



Explanatory statement

Demand management innovation allowance mechanism

Electricity transmission network service providers

May 2021

© Commonwealth of Australia 2021

This work is copyright. In addition to any use permitted under the Copyright Act 1968, all material contained within this work is provided under a Creative Commons Attributions 3.0 Australia licence, with the exception of:

- the Commonwealth Coat of Arms
- the ACCC and AER logos
- any illustration, diagram, photograph or graphic over which the Australian Competition and Consumer Commission does not hold copyright, but which may be part of or contained within this publication. The details of the relevant licence conditions are available on the Creative Commons website, as is the full legal code for the CC BY 3.0 AU licence.

Requests and inquiries concerning reproduction and rights should be addressed to the:

Director, Corporate Communications
Australian Competition and Consumer Commission
GPO Box 4141, Canberra ACT 2601

Or publishing.unit@acc.gov.au.

Inquiries about this publication should be addressed to:

Australian Energy Regulator
GPO Box 520
Melbourne Vic 3001

Tel: 1300 585 165
Email: AERInquiry@aer.gov.au

AER reference: AER200885

Amendment record

Version	Date
01	27 May 2021

Contents

Contents	3
Shortened forms and glossary	5
1 Summary	7
1.1 Key features of the final DMIAM	7
1.2 Key changes to the draft DMIAM	8
1.3 The AER's consultation process	8
1.4 Monitoring of the operation of DMIAM	9
2 Submissions	10
3 About the Demand Management Innovation Allowance Mechanism	11
3.1 Background to the Mechanism	11
3.2 The NER requirements	12
3.3 The proposed DMIAM	13
4 Design of the Mechanism	15
4.1 Application of the mechanism	15
5 Identifying eligible projects	18
5.1 Project criteria	18
5.2 Independent endorsement of proposed demand management projects	19
6 Assessment and compliance reporting	23
6.1 Compliance reporting requirements	23
6.2 Treatment of confidential information	26
6.3 AER use of compliance reports	27
6.4 Transferrable learning outcomes	27
7 Application of carryover	30
A Summary of submissions and our response on the issues	35
A.1 Application of the DMIAM	35

A.2 Identifying eligible projects.....	35
A.3 Compliance reporting and independent endorsement for proposed projects.....	35

Shortened forms and glossary

Shortened form	Extended form
ABBRR	the TNSP's unsmoothed annual building block revenue requirement, calculated in accordance with the AER's revenue determination, excluding annual adjustments for changes in the cost of debt and other factors. Annual building block revenue requirement has the meaning given in the NER.
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
Allowance Objective	The demand management innovation allowance objective for TNSPs
ARENA	Australian Renewable Energy Agency
AR	allowed revenue
capex	capital expenditure
CESS	Capital Expenditure Sharing Scheme
demand management, in transmission network context	For the purpose of the transmission DMIAM mechanism, the act of modifying the drivers of the pattern of network usage that will deliver long term benefits to consumers
DM	Demand Management
DMIAM	Demand Management Innovation Allowance Mechanism for TNSPs
DMIS	Demand Management Incentive Scheme
EBSS	Efficiency Benefit Sharing Scheme
kVA	A kilo Volt-Ampere or 1,000 Volt-Amperes
ABBRR	annual building block revenue requirement
MWh	Mega Watt hour
NCIPAP	Network capability incentive parameter action plan for TNSPs
NEM	National Electricity Market

Shortened form	Extended form
NEO	National Electricity Objective
NER	National Electricity Rules
Opex	operating expenditure
TNSP	Transmission Network Service Provider

1 Summary

The Demand Management Innovation Allowance Mechanism (DMIAM) provides an allowance to transmission network service providers (TNSPs) to undertake innovative projects related to demand management. Under the NER, the DMIAM must meet the objective of funding TNSPs for research and development (R&D) in demand management projects that have the potential to reduce long-term network costs (Allowance Objective).¹

This explanatory statement accompanies the DMIAM. It aims to assist transmission network service providers (TNSPs) and other stakeholders in understanding the DMIAM. It also explains our considerations in designing the DMIAM, including our consideration of views that stakeholders expressed to us in submissions.

More detailed information about DMIAM is provided in chapter 3 of this paper.

1.1 Key features of the final DMIAM

Following two rounds of stakeholder consultation, we have finalised the design of the DMIAM. The key features are:

- A low level allowance of 0.1 per cent of annual building block revenue requirement (ABBRR) for each TNSP per regulatory control period. We consider there are no forecast significant network constraints in the next five years. Accordingly, the DMIAM allowance should be moderate at this stage.
- Independent endorsement of proposed demand management projects. We strongly encourage—rather than mandate—TNSPs to seek independent endorsement of the DM projects from either (1) an independent advisory panel, or (2) their Consumer Consultative Committee (CCC) with an independent and suitably qualified and experienced electrical engineer if the CCC does not include one. Endorsement from an independent party assessing the DM projects will provide further assurance for us when we assess the projects against the applicable criteria. We will also monitor the implementation of the DMIAM to decide whether to review the Scheme.
- A separate allowance to fund the independent endorsements from an independent panel or the TNSPs' CCC and an independent electrical engineer. We will include an additional \$200,000 in the available allowance to fund the independent endorsements. TNSPs will be required to report on how this expenditure is used. Any under-spend is to be returned to customers.
- Flexibility to combine allowances in order to fund larger projects. There is flexibility to combine allowances between TNSPs and across regulatory periods in order to fund larger projects.

¹ NER, cl. 6A.7.6.

1.2 Key changes to the draft DMIAM

Our key changes to the draft DMIAM, published on 17 December 2021, are:

Independent endorsement for proposed DM projects

In the draft DMIAM, we proposed to encourage, rather than mandate, that TNSPs obtain an independent project assessment. We considered that mandating the assessment may disincentivise the adoption of the Scheme because of the introduction of an additional step in the approval process. For each project, when reviewing TNSPs' annual compliance report we will have particular regard to whether independent endorsement has been sought and received.

For the final DMIAM, we have provided for more flexibility for TNSPs to seek independent project endorsement, as indicated in the previous section.

Transferrable outcomes

For the draft DMIAM, we considered that the learnings and insights gained from implementing DM projects under the DMIAM should be shared with other TNSPs and the public upon request. The information that TNSPs must make available to third parties on request is limited to information about the results of the project.

Nevertheless, to give TNSPs control over the way in which the results of the project are to be shared with industry, for the final DMIAM, we have included an additional provision to allow a TNSP to require a third party recipient to keep confidential information confidential.

1.3 The AER's consultation process

We have undertaken three rounds of consultation with stakeholders in developing the DMIAM.

The Pre-issues paper

In preparation for the issues paper, we sought preliminary ideas and suggestions from TNSPs about the potential scope of a DMIAM. Each of the TNSPs provided submissions on the initial consultation, which are published on the AER's website. The submissions presented examples of projects that TNSPs would propose under the Scheme and their indicative costs. These served as a guide to the amount of potential DMIAM costs.

The issues paper

We initiated our formal consultation process for the development of the DMIAM by publishing an Issues Paper (the issues paper) on 14 August 2020. The issues paper sought stakeholders' feedback on issues relevant to the design of the DMIAM, in order to inform the development of a robust, fit for purpose allowance mechanism.

