is effective; and
- Potential impacts of the introduction of this new Participant category on existing Participant categories.

4.1.3 AEMO’s draft proposal

Based on the above assessment and stakeholder feedback (through submissions and the PFCC), AEMO proposes the following (and shown in Figure 2 below):

²³ AEMO’s estimated costs for the NEM2025 Reform Program are reported as part of the NEM2025 Gate 1 Business Case available on its website here: <https://aemo.com.au/en/initiatives/major-programs/nem-reform-implementation-roadmap>.


- To recover costs of the NEM2025 Reform Program declared NEM project as a separate fee allocated to Wholesale Participants (27.5%) and Market Customers (72.5%) (Option 2 above) charging the following fee metrics:
 - For Wholesale Participants: 50% is charged as a daily rate based on aggregate of the higher of the greatest registered capacity and greatest notified maximum capacity (of energy or Frequency Control Ancillary Service (FCAS) markets) in the previous calendar year of units from Wholesale Participants; and 50% is charged as a daily rate based on MWh energy, or in the case of Market Ancillary Service Providers (MASPs) / Demand Response Service Providers (DRSPs) the equivalent FCAS enablement, scheduled or metered (in previous calendar year).
 - For Market Customers: 37% is charged as a rate per MWh for a financial year based on AEMO's estimate of total MWh to be settled in the spot market transactions by Market Customers during that financial year. The rate is applied to the actual spot market transactions in the billing period; and 63% is charged on a per connection point basis per week.

AEMO has proposed this draft structure as, out of the three options presented in this Draft Report, this option:

- Consists of an approach that incorporates aspects of the existing fee structures but reports the fee as a separate fee tailored to the NEM2025 Reform Program. This approach utilises the methodology applied to existing fee structures while providing greater transparency on costs, addressing the main concerns raised by stakeholders on their preferences for a fee structure;
- Given some of the initiatives could be attributed to retail customers (on a per connection point basis) only²⁴, it would be unreasonably discriminatory to incorporate a Market Customer metric that charges the Market Customer category on an equal share apportioned to their energy consumption and the number of connection points;
 - AEMO's analysis (as shown in Appendix A4) on each initiative identified that those purely impacting the retail market were a larger portion of the total implementation costs, which is why the percentage allocation is weighted more towards the \$/NMI metric.
- Aligns most reasonably with the fee structure principles, particularly the reflective of involvement and not unreasonably discriminate principles, that is:
 - It bases a level of involvement to current Registered Participants leveraging the existing fee structure allocations which were determined to be appropriate through consultation for the current fee period.
 - It does not allocate costs to NSPs before the next general NEM Participant fee structure period, as the initiatives that go-live before that time do not directly involve or benefit these categories.
- Allows the appropriate Participants to begin to accommodate costs of the NEM2025 Reform Program initiatives that have progressed to the implementation stage, particularly in the FY2024-FY2026 period, and also allows other reform initiatives to continue to progress to a level where AEMO and stakeholders are better able to understand the impacts on Registered Participants (including future Registered Participants).

While AEMO has proposed not to charge TNSPs and DNSPs for now, AEMO notes that it will continue to monitor the impact on these Participant categories as the reform initiatives progress and are implemented. Additionally, the final fee structure for the NEM2025 Reform Program determined will need to be reviewed in the next general

²⁴ For example: FRC Target State and Bill Transparency



NEM Participant fee structure determination for the period commencing 1 July 2026, as per the Rules. This is to ensure that as time progresses, fee structure principles are satisfied to the extent practicable for each Participant fee structure in place.

In relation to cost recovery from the new IRP participant category, AEMO proposes:

- For existing Market Customers or Generators that voluntarily re-register as IRPs, as well as existing SGAs that must re-register as IRPs, to be charged in the same manner that they are currently charged AEMO fees, that is:
 - For Wholesale Participants²⁵: 50% is charged as a daily rate based on aggregate of the higher of the greatest registered capacity and greatest notified maximum capacity (of energy or FCAS markets) in the previous calendar year of units from Wholesale Participants; and 50% is charged as a daily rate based on MWh energy, or in the case of MASPs/DRSPs the equivalent FCAS enablement, scheduled or metered (in previous calendar year).
 - For Market Customers: 50% is charged as a rate per MWh for a financial year based on AEMO's estimate of total MWh to be settled in the spot market transactions by Market Customers during that financial year. The rate is applied to the actual spot market transactions in the billing period; and 50% is charged on a per connection point basis per week.
- For new IRPs that register from 3 June 2024, including batteries, to be charged on the same basis as the existing Market Customer (for consumption) and Wholesale Participant (for generation) charging metrics as described above.

This approach:

- Is simple to understand as the approach utilises existing fee metric approaches;
- Aligns with the reflective of involvement principle as those IRP units with generation data will be charged accordingly as Wholesale Participants, and those with consumption data will be charged accordingly as Market Customers;
- Charging IRPs both Wholesale Participant and Market Customer fees is not discriminatory because IRPs would be charged for when they are either generating or consuming; and
- Is a reasonable and efficient longer-term solution (consistent with the NEO) as it caters for the different classifications of IRPs that can register as either a 'Generator' or 'Customer', particularly when it is not currently clear the volume of registrations expected for each classification of an IRP.

4.2 Cost recovery commencement date and recovery period

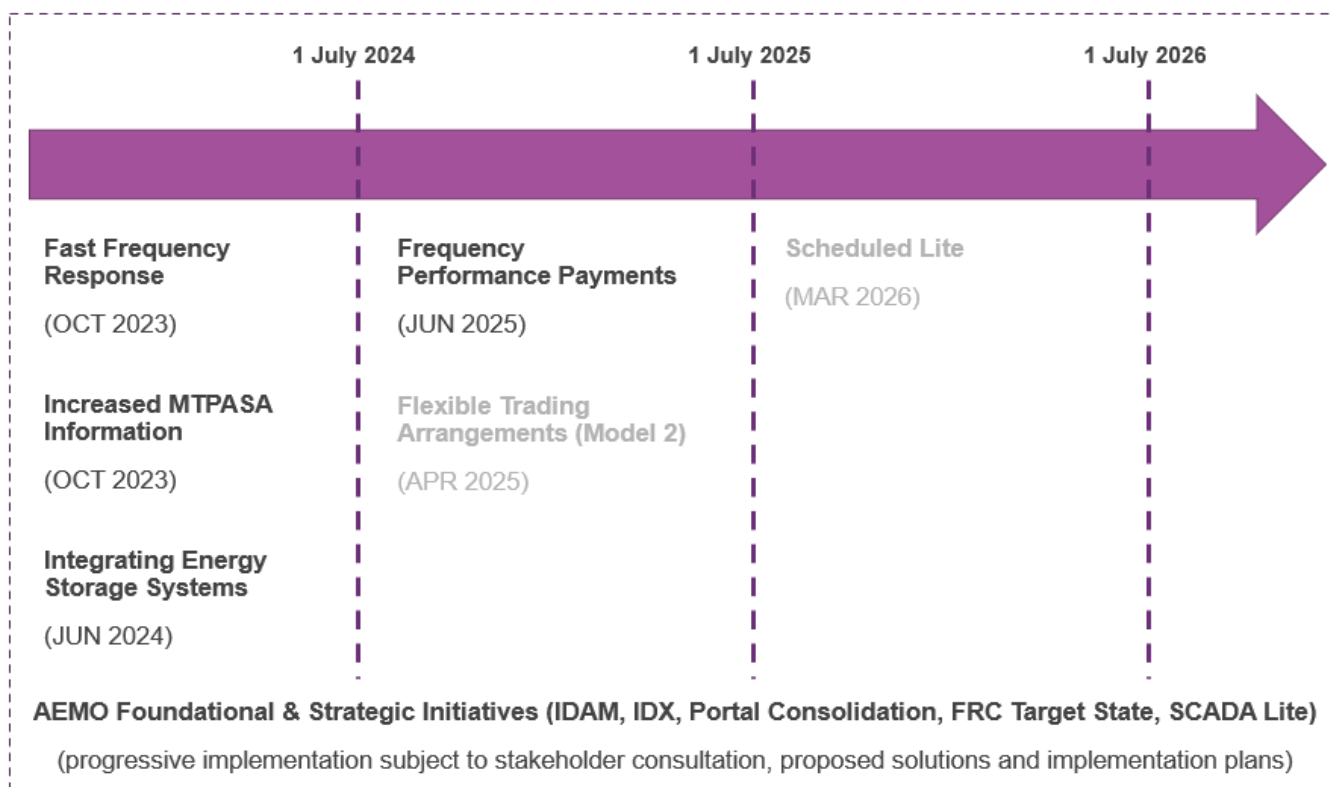
4.2.1 Issues summary and stakeholder submissions

AEMO proposed in the Consultation Paper that the recovery period commences from the beginning of the financial year after the first of the NEM2025 Reform Program initiatives is implemented, with subsequent initiatives rolled into the NEM2025 fee structure determined, from the beginning of the financial year after they are implemented, subject to the program's funding approvals process and the AEMO budget process.

