

# STRUCTURE OF PARTICIPANT FEES FOR AEMO'S NEM2025 REFORM PROGRAM

October 2023

Final Report and Determination





# Important notice

## Purpose

This document concludes AEMO's consultation 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 6 October 2023.

## Disclaimer

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

Accordingly, to the maximum extent permitted by law, AEMO and its officers, employees and consultants involved in the preparation of this document:

- make no representation or warranty, express or implied, as to the currency, accuracy, reliability or completeness of the information in this document; and
- are not liable (whether by reason of negligence or otherwise) for any statements or representations in this document, or any omissions from it, or for any use or reliance on the information in it.

## Version control

Version	Release date	Changes
#1	06/10/2023	

# Executive summary

The publication of this Final Report and Determination (Final Report) concludes the National Electricity Rules (NER, 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 30 June 2023, AEMO published the Notice of Second Stage Consultation and the Draft Report and Determination (Draft Report) to determine a Participant fee structure for the NEM2025 Reform Program (the Program) declared NEM project.

AEMO received three submissions. All these submissions supported AEMO's draft proposal to establish a separate NEM2025 Reform Program fee to recover costs of the Program from Wholesale Participants (27.5% of costs) and from Market Customers (72.5% of costs), that is, Option 2 of AEMO's Draft Report and Determination (Draft Report).

No feedback was received on AEMO's proposed approaches for:

- The start date or period of cost recovery for the NEM2025 Reform Program; or
- Cost recovery from the new Registered participant category the Integrated Resource Provider (IRP) from 3 June 2024.

Further detail on the key points made in each submission, with AEMO's responses to these submissions, can be found in Appendix A5.

In addition to the submissions, AEMO held its second Participant Fee Consultative Committee (PFCC) on 7 September 2023 that was attended by representatives from the Energy Networks Australia (ENA), Energy Users Association of Australia (EUAA) and Australian Energy Council (AEC). The PFCC discussed stakeholder feedback received from the Draft Report, as well as AEMO's approach for this Final Report. AEMO's presentation and minutes from this PFCC meeting can be found on AEMO's website: [AEMO | Participant Fee Structure for the NEM2025 Reform Program Declared NEM Project](#).

## AEMO's final determination for a Participant fee structure for the NEM2025 Reform Program

In developing this Final Report, AEMO has carefully considered the issues raised in its Consultation Paper and Draft Report, stakeholder views raised through submissions and the PFCC, further internal analysis and discussion, the NER Fee Structure Principles, and had regard to the National Electricity Objective (NEO). Based on this consideration and analysis, AEMO final determination, consistent with its proposal as per the Draft Report, is:

- To recover costs 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<sup>1,2</sup>, for a recovery period of seven years.

With regards to cost recovery from the new Integrated Resource Provider (IRP) participant category:

- For existing Market Customers or Generators that voluntarily re-register as IRPs, as well as existing Small Generation Aggregators (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 Participants<sup>3</sup>: 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: 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.<sup>4,5</sup>
- 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.

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.

---

<sup>1</sup> Subject to the program's funding approvals process and the AEMO budget process.

<sup>2</sup> 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.

<sup>3</sup> SGAs are currently included in the Wholesale Participant category.

<sup>4</sup> AEMO note this is a change from the Draft Report which provided for a metric of 50% charged as a rate per MWh and 50% charged on a per connection point basis per week. AEMO acknowledge this was a drafting error in the Draft Report, with the final metric intended to be consistent with how all Market Customers are charged the NEM2025 Reform Program Fee.

<sup>5</sup> The final Market Customer fee metric for the NEM2025 Reform Program fee was determined to be different to the fee metric charged to these participants for AEMO's general NEM fees for the reason identified in section 4.1.1 and Appendix A4.