Draft demand management innovation allowance mechanism

After reviewing stakeholders' submissions to the issues paper, we published a draft DMIAM and an explanatory statement for further consultation on 17 December 2020.

This explanatory statement

This paper sets out our final decision, explains the reasons for it and responds to the submissions we have received on the draft DMIAM. The rest of this statement is organised as follows:

- Chapter 2: Submissions
- Chapter 3: About the Mechanism
- Chapter 4: Design of the Mechanism
- Chapter 5: Identifying eligible projects
- Chapter 6: Assessment and compliance reporting
- Chapter 7: Application of carryover
- Appendix A: Summary of submissions and our response to the issues

1.4 Monitoring of the operation of DMIAM

We will monitor the implementation of the DMIAM to assess the effectiveness of the Scheme.

2 Submissions

We received two submissions regarding the draft scheme, from Public Interest Advocacy Centre (PIAC) and Energy Networks Australia (ENA).

PIAC broadly supports the AER's draft DMIAM. More importantly, PIAC strongly supports the use of an Independent Advisory Panel and recommends that TNSPs be required to form an Independent Advisory Panel to review and endorse any innovation projects under the DMIAM.²

ENA supports the following positions in the draft DMIAM:³

- a separate allowance to fund the independent panel
- flexibility to pool funds into larger projects and across regulatory years to enable more meaningful projects to be undertaken
- a broader definition of demand management, as adopted by the AER.

ENA submitted that the compliance and reporting requirements should be commensurate with the value of the scheme. ENA also submitted that the AER should determine the DMIAM allowance and inform the TNSP of its decision within 2 months of the reports being provided to the AER. In addition, ENA proposed that commercially sensitive information should be exempted from the requirement to share lessons learnt.⁴

We address each specific issue raised in the submissions in the following chapters.

² PIAC, *Submission on AER draft transmission DMIAM*, 10 February 2021, pp. 1-2.

³ ENA, *Submission on AER draft transmission DMIAM*, 12 February 2021, pp. 1-2.

⁴ ENA, *Submission on AER draft transmission DMIAM*, 12 February 2021, pp. 1-2.

3 About the Demand Management Innovation Allowance Mechanism

The objective of this Mechanism is to provide an allowance to TNSPs to undertake not fully proven demand management projects and programs. Such activities have a level of risk of not being able to deliver favourable outcomes. Thus, without this allowance, TNSPs may be less inclined to try out new ideas to manage their networks. While there is a risk that projects funded by the allowance may not result in a successful outcome, it is expected that some of the new initiatives will result in significant long-term benefits to consumers in reducing network investments. This means there are significant potential benefits to consumers that would not be realised if the projects that would be funded by the allowance do not proceed.

This section sets out the rationale and key elements for the DMIAM in the context of contributing to the National Electricity Objective (NEO) and the rule requirements.

3.1 Background to the Mechanism

Energy Networks Australia (ENA) submitted a rule change request to the AEMC, proposing amendments to the NER that would require the AER to implement a demand management incentive scheme (DMIS) and demand management innovation allowance mechanism (DMIAM) to apply to transmission network service providers (TNSPs).

The AEMC released its final rule determination on 5 December 2019. The AEMC decided to only introduce the DMIAM element, but not the DMIS element, of ENA's proposal. The purpose of the DMIAM is to provide funding for transmission businesses to expand and share their knowledge of innovative demand management projects that have the potential to reduce long term network costs – which would ultimately flow through to consumers in the form of lower electricity bills.⁵

The AEMC stated that it was not satisfied that the benefits of applying a DMIS to transmission networks would outweigh the additional costs to consumers. This decision was supported by all stakeholder submissions to the draft determination, except for Energy Networks Australia. If a DMIS were implemented, transmission businesses would receive revenue for undertaking non-network options that they would already have been required to adopt under the regulatory investment test for transmission (RIT-T). Although it is accepted that networks may face upfront, transitional costs to develop their ability to utilise non-network options, the AEMC considers that these mostly one-off costs can already be recognised and funded under the current regulatory framework.

⁵ AEMC, *Rule Determination, National Electricity Amendment (Demand management incentive scheme and innovation allowance for TNSPs) Rule 2019*, 5 December 2019.

We have completed the design of the DMIAM, including the process and criteria for applying the innovation allowance, for implementation in the next round of revenue determinations. A Rule requirement is that transmission businesses will need to publish reports on the nature and results of their demand management projects – encouraging knowledge sharing of innovative non-network solutions.⁶

3.2 The NER requirements

Under the NER:⁷

- The AER must develop a demand management innovation allowance mechanism for transmission network service providers consistent with the demand management innovation allowance objective.
- The objective of the demand management innovation allowance mechanism is to provide Transmission Network Service Providers with funding for research and development in demand management projects that have the potential to reduce long term network costs.
- In developing and applying the mechanism, the AER must take into account the following:
 - the mechanism should be applied in a manner that contributes to the achievement of the demand management innovation allowance objective
 - demand management projects should have the potential to manage ongoing changes in demand
 - demand management projects should be innovative and not be otherwise efficient and prudent non-network options that a transmission network service provider should have provided for in its revenue proposal
 - the level of the allowance should be reasonable considering the long term benefit to retail customers, should only provide funding that is not available from any other source, and may vary by transmission network service provider and over time
 - the demand management innovation allowance may fund demand management projects which occur over a longer period than a regulatory control period
 - any demand management innovation allowance mechanism developed and applied by the AER must require transmission network service providers to publish reports on the nature and results of demand management projects that are the subject of the allowance.

⁶ NER, 6A.7.6 (d).

⁷ NER, 6A.7.6 and 11.118.2.

- The date specified in the NER for the AER to develop and publish the first DMIAM by 31 March 2021. By making the DMIAM now, we will still be able to apply it in our next revenue determinations for TNSPs.

The AEMC also made a number of amendments to existing clauses in chapter 6A of the NER to accommodate the DMIAM throughout the revenue determination process.

3.3 The proposed DMIAM

The DMIAM consists of three elements:

- The allowance itself: this includes a fixed amount, applied equally to all TNSPs, plus an additional percentage of the TNSP's annual building block revenue requirement (ABBRR). It is calculated as \$200,000 + 0.1% of the relevant TNSP's ABBRR as defined in the Mechanism. TNSPs will recover this amount from network users (generators, distribution network and load customers) throughout the regulatory control period via its annual transmission use of system (TUOS) charges. Should the allowance not be spent at the end of the regulatory control period, we will calculate a carryover amount to be recovered from TNSPs as a negative pass-through to network users. Any overspend of the allowance will be borne by the TNSP.
- Project eligibility requirements: these are the necessary project criteria to be met in order for a TNSP to use the allowance to fund the project. The requirements aim to ensure the delivery of value for money to electricity consumers. The requirements are that projects be innovative and have the potential to reduce long-term network costs. Innovation, in this context, means that the project:
 - is based on new or original concepts. For clarity, we consider this could include new or original ways of building or developing capability and capacity to undertake, facilitate or utilise demand management; or
 - involves technology or a technique not previously implemented in the relevant market; or
 - is focused on customers in a market segment that has not been exposed to the technology.
- Compliance reporting requirements: these assist us in assessing compliance with the Mechanism, allow industry and consumers to understand, share and potentially also apply the research outcomes and knowledge gained from projects, and provide transparency regarding the efficiency and effectiveness of the allowance used by the TNSP. To facilitate this, each TNSP must submit an annual report to us that sets out the amount of allowance claimed, along with specifics of each project funded by the allowance. The Mechanism does not prevent the TNSP from meeting its compliance reporting requirements through or with another parties, where collaboration is a more effective and efficient way of meeting those requirements. Each project must have a project-specific report capable of being published separately. These reports must outline the expenditures and outcomes of and methodology applied for each project. We intend to publish these reports on

our website, increasing the ease of access for stakeholders, including demand management service providers, TNSPs and electricity customers.