²⁵ SGAs are currently included in the Wholesale Participant category.

The anticipated timeline of delivery for each of the initiatives in the NEM2025 Reform Program is shown in Appendix A2, which highlights that implementation for the program is expected to continue until the end of the second quarter of 2027. Figure 2 below shows a snapshot of the initiatives that will be implemented before the next general Participant fee structure period commences on 1 July 2026.

Figure 2 – FY2024-2026 implementation timeline²⁶



Some stakeholders responded to this issue in the Consultation Paper – a summary of their responses is provided below. Only one stakeholder suggested a cost recovery period for the NEM2025 Reform Program – this being a minimum of 10 years.

Table 10 – Summary of stakeholder views on cost recovery commencement date and recovery period

Option	Number of stakeholder responses	General comments
Commencement from each initiative's go-live date	5	<ul style="list-style-type: none"> Supportive of recovery commencing when each initiative goes live.
Other	2	<ul style="list-style-type: none"> One stakeholder proposed recovery commencing for some reforms as soon as practicable. One stakeholder who did not support recovery from each initiative's go-live date did not specify another option, however noted that implementation of projects generally designed as a bundle for recovery of multiple projects initiated at the same time places huge pressure on smaller retailers in particular.

²⁶ Initiatives in grey are not committed and remain subject to policy/Rules consultation processes and therefore not locked into the fee recovery at this stage.



4.2.2 AEMO's assessment

AEMO considered all stakeholder feedback as shown in Table 10.

AEMO acknowledges that some initiatives with close implementation dates may place pressure on smaller retailers. However, the work undertaken by AEMO, in collaboration with the Reform Delivery Committee on the NEM2025 Reform Program's bundling, sequencing and prioritisation reflects the best interests of consumers to deliver the benefits from the reform initiatives required and endorsed by the Energy Ministers. Additionally, a staggered approach to implementation will be applied to minimise the burden of accumulated costs on those who are charged for the reforms (this approach is described in more detail in section 5) and costs to be incurred due to the NEM2025 Reform Program will transparently be provided to Participants well in advance through the Financial Consultation Committee (FCC) and AEMO's annual budget process.

4.2.3 AEMO's draft proposal

After considering the options and stakeholder feedback, AEMO's draft proposal is to commence cost recovery from each of the NEM2025 Reform Program's initiatives' go-live dates, subject to their funding approvals process and AEMO's annual budget process, with the exception of those initiatives (e.g. Fast Frequency Response, Increased MT PASA Information) with go-live dates before 1 July 2024²⁷. Costs for these initiatives will be recovered from 1 July 2024.

This approach provides stakeholders with more assurance that AEMO will only recover costs of initiatives that are implemented or well past their development phases, and also provides the transparency of the costs through AEMO's annual budget consultation process that incorporates the initiatives with their implementation dates occurring in that financial year.

Additionally, AEMO proposes a recovery period of seven years from when an initiative is rolled into the fee structure. This approach aligns with AEMO's depreciation model for other assets.

²⁷ Clause 2.11.1(e) of the NER requires AEMO to publish the structure of Participant fees at least three months prior to implementation of the structure.

5 Other Matters Raised

5.1 Governance framework for the NEM2025 Reform Program costs

Some concerns were raised by stakeholders on the governance framework and cost approval process for the NEM2025 Reform Program including:


- How the fee structure is determined should be strengthened e.g. projects that have not completed the AEMC's Rule change process/rejected by Ministers and those that are not being implemented (e.g. Transmission Access reforms) should not be included in the fee structure consultation and stage-gate process.
- Stronger governance process is recommended to manage the variation of the budget requiring independent approval.
- Funding should not be approved for reforms that are in the current rule making process (e.g. Flexible Trading Arrangements (Model 2) and Operational Security Mechanism)) and these projects should not be included in the program or have an independent governance structure stronger than the proposed stage-gate process.
- Only projects subject to a final rule change determination or have been explicitly endorsed by Ministers to be included.
- Tighter governance over 'fee estimation' process is required due to lack of transparency including:
 - The fee estimates should be more accurate than +/-40%;
 - AEMO should provide more clarity around how it derives its fee estimates; and
 - The governance framework around the fee estimation process should be more robust.

Since the Consultation Paper was released, AEMO, in conjunction with the RDC have undertaken a series of planning activities to better understand the scope and scale of the ESB's reform initiatives and AEMO's strategic or foundational enabling initiatives that need to be delivered as part of the NEM2025 Reform Program.

These activities have culminated in the development of an updated NEM Reform Implementation Roadmap (the Roadmap) as shown in Appendix A2, which details an integrated timeline for implementing the full suite of initiatives under the NEM Reform Program, as well as broader NEM and gas related reform initiatives. The purpose of the Roadmap is to establish a basis upon which to navigate the breadth of the reforms over the coming few years, de-risking delivery, looking for opportunities to take cost out of reform implementation and informing implementation timing.

In developing the Roadmap initially, AEMO and RDC members noted the significant challenges and risks associated with delivery of the NEM Reform Program and the importance of an appropriate management and governance framework. These challenges include:

- Managing uncertainty in scope, timing and cost of initiatives. Several of the reforms included in the NEM Reform Program are at an early stage of policy or rules definition. It is likely that the scope and timing of



proposed reforms will change, new reforms will be added, and others may not proceed at all.²⁸ The Roadmap and cost estimates will need to be responsive to these circumstances.

- Establishing the basis for, and timing of AEMO strategic and foundation enabling initiatives. AEMO has identified several investments in systems to deliver an uplift to its base capability on which reforms are dependent or delivery efficiencies may be achieved. Ensuring the scope and proposed timing for these initiatives are understood by industry participants and justified from a cost/benefit basis will be key.
- Establishing structured investment disciplines to drawing down funds. A 'set and forget' funding strategy that establishes a multi-year overall fixed budget is not appropriate for the Program given the uncertainty surrounding policy and regulatory outcomes and scope of certain initiatives. This uncertainty necessitates establishing structured investment disciplines to drawing down funds as part of the overall governance framework.

Recognising these challenges, AEMO have put in place several processes that set a pathway for delivery while managing the uncertainty in policy, design, scope or timing within the NEM2025 Reform Program. These processes comprise:

- a *change management process* to assess the impacts to the Roadmap in collaboration with the RDC resulting from changes in scope/timing of the initiatives, this may include assessing if initiatives should be descope or brought into the Program;
- a *stage gate process* to ensure certainty in proceeding with an initiative prior to an investment decision being made. This may follow a final rule determination or consultation with industry and completion of a cost benefit assessment; and
- A *progressive investment commitment process* and draw down of funds that will be informed by regulatory determinations, the stage gate approach and AEMO's defined investment approval processes.

Details of the governance framework to address the above challenges can be found on AEMO's website (along with the updated Roadmap) at: [AEMO | NEM Reform Implementation Roadmap](#).

²⁸ This does not prevent AEMO from determining a fee structure for the NEM2025 Reform Program now as there are still some initiatives (as shown in Figure 3) that have passed the final stages of the governance framework for implementation before the next general NEM Participant fee structure period.

A1. Summary of NEM2025 Reform Program initiatives

A1.1 ESB major reform pathways and their NEM2025 Reform Program scope

Pathway	Objective	This means	NEM2025 Reform Program Scope ²⁹
Resource Adequacy Mechanism³⁰	<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 Demand³¹	<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 Establish wholesale market arrangements that support innovation, the integration of new business models and a more efficient supply and demand balance 	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 Distribution Local Network Services

²⁹ Further detail on the scope of the reform initiatives have been published on AEMO's website: [AEMO | NEM Reform Implementation Roadmap](#)

³⁰ The Capacity Incentive Scheme (CIS), Enhanced Information (EI), Congestion Relief Market (CRM) and Priority Access (PA) Model initiatives are not included in the scope of this consultation. If National Cabinet Energy Ministers approve a CIS, EI, CRM or PA, a separate consultation to first determine these as declared NEM projects may be undertaken.