# Contents

Executive summary	3
1 Stakeholder Consultation Process	6
2 Background	7
2.1 NER requirements	7
2.2 Context for this consultation	8
2.3 Second Stage Consultation	10
3 Summary of Key Issues for Consultation	12
3.1 Summary of key consultation issues	12
3.2 Stakeholder submissions / feedback	13
4 Final structure of the NEM2025 Reform Program Participant fee	14
4.1 AEMO's final determination and rationale	15
A1. Summary of NEM2025 Reform Program initiatives	18
A1.1 ESB major reform pathways and their NEM2025 Reform Program scope	18
A1.2 Foundational and strategic reform pathways and their associated initiatives	19
A2. The NEM Reform Implementation Roadmap	20
A2.1 Full NEM2025 Reform Implementation Roadmap (Draft v3 as of August 2023)	20
A3. Fee structure principles	22
A4. Background to final fee structure allocations	25
A5. Summary of submissions and AEMO responses	28
A6. Registered Participants (current)	30
A7. Glossary	31

## Tables

Table 1 – Consultation timeline	6
Table 2 – Estimated total Program costs as of August 2022 <sup>1</sup>	10
Table 3 – Summary of consultation issues	12
Table 4 – Summary of Participant fee structure options	14

# 1 Stakeholder Consultation Process

As required by the National Electricity Rules (NER, Rules), AEMO consulted 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 timeline for this consultation is outlined below.

**Table 1 – Consultation timeline**

Deliverable	Indicative date
<b>Consultation Paper and Notice of First Stage Consultation published</b>	Friday 3 February 2023
<b>First Stage Submissions closed</b>	Friday 3 March 2023
<b>Draft Report and Notice of Second Stage Consultation to be published</b>	Friday 30 June 2023
<b>Second State Submissions closed</b>	Friday 28 July 2023
<b>Final Report and Determination published</b>	Friday 6 October 2023

To support AEMO in its consultation on an appropriate participant fee structure, AEMO established the Participant Fee Consultative Committee (PFCC) as one key mechanism to collaborate and engage with industry and consumers. The PFCC was established to include broad representation across market participants, with EOIs called for consumer representatives to participate. AEMO has been working 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.

PFCC meetings were held on 27 April 2023 and 7 September 2023, that were attended by representatives from the Energy Networks Australia (ENA), Clean Energy Council (CEC)<sup>6</sup>, Energy Users Association of Australia (EUAA) and Australian Energy Council (AEC). Presentations and minutes for both meetings have been published on AEMO's website: [AEMO | Participant Fee Structure for the NEM2025 Reform Program Declared NEM Project](#).

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.

<sup>6</sup> 27 April 2023 meeting only.

## 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 work<sup>7</sup> 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

---

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





Cabinet endorsed the ESB's final recommendations in October 2021, as agreed by the Energy National Cabinet Reform Committee (ENCRC) in September 2021, under the following pathways:

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.<sup>8</sup>

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 Program<sup>9</sup> 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.

---

<sup>8</sup> 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.

<sup>9</sup> 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.

To implement all the initiatives efficiently and transparently, AEMO and the RDC developed the NEM Reform Implementation Roadmap (the Roadmap)<sup>10</sup> shown in Appendix A2. The Roadmap establishes a basis upon which AEMO, and stakeholders may navigate the breadth of reforms over the coming few years, de-risking delivery, and informing implementation timing. Importantly, 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 a tiered management and governance framework to mitigate Program challenges and risks, and provide for both implementation and investment disciplines whereby funding 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, as of August 2022, 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 – Estimated total Program costs as of August 2022<sup>11,12,13</sup>**

Cost component	\$m
Total capital costs	\$250 - \$350
Ongoing costs <sup>14</sup>	\$170 - \$240
<b>Total Program costs</b>	<b>\$430 - \$600</b>
<b>Net Present Cost</b>	<b>\$350</b>

## 2.3 Second Stage Consultation

AEMO issued a Notice of Second Stage Consultation and published its Draft Report and Determination (Draft Report) on 30 June 2023.

The Draft Report presented various Participant fee structure options to apply to the NEM2025 Reform Program declared NEM project, as well as AEMO's draft proposal, to stakeholders for feedback, noting that the consultation does not apply to the actual amount charged for the fee.<sup>15</sup>

<sup>10</sup> Further information on the consultation of the Roadmap can be viewed on AEMO's website: [AEMO | Regulatory Implementation Roadmap](#)

<sup>11</sup> 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.

<sup>12</sup> AEMO NEM2025 Reform Program Gate 1 Business Case. August 2022. 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. Net Present Cost (NPC) mid-point shown for comparison purposes.