Our reasons for setting the above framework in the DMIAM are explained in the following chapters.

4 Design of the Mechanism

The AER must calculate and determine the maximum amount of the allowance under this mechanism for the regulatory control period. Subclause 2.1(1) of the Mechanism specifies that our revenue determination will set out how the Mechanism will apply to a TNSP in the relevant regulatory control period.

We will set the allowance cap for a TNSP by applying the formula in equation 1. This cap must be calculated and determined for the regulatory control period as the sum of:

- A fixed base allowance level of \$200,000, indexed from 30 June 2021 to the start of the new regulatory period, for the costs of independent assessment, adjusted by the AER for inflation using actual CPI, consistent with the methodology used, in the TNSP's revenue determination for the relevant regulatory year, for the indexation of maximum allowed revenue; and
- A project allowance of 0.1% of the transmission network service provider's total *ABBRR* for the regulatory control period as determined in the revenue determination at the time that revenue determination is first made. *ABBRR* is the sum of the TNSP's annual building block revenue requirement for each year of the regulatory period, as set out in that TNSP's revenue determination at the time that revenue determination was first made.

Equation 1: Allowance cap for a regulatory control period

$$\text{Allowance cap} = \$200,000 + 0.1\% \times \text{Total ABBRR}$$

The effect of this drafting is that for 1 July 2021 to 30 June 2022 (for example), the indexation of the fixed base allowance will be as per the TNSP's revenue determination for that year. When a new revenue determination takes effect (for example, the Powerlink revenue determination that will take effect on 1 July 2022), the indexation (for 1 July 2021 to 30 June 2022, for example) will be as per the revenue determination that expired on 30 June 2022.

4.1 Application of the mechanism

In the draft decision, we considered that a lower level allowance (0.1 per cent of the *ABBRR* for the regulatory period) is likely to be consistent with the DMIAM Objective.⁸

Our draft decision on the mechanism allowance was that:

- A lower level allowance, with 0.1 per cent of *ABBRR* for each TNSP per regulatory period, is appropriate
- Ex post assessment is more appropriate given the size of the allowance

⁸ AER, *Draft decision - Demand management innovation allowance mechanism - Electricity transmission network service providers*, December 2020, pp. 12-18.

- Pooling funding to jointly fund DM projects should be allowed
- The DMIAM allowance should be spent on opex only.

Submissions

PIAC broadly supported the AER's draft DMIAM. In particular, it supported that the DMIAM is opex-only, does not include an uplift and the project allowance constitutes only 0.1% of a TNSP's ABBRR.⁹

ENA supported the separate allowance to fund the independent panel, and the flexibility to pool allowances to fund larger projects and across regulatory years to enable more meaningful projects to be undertaken. ENA also submitted that clarification is required in the final DMIAM regarding the CPI indexation of the \$200,000 base allowance.¹⁰

Our consideration

We have made it clear in the final DMIAM that \$200,000 is provided for the costs of independent endorsement for DM projects, as at 30 June 2021, to be adjusted by the AER for inflation using actual CPI.

Final decision

Given that no other issue has been raised about our draft DMIAM allowance, our final decision on the DMIAM is that:

- There are two parts to the allowance under the Mechanism:
 - A project allowance of 0.1% of the TNSP's ABBRR, as set out in the TNSP's revenue determination;
 - A fixed base allowance level of \$200,000 to fund the independent project endorsement as at 30 June 2021, escalated annually by the lagged CPI applicable to the TNSP to bring this base allowance to the dollar terms reflecting the start of its regulatory period. The TNSP will be required to report on how this expenditure is used, and any under-spend will be returned to customers.
- Ex post assessment is more appropriate given the size of the allowance
- Pooling funding to jointly fund DM projects should be allowed
- The DMIAM allowance should be spent on opex only
- No uplift on actual expenditure should be provided.

⁹ PIAC, *Submission on AER draft transmission DMIAM*, 10 February 2021, pp. 1-2.

¹⁰ ENA, *Submission on AER draft transmission DMIAM*, 12 February 2021, pp. 1-2.

Table 1 below sets out the TNSPs' indicative DMIAM allowance per regulatory control period for each TNSP, calculated using the TNSPs' actual historical revenue from transmission data reporting. This gives an indication of the relative magnitude of the allowance.

Table 1 TNSPs' average annual actual revenue for 2006-2020 and indicative DMIAM allowance per regulatory control period (\$m, 2020-21)

	Powerlink	TransGrid	AusNet (T)	ElectraNet	TasNetworks (T)
Actual revenue	785	640	557	281	187
Sum of average annual revenue over a 5 year period	3,924	3,198	2,784	1,404	937
Indicative DMIAM allowance	4.1	3.4	3.0	1.6	1.1

Source: AER analysis; TNSP 2020 data report.

5 Identifying eligible projects

Clause 2.2 of the DMIAM sets out project criteria to define the type of projects to which the DMIAM is to apply ('eligible projects'). Specifically, the projects should:

- (a) have the potential to manage ongoing changes in demand; and
- (b) be innovative and not be otherwise efficient and prudent non-network options that a Transmission Network Service Provider should have provided for in its Revenue Proposal.

This chapter sets out our consideration of the proposed project criteria that a project must meet to be eligible and the need for independent endorsement of the proposed DMIAM projects.

5.1 Project criteria

Table 2 summarises the criteria that a project must meet to be eligible. Table 2 also explains how each element will give effect to the NER, and how it responds to any stakeholder views. These criteria aim to fulfil our obligations under clause 6A.7.6(c)(2) of the NER and reflect our consideration of the factors contained within that provision.

Table 2: Project criteria for eligibility under the Mechanism

Project criterion	Rationale for criterion	Consideration of stakeholder views
Be a demand management project or program	<p>The Allowance Objective requires that projects funded under the Mechanism relate to demand management.</p> <p>In the transmission network context, we have interpreted demand management as referring to modifying the drivers of network demand usage patterns in a way that will deliver long term benefits to consumers.</p>	Stakeholders supported the broader definition of demand management. ¹¹
<p>Be innovative, in that the project or program is:</p> <ul style="list-style-type: none"> • based on new or original concepts; • involving technology or techniques that differ from those previously implemented or used in the relevant market; or • focused on customers in a market segment that significantly differs, from those previously targeted by implementation of the relevant technology, in relevant geographic or 	<p>The Allowance Objective requires that projects which receive funding under the Mechanism should be innovative.</p> <p>The goal of this definition is to fund projects that materially add to our understanding of demand management and its potential for technical and/or commercial viability in supporting the operation of the transmission network.</p> <p>We consider the definition in the Mechanism strikes the right balance. It is not overly prescriptive, but directs TNSPs to use the allowance in ways that will build</p>	Stakeholders have not raised an issue.