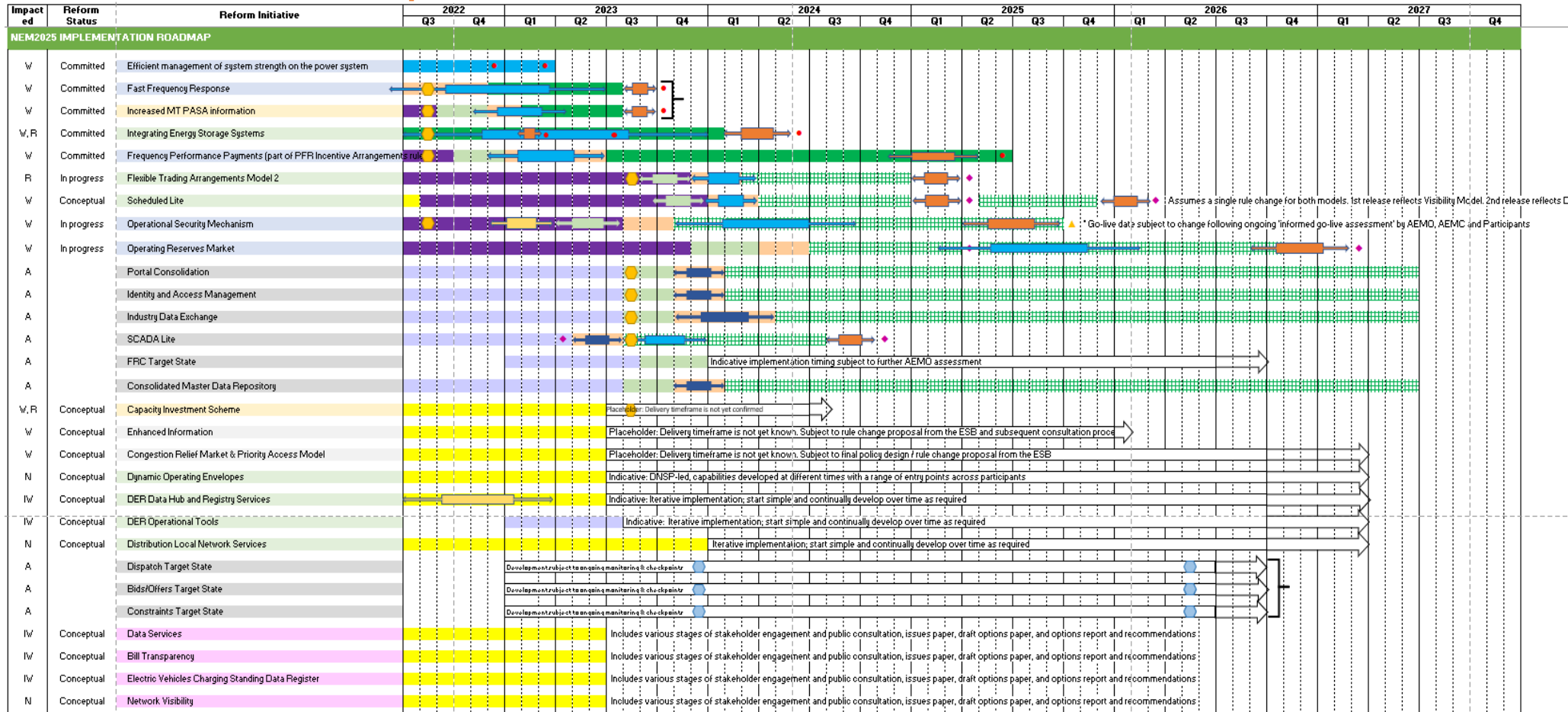
³¹ Turn-up Services has subsequently been descope from the NEM2025 Reform Program (April 2023) since the release of the Consultation Paper following consultation with the RDC.

Pathway	Objective	This means	NEM2025 Reform Program Scope ²⁹
	<ul style="list-style-type: none"> 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 		<ul style="list-style-type: none"> Turn-up Services DER Data Hub and Registry Services DER Market and System Operator integration
Data Strategy	<ul style="list-style-type: none"> A framework is established with new guiding policy principles, build capability, forward planning and adaptability and address priority data gaps 	Varied actors in the market have access to timely data to perform their functions	<ul style="list-style-type: none"> Data Services EV Charging Standing Data Register Bill transparency Network Transparency

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. The NEM Reform Implementation Roadmap



Legend

Policy development and design	Proof of concept trial	Rules development	AEMO scoping process
Initiation, including high-level pre-execution design	Detailed pre-execution design	AEMO process mapping and optimisation	AEMO Procedure/Guideline development
Committed solution delivery	Indicative Solution delivery	Industry testing and trials	Production roll Out
Committed effective date	Proposed effective date	Estimated effective date	
Stage gate checkpoint	Development checkpoint	Grouped release	

Updates / Callouts

- + Initiative updated since last version
- Initiatives will be delivered incrementally
- An effective date for transition to target stage for the NEM that will be determined in collaboration with Participants

NEM2025 Reform Pathways

Resource Adequacy Mechanisms and Ageing Thermal Generation	Essential System Services, Scheduling and Ahead Mechanisms	Impacted Sector	
Integration of DER and Flexible Demand	Transmission and Access	A	AEMO
Data Strategy		N	Network
		W	Wholesale
		R	Retail
		IW	Industry Wide
		G	Gas

AEMO Strategic / Foundational NEM2025 Program dependency

A3. 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	<p>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>	<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	<p>Participant fees should not unreasonably discriminate against a category or categories of Registered Participants</p>	<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	<p>In developing, reviewing and publishing, the structure of Participant fees, AEMO must consider other fee structures in</p>	<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>	

A4. Background to draft fee structure allocations

The table below presents the basis for which the overall weighted involvement of each Registered Participant for the NEM2025 Reform Program pathways (shown in Table 8 in section 4.1.2) were obtained.

Pathway	Initiatives	Total Implementation costs (±40%, \$m) ³²	Registered Participants – Weighted involvement ³³		Principle / Existing fee structure allocations applied
			Wholesale Participants	Market Customers	
Resource Adequacy Mechanism	Increased MT PASA information	\$0.9 – \$2.1	44.6%	55.4%	Core NEM fee
	Weighted Average		44.6%	55.4%	
Essential Security Systems	Fast Frequency Response	\$2.5 - \$5.9	44.6%	55.4%	Core NEM fee
	Frequency Performance Payments	\$6.9 - \$16.0	44.6%	55.4%	Core NEM fee
	Operational Security Mechanism	\$6.9 - \$16.0	44.6%	55.4%	Core NEM fee
	Operating Reserves Market	\$6.9 - \$16.0	44.6%	55.4%	Core NEM fee
	Weighted Average		44.6%	55.4%	
Integration of DER & Flexible Demand	Integrating Energy Storage Systems	\$19.3 - \$44.9	44.6%	55.4%	Core NEM fee
	Flexible Trading Arrangements Model 2	\$2.6 - \$6.2	20%	80%	DER Integration Program fee
	Scheduled Lite	\$10.9 - \$25.5	20%	80%	DER Integration Program fee
	DER Data Hub and Registry Services	\$7.6 - \$17.7	20%	80%	DER Integration Program fee
	DER Operational Tools	\$2.7 - \$6.2	20%	80%	DER Integration Program fee
	Dynamic Operating Envelopes	\$0.6 - \$1.3	20%	80%	DER Integration Program fee
	Distribution Local Network Services	\$0.6 - \$1.3	20%	80%	DER Integration Program fee
	Weighted Average		30.7%	69.3%	

³² Obtained from the NEM Reform Program Business Case – Addendum, which provided costs estimates for individual initiatives noting a contingency amount of ±40% as part of a Gate 1 business case assessment Available on AEMO's website at: [nem-reform-program-business-case-addendum.pdf \(aemo.com.au\)](https://www.aemo.com.au/nem-reform-program-business-case-addendum.pdf)

³³ The weighted involvement calculation also incorporates the existing apportionment of AEMO's budgeted revenue requirements for its Core NEM fee that recovers 70% from allocated (direct) costs and 30% from unallocated (indirect) 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 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.

