

Demand Management Innovation Allowance Mechanism

Electricity transmission network service providers

May 2021



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Contents

1	Nature and authority4	-
	1.1 Introduction4	
	1.2 Authority4	
	1.3 NER requirements4	
	1.4 AER Objectives	•
	1.5 Confidentiality5	;
	1.6 Definitions and interpretation5	•
	1.7 Processes for revision	;
	1.8 Version history and effective date5	;
2	The demand management innovation allowance mechanism6)
	2.1 Application of the mechanism	,
	2.2 Identifying eligible projects9)
	2.3 Compliance reporting10)
	2.4 AER review and determination12	
	2.5 Application of carryover13)
	2.6 Transferrable outcomes14	ŀ
3	Glossary15	;

1 Nature and authority

1.1 Introduction

(1) In accordance with the requirements of clause 6A.7.6 of the **NER**, this publication sets out the **AER's demand management innovation allowance mechanism** for **transmission network service providers**.

1.2 Authority

(1) Clause 6A.7.6 of the **NER** requires the **AER** to develop the **mechanism** in accordance with the **transmission consultation procedures**.

1.3 NER requirements

- (1) Clause 6A.7.6 of the **NER** requires the **AER** develop a **mechanism** consistent with the **demand management innovation allowance objective**.
- (2) The demand management innovation allowance objective 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 (the allowance objective).
- (3) In developing, and applying, any **mechanism**, the **AER** must take into account the following:
 - (a) the **mechanism** should be applied in a manner that contributes to the achievement of the **allowance objective**;
 - (b) demand management projects should have the potential to deliver ongoing reductions in demand, and be innovative and not otherwise efficient and prudent non-network options that a transmission network service provider should have provided in its revenue proposal;
 - (c) the level of allowance;
 - should be reasonable, considering the long term benefits to retail customers;
 - ii) should only provide funding that is not available from another source, including under a relevant **revenue determination**; and
 - iii) may vary by transmission network service provider and over time;
 - (d) the allowance may fund **demand management** projects which occur over a period longer than a **regulatory control period**.
- (4) Any mechanism developed and applied by the AER must require transmission network service providers to publish and report on the nature and results of demand management projects that are the subject of this allowance.
- (5) The **AER**:
 - (a) must develop and publish the mechanism; and

(b) may, from time to time, amend or replace the **mechanism** developed and published under clause 6A.7.6 of the **NER**,

in accordance with the transmission consultation procedures.

1.4 AER Objectives

- (1) The AER's objectives for this mechanism are that it:
 - (a) contributes to the achievement of the **NEO**.
 - (b) is consistent with the principles in clause 6A.7.6 of the **NER**.

1.5 Confidentiality

(1) The AER's obligations regarding confidentiality and the disclosure of information provided to it by a transmission network service provider are governed by the Competition and Consumer Act 2010, the National Electricity Law and the NER including the confidentiality guidelines. The confidentiality guidelines are binding on the AER and each transmission network service provider.

1.6 Definitions and interpretation

- (1) In this **mechanism**, the words and phrases presented in bold have the meaning given to them in:
 - (a) the glossary, or
 - (b) if not defined in the glossary, the **NER**.
- (2) Any example, figure or explanatory box in this **mechanism** is for guidance only.

1.7 Processes for revision

(1) The **AER** may amend or replace this **mechanism** from time to time in accordance with clause 6A.7.6 of the **NER** and the **transmission consultation procedures**.

1.8 Version history and effective date

(1) A version number and an effective date of issue will identify every version of this **mechanism**.

2 The demand management innovation allowance mechanism

- (1) This mechanism provides a transmission network service provider with an exante allowance in the form of a fixed amount of additional revenue at the commencement of the regulatory control period.
- (2) In the second regulatory year of the subsequent regulatory control period, when the transmission network service provider's expenditure under this mechanism for the regulatory years of the preceding regulatory control period is known, a single adjustment will be made to recover the amount of any underspend, and of any unapproved expenditure, from the transmission network service provider.

Note: The purpose of this clause is to return unspent funding to network users.

- (3) When a transmission network service provider receives funding under this mechanism, it must submit annual reports on its activities, expenditures, projects and programs undertaken in a regulatory year to the AER for publication in accordance with the compliance requirements set out in clause 2.3.
- (4) The **AER** will consider the **mechanism's** outcomes through an annual review process.
- (5) The steps involved in the operation of this **mechanism** are as follows:
 - (a) The **AER** will determine how this **mechanism** will apply to a **transmission network service provider**, including the cap on the allowance available under this **mechanism**, in accordance with clause 2.1.
 - (b) The transmission network service provider must identify eligible projects against the AER's project criteria in accordance with clause 2.2, and must implement these projects.
 - (c) The **transmission network service provider** must submit annual **compliance reports** in accordance with clause 2.3.
 - (d) The **AER** will calculate, determine, and apply any carryover amount in accordance with clauses 2.4 and 2.5.