<sup>13</sup> Scope of estimates does not include Capacity Mechanism, Congestion Management Mechanism and Data Strategy due to ongoing policy uncertainty at the time.

<sup>14</sup> Ongoing costs are assumed to commence from the end of the implementation period for each initiative until the end of the Program.

<sup>15</sup> The latter is to be determined on an annual basis, via the AEMO budgeting process.



AEMO received three written submissions in the second stage of consultation from AusNet Services, the ENA and TasNetworks. Feedback received from these submissions have been outlined in more detail in section 3 and Appendix A5.

AEMO also held a Participant Fee Consultative Committee (PFCC) on 7 September 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 that have been 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. <b>Participant fee structure (including fee metrics and Registered Participants to be charged)</b>	<ul style="list-style-type: none"> <li>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.</li> <li>AEMO proposed three options in its Draft Report for stakeholder feedback:               <ol style="list-style-type: none"> <li>To use the existing fee structures.</li> <li>To establish a separate NEM2025 Reform Program fee that allocates costs to Wholesale Participants (27.5%) using existing Wholesale Participant metrics, and Market Customers (72.5%) where the Market Customer metrics include:                   <ul style="list-style-type: none"> <li>37% 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; and 63% is charged on a per connection point basis per week.</li> </ul> </li> <li>To establish a separate NEM2025 Reform Program fee that allocates 100% of the costs to Market Customers.</li> </ol> </li> <li>All three stakeholder submissions supported Option 2.</li> <li>All three stakeholders noted that should it be determined in future fee consultation iterations that Distribution Network Service Providers (DNSPs) are to be charged for the NEM2025 Reform Program, then appropriate cost recovery mechanisms and transitional arrangements will be required as they currently do not have a regulatory mechanism that allows them to recover AEMO's fees.</li> </ul>
2. <b>Cost recovery commencement date and recovery period</b>	<ul style="list-style-type: none"> <li>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.</li> <li>AEMO's Draft Report proposed commencing recovering capital costs from each initiatives' go-live dates, subject to the program's funding approvals and AEMO's annual budget processes, for a period of seven years.</li> <li>No feedback was provided on this matter.</li> </ul>
3. <b>Cost recovery of the new Integrated Resource Provider (IRP) participant category</b>	<ul style="list-style-type: none"> <li>One of the NEM2025 Reform Program initiatives that is implemented includes the Integrating Energy Storage Systems (IESS) project (effective from 3 June 2024) which introduces a new Registered Participant category, the IRP.</li> <li>As this new participant category is introduced before the next general Participant fee structure period, this consultation must also determine if, and how, the costs of the NEM2025 Reform Program should be recovered from IRPs.</li> <li>AEMO's Draft Report proposed:               <ul style="list-style-type: none"> <li>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.</li> </ul> </li> </ul>

Consultation Matter	Summary of key issues
	<ul style="list-style-type: none"> <li>– 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.</li> <li>• No feedback was received on this matter.</li> </ul>

## 3.2 Stakeholder submissions / feedback

AEMO received three submissions to its Draft Report from AusNet Services, the ENA and TasNetworks. There were no major objections to any of AEMO’s draft proposals under consultation as highlighted in Table 3 above.

The three submissions raised similar points relating to the main issues for consultation which included the following:

- Support for AEMO’s draft fee structure for the NEM2025 Reform Program fee (that is Option 2), as it:
  - Aligns with the relevant principles of simplicity, non-discrimination and cost recovery based on the involvement of participants.
  - Does not allocate costs to transmission network service providers (TNSPs) and distribution network service providers (DNSPs) in the short term, which aligns with the expectation that these participants will not have significant involvement in the immediate NEM2025 Reform initiatives.

The submissions also raised that:

- Any proposed future allocations to TNSPs and DNSPs can only occur following the establishment of a suitable cost recovery mechanism, for DNSPs in particular.
  - Network service providers (NSPs) require advanced notice and accurate forecasts of AEMO fees in order to recover costs under the regulatory framework should existing fees or future iterations allocate costs to NSPs.

Additionally, AusNet raised a concern that the involvement principle is inconsistent with other aspects of the regulatory framework and that AEMO should clarify the fee structure principles in the NER to be consistent with the broader NEM framework.

Further detail on these submissions and AEMO’s responses can be found in Appendix A5.