Pathway	Initiatives	Total Implementation costs (±40%, \$m) ³²	Registered Participants – Weighted involvement ³³		Principle / Existing fee structure allocations applied
			Wholesale Participants	Market Customers	
Data Strategy ³⁴	Data Services	\$2.0 - \$6.0	50%	50%	N/A – even split across WP/MC ³⁵
	Bill Transparency	\$0.5 - \$1.5	0%	100%	Electricity Markets Retail fee
	Electric Vehicles Charging Standing Data Register	\$1.0 - \$3.0	20%	80%	DER Integration Program fee
	Network Visibility	\$1.0 - \$3.0	20%	80%	DER Integration Program fee
	Weighted Average		31.1%	68.9%	
AEMO Foundational	Identity and Access Management	\$7.6 - \$17.7	21.5%	78.5%	Reflects likely allocation across existing Core NEM fee, Electricity Markets Retail fee and DER Integration Program fee
	Industry Data Exchange	\$7.6 - \$17.7	21.5%	78.5%	
	SCADA Lite	\$2.6 - \$6.1	20%	80%	
	Weighted Average		21.3%	78.7%	
AEMO Strategic	Portal Consolidation	\$7.6 - \$17.7	22.3%	77.7%	Reflects likely allocation across existing Core NEM fee and Electricity Retail fee
	Consolidated Master Data Repository	\$7.6 - \$17.7	22.3%	77.7%	
	FRC Target State	\$30.0 - \$70.0	0%	100%	Electricity Retail Markets fee
	Dispatch, Bids & Offers, Constraints Target States	\$26.3 - \$61.4	44.6%	55.4%	Core NEM fee
	Weighted Average		21.2%	78.8%	
NEM2025 Reform Program	Total Weighted Average		27.5%	72.5%	

³⁴ Implementation costs for the Data Strategy pathway are approximate and in the expected order of magnitude according to the scope of works for each initiative currently. As these initiatives progress towards a stage gate or investment decision and further assessment of the overall scope and implementation requirements is completed, the level of uncertainty associated with the scope, design, requirements, or timeline for implementing that initiative will reduce providing for updated cost estimates.

³⁵ An even split across Wholesale Participants and Market Customers has been assumed as other stakeholders who are not Registered Participants of the NEM (e.g., universities, governments) will also be charged for this service/initiative.

The table below outlines the approach applied to calculate an appropriate Market Customer metric for the NEM2025 Reform Program fee. The approach apportions the total implementation costs in the table above against its corresponding fee structure (or likely allocation approach) according to the Market Customer metric for that fee structure (or likely allocation approach) applied.

Principle / Existing Market Customer fee structure applied across the NEM2025 Reform pathways	Principle / Existing Market Customer involvement allocation (%)	Principle / Existing Market Customer metric	Total Implementation costs allocated per fee structure metric (range \$m)
Core NEM fee	55.4	\$/NMI – 50%	\$34.85 - \$80.1
		\$/MWh – 50%	\$34.85 - \$80.1
DER Integration Program fee	80.0	\$/NMI – 50%	\$14.8 - \$35.15
		\$/MWh – 50%	\$14.8 - \$35.15
Electricity Retail fee	100.0	\$/NMI – 100%	\$30.5 - \$71.5
Other approach – reflects likely allocation approach ³⁶	50.0 ³⁷	\$/NMI – 50%	\$16.2 - \$38.4
	77.7 ³⁸	\$/MWh – 50%	\$16.2 - \$38.4
	78.5 ³⁹		

³⁶ Applied for some initiatives within the Data Strategy, AEMO Foundational and AEMO Strategic pathways.

³⁷ Reflects a 50/50 split to Wholesale Participants and Market Customers each based on their expected level of involvement in the Data Services initiative.

³⁸ Reflects the weighted average of the existing level of involvement (%) to Market Customers for the Electricity Markets Retail fee and Core NEM fee as certain requirements for the Portal Consolidation and Consolidated Master Data Repository initiatives separately involve retail Market Customers or wholesale Market Customers.

³⁹ Reflects the weighted average of the existing level of involvement (%) to Market Customers for the Electricity Markets Retail fee, DER Integration Program fee and Core NEM fee as certain requirements for the Identity and Access Management and Industry Data Exchange initiatives separately involve retail Market Customers or wholesale Market Customers.

A5. Summary of submissions and AEMO responses

Consulted person	Key points	AEMO response
<p>1. AGL</p>	<p>a) Prefer Option 2 because it is more reflective of involvement and allows greater visibility of the fee. Suggests costs are recovered by all participants (as all will benefit going forward). Suggested AEMO should consider if a separate fee structure should apply to the three main pathways (Resource Adequacy Mechanisms, Essential System Services, and Integration of DER & Flexible demand) – may improve reflective of involvement principle. Participants to charge should be through a transparent rigorous assessment of involvement for each of the various reforms, which should then be provided to stakeholders for the next phase of consultation:</p> <ul style="list-style-type: none"> - Don't support using stakeholder submissions as a basis or the survey of AEMO's Senior Managers as is applied for the core NEM fee. - Can't say at this stage that any participant should be excluded given the broad impact of the reforms. 	<p>Noted.</p> <p>As outlined in section 4.1.1 and 4.1.2, AEMO has proposed a variation of the original Option 2 that takes into consideration the Registered Participants charged in the existing fee structures and a quantitative analysis on their weighted involvement in each of the NEM2025 Reform Program pathways, noting that the initiatives that go-live prior to the general NEM participant fee determination do not involve network service providers (shown in Table 8).</p>
	<p>b) Existing fee metrics are appropriate.</p>	<p>Noted.</p> <p>As outlined in section 4, existing fee metrics have been used, except for the Market Customer metric split between \$/MWh and \$/NMI. This is because AEMO's analysis on each initiative within the NEM2025 Reform Program identified that some initiatives impact the retail market only and therefore it would be unreasonably discriminatory to charge the Market Customer category an equal 50:50 \$/MWh:\$/NMI split.</p>

Consulted person	Key points	AEMO response
	<p>c) Does not support recovery commencing when the projects ‘go live’ – suggests some reform projects are recovered as soon as practicable.</p> <ul style="list-style-type: none"> – Expectation of a new reform can provide investment signals which lead to the accrual of benefit in advance of a project going live. – Some reforms are overdue so it is not unreasonable that costs of these reforms are allocated to existing customers, even if some may not benefit in the future. – Suggests costs are recovered across a minimum period of 10 years. <p>d) Suggest AEMO provides forward fee trends and use a glide path approach to the allocation of the reform program fees so that fees are less volatile and therefore easier to manage by those allocated the fees.</p>	<p>AEMO acknowledges AGL’s comment that recovery for some projects should commence as soon as practicable. However, as noted in section 4.2.3, it is more appropriate that recovery commences once projects have been implemented to provide stakeholders reassurance that AEMO is only recovering for projects that are firm or well past their development phase and to align with AEMO’s annual budget consultation process.</p> <p>AEMO notes AGL’s proposal for costs to be recovered across a minimum period of 10 years. AEMO has suggested recovery initially for 7 years as this aligns with the current depreciation approach for other assets.</p> <p>AEMO acknowledges AGL’s intent of a glide path approach to mitigate volatility in fees. However, the timing of allocation of the reform program fees will be dependent on the different implementation dates of each of the initiatives (see Appendix A2), the progress of various policy and/or rules consultation processes, as well as AEMO’s funding approvals process. AEMO have committed to transparency through the program’s governance framework (outlined in section 5 of the Draft Report) as well as the FCC and AEMO’s annual budget consultation process.</p>
<p>2. AusNet Services</p>	<p>a) Without a compelling case to develop a new fee structure, the existing Core NEM fee structure should be extended.</p> <p>Do not support a change to the current fee structures is warranted before July 2026 on the basis of the most substantive and most costly elements of the project are not yet developed to the point of rule changes.</p> <p>Without certainty there is no reasonable basis to assess reflective of involvement or non-discrimination principles.</p>	<p>Noted.</p> <p>As outlined in sections 4.2.2 and 4.2.3, AEMO has developed and proposes in its Draft Report an option for a single NEM2025 Reform Program fee structure that utilises elements of the existing fee structures while also providing the transparency on cost allocation that a separate fee allows for. AEMO’s view is that this option is most consistent with all fee structure principles in comparison to other</p>