Figure 1: Outline of mechanism operation

Application of the mechanism

AER's revenue determination specifies how the mechanism applies to a transmission network service provider (TNSP) for the regulatory control period. AER sets the allowance cap.



Project eligibility

A TNSP identifies research and development projects in demand management that comply with the project criteria.



Compliance reporting

TNSPs report on previous regulatory year, including expenditure on demand management research and development and indepedent assessment if applicable, expected outputs of current projects and outputs of completed projects.



AER use of compliance report

AER approves expenditure and publishes project-specific reports.



Application of carryover amount

AER determines and applies any carryover amount from underspending the allowance as a deduction from the TNSP's revenue requirement in the subsequent regulatory control period.

2.1 Application of the mechanism

- (1) The AER will determine how this mechanism will apply to a transmission network service provider for a regulatory control period through the following process:
 - (a) The AER's framework and approach paper for a transmission network service provider will set out whether the AER intends to apply this mechanism to that transmission network service provider's forthcoming revenue determination under clause 6A.10.1A(b)(7) of the NER.
 - (b) A transmission network service provider's revenue proposal must:
 - i) Include a description, including relevant explanatory material, of how it proposes this mechanism should apply for the relevant regulatory control period; and

- Detail how its proposed approach would satisfy the requirements of the National Electricity Law and NER.
- (c) The AER's revenue determination for the transmission network service provider will set out how this mechanism is to apply to the transmission network service provider in the relevant regulatory control period under clause 6A.14.1 (5A) of the NER.
- (2) Without otherwise limiting clause 2.1(1)(c), the **AER** must apply this **mechanism** to the **transmission network service provider** in a revenue determination in the following manner:
 - (a) The **AER** must calculate and determine the maximum amount of the allowance under this **mechanism** for the **regulatory control period**. This amount must be calculated and determined for the **regulatory control period** as the sum of:
 - i. \$200,000 for the costs of independent assessment as at 30 June 2021, 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
 - ii. 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.
 - (b) The AER must set out, in the revenue determination, how the carryover of any underspend of the allowance under this mechanism will be applied in accordance with clause 2.5.

Example 1:

Assume a **regulatory control period** commences 1 July 2022. Assume **CPI** was 2.5% in **regulatory year** 2021/22. At the start of the **regulatory control period**, the base component would be $$205,000 = $200,000 \times 1.025$.

Assume for simplicity that 0.1% of a **transmission network service provider's** total **ABBRR** is \$5 million (when converted to real dollars at the start of the **regulatory control period**), over the **regulatory control period**, as determined under subclause 2.1(2)(a)(ii) of this **mechanism**. Given this, the **AER** would determine a total allowance for the **TNSP** of \$5.205 million in real dollars at the start of the **regulatory control period** (being the sum of \$5 million and \$205,000).

The amount spent under this **mechanism** in any one **regulatory year** is at the **TNSP's** discretion. However, the total amount recoverable over the **regulatory control period** cannot exceed \$5.205 million in real dollars at the start of the **regulatory control period**. The **TNSP** would have the flexibility to select an ex-post expenditure profile that suits its circumstances, subject to remaining within the approved cap for the whole of the **regulatory control period**.

2.2 Identifying eligible projects

(1) An **eligible project** is a project that is eligible to receive funding under this **mechanism**. To be an **eligible project**, a project must satisfy the **project criteria**.

2.2.1 Project criteria

- (1) To be an eligible project, a project or program must:
 - (a) be a project or program for researching, developing or implementing **demand management** capability or capacity;
 - (b) be innovative, in that the project or program:
 - i) is based on new or original concepts; or
 - ii) involves technology or techniques or concepts that differ from those previously implemented or used in the **relevant market**; or
 - iii) is focused on customers in a market segment that significantly differs from those previously targeted by implementations of the relevant technology, in relevant geographic or demographic characteristics that are likely to affect demand; and
 - (c) have the potential, if proved viable, to reduce long term network costs (including, for example, by improving wholesale market outcomes).
 - (d) be the subject of a public commitment, given by the TNSP before the project or program commences, to share information about the results of the project or program (including the learnings and insights that have been gained from implementing the project or program) where requested to do so by any person, and to minimise confidentiality claims over that information as far as possible.
- (2) A TNSP's costs of a project or program are not eligible for recovery under the mechanism if those costs are:
 - i) recoverable under any other jurisdictional incentive scheme;
 - ii) recoverable under any state or Australian Government scheme; or
 - iii) otherwise included in forecast capital expenditure or operating expenditure approved in the **TNSP's** distribution determination.
- (3) A TNSP's costs of a project or program are only eligible for recovery under the mechanism if those costs are
 - (a) operating expenditure costs; or
 - (b) the prudent and efficient costs of obtaining endorsement of a project from an **independent assessment** in accordance with clause 2.2.2(1).
- (4) For avoidance of doubt, the **mechanism** does not require a **TNSP**'s **eligible project** to be geographically constrained to its **transmission network**.