AEMO also notes verbal feedback from the EUAA at the PFCC on 7 September 2023, and that it raised some broader concerns regarding the involvement principle, affordability and impact of costs on consumer bills. AEMO notes the EUAA’s views and we remain committed to deliver reforms effectively and efficiently, and will continue to engage with the EUAA and other stakeholders to achieve these goals through other relevant processes.

# 4 Final structure of the NEM2025 Reform Program Participant fee

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.

Three options were presented in AEMO’s Draft Report (see Table 4).

**Table 4 – Summary of Participant fee structure options**

Example	Description
<p><b>1. Use existing Participant fees structures such as the core NEM fee and/or DER program fee and/or Electricity Retail Markets fee</b></p>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Attributions of allocated costs to Registered Participants would be as per the existing Participant fee that is applied to the Reform pathway.</li> <li>• Existing fee metrics for Registered Participant categories would apply.</li> <li>• 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.</li> </ul>
<p><b>2. A separate NEM2025 Reform Program fee allocating costs to Wholesale Participants (27.5%) and Market Customers (72.5%)</b> <i>(see Appendix A4 on the development of these Participant allocations)</i></p>	<ul style="list-style-type: none"> <li>• A new Participant fee structure to apply to the whole NEM2025 Reform Program.</li> <li>• Requires determining the relevant Registered Participant/s to recover costs from as well as the attribution to be allocated to each Registered Participant.</li> <li>• Requires determining the relevant fee metric to apply to each of the Registered Participants.</li> <li>• 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).</li> </ul>
<p><b>3. A separate NEM2025 Reform Program fee allocating 100% of costs to Market Customers</b></p>	<ul style="list-style-type: none"> <li>• A new Participant fee structure to apply to the whole NEM2025 Reform Program.</li> <li>• Costs are only allocated to and recovered from Market Customers.</li> <li>• Requires determining a more relevant fee metric to apply to Market Customers if the existing Market Customer fee metric is deemed inappropriate to apply to the NEM2025 Reform Program as a whole.</li> <li>• 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).</li> </ul>

## 4.1 AEMO's final determination and rationale

In line with AEMO's draft proposal and assessment conducted for the second stage of consultation, and after consideration of submissions received to the Draft Report, AEMO's final determination is outlined below in sections 4.1.1 to 4.1.3.

AEMO notes this final fee structure for the NEM2025 Reform Program determined will need to be reviewed in the next general 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.

### 4.1.1 Participant fee structure for the NEM2025 Reform Program

AEMO's final determination is to recover capital 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 final structure because 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;
- Acknowledges that some of the initiatives could be attributed to retail customers on a per connection point basis only<sup>16</sup>, and that it would otherwise 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:

---

<sup>16</sup> For example: FRC Target State and Bill Transparency

- 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.

#### 4.1.2 Cost recovery commencement date and recovery period

AEMO's final determination on cost recovery commencement date and recovery period 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.
  - The exception is for those initiatives (e.g. Fast Frequency Response, and Increased MT PASA Information) with go-live dates before 1 July 2024<sup>17</sup>. Costs for these initiatives will be recovered from 1 July 2024.
- A recovery period of seven years from when an initiative is rolled into the fee structure.

This approach provides stakeholders with more assurance that AEMO will only recover costs of initiatives that are implemented, 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, the recovery period aligns with AEMO's depreciation model for other assets.

#### 4.1.3 Cost recovery from the new IRP Registered Participant category


AEMO's final determination for recovery from IRPs for the NEM2025 Reform Program fee includes:

- 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 allocated AEMO fees, that is:
  - For Wholesale Participants<sup>18</sup>: 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: 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.

<sup>17</sup> 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.

<sup>18</sup> SGAs are currently included in the Wholesale Participant category.





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.<sup>19,20</sup>

- 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.

Additionally, AEMO notes from 3 June 2024, once the IRP participant category becomes effective, AEMO will charge this group general NEM fees in the same manner they are currently charged, that is, either as a Market Customer or Wholesale Participant.

---

<sup>19</sup> AEMO note this is a change from the Draft Report which provided for a metric of 50% charged as a rate per MWh and 50% charged on a per connection point basis per week. AEMO acknowledge this was a drafting error in the Draft Report, with the final metric intended to be consistent with how all Market Customers are charged the NEM2025 Reform Program Fee.