¹¹ ENA, *Submission on AER draft transmission DMIAM*, 12 February 2021, pp. 1-2. PIAC, *Submission on AER transmission DMIAM issues paper*, 12 February 2021, pp. 1-2.

demographic characteristics that are likely to affect demand.	market/industry understanding of demand management.	
Have the potential, if proved viable, to reduce long term network costs	<p>The Allowance Objective requires that projects funded under the Mechanism have the potential to reduce long-term network costs for consumers.</p> <p>In the context of innovation, we see reducing costs in the context of that project's overall ability to contribute to developing demand management and industry knowledge, rather than a strict adherence to project benefits.</p> <p>This allows TNSPs to spend the allowance experimentally, while still directing them to implement potentially efficient solutions. Exploring this potential is vital to building market/industry understanding and commercialising solutions.</p>	Stakeholders have not raised an issue.
<p>The costs of a project or program are not eligible for recovery under the Mechanism if those costs are:</p> <ul style="list-style-type: none"> recoverable under any other jurisdictional incentive scheme, recoverable under any state or Australian Government scheme, or included in forecast capital expenditure or operating expenditure approved in the revenue determination. 	<p>The Mechanism is intended to provide funding for innovative solutions that would not otherwise be available. This aims to fund innovation, rather than allowing TNSPs to recover extra money for simply undertaking actions that are otherwise prudent and should be included in their revenue allowances. This clause aims to prevent 'double-dipping' of R&D revenue.</p> <p>This is consistent with 6A.7.6 (c)(3) of the NER, which states that the level of the allowance should provide funding that is not available from any other source, including a revenue determination.</p>	Stakeholders have not raised an issue.
DM projects that also improve wholesale market outcomes should be considered	<p>Transmission networks have considerable interactions with the wholesale market. A DM project that would improve wholesale market outcomes could be eligible for the allowance if the applicant can demonstrate that the project would lead to a reduction in long term network costs.</p>	Stakeholders have not raised an issue.
Prior public commitment to share the results, learnings and insights of the DM project.	<p>Given that these R&D works will be funded by consumers, rather than the shareholders of the businesses, we consider that the learnings and insights gained from implementing these projects should be shared upon request.</p>	Stakeholders have not raised an issue.

Source: AER analysis.

5.2 Independent endorsement of proposed demand management projects

In the draft decision, we proposed to encourage rather than mandate a project panel, because of potential disincentive effects on the use of the scheme. We stated that when reviewing a TNSP's annual compliance report, we would take into consideration

whether a particular DM project received endorsement from an independent expert panel.¹²

Submissions

In response to AER's draft DMIAM, PIAC submitted that:¹³

- it strongly supports the use of an Independent Advisory Panel with consumer or community representatives in addition to members with relevant technical knowledge.
- the panel should also be used by TNSPs to help build trust in the DMIAM more generally and should complement, but not replace, the AER's own assessment of the projects as an expert regulator.
- TNSPs should be required to form an Independent Advisory Panel to review and endorse any innovation projects under the DMIAM. Even without a formal requirement to do so, forming such a panel would be a prudent measure for TNSPs to help maximise the benefits from innovation projects and to minimise the risk that an ex-post review rejects the projects.
- it would be prudent to form a panel across multiple TNSPs as this would not only help minimise the cost to each business but also lead to a more effective panel. For instance, it would allow panel members to better compare the projects being proposed to ensure they were truly innovative and not duplicating earlier work.

AER staff held various meetings with PIAC and ENA to discuss their submissions to the draft DMIAM.¹⁴ Regarding the independent project panel, PIAC supported compulsory endorsement of a proposed DM project by the panel.

In contrast, ENA staff submitted that the formation of a panel should be discretionary for the TNSPs given the extra work required to obtain ACCC approval for setting up a joint panel. ENA staff considered that a TNSP should have the option of seeking endorsement from its Consumer Consultative Committee (CCC). After the exchange of viewpoints, ENA staff accepted that, should this approach be adopted, independent technical clearance would also be necessary in order for the CCCs to make a proper decision, given that the CCCs do not always have the technical capability to scrutinise DM projects and identify which projects are suitable to receive DMIAM funding.

Our consideration

We consider that PIAC's submission on endorsement of projects by an independent panel has merit. It will increase the transparency of how DM projects are selected and potentially increase the level of engagement by stakeholders. If TNSPs are willing to

¹² AER, *Draft decision - Demand management innovation allowance mechanism - Electricity transmission network service providers*, December 2020, pp. 22-24.

¹³ PIAC, *Submission on AER draft transmission DMIAM*, 10 February 2021, pp. 1-2.

¹⁴ AER staff held various meetings with PIAC (4 February 2021) and ENA (24 February 2021) to discuss their submissions to the draft DMIAM.

set up a joint panel, the benefits of an independent panel will most likely outweigh the cost.

However, we also consider the alternative option accepted by ENA also meets the objective of independent verification of selected DM projects. That is, the panel should be discretionary for the TNSPs and a TNSP should have the option of seeking endorsement from:

- an independent panel, or
- an independent suitably qualified and experienced electrical engineer and its Consumer Consultative Committee (CCC).

We consider that the potential disincentive effects on the use of the Scheme can be minimised through the following initiatives:

- There is a separate allowance in the DMIAM to fund these options. This means that the allowance for DM projects will not be reduced due to funds being directed towards the cost of the independent endorsement for a DM project.
- By encouraging a joint panel across multiple TNSPs, this would not only help minimise the cost to each business but would also lead to a more effective panel. As indicated by PIAC, it would allow panel members to better compare the projects being proposed to ensure they were truly innovative and not duplicating earlier work.
- Use of one of these options to endorse a DM project will reduce the TNSP's risk that a project is rejected on ex-post review. This approach will therefore address ENA's concerns about the ex-post risk of a project being rejected.

While recognising the benefits of such endorsement, we consider it appropriate to strongly encourage rather than mandate an independent endorsement. This is because making the endorsement compulsory could result in TNSPs being less inclined to undertake non-network solutions, contrary to the intent of the DMIAM. Nonetheless, significant weight will be put on the independent endorsement to decide whether or not to approve DM projects. We will also monitor the implementation of the DMIAM to decide whether to review the Scheme.

The independent members of a panel should have relevant knowledge and experience in electricity markets, networks and demand management. The independent panel should include customer/community representatives.

As noted above, TNSPs might potentially set up joint independent panels to share the cost. If there is a possibility that the way in which the joint panel will be used in practice might give rise to issues under the Competition and Consumer Act 2010 (the CCA), the CCA includes a mechanism for seeking authorisation of proposed conduct if the conduct is not likely to have an anti-competitive effect, or if the likely public benefits of the conduct outweigh any likely public detriment.

We encourage TNSPs to jointly set up project panels to undertake evaluation of potential non-network solutions relating to demand management, which would deliver benefits to consumers. The benefits of using a joint panel include but are not limited to:

- Efficiency gains and a reduction of cost. A joint panel for multiple TNSPs, instead of an individual panel for each TNSP, will reduce the total establishment and operating costs for the use of a panel. This would lead to efficiency gains and value for money for consumers.
- Less duplication of DM projects and programs. A joint panel would make it easier to identify duplication of proposed projects among the TNSPs and allow TNSPs to try different types of DM projects.
- Improved sharing of learning. TNSPs using a joint panel would normally share the project specific information including project aim, nature, scope and desired outcomes. This will also help TNSPs to share with other TNSPs the outcomes and lessons learned after the DM projects have been delivered.