Consulted person	Key points	AEMO response
	<p>Most prudent option is to consider structure of the fees as part of the next consultation of the core NEM fees since majority of the NEM2025 project costs unlikely to be incurred until mid-2025.</p> <p>Using existing core NEM fee is administratively simple for AEMO to implement and for industry to understand.</p> <p>Designing a new fee structure would require rapid development To avoid higher inefficient long-term costs on customers and be consistent with the NEO, the registered participant cost allocations should only be on contestable parties that are in either:</p> <ul style="list-style-type: none"> - direct control of their cost of participation in the wholesale market in the case of generators and other service providers; or - control of their unit prices in the contestable retail market in the case of market customers. <p>b) Needs to be a strong focus on efficiency – industry costs will ultimately be paid for by energy consumers regardless of the party AEMO assigns fees to and each reform that proceeds needs to be supported by a cost-benefit analysis.</p>	<p>options presented, particularly for FY2024-2026, including being administratively simple for AEMO to implement and for industry to understand.</p> <p>Additionally, once a project is determined a declared NEM project in accordance with clause 2.11.1(ba) of the NER, which allows for a determination to be made on the basis of an <i>anticipated</i> change, AEMO is required to determine a structure of Participant fees to apply to that declared NEM project in accordance with the fee structure principles outlined in the Rules <i>to the extent practicable</i>. This means a fee structure can be developed to an extent that is practicable for an anticipated change (of a declared NEM project) that inherently includes some uncertainty. As also highlighted in section 4.2.3, AEMO will consider if this fee structure is still appropriate in the next NEM general Participant fee structure consultation.</p> <p>With respect to Registered Participant cost allocations, please refer to section 4.1.2 and Appendix A4 on how AEMO developed these for option 2 presented in this Draft Report.</p> <p>AEMO acknowledges AustNet’s comment. The NEM2025 Reform Program is subject to a specific governance and cost approval framework that has been designed to manage uncertainty in scope, timing and cost of initiatives. The program’s Roadmap, developed in consultation with industry and the Reform Delivery Committee, has also been designed to be responsive to these circumstances and is updated as and when required. AEMO notes the implementation timeline has been updated since our Consultation Paper was published. Further detail on the governance framework is outlined in section 5.</p>

Consulted person	Key points	AEMO response
	<p>c) Determining participant fee structures without the certainty, or detail behind, the proposed reforms within the program would likely lead to inaccurate cost allocations potentially creating inefficiency.</p> <p>d) Under the current regulatory framework, NSPs can only recover costs if fees can be accurately forecasted in the relevant regulatory determination – needs to be up to 6 years in advance.</p> <p>e) Would like to discuss the principles at the forthcoming PFCCs, in particular the reflective of involvement principle which is different to other aspects of the regulatory framework that generally promote a beneficiary pays approach – fees should be consistent with this.</p>	<p>AEMO has outlined its approach on cost allocation in section 4.1.2 which has utilised existing fee structure allocations (determined through consultation on the current Participant fee structure) as a basis but apportioning the allocation on weighted involvement for each initiative.</p> <p>AEMO considered this in its consultation on the current Participant fee structure in relation to commencing to charge TNSPs. This resulted in collaboration with the ENA to determine an appropriate mechanism for TNSPs to recover AEMO's fees. AEMO has proposed, in section 4.1.3, an option that does not allocate costs to TNSPs and DNSPs at this time, however we will continue to monitor the impact of the NEM2025 Reform Program on these categories, as well as other Registered Participants. Additionally, the FCC are working on providing greater transparency on forecasts for NSPs on AEMO fees up to five years ahead.</p> <p>AEMO notes this was discussed at the PFCC held on 27 April 2023 and appreciates AusNet's engagement in this process. As highlighted at this meeting AEMO will consider the appropriateness of the reflective of involvement principle going forward, however at this time AEMO must develop its fee structures in line with the principles outlined in clause 2.11.1 of the NER.</p>
3. CEIG	<p>a) AEMO should be clear about which category(ies) of market participant(s) will be charged a fee and the rationale behind their share of the fee (including who are the reform beneficiaries). It is not clear why utility-scale generation plants connected to the transmission network should be exposed to the costs of the DER program, unless the point can be made around that work directly impacting, and benefiting, generators in the transmission network.</p>	<p>Please refer to AEMO response 1a) and section 4.1.2 of this Draft Report.</p>

Consulted person	Key points	AEMO response
	<p>b) Suggests greater transparency over the costs proposed to be passed through</p> <p>Tighter governance is required over ‘fee estimation’ process due to lack of transparency including:</p> <ul style="list-style-type: none"> - The fee estimates should be more accurate than $\pm 40\%$; - AEMO should provide more clarity around how it derives its fee estimates; and - The governance framework around the fee estimation process should be more robust. 	<p>AEMO has undertaken further work around the governance framework in collaboration with the RDC. Please refer to AEMO response 1d) and section 5 of this Draft Report. Further, AEMO note the costs estimates of individual initiatives targeted a $\pm 40\%$ 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 and scope risks) and other risks such as delivery uncertainty. This provided a range within which the Program’s costs are expected to lie consistent with the early-stage evaluation required of a Gate 1 business case assessment. As an initiative progresses towards a stage gate or investment decision, the level of uncertainty associated with the scope, design, requirements, or timeline for implementing that initiative reduces. Similarly, the risks associated with implementation of an initiative are assessed and factored into a funding request accordingly. This will typically lead to an uncertainty range typical of IT development projects in the order to $\pm 15\%$ at the time of making an investment decision.</p>
	<p>c) Suggests strengthening how fee structure is determined e.g. projects that have not completed the AEMC’s Rule change process/rejected by Ministers and those that are not being implemented (e.g. CMM, LMPs, capacity mechanism) should not be included in the fee structure consultation and stage-gate process</p>	<p>The initiatives that are in scope of the NEM2025 Reform Program declared NEM project, and therefore subject to this consultation on determining a Participant fee structure, have been outlined in Appendix A1. Additionally, please refer to AEMO response 1d) and section 5 of this Draft Report that outlines more detail on the governance framework that incorporates the stage-gate process to be applied.</p>
	<p>d) AEMO should demonstrate how the savings from the 5MS program are lowering costs for the NEM2025 Reform Program.</p>	<p>AEMO is leveraging several lessons learnt from its delivery of major programs, including 5MS, in establishing the NEM2025 Reform Program. These include establishing the</p>

Consulted person	Key points	AEMO response
	<ul style="list-style-type: none"> - AEMO should publish its lesson learnt report and demonstrate what savings will be able to be leveraged (e.g. AEMO's IT uplift) for the NEM2025 reform projects. - AEMO should also identify as part of its Corporate Plan how those investments are being leveraged to keep the costs of the NEM2025 Reform Program contained. 	<p>Reform Delivery Committee to collaborate and coordinate the implementation of reforms including the development of the NEM Reform Implementation Roadmap. This work, provides for assessment of opportunities to bundle, sequence, and prioritise the implementation of initiatives, as well as identification of opportunities to take cost out of industry. Further, AEMO is working with stakeholders to identify and better understand the impacts of individual initiatives to both AEMO and participant IT systems and business processes as part of the planning efforts ahead of an initiatives implementation through such forums as the Program Consultative Forum and Electricity Wholesale Consultative Forum.⁴⁰</p> <p>Please also refer to AEMO response 1d) and section 5 of this Draft Report that outlines the governance framework for the NEM2025 Reform Program which aims to certainty of proceeding in relation to an initiative, as well as transparency on costs and program implementation. Finally, appendix A1 lists the NEM2025 Reform Program initiatives which form part of the AEMO Foundational and AEMO Strategic pathways, which includes IT uplift requirements. These pathways are enablers (or pre-requisites) to deliver the whole NEM2025 Reform Program as efficiently as possible. Without the implementation of these pre-requisite initiatives, the implementation of the remaining Reform initiatives would be more costly.</p>
<p>4. CS Energy</p>	<p>a) Agrees a fee structure needs to be determined given the current fee cycle but introducing the level of uncertainty will adversely impact consumers.</p> <p>The DER workstream should be incorporated into the existing DER program fee (except those not in final regulatory stages).</p>	<p>Please see AEMO response 2b) and section 5 of this Draft Report which outline how uncertainty is being managed for the NEM2025 Reform Program.</p> <p>In relation to the DER workstream, section 4.1.2 outlines AEMO's proposed approach to allocate costs of this</p>

⁴⁰ An extract from the PwC report that includes a summary of the 5MS lessons learned can be found on [AEMO's website](#).