<sup>20</sup> The final Market Customer fee metric for the NEM2025 Reform Program fee was determined to be different to the fee metric charged to these participants for AEMO's general NEM fees for the reason identified in section 4.1.1 and Appendix A4.

# 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 <sup>21</sup>
<b>Resource Adequacy Mechanism<sup>22</sup></b>	<ul style="list-style-type: none"> <li>Establish new market-based arrangements to explicitly value capacity to provide an 'investable' and enduring long-term signal</li> <li>Establish market arrangements that support efficient allocation of investment risk between participants, jurisdictions, and consumers</li> <li>Establish tools that provide jurisdictions sufficient confidence that reliability will be maintained in a way that preserves market signals</li> </ul>	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"> <li>Increased MT PASA Information (Note other reforms are being considered through ESB policy considerations)</li> </ul>
<b>Essential System Services and Ahead Mechanisms</b>	<ul style="list-style-type: none"> <li>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)</li> <li>Establish new market mechanisms to support efficient scheduling and dispatch by AEMO</li> <li>Deliver a range of supply and demand-based technologies and resources with capabilities to deliver these essential services</li> </ul>	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"> <li>Fast Frequency Response</li> <li>Frequency Performance Payments (part of PFR Incentive Arrangements rule change)</li> <li>Operating Reserve Market</li> <li>Improving security frameworks for the energy transition<sup>23</sup></li> </ul>
<b>Integration of DER &amp; Flexible Demand<sup>24</sup></b>	<ul style="list-style-type: none"> <li>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</li> </ul>	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"> <li>Integrating Energy Storage</li> <li>Unlocking CER benefits through flexible trading<sup>25</sup></li> <li>Integrating price responsive resources into the NEM<sup>26</sup></li> </ul>

<sup>21</sup> Further detail on the scope of the reform initiatives have been published on AEMO's website: [AEMO | NEM Reform Implementation Roadmap](#)

<sup>22</sup> 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.

<sup>23</sup> Formerly Operational Security Mechanism.

<sup>24</sup> Turn-up Services has subsequently been decoupled from the NEM2025 Reform Program (April 2023) since the release of the Consultation Paper following consultation with the RDC.

<sup>25</sup> Formerly Flexible Trading Arrangements (Model 2)

<sup>26</sup> Formerly Scheduled Lite.