A TNSP has the option of seeking endorsement of projects by its Consumer Consultative Committee (CCC). Should this approach be adopted, suitable independent technical review would also be necessary in order for the CCCs to make a proper decision, given that the CCCs do not always have the technical capability to scrutinise DM projects and identify which projects are suitable to receive DMIAM funding.

Final decision

We consider there would be benefit in a TNSP seeking independent endorsement for its proposed DM projects from:

- an independent panel, or
- an independent suitably qualified and experienced electrical engineer and its Consumer Consultative Committee (CCC), if the CCC does not include one .

TNSPs are encouraged to set up a joint independent panel to share the cost and deliver benefits to consumers. The DMIAM will strongly encourage, but will not mandate, independent endorsement of each project by an independent advisory panel or by its CCC together with an independent suitably qualified and experienced electrical engineer.

However, for each project, we will have particular regard to whether independent endorsement has been sought and received when reviewing TNSPs' annual compliance reports.

The independent endorsement should be funded within the DMIAM allowance, as discussed in section 4 above.

6 Assessment and compliance reporting

Clause 2.4 of the Mechanism specifies that, each regulatory year, a TNSP will submit a compliance report to us. This report serves two purposes: to allow us to assess compliance with the Mechanism's requirements, and to assist in socialising the knowledge gained from the research projects funded under the Mechanism. By using the report in this way, we consider that the burden on TNSPs will be reasonable.

Under the NER, any distribution DMIAM developed and applied by the AER must require DNSPs to publish reports on the nature and results of demand management projects that are the subject of the allowance.¹⁵ The same requirement applies for the transmission DMIAM.¹⁶

To give effect to this for the distribution DMIAM, the AER requires the distribution businesses to submit compliance reports to it in a form that is capable of being published by the AER – with the intention of then publishing the reports on the AER's website to 'increase the usefulness and accessibility of each project report'.¹⁷ The AEMC expects that the AER would adopt a similar approach for transmission networks.¹⁸

We concur with the AEMC's view. Accordingly, our proposed reporting framework for transmission DMIAM has been adopted from the distribution DMIAM because we consider these DMIAMs have a similar scope and framework.

6.1 Compliance reporting requirements

Our draft DMIAM for transmission proposed a reporting framework based on that in the distribution DMIAM, because we considered that these DMIAMs have a similar scope and framework.

Submissions

ENA submitted that the compliance and reporting requirements should be commensurate with the value of the scheme. ENA noted that several reports are required annually - a report on TNSP performance against allowance and project specific reports.

ENA submitted that:¹⁹

¹⁵ NER, cl. 6.6.3A.

¹⁶ NER, cl. 6A.7.6(d).

¹⁷ AER, *Demand management innovation allowance mechanism: Explanatory statement*, December 2017, p. 26.

¹⁸ AEMC, *Rule Determination, National Electricity Amendment (Demand management incentive scheme and innovation allowance for TNSPs) Rule 2019*, 5 December 2019, Footnote 119, p. 30.

¹⁹ ENA, *Submission on AER draft transmission DMIAM*, 12 February 2021, pp. 1-2.

- Given this level of reporting, the AER should also have an obligation in the DMIAM to notify the TNSP if they consider that there is any non-compliance with the project criteria.
- The AER review and approval of an allowance should occur as soon as practical after the DMIAM reports are provided to the AER.
- Clause 2.4 (2) of the scheme should be amended to ensure that the AER has determined the allowance and informed the TNSP within 2 months of the reports being provided to the AER.

Our consideration

Clause 2.3(1) of the Mechanism specifies that for each regulatory year, a TNSP will submit a compliance report to us. This report serves two purposes: to allow us to assess compliance with the Mechanism's requirements, as well as to assist in socialising the knowledge gained from the research projects funded under the Mechanism. We consider the compliance and reporting requirements are appropriate and reasonable.

Compared to the distribution DMIAM, the only additional new reporting requirements, under clause 2.3 of the Mechanism (see section 5.2 above), includes the following elements, which we do not consider onerous:

- Independent endorsement of the DM projects, if applicable
- reporting of actual expenditure on the project endorsement.

We agree that the AER review and approval of an allowance should occur as soon as practical after the DMIAM reports are provided to the AER. However, we do not consider it practical for the AER to determine the allowance and inform the TNSP within 2 months of the reports being provided to the AER. This is because, from our most recent experience of the distribution DMIAM, some projects are “marginal” in terms of whether they meet the approval criteria. Accordingly, the assessment could take more time to complete.

Final decision

We maintain our decision as set out in the compliance reporting requirement in sections 6.1.1 and 6.1.2 below and 2.3 of the Mechanism.

6.1.1 The overall report

Clause 2.3(3) of the Mechanism sets out the requirements for compliance reporting. Project or program specific reports for each project claimed under the Mechanism are required. The report for each project must be capable of being published separately such that the information within the report is self-contained. The Compliance reporting requirements also require that the TNSPs submit an overall report containing:

- The total amount of the allowance spent;
- A list and description of each eligible project on which the allowance was spent;

- Evidence of any independent assessment of each demand management project.
- A summarised explanation of each demand management project which the TNSP funded under the Mechanism, demonstrating and justifying the project's compliance against the project criteria.
- Where a demand management project or program has extended across more than one regulatory year of the regulatory control period, details of the actual expenditure on each such project or program in each regulatory year of the regulatory control period to date.
- The name and qualifications of each independent assessor, where used, and a statutory declaration certifying their independence.
- The amount of the allowance spent on the independent assessment(s), where applicable.
- A statutory declaration signed by an officer of the TNSP delegated by the chief executive officer, certifying that the costs being claimed for each demand management project:
 - have been incurred as reported;
 - are not recoverable under any other jurisdictional incentive scheme;
 - are not recoverable under any state or Australian Government scheme; and
 - are not included in forecast capital expenditure or operating expenditure approved in our revenue determination for the regulatory control period under which the Mechanism applies, or under any other incentive scheme in that revenue determination.

These requirements allow us to assess individual project eligibility, as well as the overall spending pattern of the allowance. This information will assist us in determining how much of the allowance has been spent, what projects it has been spent on, and how TNSPs justify that expense with regard to the Allowance Objective. The expenditure information is required to be provided on a number of levels. The expenditure information must be given for each project on an annual basis. A breakdown of the cumulative expenditure on the project should also form part of the report. This information, considered together, will allow us to track the amount of the allowance TNSPs are spending. We can then quickly gain a broad outline of the projects a TNSP is undertaking.

The statutory declaration aims to give effect to clause 6A.7.6(c)(3)(ii) of the NER, which aims to prevent TNSPs from 'double dipping' and receiving payment for the project costs twice. These requirements also aim to reserve the allowance for projects that are innovative, and not simply otherwise efficient projects for which the TNSP should have made provision in the expenditure forecasts in their revenue proposal.

In addition, to the extent that the TNSPs' compliance reporting requirements can be met more effectively and economically with or through other parties, TNSPs can do so through another party. This will prevent the Mechanism from restricting TNSPs from creating their compliance reports with another party. This is intended to provide further

clarification that TNSPs can cross-collaborate on projects, which is a goal that various stakeholders have supported.

When reviewing TNSPs' annual compliance reports, we will have particular regard to whether independent endorsement has been sought and received.