Consulted person	Key points	AEMO response
		workstream which considers the existing DER integration program fee structure.
	<p>b) Disagrees with recovery commencing once a project is at its 'go live' date. Implementation of projects generally designed as a bundle for recovery of multiple projects initiated at same time – huge pressure on smaller retailers in particular.</p>	<p>As outlined in section 4.2.2 of this Draft Report, the work undertaken by AEMO and the RDC on the NEM2025 Reform Program's bundling, sequencing and prioritisation reflects the best interests of consumers to deliver the benefits from the reform initiatives required and endorsed by the Energy Ministers. Additionally, a staggered approach to implementation will be applied to minimise the burden of accumulated costs on those who are charged for the reforms and costs to be incurred due to the NEM2025 Reform Program will transparently be provided to Participants well in advance through the FCC and AEMO's annual budget process.</p>
	<p>c) AEMO needs to be more cognisant of the volume of funds seeking to recover not just recovery mechanism, in particular:</p> <ul style="list-style-type: none"> - No clarity/transparency or governance on fees for Participants - +/- 40% is an unacceptable risk - Unclear how each project contributes to the \$600m e.g. several projects (FTA, OSM and Scheduled Lite) have not been endorsed by Ministers or the market – unclear on the governance process to be applied if these projects change/not passed into regulation; Capacity mechanism has been rejected. 	<p>Please refer to AEMO response 2b) and 3b).</p>
	<p>d) Learnings from 5MS implementation have not been demonstrated – which projects are leveraging the systems implemented under 5MS and where are the resultant savings from AEMO getting its systems 'future ready' from 5MS costs.</p>	<p>Please refer to AEMO response 3d).</p>
	<p>e) Stronger governance process is recommended to manage the variation of the budget requiring independent approval.</p> <ul style="list-style-type: none"> - Funding should not be approved for reforms that are in the current rule making process (e.g. FTA and OSM which have been delayed by the AEMC) and these projects should not be included 	<p>Please refer to AEMO response 2b).</p>

Consulted person	Key points	AEMO response																		
	<p>in the program or have an independent governance structure stronger than the proposed stage-gate process.</p> <ul style="list-style-type: none"> – Recommends only projects subject to a final rule change or have been explicitly endorsed by Ministers to be included. <p>f) Recommends an overall threshold applied to recovery e.g. imposed annually to provide greater certainty/better management for participants e.g. if total program cost is \$600m over 5 years = recovery threshold \$120m/annum.</p> <p>g) NEM2025 program should be treated like Snowy 2.0 – a project of public interest with material budget variations subject to estimate hearings.</p>	<p>AEMO acknowledges this comment and its intent. AEMO is of the view that its governance framework and cost approval process and flexible Roadmap which can adapt to changing circumstances accounts for the management of cost uncertainty.</p> <p>AEMO acknowledges CS Energy’s comment. AEMO notes that the NEM2025 Reform Program was determined a declared NEM project in September 2022 and therefore abides to the requirements set out in the NER. The relevant clauses in the NER do not specify that estimate hearings are required. Instead, AEMO has put in place a transparent cost approval process that is subject to stakeholder feedback through the FCC and AEMO’s annual budget process.</p>																		
<p>5. ENA</p>	<p>a) Supports Option 1 until the next general fee determination.</p> <ul style="list-style-type: none"> – Declared NEM project fees should be allocated within existing fee categories consistent with the NEO and principle of involvement – requires weighting the allocation of fees to causers and beneficiaries of costs (only a small port should be allocated to the core NEM fees). – Disagreed with AEMO’s assessment against the principles and NEO: <table border="1" data-bbox="584 1139 981 1238"> <thead> <tr> <th>Option</th> <th>Simplicity</th> <th>Involvement</th> <th>Discriminate</th> <th>Recovery</th> <th>NEO</th> </tr> </thead> <tbody> <tr> <td>Use existing fee structures</td> <td>Green</td> <td>Yellow</td> <td>Yellow</td> <td>Green</td> <td>Green</td> </tr> <tr> <td>Create a new NEM 2025 fee</td> <td>Yellow</td> <td>Yellow</td> <td>Red</td> <td>Green</td> <td>Yellow</td> </tr> </tbody> </table> <p>Neither option can apportion costs perfectly for the reflective of involvement principle but which option is better? AEMO should exercise discretion that best promotes the NEO – it is too early to</p>	Option	Simplicity	Involvement	Discriminate	Recovery	NEO	Use existing fee structures	Green	Yellow	Yellow	Green	Green	Create a new NEM 2025 fee	Yellow	Yellow	Red	Green	Yellow	<p>AEMO acknowledges the assessment against the principles undertaken by the ENA and since the Consultation Paper was published AEMO has revised its assessment after further consideration (as shown in section 4.1.2). However, as referenced in AEMO responses 1a) and 2a), AEMO has proposed a draft structure in section 4.1.3 that incorporates aspects of both existing fee structures and a separate fee structure.</p> <p>Additionally, AEMO has applied an alternative approach to the Participant Impact Assessments the ENA refers to in its submission, to determine draft allocations to Registered Participant categories which is explained in detail in section 4.1.2.</p>
Option	Simplicity	Involvement	Discriminate	Recovery	NEO															
Use existing fee structures	Green	Yellow	Yellow	Green	Green															
Create a new NEM 2025 fee	Yellow	Yellow	Red	Green	Yellow															

Consulted person	Key points	AEMO response
	<p>observe what the detailed design of individual initiatives will be and the level of involvement from participants</p> <ul style="list-style-type: none"> - AEMO could use Electricity Retail Markets fee or DER fee which weights more towards causers and beneficiaries (i.e. wholesale participants and market customers) as allocation to DNSPs would likely create risks and costs that cannot be managed and therefore passed on to consumers as higher prices or reduced services over the long-term (therefore does not satisfy the NEO) <p>Does not support Participant Impact Assessments to inform level of involvement as it does not reflect causer and beneficiaries, rather it weights towards a 'user pays' approach.</p>	
	<p>b) Supports fees charged from the 'go live' dates for each reform. Supports beginning recovery for the overall declared NEM project from the first relevant reform's go-live date.</p>	<p>Noted. AEMO has proposed that the recovery period commences from the beginning of the next financial year that commences after the first of the NEM2025 Reform Program initiatives is implemented and funding is approved, with subsequent initiatives rolled into the NEM2025 Reform Program fee structure determined, at the start of the next financial year that commences after their implementation, subject to the program's funding approvals process and the AEMO budget process.</p> <p>Please see sections 4.2.2 and 4.2.3 of this Draft Report for further details.</p>
	<p>c) Supports changes to the fee structure for the next general fee term – potentially including consideration of:</p> <ul style="list-style-type: none"> - Moving away from c/kWh metric if it means that causers of the costs pay less (i.e. households with solar PV and batteries currently pay less) – significant collaboration with industry required to ensure changes are fit for purpose. - Cost allocation weighted more towards causers and beneficiaries not TNSPs/DNSPs who have little influence over AEMO's costs 	<p>Noted. Such matters will be consulted on as part of the next general NEM Participant fee structure determination. Further, as highlighted in sections 4.1.2 and 4.1.3, AEMO has proposed an option that does not allocate costs to TNSPs or DNSPs at this time.</p> <p>AEMO will continue to monitor the level of involvement of TNSPs and DNSPs going forward as the NEM2025 Reform Program implementation progresses.</p>

Consulted person	Key points	AEMO response
	<p>and aren't the major causers and beneficiaries of AEMO's costs, e.g.:</p> <ul style="list-style-type: none"> i) Recognising difference between BAU costs which are more stable vs transformation or change project costs (more variable). ii) Developing cost smoothing mechanisms for participants that do not have equal ability to recover changes in costs e.g. providing fixed cost paths for NSPs that align with their regulatory periods or providing better forecasting of costs to reduce risk of incorporating AEMO fees in regulatory proposals. iii) It will be important in any new fee determination to effectively separate the matters that TNSPs and DNSPs are able to effectively influence, and those that they are not able to influence. This approach will create a much clearer incentive for TNSPs and DNSPs to influence AEMO's costs and would avoid the misallocation of costs and risks. <p>d) Supports AEMO's proposed engagement plan, including establishment of the PFCC and this continuing to work towards the next general fee determination.</p>	<p>In relation to aligning costs charged with NSPs' regulatory periods, the NEM2025 Reform Program incorporates a consultative cost approvals process through the FCC and AEMO's annual budget process to provide all Participants transparency on costs.</p> <p>Noted. AEMO appreciates the ENA's engagement in the first PFCC held.</p>
	<p>e) Notes that costs that are not forecasted and included in a revenue determination for NSPs cannot be recovered unless under specific circumstances (i.e. cost pass-through and amount of the variance in costs is greater than 1% of MAR for the relevant year)</p> <ul style="list-style-type: none"> - The extent to which TNSPs and DNSPs are allocated costs in the future and the ability for them to recover those costs will also depend on how stable and forecastable they are (AEMO's traditional approach of allocating a percentage, with actual costs varying year-on-year, is not sufficient for NSPs to recover their fee costs over the long-term. - NSPs do not have control over AEMO's transformation project costs. 	<p>Please refer to AEMO response 2d). AEMO (through consultation) determines a Participant fee structure in accordance with the requirements outlined in clause 2.11 of the NER. This includes the principles that AEMO must, to the extent practicable be consistent with. Through assessment undertaken in section 4.1.2, AEMO proposes that NSPs are not allocated costs for FY2024-2026 in particular, as the initiatives that go-live within this time do not involve TNSPs or DNSPs. Additionally, should AEMO, through consultation as part of the next general NEM participant fee determine to commence charging NSPs in the future, AEMO will consider</p>

