



Demand Management Innovation Allowance Mechanism

Electricity distribution network service providers

December 2017

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Director, Corporate Communications
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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: (03) 9290 1444

Fax: (03) 9290 1457

Email: AERInquiry@aer.gov.au

AER reference: 58882

Amendment record

Version	Date
01	14 December 2017

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1 Nature and authority

1.1 Introduction

- (1) In accordance with the requirements of clause 6.6.3A of the **NER**, this publication sets out the **AER's demand management innovation allowance mechanism for distribution network service providers**.

1.2 Authority

- (1) Clause 6.6.3A of the **NER** requires the **AER** to develop the **mechanism** in accordance with the **distribution consultation procedures**.

1.3 NER requirements

- (1) Clause 6.6.3A 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 **distributors** 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 or peak demand, and be innovative and not otherwise efficient and prudent **non-network options** that a **distributor** should have provided in its **regulatory proposal**;
 - (c) the level of allowance;
 - i) should be reasonable, considering the long term benefits to **retail customers**;
 - ii) should provide funding that is not available from another source, including under a relevant **distribution determination**; and
 - iii) may vary by **distributor** 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 **distributors** 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 6.6.3A of the **NER**;

in accordance with the **distribution 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 6.6.3A of the **NER**.

1.5 Confidentiality

- (1) The **AER**'s obligations regarding confidentiality and the disclosure of information provided to it by a **distributor** 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 **distributor**.

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 6.6.3A (e) of the **NER** and the **distribution consultation procedures**.