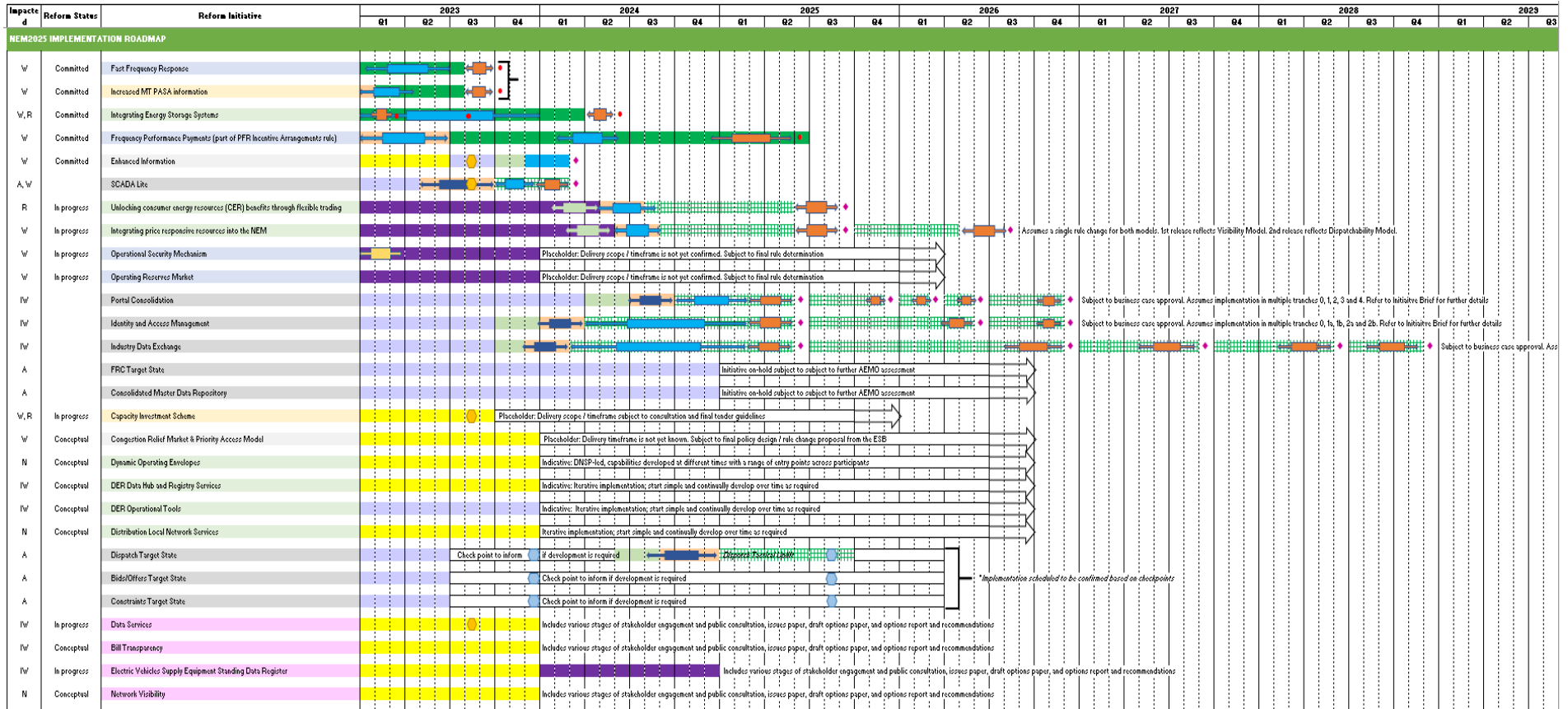
Pathway	Objective	This means	NEM2025 Reform Program Scope <sup>21</sup>
	<ul style="list-style-type: none"> <li>Establish wholesale market arrangements that support innovation, the integration of new business models and a more efficient supply and demand balance</li> <li>Establish networks with the ability to accommodate the continued update of DER, two-way energy flows, and manage the security of the network in a cost-effective way</li> <li>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</li> </ul>		<ul style="list-style-type: none"> <li>Dynamic Operating Envelopes</li> <li>Distribution Local Network Services</li> <li>Turn-up Services</li> <li>DER Data Hub and Registry Services</li> <li>DER Market and System Operator integration</li> </ul>
<b>Data Strategy</b>	<ul style="list-style-type: none"> <li>A framework is established with new guiding policy principles, build capability, forward planning and adaptability and address priority data gaps</li> </ul>	Varied actors in the market have access to timely data to perform their functions	<ul style="list-style-type: none"> <li>Data Services</li> <li>EV Charging Standing Data Register</li> <li>Bill transparency</li> <li>Network Transparency</li> </ul>

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

Category	Description	Initiatives
<b>AEMO Foundational</b>	Foundational dependency work to deliver an uplift to base capability on which reforms are dependent	<ul style="list-style-type: none"> <li>Identity Access Management</li> <li>Industry Data Exchange</li> <li>SCADA Lite</li> </ul>
<b>AEMO Strategic</b>	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"> <li>Portal Consolidation</li> <li>Consolidated Master Data Repository</li> <li>Dispatch Target State</li> <li>Bids / Offers Target State</li> <li>Constraints Target State</li> <li>FRC Target State</li> </ul>

# A2. The NEM Reform Implementation Roadmap

## A2.1 Full NEM2025 Reform Implementation Roadmap (Draft v3 as of August 2023)



**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	<b>Impacted Sector</b>	
Integration of DER and Flexible Demand	Transmission and Access	A	AEMO
Data Strategy		N	Network
		W	Wholesale
		R	Retail
AEMO Strategic / Foundational	NEM2025 Program dependency	IW	Industry Wide
		G	Gas

## A3. Fee structure principles

Fee Structure Principle	Requirement	Application and examples
<b>National Electricity Objective (NEO)</b>	<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>
<b>Simplicity</b>	<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"> <li>• straight-forward</li> <li>• easily understood by participants</li> </ul>