Consulted person	Key points	AEMO response
	<ul style="list-style-type: none"> - DNSPs and TNSPs are in materially different positions in their ability to recover AEMO fees (historical reasons) – if AEMO fees were nominated as pass-through events for DNSPs, it is unlikely to meet materiality threshold for recovery and there is uncertainty on whether allocation of fees would be considered a ‘regulatory change event’ to trigger ability to recover costs. <p>f) Limited incentive on AEMO to stay within its forecasts of its costs – ENA suggest more transparency tracking AEMO’s forecast and actual costs required to incentivise cost control.</p>	<p>mechanisms that allow DNSPs to recover AEMO’s costs, as was undertaken for TNSPs.</p> <p>Please refer to AEMO response 1d) and section 5 of this Draft Report that outlines the governance framework for the NEM2025 Reform Program which aims to provide transparency on costs in addition to program implementation.</p>
6. Endeavour Energy	<p>a) Option 1 is most consistent with fee structure principles and the NEO until the end of the current fee period.</p> <p>High degree of uncertainty with the ‘involvement’ principle around final design of the reforms:</p> <ul style="list-style-type: none"> - From a DNSP perspective, uncertainty around future levels of participation is reflected in the Participant Impact Assessment survey. - Involvement of DNSPs could be overstated if finalised initiatives depart from initial expectations or jurisdictional derogations from NEM arrangements are declared. <p>Scope of AEMO’s assessment on non-discrimination principle to better consider regulatory barriers preventing DNSPs from recovering the costs of AEMO’s participant fees – in the absence of reg change enabling costs to be recovered any new fee structure that includes recovery from DNSPs would discriminate against DNSPs.</p> <p>Support ENA’s alternative assessment of the options against the fee principles and NEO.</p> <p>Costs and complexities of establishing a separate fee would outweigh benefits and should instead be considered for fee period commencing 1 July 2026 – this would provide confidence the allocation of costs is representative of Participant involvement and allows time to consider</p>	<p>Please refer to AEMO responses 2a) and 5a).</p>

Consulted person	Key points	AEMO response
	<p>any regulatory changes to enable DNSPs to recover any AEMO fees allocated to them in the future.</p> <p>b) Primary concern is that Participant fees would not have been factored into DNSPs expenditure allowances for the current regulatory period</p> <ul style="list-style-type: none"> - Given the Program will formally run over a period of approximately 5 years commencing in July 2022, there is insufficient information to enable DNSPs to provide a reasonably accurate forecast of Participant fee costs to include in expenditure forecasts for the next regulatory period. - Cost pass through mechanism cannot be relied on – costs apportioned to DNSPs unlikely to meet cost materiality threshold. 	<p>Please refer to AEMO responses 5c) and 5e).</p>
<p>7. Energy Australia</p>	<p>a) Supports option 2 – will allow for assessment of the relevant registered participants to attribute costs to/recover costs from and associated risks</p> <ul style="list-style-type: none"> - Consideration for more acute allocation of fees is preferable (retailers and generators have historically incurred the bulk of AEMO’s fees based on wholesale load and customer profile). - Further complication arises when considering how the existing participant fee categories will need to be amended to allow assigning the benefits of the program and apportioning contribution based on this benefit. <p>Overcoming any complexities should be justified by the objective of achieving a more equitable allocation of charges.</p> <p>Further consideration should be provided to a process that requires new entrants to become registered participants, or a way to assign costs without this precondition (many of the NEM2025 reforms are targeted at DER and the benefits will be received by many new entrants).</p> <p>b) Supports cost recovery that commences once projects ‘go live’</p>	<p>Please refer to AEMO responses 1a) and 2a).</p> <p>In response to Energy Australia’s comment on assigning costs without the precondition for the new entrant to become a Registered Participants, AEMO can only recover its costs from Registered Participants under clause 2.11.1 of the NER.</p> <p>Please refer to AEMO response 5b).</p>

Consulted person	Key points	AEMO response
8. EQL	a) Strongly support a separate fee (option 2) to promote transparency of the costs of the program. Recommend AEMO use detailed cost-benefit analysis discussed in the paper to review fee distribution and ensure costs are attributed as efficiently as possible.	Please refer to AEMO responses 1a) and 2a).
	b) Supports delay of cost recovery until projects are implemented.	Please refer to AEMO response 5b).
	c) Acknowledges AEMO must upgrade its information systems, and request that AEMO release the results of its needs assessments to participants for review, prior to proceeding with any investment in the interests of equity and transparency <ul style="list-style-type: none"> - Concerned costs may fall disproportionately on participants that will not benefit from implementation e.g. DER costs (for FTA) could potentially be borne by retailers. 	Please refer to AEMO response 1d) and section 5 of this Draft Report that outlines more detail on the governance framework that is applied to the NEM2025 Reform Program costs. Further, AEMO note its open consultation with industry and the formation of the NEM Reform Foundational and Strategic Initiatives Focus Group (FaSI FG) to assess such initiatives including Identify and Access Management, Industry Data Exchange, and Portal Consolidation details of which are available on AEMO's website here .
	d) Concerned that DNSPs (e.g. Energex and Ergon) may not be able to appropriately recover costs of fees over next regulatory control period (commencing 1 July 2025) <ul style="list-style-type: none"> - In order for DNSPs to appropriately incorporate the proposed fees into their determinations, fees will need to be a stable forecastable amount however current cost impacts is unknown. - Imperative that AEMO takes an equitable approach to how the fees are distributed among participants – AEMO needs to consider how participant fees would have a greater impact on some market participants in terms of equitable cost recovery. 	Please refer to AEMO responses 5c) and 5e).
9. Origin Energy	a) Prefers option 2 (separate fee) for transparency of costs and greater clarity on drivers of AEMO cost changes – therefore likely better supports reflective of involvement principle <ul style="list-style-type: none"> - Core NEM fees should only be used to recover costs associated with AEMO's core functions. 	Please refer to AEMO responses 1a) and 2a). In response to the introduction of the IRP participant category and its impact, AEMO has undertaken its assessment on whether to charge this new Registered Participant and has proposed in this Draft Report to charge newly registered IRPs using the existing Wholesale

Consulted person	Key points	AEMO response
	<p>In considering the simplicity principle, consumers should be considered as well as the participants who will be charged the fee:</p> <ul style="list-style-type: none"> - Consideration of retailer-customer interactions and billing should be front-of-mind in this context, with any fees to be easily understood by both market participants and end-use consumers that may be indirectly exposed to those fees in some cases. <p>AEMO to consider additional analysis on participant impact assessment (e.g. supported by AEMO's normal survey process) will be required to ensure alignment with the reflective of involvement principle and inform cost allocation:</p> <ul style="list-style-type: none"> - Since IRP participant category will be available in June 2024, will be prudent to contemplate the impact of this new category and any transitional arrangements that may be required. <hr/> <p>b) AEMO's final budget and fees for an upcoming financial year are generally not available to be incorporated in determinations of the DMO and VDO due to timing differences between these processes</p> <ul style="list-style-type: none"> - To address this for the 2022/23 determination of the DMO and VDO, AEMO requested that an estimation of its fees be incorporated in the tariffs, which was ultimately accepted under both processes. - The stage gate process and uncertainty regarding future spend might present risks that actual fees diverge materially from fees assumed in the DMO and VDO determinations – AEMO to consider these risks and how best to address them, including whether AEMO will continue to provide fee estimations for the purposes of the determinations. 	<p>Participant metric (if they are generating) or the existing Market Customer metric (if they are consuming) and those existing units that re-register as IRPs in the same manner as they are charged currently (see sections 4.1.2 and 4.1.3 for further detail).</p> <hr/> <p>Noted. AEMO will continue to monitor the progress of NEM2025 Reform Program initiatives and provide updates to the Roadmap as necessary to reflect any changes which can then in turn be reflected as fee estimations for DMO/VDO determinations.</p>