6.1.2 Project specific reports

The overall report must include project specific reports. The subordinate clauses to subclause 2.3(3)(d) of the Mechanism set out the requirements for these project specific reports.

TNSPs will provide us with an overview of the project, setting out:

- The project's nature and scope
- The project's aims and expectations
- How the project meets the project criteria
- The TNSP's implementation approach for the project
- The TNSP's outcome measurement and evaluation approach for the project
- The project costs incurred that year, as well as to date. This should also include costs the TNSP expects to incur over the project duration.
- For ongoing eligible projects, a summary of project activity to date, an update of any material changes to the project in that regulatory year, and reporting of collected results (where available).
- For eligible projects completed that regulatory year, the quantitative results and an analysis of the results. The report should also describe how the results of the eligible project will inform future demand management projects. We have done this by requiring TNSPs to report on what demand management projects or techniques, and/or under what circumstances such projects or techniques, are unlikely to form technically or economically viable non-network options.
- Any other information that an informed observer would require to understand, evaluate and potentially reproduce the approach used. This catch all requirement cements the Mechanism's focus on third party consideration.

As well as helping us assess individual project compliance, these reporting requirements should provide specific benefits by increasing TNSPs' and other market participants' understanding of the potential applications for demand management. We have chosen to require individual reports for each project to help standardise the quality and presentation of these reports. These requirements should shift the focus of reporting towards the socialisation of knowledge gained from projects to better serve the Allowance Objective.

6.2 Treatment of confidential information

As we have not received a submission on this matter, we confirm we maintain our position stated in the draft decision, that:

Information provided under the compliance reporting requirements may include confidential third party information.

If a TNSP wishes to redact such information from their report, they must provide two copies of the report to us, one unredacted and one suitable for publication. The unredacted version is required for us to assess compliance and the merits of the confidentiality claim. A statement setting out the reasoning for the confidentiality claim must accompany the report. TNSPs must provide versions of the overall report and the project specific reports that are suitable for both compliance assessment and publication.

The TNSP cannot fully redact the project's aim, methods, implementation, results, analysis and implications. These must be available via the report in a form that provides a reasonable level of information to the industry to enable further development and innovation.

These procedures will encourage TNSPs to be candid where they can be in reports, while protecting the information of third parties where appropriate, so that stakeholders can easily access information regarding projects funded under the Mechanism.

6.3 AER use of compliance reports

In the first instance, the information provided in a TNSP's annual overall report will form the basis, together with associated individual project or program reports, for our assessment of the TNSP's compliance with the project criteria, and its entitlement to recover expenditure under the Mechanism. Under the Mechanism, we will conduct ex-post reviews of projects to determine their compliance with the project criteria. These compliance-based uses for the report are vital to the ongoing integrity of the Mechanism.

Beyond these compliance uses, this information will assist us in making informed improvements in potential revision/s of the Mechanism.

Further, we will compile a report comparing the performance of all TNSPs, both in terms of compliance and efficacy. We consider that this report will serve as a helpful resource for the market to understand the development of innovative demand management practices. It will also allow the market to understand which TNSPs are performing well and are active in this space. Over the long term, we hope that this will encourage a culture of innovation in the market. We will also use this report to gain an understanding of the overall direction of demand management in electricity networks.

Finally, we will publish project specific reports separately on our website or on an online portal. These publications will allow detailed technical information to be easily accessed by businesses and other interested parties so they can fully understand the testing procedure for a given project.

6.4 Transferrable learning outcomes

For the draft DMIAM, we considered that the learnings and insights gained from implementing DM projects under the DMIAM should be shared with other TNSPs and the public upon request.

Submissions

ENA submitted that clause 2.6 of DMIAM should be amended to limit it to reasonable requests and must also be subject to a confidentiality agreement with the service provider. ENA submitted that:

- As currently drafted, the additional information could cover anything the requesting party wants.
- ENA note that, since learnings and insights for each project will already be publicly reported and available on the AER's website, this should be the first avenue for seeking information on, and understanding of, the project.

Our consideration

TNSPs should share their knowledge and understanding of innovative demand management projects that have the potential to reduce long term network costs, and therefore prices for consumers. Given that these R&D works will be funded by consumers, rather than the shareholders of the business, we consider that the learnings and insights gained from implementing these projects should be shared with other TNSPs and the public.

Under the draft and final DMIAM:

- the information that TNSPs must make available to third parties on request is limited to information about the results of the project, and is therefore considerably narrower than the ENA asserts. It is not intended to cover, for example, information about the terms on which third party contractors are engaged to provide goods or services as part of implementing the project, though it would include information about the conclusions reached by the TNSP about whether the particular demand management solution is commercially viable. In our view, the DMIAM as currently drafted already sets reasonable and appropriate limits on the scope of third party requests.
- provision of information by the TNSPs to the AER is subject to the AER's Confidentiality Guideline. However, the provision of information by TNSPs to third parties is not currently subject to that guideline. The AER's Confidentiality Guideline recognises various categories of confidential information, including: information affecting the security of the TNSP's network or its ability to operate its network; market sensitive cost inputs; information which may provide an advantage to a TNSP's competitors for non-regulated or contestable activities; and personal information.

We consider that the limited nature of the information that TNSPs would be required to provide under the DMIAM (see above) means that it is hard to see how that information would be confidential (under the AER's confidentiality guideline).

Nevertheless, to give TNSPs visibility of the way in which the results of the project are being shared within the industry, the final DMIAM also includes additional description to make it clear that a TNSP is able to require a third party recipient to maintain the confidentiality of any confidential information. Any information over which a DNSP imposes such a requirement must be included in the DNSP's annual compliance report. All the actual information must be included – not merely a summary or description of the information. The DNSP must also identify the person or persons on whom the requirement has been imposed.

We do not consider it reasonable that TNSPs should be able to require third parties to enter into confidentiality agreements as a condition of receiving the information, as there is potential for such a requirement to be used by TNSPs as a reason for delaying or denying access (such as by insisting on the inclusion of onerous terms in such agreements). Accordingly, the additional wording that has been included in the final DMIAM is only intended to allow TNSPs to make it clear to third parties that the information is being provided to them in confidence, rather than on any other particular terms or conditions.

Final decision

We maintain our decision as set out in 2.3, 2.4 and 2.6 of the Mechanism.

Our view is that the learnings and insights gained from implementing these projects should be shared with other TNSPs, and the public, upon request. To this end, the final DMIAM includes:

- an additional criterion that must be satisfied in order for a project to be an eligible project – namely, that the TNSP must give a prior public commitment to share the results, learnings and insights of the project, and to minimise confidentiality claims over that information as far as possible.
- a mechanism to enable the recovery of funding from TNSPs if that commitment is not honoured. This is necessary because a TNSP's failure to comply with a sharing request may occur after the AER has approved the DMIAM allowance for that project in a previous regulatory year.
- The mechanism will be applicable to a project until two years after the project's completion, in order to allow additional time for other interest parties to request the final results, learnings and insights of the trial.

In certain circumstances (for example, where a TNSP has not commenced any eligible projects in a year in which it fails to comply with a sharing request) the mechanism may result in the amount recoverable by the TNSP for that year being negative. This removes any incentive for the TNSP to scale back its future deployment of DMIAM projects in order to avoid needing to share information about projects that have already commenced.

We also include an additional provision in the DMIAM to make it clear that a TNSP is able to require a third party recipient to keep information confidential.