Fee Structure Principle	Requirement	Application and examples
		<ul style="list-style-type: none"> <li>readily applied by Registered participants and AEMO</li> <li>foreseeable and forecastable in terms of impacts and costs.</li> </ul>
<b>Reflective of Involvement</b>	<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"> <li>(a) interacts with AEMO in relation to the output;</li> <li>(b) uses the output;</li> <li>(c) receives the output; and</li> <li>(d) benefits from the output.</li> </ul> <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>
<b>Non-discriminatory</b>	<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>
<b>Comparability</b>	<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"> <li>Other electricity market fee structures such as Western Australia or globally</li> <li>Gas markets operated by AEMO</li> </ul>

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 final fee structure allocations

The table below presents the basis for which the weighted involvement of each Registered Participant for the NEM2025 Reform Program pathways were calculated to result in the final cost allocation to participants for the NEM2025 Reform Program as a whole.

Pathway	Initiatives	Total Implementation costs (±40%, \$m) <sup>27</sup>	Registered Participants – Weighted involvement <sup>28</sup>		Basis for fee allocation methodology
			Wholesale Participants	Market Customers	
Resource Adequacy Mechanism	Increased MT PASA information	\$0.9 – \$2.1	44.6%	55.4%	Core NEM fee
	<b>Weighted Average</b>		<b>44.6%</b>	<b>55.4%</b>	
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
	<b>Weighted Average</b>		<b>44.6%</b>	<b>55.4%</b>	
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
	<b>Weighted Average</b>		<b>30.7%</b>	<b>69.3%</b>	

<sup>27</sup> Obtained from the August 2022, Gate 1 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)

<sup>28</sup> 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) <sup>27</sup>	Registered Participants – Weighted involvement <sup>28</sup>		Basis for fee allocation methodology
			Wholesale Participants	Market Customers	
Data Strategy <sup>29</sup>	Data Services	\$2.0 - \$6.0	50%	50%	N/A – even split across WP/MC <sup>30</sup>
	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
	<b>Weighted Average</b>		<b>31.1%</b>	<b>68.9%</b>	
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%	
	<b>Weighted Average</b>		<b>21.3%</b>	<b>78.7%</b>	
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
	<b>Weighted Average</b>		<b>21.2%</b>	<b>78.8%</b>	
NEM2025 Reform Program	<b>Total Weighted Average</b>		<b>27.5%</b>	<b>72.5%</b>	

The table below outlines the approach applied to calculate an appropriate Market Customer metric for the NEM2025 Reform Program fee. Specifically, leveraging the total estimated costs attributed to each portion of the Market Customer charge, i.e. \$/MWh or \$/NMI, across those fee structures (or likely

<sup>29</sup> 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.

<sup>30</sup> 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.

allocation approaches) applied as the basis for the fee allocation methodology provides for a new weighted fee metric for the NEM2025 Reform Program of 37% charged on a \$/MWh basis and 63% charged on a \$/NMI basis.

Basis for Market Customer fee allocation methodology across the NEM2025 Reform pathways	Market Customer involvement allocation (%)	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 <sup>31</sup>	50.0 <sup>32</sup>	\$/NMI – 50%	\$16.2 - \$38.4
	77.7 <sup>33</sup>	\$/MWh – 50%	\$16.2 - \$38.4
	78.5 <sup>34</sup>		

<sup>31</sup> Applied for some initiatives within the Data Strategy, AEMO Foundational and AEMO Strategic pathways.

<sup>32</sup> Reflects a 50/50 split to Wholesale Participants and Market Customers each based on their expected level of involvement in the Data Services initiative.

<sup>33</sup> 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.