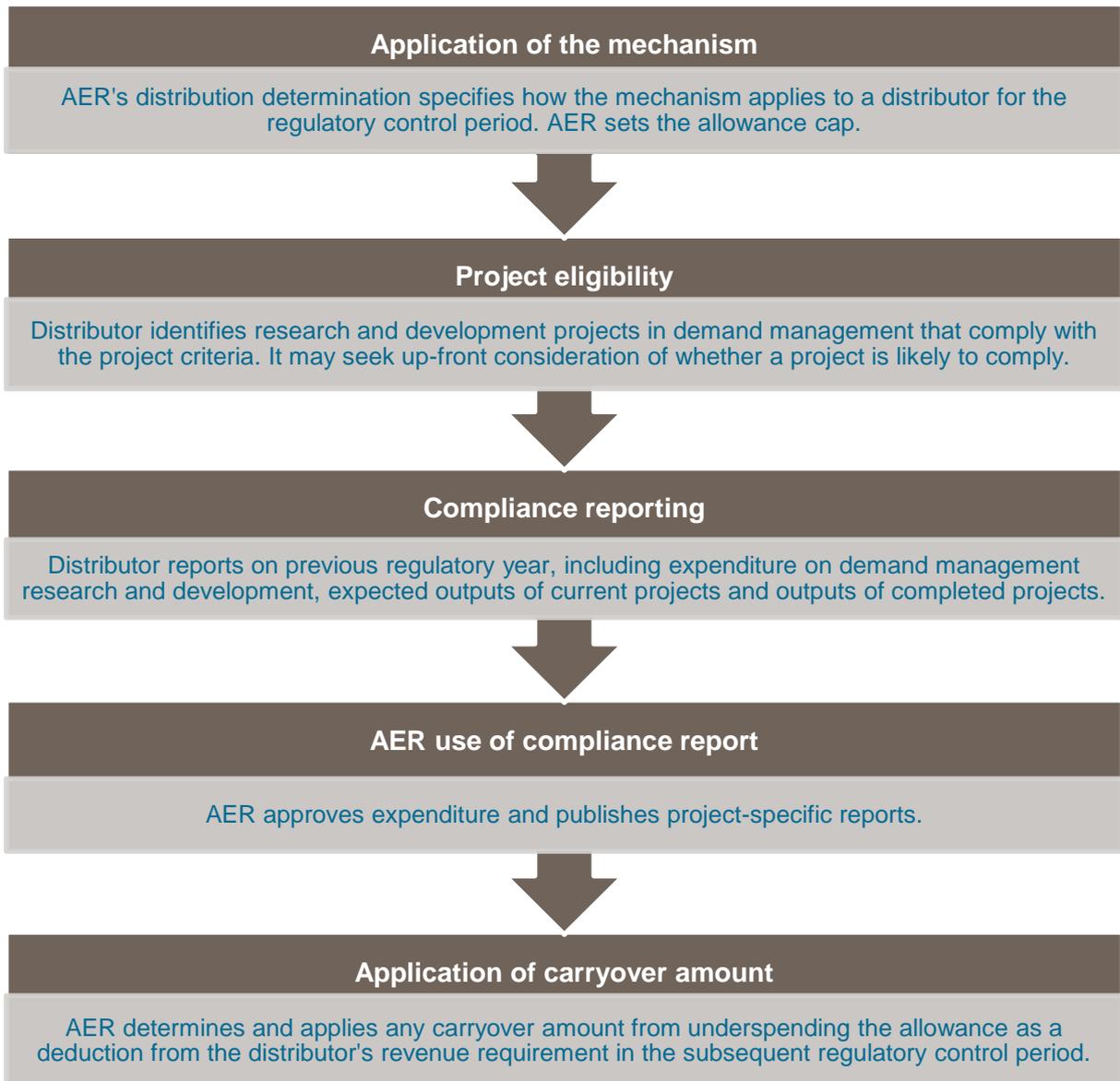
1.8 Version history and effective date

- (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 **distributor** with an annual, ex-ante allowance in the form of a fixed amount of additional revenue at the commencement of each **regulatory year** of the **regulatory control period**.
- (2) In the second **regulatory year** of the subsequent **regulatory control period**, when the **distributor's** total expenditure under this **mechanism** for the **regulatory years** of the preceding **regulatory control period** are known, a single adjustment will be made to recover the amount of any underspend, and of any unapproved expenditure, from the **distributor**.
- (3) When a **distributor** 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) By the end of the first month of each **regulatory year**, a **distributor** may apply for **up-front consideration** of whether a proposed project would likely be an **eligible project** under this **mechanism** as set out in clause 2.2.2.
- (6) The steps involved in the operation of this **mechanism** are as follows:
 - (a) The **AER** will determine how this **mechanism** will apply to a **distributor**, including the cap on the allowance available under this **mechanism**, in accordance with clause 2.1.
 - (b) The **distributor** must identify **eligible projects** against the **AER's project criteria** in accordance with clause 2.2, and must implement these projects.
 - (c) The **distributor** 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



2.1 Application of the mechanism

- (1) The **AER** will determine how this **mechanism** will apply to a **distributor** for a **regulatory control period** through the following process:
 - (a) The **AER's framework and approach paper** for a **distributor** will set out whether the **AER** intends to apply this **mechanism** to that **distributor's** forthcoming distribution determination under clause 6.8.1(b)(2)(vi) of the **NER**.
 - (b) A **distributor's regulatory 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
 - ii) Detail how its proposed approach would satisfy the requirements of the National Electricity Law and **NER**.

- (c) The **AER's** distribution determination for the **distributor** will set out how this **mechanism** is to apply to the **distributor** in the relevant **regulatory control period** under clause 6.12.1(9) of the **NER**.
- (2) Without otherwise limiting clause 2.1(1)(c), the **AER** must apply this **mechanism** to the **distributor** in a distribution 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 for each **regulatory year** in the **regulatory control period** as the sum of:
- i) \$200,000 (in the dollars of the **distributor's regulatory year** that ends in 2017), where the **AER** accounts for inflation using **CPI**; and
 - ii) 0.075% of the **distributor's ARR** for that **regulatory year** as determined in that **distribution determination** at the time the **distribution determination** is first made.
- (b) The **AER** must set out, in the distribution 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 2019. Assume **CPI** was 2.0% in **regulatory year** 2017/18 and 2.5% in **regulatory year** 2018/19. At the start of the **regulatory control period**, the base component would be $\$209,100 = \$200,000 \times (1.02) \times (1.025)$.

Assume for simplicity that 0.075% of a **distributor's ARR** is \$1.0 million (when converted to real dollars at the start of the **regulatory control period**) for each **regulatory year** over a 5 year **regulatory control period**, as determined under subclause 2.1(2)(a) of this **mechanism**. Given this, the **AER** would grant a **distributor** an allowance of \$1.2091 million for each of these **regulatory years** in real dollars at the start of the **regulatory control period** (being the sum of \$1 million and \$209,100).

The amount spent under this **mechanism** in any one **regulatory year** is at the **distributor's** discretion. However, the total amount recoverable over a **regulatory control period** with five **regulatory years** cannot exceed \$6.0455 million (being \$1.2091 million \times 5 years), in real dollars at the start of the **regulatory control period**. The **distributor** would have the flexibility to select an ex-post expenditure profile that suits its circumstances, subject to remaining within the approved cap in each **regulatory year**.

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) An **eligible project** must:
 - (a) be a project or program for researching, developing or implementing **demand management** capability or capacity; and
 - (b) be innovative, in that the project or program:
 - i) is based on new or original concepts; or
 - ii) involves technology or techniques 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.
- (2) A **distributor'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 **distributor's** distribution determination.
- (3) For avoidance of doubt, the **mechanism** does not require a **distributor's eligible project** to be geographically constrained to its **distribution network**.