Consulted person	Key points	AEMO response
10. Powerlink	<p>a) Current fee structures (option 1) will not adequately reflect the future involvement of participants – recommends AEMO develop fee structures that reflects involvement of participants e.g. those involved in the DER workstream are different to those involved in wholesale market dispatch initiatives</p> <ul style="list-style-type: none"> – DNSPs may need suitable transitional fee arrangements until changes to the Rules could provide for cost recovery. – Application of current fee structures may lead to cross-subsidisation between participants. – Updated participant impact assessments could inform development of fee structures that meet the principles. 	<p>Please refer to AEMO responses 1a) and 2a) on fee structure options, including allocation to Participants. Additionally, please refer to AEMO responses 5c) and 5e) on any potential cost recovery from DNSPs.</p>
	<p>b) Important that fee structure is fit-for-purpose as program is a substantial investment where further costs may be added subject to decisions by Energy Ministers on capacity and CMM.</p>	<p>AEMO note that only those initiatives included under the declared NEM project determination which AEMO concluded its consultation on in September 2022⁴¹ are part of this Participant fee structure consultation. These initiatives are outlined in Appendix A1.</p> <p>As highlighted in section 4.1.3, AEMO will be required to review all of its Participant fee structures in the consultation for the next general NEM Participant fee structure determination to commence from 1 July 2026. Consultation on this is expected to commence early to mid-2025, by which stage there may be more certainty on other initiatives.</p>
	<p>c) Acknowledge the governance framework AEMO and the RDC have put in place to deliver the NEM2025 Reform Program.</p>	<p>Noted.</p>
11. Shell Energy	<p>a) Supports Option 2 as it would demonstrate to all energy market participants the costs of these reforms, allow allocation of the costs appropriately and allow assessment on whether there have been commensurate benefits delivered</p> <ul style="list-style-type: none"> – Existing structure may not neatly translate to the beneficiary or causer of NEM2025 reforms. 	<p>Please refer to AEMO responses 1a) and 2a).</p>

⁴¹ [AEMO | Declared NEM Project - NEM 2025 Reform Program](#)

Consulted person	Key points	AEMO response
	<p>b) Agree that recovery commence when projects go live and subsequent ones rolled into the fee structure as and when they are implemented:</p> <ul style="list-style-type: none"> - Would help to minimise cost increases for consumers and to avoid recovering costs of projects yet to pass rule changes/not implemented. <p>c) Find it difficult to separate the structure of fees and the actual amount to be recovered – consumers already under significant electricity cost pressure. In particular:</p> <ul style="list-style-type: none"> - Wants to understand how the +/-40% contingency and +/-40% level of accuracy interact, e.g. are the 2 in addition to each other? Does the +/-40% apply to the \$430m-\$600m cost estimate? - Wants to understand the risks of reforms costing more than \$600m over a 10-year period. - Believes the importance and magnitude of implementation costs tends to be minimised during the consultation process. - Queries the inclusion of projects yet to pass rule change processes e.g. OSM and FTA – while costs of these reforms are not baked into the process and costs may not be incurred if the projects do not pass rule change processes, it is difficult to parse these reforms to establish where costs may be avoided if projects do not progress. - Strongly encourages a process to look back at projects to assess whether the costs of implementing them have delivered tangible benefits to consumers (similar to FTI’s Retail Reg Framework Review for the AER). 	<p>Please refer to AEMO response 5b).</p> <hr/> <p>As noted in section 2, AEMO’s consultation does not include the quantum of the NEM2025 Reform Program. Please refer to response 3b). AEMO has provided and continues to provide information on the costs of the program through the RDC and FCC, which can be found on AEMO’s website: AEMO NEM Reform Delivery Committee and AEMO Financial Consultation Committee respectively. Additionally, section 5 of this Draft Report outlines the governance framework that is applied to the NEM2025 Reform Program to ensure transparency around the program’s implementation progress and costs are provided. Further, AEMO is of the view that the AEMC Rule change process is the appropriate avenue that considers whether costs of implementing change will deliver tangible benefits to consumers.</p>
12. TasNetworks	<p>a) Development of any new fee structure must be complemented by a thorough and transparent consultation process</p> <ul style="list-style-type: none"> - AEMO must consult on the indicative split and allocation to each participant – will allow time for AEMO and market participants to understand their level of involvement. 	<p>Please refer to AEMO responses 1a) and 2a).</p>

Consulted person	Key points	AEMO response
	<ul style="list-style-type: none"> - Particularly concerned being allocated costs before the 2026 fee period and before DNSPs have a mechanism to recover those costs. <p>b) There is lack of transparency and oversight on AEMO's budget and limited ability to ensure ongoing efficiencies and cost minimisation is achieved – NSPs don't have decision-making authority on costs</p> <ul style="list-style-type: none"> - Encourage an independent cost-benefit analysis of AEMO's NEM2025 Reform Program to ensure expenditure is in the long term interests of consumers to assure market participants and customers that AEMO fees are providing commensurate benefits. 	<p>AEMO's budget process is subject to its own annual consultation process – consultation on the FY24 budget recently concluded with the final report available on AEMO's website: AEMO Energy market fees and charges.</p> <p>Additionally, please refer to section 5 of this Draft Report on the governance framework applied to the NEM2025 Reform Program.</p> <p>AEMO note the costs and benefits of the wider reform program were first assessed as part of the ESB's final recommendations to Ministers.⁴² A more detailed assessment of the costs and benefits at a reform initiative level is to be completed by the AEMC as part of the rule change consultation process. Further, AEMO have committed to a completing a cost benefit assessment of its own assessment of the foundational and strategic initiatives in conjunction with the governance framework for the NEM2025 Reform Program, and in considering the implementation of NEM2025 Reform Program completed a cost benefit assessment of alternative implementation pathways. This assessment was supported by external consultants and is available on AEMO's website: AEMO NEM2025 Program Gate 1 Business Case.</p>
13. Tilt Renewables	<p>a) Indifferent to the options – the objective to whichever is chosen should be that the entities gaining the benefit from the reforms should pay the vast majority of the costs, noting that the benefits appear to flow to customers rather than market participants.</p>	<p>Noted. Please refer to AEMO responses 1a) and 2a).</p>

⁴² As part of this process, AEMO's costs were independently reviewed.

Consulted person	Key points	AEMO response
	<p>b) Suggest cost recovery to commence once an initiative is successfully implemented.</p>	<p>Noted. Please refer to AEMO response 5b).</p>
	<p>c) Insufficient information on costs for stakeholders to provide a view on whether framework is fit for purpose or value for money</p> <ul style="list-style-type: none"> - Difficult to align costs of each initiative (from the business case) with the total costs, initiatives and activities (i.e. timeline/work package sequencing) presented in the consultation paper. - Propose publishing a simple spreadsheet of different initiatives, at least as granular as the timeline, with the amount spent to date and the amounts estimated to be spent in the future. 	<p>Please refer to AEMO response 11c).</p>
	<p>d) Only initiatives that result in implemented rule changes, regulations or other mechanisms should be eligible to be charged to participants</p> <ul style="list-style-type: none"> - Participants should not be charged for AEMO's work on 'policy ideas' that were not implemented/unlikely to be implemented. 	<p>Please refer to AEMO response 1d) and section 5 of this Draft Report on the governance framework applied to the NEM2025 Reform Program.</p>
	<p>e) Comments provided on previous decisions made in the Final Determination for the current Participant fee period, including:</p> <ul style="list-style-type: none"> - The DER integration program fee: <ul style="list-style-type: none"> i) Wants to understand the reason large generators should pay 20% of the DER integration program fee since generators connecting to transmission network are not DER ii) Open to discussion on at what point larger generators connecting to the distribution network might be DER (i.e. <10MW?) iii) Considers all large generators in the distribution network, and all transmission-connected generators should be exempt from DER fees - The new Wholesale Participant category terminology: <ul style="list-style-type: none"> i) Strongly advocates the 'Generator fee' category remains as is to separate those entities involved with DER and those that are unaffected (terminology of 'Wholesale Participants' adds several potential DER participants to the category and therefore large generators are charged for DER). 	<p>AEMO notes this consultation applies to a Participant fee structure for the NEM2025 Reform Program declared NEM project. The rationale for decisions made in AEMO's Final Determination for the current Participant fee period can be found on AEMO's website at: AEMO Electricity Market Participant Fee Structure Review. The consultation was undertaken in accordance with the Rules consultation procedures specified in NER 8.9. Consultation on the next general NEM Participant fee structure determination will commence early to mid-2025 for the fee period commencing 1 July 2026.</p>

A6. 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

A7. Glossary

Term or acronym	Meaning
NEM2025 Reform Program	The program developed and run by AEMO to implement initiatives required to deliver the ESB's policy reforms
AEMO	Australian Energy Market Operator
ESB	Energy Security Board
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
ENA	Energy Networks Australia
EUAA	Energy Users Association of Australia
CEC	Clean Energy Council
AEC	Australian Energy Council
NEM	National Electricity Market
NER	National Electricity Rules
DER	Distributed Energy Resource
MT PASA	Medium Term Projected Assessment of System Adequacy
FCAS	Frequency Control Ancillary Service
RDC	Reform Delivery Committee
PFCC	Participant Fee Consultative Committee
FCC	Financial Consultation Committee
IRP	Integrated Resource Provider
IESS	Integrating Energy Storage Systems