<sup>34</sup> 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
1. AusNet Services	a) Supports AEMO's draft decision to recover costs from Wholesale Participants (27.5%) and Market Customers (72.5%).	Noted.
	b) The application of the involvement principle is inconsistent with other aspects of the regulatory framework that promote a beneficiary pays and an efficiency approach. Suggest AEMO seek to clarify the Chapter 2 NER principles behind participant fees to be consistent with the broader NEM regulatory framework and provide clear guidance to participants.	AEMO notes this was discussed at the PFCC held on 7 September 2023. As highlighted at this meeting, AEMO will consider the appropriateness of all fee structure principles ahead of the next general NEM fees consultation, however at this time AEMO must develop its fee structures in line with the principles outlined in clause 2.11.1 of the NER.
	c) Noted that NSPs require advanced notice and accurate forecasts of AEMO fees in order to recover costs under the regulatory framework should existing fees or future iterations allocate costs to NSPs. <ul style="list-style-type: none"> <li>- Appreciate AEMO's consideration of these requirements for network businesses in the PFCC on which the ENA is represented and will continue to engage with AEMO through this process.</li> </ul>	AEMO acknowledges this requirement and appreciates the network businesses engagement in the PFCC process through the ENA.
2. ENA	a) Supports AEMO's approach taken in the Draft Determination allocating fees for the NEM2025 Reform Program as it meets the relevant principles of simplicity, non-discrimination and cost recovery based on the involvement of participants. Additionally, a separate fee provides transparency of budgets and expenditure related to the work program.	Noted.
	b) The ENA's DNSP members note and rely on AEMO's comment that, should there be a need to allocate fees to DNSPs in the future, AEMO will discuss with DNSPs an approach to introducing a cost recovery mechanism, including transitional arrangements, in a similar way that was applied for the commencement of charging TNSPs. <ul style="list-style-type: none"> <li>- The ENA considers this a sensible approach and would welcome early discussions on this as AEMO approaches its 2026 general fee determination.</li> <li>- Also noted the timing of the next general fee determination consultation process will need to take into account the need for fee estimates to be notified to TNSPs in February 2026.</li> </ul>	See AEMO response to 1c).  Additionally, AEMO acknowledges these comments from the ENA and will continue to factor in the timing requirements for TNSPs and DNSPs to allow them to recover costs associated with AEMO's fees.
3. TasNetworks	a) Strong support for AEMO's decision to not allocate fees to TNSPs and DNSPs in the short term given they are not expected to have significant involvement in the immediate NEM2025 Reform initiatives.	Noted.

Consulted person	Key points	AEMO response
	<p>b) Supportive of AEMO's approach to reconsider the allocation of fees at the next fee determination in mid-2026 reflecting the staged implementation approach of the NEM2025 Reform Program which should be supported by robust consultation period to ensure sufficient time for any change in fee allocations.</p> <ul style="list-style-type: none"> <li>- Any proposed future allocations to TNSPs and DNSPs can only occur following the establishment of a suitable cost recovery mechanism.</li> </ul>	<p>See AEMO responses to 1c) and 2b).</p>

## A6. Registered Participants (current)

Participant category	Description	Registered participant class
<b>Generators</b>	Any person who owns, controls or operates a generating system connected to a transmission or distribution network	<ul style="list-style-type: none"> <li>• Market Scheduled</li> <li>• Market Non-scheduled</li> <li>• Market Semi-scheduled</li> <li>• Non-market Scheduled</li> <li>• Non-market Non-scheduled</li> <li>• Non-market Semi-scheduled</li> </ul>
<b>Small Generation Aggregator</b>	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"> <li>• Market small aggregated generator</li> </ul>
<b>Customers</b>	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"> <li>• Market customer</li> <li>• First-tier customer</li> <li>• Second-tier customer</li> </ul>
<b>Network Service Providers</b>	A person who owns, operates or controls a transmission or distribution system	<ul style="list-style-type: none"> <li>• Transmission network service provider</li> <li>• Distribution network service provider</li> <li>• Market network service provider</li> </ul>
<b>Special Participant</b>	<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"> <li>• System operator</li> <li>• Distribution system operator</li> </ul>
<b>Reallocator</b>	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"> <li>• Reallocator</li> </ul>
<b>Trader</b>	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"> <li>• Trader</li> </ul>
<b>Metering Coordinator</b>	Has the overall responsibility for coordination and provision of metering services at a connection point in the NEM	<ul style="list-style-type: none"> <li>• Metering coordinator</li> </ul>
<b>Market Ancillary Service Provider (MASP)</b>	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"> <li>• Market ancillary service provider</li> </ul>
<b>Demand Response Service Provider (DRSP)</b>	<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"> <li>• Demand response service provider</li> </ul>

## A7. Glossary

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