2.2.2 Option for up-front consideration

- (1) A **distributor** may apply to the **AER** for **up-front consideration** of a project or program under this **mechanism**.
- (2) To apply for **up-front consideration**, a **distributor** must provide details of the proposed project or program under this **mechanism**, including details of the **distributor's** proposed expenditure on the project or program, to the **AER** in the first month of the **regulatory year** in which the **distributor** proposes to first incur expenditure on the project or program.
- (3) **Up-front consideration** of a proposed project or program will result in an **AER** staff-level letter to the **distributor**, providing an in-principle indication of whether the proposed project or program (including the proposed expenditure on the project or program) would satisfy the **project criteria** and would be recommended as an **eligible project** to the **AER** Board.

2.3 Compliance reporting

- (1) For each **regulatory year**, a **distributor** 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 **distributor** 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) the amount of the allowance spent by the **distributor**;
 - (b) a list and description of each **eligible project** on which the allowance was spent;
 - (c) a summary of how and why each **eligible project** complies with the **project criteria**;
 - (d) 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:
 - i) 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 **distributor's** implementation approach for the **eligible project**;
 - v) The **distributor's** outcome measurement and evaluation approach for the **eligible project**;
 - vi) The costs of the **eligible project**:
 1. incurred by the **distributor** to date as at the end of that **regulatory year**;
 2. incurred by the **distributor** in that **regulatory year**; and
 3. expected to be incurred by the **distributor** in total over the duration of the **eligible project**.
 - vii) For ongoing **eligible projects**:
 1. a summary of project activity to date;
 2. 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
 3. 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 of the **eligible project**.
- (e) 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.
- (f) A statutory declaration signed by an **officer** of the **distributor** delegated by the chief executive officer of the **distributor**, certifying that the costs being claimed for each **demand management** project:
 - i) are not recoverable under any other jurisdictional incentive scheme;
 - ii) are not be recoverable under any state or Australian Government scheme; and
 - iii) are not otherwise included in forecast capital expenditure or operating expenditure approved in the **AER's** distribution determination for the **regulatory control period** under which the **mechanism** applies, or under any other incentive scheme in that distribution determination.
- (4) The **confidentiality guidelines** apply to the information contained in **compliance reports**. If the **distributor's compliance report** contains confidential information, the **distributor** 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) 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 **distributor'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 **distributors** from doing this.

2.4 AER review and determination

- (1) The **AER** will review the expenditure a **distributor** has incurred in each **regulatory year** in relation to this **mechanism** to ensure compliance with the **project criteria**.
- (2) For each **regulatory year**, the **AER** will determine, and inform the **distributor** of, the amount of the allowance recoverable by the **distributor** in accordance with this **mechanism** as at the end of that **regulatory year**. This amount will exclude any amount provided to the **distributor** by another **distributor**, 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 **distributor** for a **regulatory control period** will not exceed the cap of the allowance recoverable determined under clause 2.1.

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 allowance unspent or not approved over the **regulatory control period**; and
 - (b) the time value of money accrued or lost as a result of the expenditure profile that the **distributor** selected.
- (2) At the end of the **regulatory control period** with N **regulatory years**, the **AER** will calculate a carryover amount, C , which is a negative value, in accordance with equation 1. The **AER** will include C in the **distributor's total annual revenue** in **regulatory year 2** of the subsequent **regulatory control period**.

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 **distributor's regulatory control period** for which the carryover is being calculated.
 - R_t is the ex-ante allowance under this **mechanism** for **regulatory year**, t .
 - 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 **distributor** 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:

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

¹ 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
AER	Australian Energy Regulator
allowance objective	the demand management innovation allowance objective, as defined in the NER
ARR	the distributor's unsmoothed annual revenue requirement calculated in accordance with the AER's distribution determination for the distributor, excluding annual adjustments for changes in the cost of debt and other factors. Annual revenue requirement has the meaning given in the NER.
confidentiality guidelines	the document published by the AER entitled "Confidentiality Guideline, November 2013", 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.
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 demand
distributor	distribution network service provider
eligible project	has the meaning given in clause 2.2(1)
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
officer	has the meaning given in the National Electricity Law
project criteria	the criteria set out in clause 2.2(1) of this Mechanism
relevant market	the National Electricity Market, where the distributor is a part of that market. Otherwise, the relevant electricity market in which the distributor transports electricity.
total annual revenue	the total annual revenue determined by the control mechanism that the AER applies to the distributor, after any revenue smoothing, annual adjustments, carryovers and pass throughs have been applied
up-front consideration	AER staff-level consideration of whether a proposed project or program would be an eligible project (eligible project is defined in this glossary)