2.2.2 Independent assessment for proposed project or program

- (1) A **TNSP** may seek and obtain a written **independent assessment** that a proposed project or program meets the criteria set out in clauses 2.2.1(1)(a) to (c).
- (2) Any **independent assessment** must be provided by either:
 - (a) an independent panel established by one or more **TNSPs**, for the purposes of this mechanism, that should include:
 - (i) one or more representatives who have relevant knowledge and experience in electricity markets, networks and demand management; and
 - (ii) one or more customer or community representatives; or
 - (b) the **TNSP's consumer consultative committee** and a suitably qualified and experienced electrical engineer.
 - Note: if the consumer consultative committee of the TNSP has a qualified and suitable engineering expert, there is no need for further independent engineer review.
- (3) The persons providing an independent assessment (including, in the case of the TNSP's consumer consultative committee, all the members of that committee) must not include any person who is, or who has been in the 24 months prior to their appointment, a director, employee, contractor or consultant of the TNSP or any related body corporate.
- (4) The TNSP's expenditure on the costs of independent assessment during a regulatory control period must not exceed the amount specified in clause 2.1(2)(a)i.

2.3 Compliance reporting

- (1) For each regulatory year, a TNSP must submit a compliance report to the AER no later than 4 months after the end of the regulatory year to which the compliance report relates.
- (2) The **TNSP** must submit each **compliance report** in a form suitable for publication.
- (3) Each **compliance report** must include, for the **regulatory year** to which the **compliance report** relates:
 - (a) evidence of any independent assessment of each eligible project;
 - (b) for each independent assessment, the name and qualifications of each assessor, and certification (in the form of a statutory declaration signed by an officer of the TNSP delegated by the chief executive officer of the TNSP) that each assessor meets the requirement in clause 2.2.2(3);
 - (c) the amount of the allowance spent on the **eligible project** by the **TNSP**;
 - (d) the amount of the allowance spent on each **independent assessment** by the TNSP:

- (e) a list and description of each **eligible project** on which the allowance was spent; and
- (f) a summary of how and why each **eligible project** complies with the **project criteria**.
- (g) For each eligible project on which the allowance was spent, and in a form that is capable of being published separately for each individual eligible project, a project specific report that identifies and describes:
 - The nature and scope of the eligible project;
 - ii) The aims and expectations of the eligible project;
 - iii) How and why the eligible project complies with the project criteria;
 - iv) The TNSP's implementation approach for the eligible project;
 - v) The **TNSP's** outcome measurement and evaluation approach for the **eligible project**;
 - vi) The costs of the eligible project:
 - 1. incurred by the TNSP to date as at the end of that regulatory year;
 - 2. incurred by the TNSP in that regulatory year; and
 - 3. expected to be incurred by the **TNSP** in total over the duration of the **eligible project**.

vii) For ongoing eligible projects:

- 1. a summary of project activity to date;
- an update of any material changes to the project in that regulatory year; and
- 3. reporting of collected results (where available).

viii) for eligible projects completed in that regulatory year:

- 1. reporting of the quantitative results of the project;
- 2. an analysis of the results; and
- a description of how the results of the eligible project will inform future demand management projects, including any lessons learnt about what demand management projects or techniques (either generally or in specific circumstances) are unlikely to form technically or economically viable non-network options.
- ix) any other information required to enable an informed reader to understand, evaluate, and potentially reproduce the **demand management** approach and the **demand management** benefits of the **eligible project**.
- (h) Where an eligible project 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.

- (i) A statutory declaration signed by an officer of the TNSP delegated by the chief executive officer of the TNSP, certifying that the costs being claimed for each demand management project:
 - i) have in fact been incurred as set out in the compliance report;
 - ii) are not recoverable under any other jurisdictional incentive scheme;
 - iii) are not recoverable under any state or Australian Government scheme; and
 - iv) are not otherwise included in forecast capital expenditure or operating expenditure approved in the **AER's** revenue determination for the **regulatory control period** under which the **mechanism** applies, or under any other incentive scheme in that revenue determination.
- (j) any information that is subject to confidentiality requirements established by the TNSP under clause 2.6, and information identifying the persons to whom those requirements apply.
- (4) The confidentiality guidelines apply to the information contained in compliance reports. If the TNSP's compliance report contains confidential information, the TNSP must also provide a non-confidential version of the report in a form suitable for publication. The AER may publish the compliance report (or the non-confidential version of the compliance report, if applicable), excluding the identifying information referred to in clause 2.3(3)(j), on its website, including by publishing a separate report for each eligible project as contemplated by clause 2.3.3(d) above.
- (5) For avoidance of doubt, to the extent that a TNSP's compliance reporting requirements can be more effectively and economically achieved by, or in collaboration with, another party or parties, the mechanism does not preclude TNSPs from doing this.