7 Application of carryover

Clause 2.5 of the Mechanism describes the process for passing on any underspend of the allowance. Under the Mechanism, TNSPs will bear any overspends of the allowance. So that there is no double-dipping in respect of jointly funded projects, the final version of the Mechanism includes a provision for calculating underspends. It states that we will not treat as a cost to the consumer any amount provided to the TNSP by another TNSP, or by a third party for the purposes of implementing a jointly funded project.

The carryover process aims to make TNSPs neutral towards the expenditure profile they take under the Mechanism over the regulatory control period. It entails a revenue adjustment, which is calculated so that the TNSP is indifferent in net present value (NPV) terms to the expenditure profile it selects over the regulatory control period. This removes any incentive for the TNSP to defer or advance expenditure.

The formula we have adopted for calculating the carryover is the same as in the current distribution DMIAM. We have also updated this formula to account for the annual updating of the allowed rate of return. This formula involves calculating the total allowance spent in a regulatory control period in the last year of that period, and returning any underspend of the allowance to consumers via a negative pass through in the second year of the next regulatory control period. This formula, as presented in equation 2, captures the time value of money in this calculation.

Equation 2: Carryover amount, C for subsequent regulatory control period

$$C = - \left[\sum_{t=1}^N \frac{R_t - A_t}{(1 + r_t)^t} \right] \times \prod_{t=1}^{N+2} (1 + r_t)^t$$

Where:

- C is the total carry over amount.
- t is a regulatory year, which can take the value of integers between 1 and N+2, where N is the number of regulatory years in the TNSP's regulatory control period for which the carryover is being calculated.
- R_t is the ex-ante allowance under the Mechanism for regulatory year, t .
- A_t is the expenditure approved ex-post under the Mechanism for regulatory year, t .
- r_t is the allowed rate of return in regulatory year, t . In equation 1, t can take the value of 1 to N+2, with 1 referring to the first regulatory year of the regulatory control period in which the expenditure was incurred, and N+2 referring to the second regulatory year of the subsequent regulatory control period.

In equation 2, $R_t - A_t$ represents the difference between the allowance approved and the allowance spent (the underspend) in regulatory year t . Dividing this by $(1 + r_t)^t$ adjusts this underspend for the time value of money, using the TNSP's allowed rate of

return for regulatory year t . The sigma notation prompts us to do this for each of the five years of a regulatory control period, and to sum these amounts.

This sum total, shown in equation 3, is then presented as a negative amount to be carried over. Since we provide a TNSP with its allowance ex-ante, we must subtract its allowance underspends from its total revenue as a negative pass through.

Equation 3: Part 1 of the carryover amount calculation

$$-\left[\sum_{t=1}^N \frac{R_t - A_t}{(1 + r_t)^t} \right]$$

The ultimate outcome of this step is an expression of the difference between the amount spent and the approved allowance. This is presented as a present value at $t = 0$, using the TNSP's allowed rate of return as the discount factor.

Table 3 and table 4 provide two worked examples of how we would apply part 1 of the carryover amount calculation, shown in equation 3. In these examples, we have:

- For simplicity, assumed a constant annual allowance of \$1.4 million in nominal terms, which could reflect an allowance for a large TNSP under the Mechanism;
- Assumed an allowed rate of return of 6.5% for each year of the regulatory control period. We consider this could reflect a nominal allowed rate of return that a TNSP might receive. Since the cash flows in this example are in nominal terms, we are applying a nominal rate of return as the discount factor. If cash flows were in real terms, a TNSP would apply a real rate of return as a discount factor; and
- Rounded figures to increase the readability of the table.

Table 3 shows the first worked example. In year one of this worked example, the TNSP underspends the allowance by \$400,000. The present value of these costs in year one is \$376,000. As there is no further under or overspending of the allowance, the total spend differential is \$376,000.

Table 3: Example 1 —First year underspend (\$'000)

Year	1	2	3	4	5	Total
Nominal allowance approved (Rt) (a)	1,400	1,400	1,400	1,400	1,400	7,000
Nominal allowance Spent (At) (b)	1,000	1,400	1,400	1,400	1,400	6,000
Nominal Differential (c)	400	\$0	\$0	\$0	\$0	400
PV of underspend (t=0 end) (d)	376	0	0	0	0	376
Cumulative NPV of underspend (t=0 end) (e)	376	376	376	376	376	376

Notes:

- (a): This row represents the real value of the DMIAM allowance for each year, using the annual CPI.
 (b): This row sets out the actual annual expenditure approved by the AER in its annual assessments.

- (c): This row sets out the difference between the ex ante allowance and ex post expenditure.
- (d): Using the annual weighted average cost of capital (WACC), this row calculates the net present value (NPV) of under/over expenditure in each year.
- (e): This row converts the value in row (d) to dollar value when the carryover amount will be passed back to consumers, using the annual WACC. Using the formula specified in the DMIAM, this row calculates the “cumulative carryover balance” for each year of the regulatory control period. The amount in the final year will be deducted from the TNSP’s revenues of true up year.

Table 4 shows a second worked example. In this example, the TNSP again underspends the allowance in year one, but also overspends in year three. Both times the TNSP deviates from the allowance by \$400,000. However, as we adjust for the time value of money, the earlier underspend had a higher present value. Given this, the TNSP would have still underspent overall. We would therefore subtract this underspend from the TNSP’s total revenue as a negative pass through.

Table 4: Example 2 — First year underspend, third year overspend (\$’000)

Year	1	2	3	4	5	Total
Nominal allowance approved (Rt) (a)	1,400	1,400	1,400	1,400	1,400	7,000
Nominal allowance Spent (At) (b)	1,000	1,400	1,800	1,400	1,400	7,000
Nominal Differential (c)	400	0	- 400	0	0	0
PV of over/ underspend (t=0 end) (d)	376	0	- 331	0	0	45
Cumulative NPV of over/underspend (t=0 end) (e)	376	376	45	45	45	45

Notes:

- (a): This row represents the real value of the DMIAM allowance for each year, using the annual CPI.
- (b): This row sets out the actual annual expenditure approved by the AER in its annual assessments.
- (c): This row sets out the difference between the ex ante allowance and ex post expenditure.
- (d): Using the annual weighted average cost of capital (WACC), this row calculates the net present value (NPV) of under/over expenditure in each year.
- (e): This row converts the value in row (d) to dollar value when the carryover amount will be passed back to consumers, using the annual WACC. Using the formula specified in the DMIAM, this row calculates the “cumulative carryover balance” for each year of the regulatory control period. The amount in the final year will be deducted from the TNSP’s revenues of true up year.

The total cumulative underspends in table 3 and table 4 represent the value inside the bracket of equation 3. To calculate the total carryover amount, we would also need to apply the second part of equation 2, as replicated in equation 4 below.

Equation 4: Part 2 of the carryover amount calculation

$$\times \prod_{t=1}^{N+2} (1 + r_t)^t$$

The step in equation 4 entails taking the overall adjusted underspend (which is a present value at $t = 0$), and converting it to a present value at $t = N + 2$. This reflects the year that the underspend is passed through — which is the second year of the subsequent regulatory control period. This means the carryover reflects the true value of the underspent money to the TNSP, as we have now accounted for the entire time that the underspend has been retained.

The aim of this step is to pass through an amount that reflects the benefits of underspending the allowance in the previous regulatory control period. We consider this is an equitable means of reflecting the value gained from underspending the allowance in each year of the regulatory control period.

The calculation below shows the complete application of equation 2 to the previous example 1. We have used the same assumptions as previously, but have also added the assumption that the allowed rate of return for the first two years of the second regulatory control period is 7.0%. We have taken the figure, -\$376,000 from the calculation in table 3.

$$C = - \left[\sum_{t=1}^{N+2} \frac{R_t - A_t}{(1 + r_t)^t} \right] \times \prod_{t=1}^{N+2} (1 + r_t)^t$$

$$C = -\$376,000 \times [1.065 \times 1.065 \times 1.065 \times 1.065 \times 1.065 \times 1.07 \times 1.07]$$

$$C = -\$376,000 \times [(1.065)^5(1.07)^2]$$

$$C = -\$589,798$$

Using the same assumptions, we apply equation 2 to the previous example 2. In this application, we have taken the figure, -\$45,000 from the calculation in table 4.

$$C = -\$45,000 \times [1.065 \times 1.065 \times 1.065 \times 1.065 \times 1.065 \times 1.07 \times 1.07]$$

$$C = -\$45,000 \times [(1.065)^5(1.07)^2]$$

$$C = -\$70,588$$

Under each of these applications of equation 2, the TNSP returns the full value of its underspend to consumers and the NPV of the total underspend becomes zero. This is because we have specifically designed equation 2 to be revenue-neutral.

Table 5 shows a third worked example. In this example, the TNSP has underspent its first year allowance, before overspending its third year allowance by \$700,000. This results in an overspend of the total allowance allotted in the regulatory control period by \$300,000 in nominal terms and \$196,000 when adjusted for the time value of money.

Table 5: Example 3 — Allowance overspend (\$'000)

Year	1	2	3	4	5	Total
Nominal allowance approved (Rt) (1,400	1,400	1,400	1,400	1,400	7,000
Nominal allowance Spent (At)	1,000	1,400	2,100	1,400	1,400	7,300
Nominal Differential	400	0	- 700	0	0	- 300
PV of over/ underspend (t=0 end)	376	0	- 571	0	0	- 196
Cumulative NPV of over/underspend (t=0 end)	376	376	- 196	- 196	- 196	- 196

Notes:

- (a): This row represents the real value of the DMIAM allowance for each year, using the annual CPI.
- (b): This row sets out the actual annual expenditure approved by the AER in its annual assessments.
- (c): This row sets out the difference between the ex ante allowance and ex post expenditure.
- (d): Using the annual weighted average cost of capital (WACC), this row calculates the net present value (NPV) of under/over expenditure in each year.
- (e): Using the formula specified in the DMIAM, this row calculates the “cumulative carryover balance” for each year of the regulatory control period.

Unlike in the first two examples, this overspend will not result in a pass through to customers. This is because, under the Mechanism, TNSPs have to return allowance underspends to consumers, but have to bear the cost of overspends.

A Summary of submissions and our response on the issues

A.1 Application of the DMIAM

Proposed position	Submissions	Our response
Allowance cap = \$200,000 + 0.1% × MAR	ENA submitted that clarification is required in the final DMIAM regarding the CPI indexation of the \$200,000 base allowance.	We have made it clear in the final DMIAM that \$200,000 is provided for the cost of independent endorsement for DM projects, as at 30 June 2021, adjusted by the AER for inflation using CPI.

A.2 Identifying eligible projects

Proposed position	Submissions	Our response
Definition of demand management	ENA supported a broader demand management definition adopted in the draft DMIAM.	We have maintained our draft decision to adopt the distribution DMIAM definition in the final DMIAM.

A.3 Compliance reporting and independent endorsement for proposed projects

Proposed position	Submissions	Our response
Proposal for an independent endorsement of any proposed DM projects	PIAC submitted that: ²⁰ <ul style="list-style-type: none">It strongly supports the use of an Independent Advisory Panel with consumer or community representatives in addition to members with	We consider it appropriate to strongly encourage, but not to mandate, an independent endorsement for proposed DM projects from either a project panel or from the TNSP's Consumer Consultative Committee and independent suitably qualified

²⁰ PIAC, *Submission on AER draft transmission DMIAM*, 10 February 2021, pp. 1-2.

relevant technical knowledge.

- The panel should also be used by TNSPs to help build trust in the DMIAM more generally and should complement, but not replace, the AER's own assessment of the projects as an expert regulator.
- TNSPs should be required to form an Independent Advisory Panel to review and endorse any innovation projects under the DMIAM. Even without a formal requirement to do so, forming such a panel would be a prudent measure for TNSPs to help maximise the benefits from innovation projects and to minimise the risk that an ex-post review rejects the projects.
- It would be prudent to form a panel across multiple TNSPs as this would not only help minimise the cost to each business but also lead to a more effective panel. For instance, it would allow panel members to better compare the projects being proposed to ensure they were truly innovative and not duplicating earlier work.

ENA submitted that the panel should be discretionary for the TNSPs given the extra work required for ACCC approval to set up a joint panel. ENA staff considered that a TNSP should have the option of seeking

and experienced electrical engineer (if the CCC does not include one). We have amended the DMIAM to include a commitment that the AER will have particular regard, in its ex post consideration of the project, to whether any independent endorsement has been sought and received.

The independent members of a panel should have relevant knowledge and experience in electricity markets, networks and demand management. The independent panel should also include customer/community representatives.

TNSPs might potentially set up joint independent panels to share the cost.

	<p>endorsement from its Consumer Consultative Committee (CCC) with an independent reputable engineer.</p>	
<p>Information and reporting requirements</p>	<p>ENA submitted that the compliance and reporting requirements should be commensurate with the value of the Scheme. ENA noted that several reports are required annually - a report on TNSP performance against allowance and project specific reports. ENA submitted that:</p> <ul style="list-style-type: none"> • Given this level of reporting, the AER should also have an obligation in the final DMIAM to notify the TNSP if they consider that there is any non-compliance with the project criteria. • The AER review and approval of an allowance should occur as soon as practical after the DMIAM reports are provided to the AER. • Clause 2.4(2) of the scheme should be amended to ensure that the AER has determined the allowance and informed the TNSP within 2 months of the reports being provided to the AER. 	<p>We have maintained our draft decision on the proposed information and reporting requirements, as we consider the compliance and reporting requirements are appropriate and reasonable. This is because the majority of the reporting obligations have been adopted from the distribution DMIAM, and that stakeholders have not raised any issues with respect to the proposed reporting obligations. The only additional new reporting requirements, under clause 2.3 of the Mechanism (see section 5.2 above), include the following elements, which we do not consider onerous.</p>
<p>Project elements in compliance reporting and sharing of learning</p>	<p>ENA submitted that clause 2.6 of DMIAM should be amended to limit it to reasonable requests and must also be subject to a confidentiality agreement</p>	<p>We have included some additional wording in this Explanatory Statement about exactly what we mean by the “results” of the project.</p>

with the service providers.
ENA submitted that:

- As currently drafted the additional information could cover anything the requesting party wants.
- ENA note that learnings and insights for each project will already be publicly reported and available on the AER's website, this should be the first avenue to seek information on and understand the project

We have included additional wording in the final DMIAM to make it clear that a TNSP is able to require a third party recipient to keep confidential information confidential.