2.4 AER review and determination

- (1) The AER will review the expenditure a TNSP has incurred in each regulatory year in relation to this mechanism to ensure compliance with the project criteria. In doing so, the AER will have particular regard to whether an independent assessment of a project or program under clause 2.2.2(1) has been carried out, and to the findings of any independent assessment.
- (2) For each regulatory year, the AER will determine, and inform the TNSP of, the amount of the allowance recoverable by the TNSP in accordance with this mechanism as at the end of that regulatory year. This amount will exclude any amount provided to the TNSP by another TNSP, or by another party, for the purposes of implementing a jointly funded eligible project.
- (3) The total amount of expenditure determined by the **AER** as recoverable by the **TNSP** for a **regulatory control period** will not exceed the cap of the allowance recoverable determined under clause 2.1.
- (4) In making its determination under clause 2.4(2), the **AER** may reduce the amount of the allowance recoverable by the TNSP in accordance with this mechanism as

- at the end of that **regulatory year**, by the amount of any such allowance otherwise recoverable by the **TNSP** under this **mechanism** (including pursuant to a previous **AER** determination under clause 2.4(2)) for an **eligible project** in respect of which the **TNSP** has not complied with clause 2.6. For clarity, this may result in the total allowance for that **regulatory year** being below \$zero.
- (5) Clause 2.4(4) does not apply to an eligible project that has been completed more than 24 months before the end of the **regulatory year** to which the **AER**'s determination under clause 2.4(2) relates.

2.5 Application of carryover

- (1) Once all relevant information (including the content of each **compliance report**) for a **regulatory control period** becomes available after the end of the **regulatory control period**, the **AER** will calculate any carryover amount, *C* to account for:
 - (a) any amount of **eligible project** allowance, under clause 2.1(2)(a)i, unspent or not approved over the **regulatory control period**; and
 - (b) any amount of **independent assessment** allowance, under clause 2.1.2(a)ii, unspent or not approved over the **regulatory control period**; and
 - (c) the time value of money accrued or lost as a result of the expenditure profile that the **TNSP** selected.
- (2) At the end of the regulatory control period with N regulatory years, the AER will calculate a carryover amount, C to be deducted from the TNSP's MAR in regulatory year 2 of the subsequent regulatory control period, in accordance with equation 1.

Equation 1: 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:

- t is a regulatory year. It takes the value of an integer 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.
- o R_t is the ex-ante revenue allowance under this **mechanism** for **regulatory** year, t.
- o A_t is the expenditure approved ex-post under this **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.

(3) For clarity, equation 1 calculates the carryover amount, *C*, so the **TNSP** is revenue neutral (that is, net present value = 0) to the profile of expenditure approved by the **AER** over the **regulatory control period**.¹ That is, equation 1 can be rearranged as follows:

$$C + \left[\sum_{t=1}^{N} \frac{R_t - A_t}{(1 + r_t)^t} \right] \times \prod_{t=1}^{N+2} (1 + r_t)^t = 0$$

2.6 Transferrable outcomes

If requested by another person, the **TNSP** must provide additional information (as requested by the other person) to that person about the results of an **eligible project** funded under this **mechanism** (including the learnings and insights that have been gained from implementing the **eligible project**). If the information is confidential information, the **TNSP** may require that other person to keep that information confidential.

This includes an adjustment to account for the time value of money in the first two years of the subsequent regulatory control period.

3 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.
AER	Australian Energy Regulator
allowance objective	the demand management innovation allowance objective, as defined in the NER
confidentiality guidelines	the document published by the AER entitled "Confidentiality Guideline, August 2017", as amended or replaced by the AER from time to time.
compliance report	the compliance report required under clause 2.3(1) of this mechanism
Consumer Consultative Committee	a customer engagement forum set up by the TNSP for the purpose of consultation with its customers regarding the existing and future activities of the TNSP
CPI	the headline Consumer Price Index, calculated as the weighted average of eight capital cities
demand management	network demand management - that is, the act of modifying the drivers of network usage
eligible project	has the meaning given in clause 2.2(1)
independent assessment	an assessment conducted under clause 2.2.2 for reviewing and endorsing a proposed project or program
Mechanism	Demand Management Innovation Allowance Mechanism
NEO	National Electricity Objective as defined in the National Electricity Law
NER	National Electricity Rules
non-network option	has the meaning given in chapter 10 of the NER
project criteria	the criteria set out in clause 2.2.1 of this mechanism
related body corporate	has the meaning given in the Corporations Act 2001 (Cth)
TNSP	Transmission Network Service Provider, as defined in the NER