



Draft Decision

Ausgrid distribution determination

2015–16 to 2018–19

**Attachment 12: Demand management incentive
scheme**

November 2014

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Note

This attachment forms part of the AER's draft decision on Ausgrid's 2015–19 distribution determination. It should be read with other parts of the draft decision.

The draft decision includes the following documents:

Overview

Attachment 1 – Annual revenue requirement

Attachment 2 – Regulatory asset base

Attachment 3 – Rate of return

Attachment 4 – Value of imputation credits

Attachment 5 – Regulatory depreciation

Attachment 6 – Capital expenditure

Attachment 7 – Operating expenditure

Attachment 8 – Corporate income tax

Attachment 9 – Efficiency benefit sharing scheme

Attachment 10 – Capital expenditure sharing scheme

Attachment 11 – Service target performance incentive scheme

Attachment 12 – Demand management incentive scheme

Attachment 13 – Classification of services

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Shortened forms

Shortened form	Extended form
AARR	aggregate annual revenue requirement
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
ASRR	aggregate service revenue requirement
augex	augmentation expenditure
capex	capital expenditure
CCP	Consumer Challenge Panel
CESS	capital expenditure sharing scheme
CPI	consumer price index
CPI-X	consumer price index minus X
DRP	debt risk premium
DMIA	demand management innovation allowance
DMIS	demand management incentive scheme
distributor	distribution network service provider
DUoS	distribution use of system
EBSS	efficiency benefit sharing scheme
ERP	equity risk premium
expenditure assessment guideline	expenditure forecast assessment guideline for electricity distribution
F&A	framework and approach
MRP	market risk premium

Shortened form	Extended form
NEL	national electricity law
NEM	national electricity market
NEO	national electricity objective
NER	national electricity rules
NSP	network service provider
opex	operating expenditure
PPI	partial performance indicators
PTRM	post-tax revenue model
RAB	regulatory asset base
RBA	Reserve Bank of Australia
repex	replacement expenditure
RFM	roll forward model
RIN	regulatory information notice
RPP	revenue pricing principles
SAIDI	system average interruption duration index
SAIFI	system average interruption frequency index
SLCAPM	Sharpe-Lintner capital asset pricing model
STPIS	service target performance incentive scheme
WACC	weighted average cost of capital

12 Demand management incentive scheme

The National Electricity Rules (NER) require us to develop and implement mechanisms to incentivise distributors to consider economically efficient alternatives to building more network.¹ To meet this requirement, and motivated by the need to improve distributors' capability in the demand management area, we implemented a demand management incentive scheme (DMIS) in our NSW/ACT distribution determinations for the 2009–14 regulatory control period.²

The current DMIS for NSW distributors includes two components—the demand management innovation allowance (DMIA)³ and the D-factor.⁴

The DMIA is a capped allowance for distributors to investigate and conduct broad-based and/or peak demand management projects. It contains two parts:

- Part A provides for an innovation allowance to be incorporated into each distributor's revenue allowance for opex each year of the regulatory control period. Distributors prepare annual reports on their expenditure under the DMIA⁵ in the previous year, which we then assess against specific criteria.⁶
- Part B compensates distributors for any foregone revenue demonstrated to have resulted from demand management initiatives approved under Part A. During the 2009–14 regulatory control period, NSW distributors were subject to a weighted average price cap (WAPC) form of control. Under this control mechanism, if a demand management project resulted in a fall in demand for direct control services, the distributor's recoverable revenues would fall as prices were fixed. For this reason, foregone revenue was recoverable under Part B of the DMIA.

Under the scheme, we return any underspend against the allowance to customers and compensate distributors for approved foregone revenue, once we know their approved DMIA expenditure for each year of the current period. We implement this as an adjustment to each distributor's innovation allowance in the following regulatory control period.

The D-factor scheme⁷ acts as a counter balance to distributors' disincentive to implement demand management under the WAPC form of control. The D-factor offers compensation for both the costs and foregone revenue incurred from demand management projects for which the distributor can demonstrate a resultant reduction in both capex and demand.

12.1 Draft decision

We have determined to continue Part A of the DMIA but we will not apply either Part B of the DMIA or the D-Factor scheme for Ausgrid in the 2015–19 regulatory control period. This is consistent with our

¹ NER, cl. 6.6.3(a).

² The rules have since changed the name to 'Demand Management and Embedded Generation Connection Incentive Scheme' (DMEGCIS) to explicitly cover innovation with respect to the connection of embedded generation. Our current and proposed DMIS include embedded generation. We consider embedded generation to be one means of demand management, as it typically reduces demand for power drawn from a distribution network.

³ AER, *Demand management incentive scheme for the ACT and NSW 2009 distribution determinations—Demand management innovation allowance scheme*, 28 November 2008. (AER, DMIA for ACT and NSW distributors, Nov 2008).

⁴ AER, *Demand management incentive scheme for the ACT and NSW 2009 distribution determinations—D-factor scheme*, 29 February 2008.

⁵ The DMIA excludes the costs of demand management initiatives approved in our determination for the 2009–14 regulatory control period or under the D-factor scheme.

⁶ AER, *DMIA for ACT and NSW distributors*, Nov 2008, pp. 4–5.

⁷ From IPART's NSW distribution determinations for the 2004–09 regulatory control period.

proposed approach in the Stage 2 Framework and Approach (F&A) and is also consistent with the approach we took in the transitional regulatory control period.⁸ We have also determined that Ausgrid's proposed Demand Management Benefit Sharing Scheme not be introduced at this time.

The current innovation allowance amount of \$1 million (\$2014–15) per annum will continue in the 2015–19 regulatory control period.

12.2 Ausgrid's proposal

Ausgrid supported our proposal, as set out in the Stage 2 F&A, to continue applying Part A of the DMIA at the same scale as is currently applied, but to discontinue Part B of the scheme as it related to compensation for foregone revenue.⁹

Ausgrid forecast a DMIA under spend and negative carryover of \$2 million (\$2013-14) for the 2009–14 regulatory control period. Ausgrid acknowledged that, by the time the final revenue determination is made, our assessment of Ausgrid's DMIA expenditure for the 2009–14 regulatory control period will be complete and adjustments made accordingly. Given the two-year D-factor lag, actual and expected incentive payments related to Ausgrid's D-factor performance for 2012–13 and 2013–14 respectively was included in its revenue proposal for the 2015–19 regulatory control period.¹⁰

However, for the 2015–19 regulatory control period, Ausgrid proposed a demand management benefit sharing scheme (DMBSS) to replace and improve the incentive component of the D-factor. Ausgrid proposed its DMBSS in anticipation of a series of rule changes which are currently being considered by the AEMC as part of its Power of Choice review. This review includes an examination of distributor incentives to pursue efficient alternatives to network augmentation and anticipates new rules and principles guiding the design of a new DMIS.

Ausgrid described its proposed DMBSS as recognising the wider benefits that can flow to consumers as a result of network initiated demand management programs. Further, given the requirements of the Regulatory Investment Test for Distribution (RIT-D) to consider market benefits in investment decisions, Ausgrid considers its proposed scheme would remove a potential disincentive against selecting demand management alternatives.

Ausgrid's proposed DMBSS seeks to share the market benefits that would accrue to its customers with the DNSP in order to ensure optimal decisions in relation to non-network alternatives. Specifically, Ausgrid proposed:

- a \$100 per kVA incentive in 2013/14 dollars to reflect a 50% share of upstream market benefits from demand management (a rounding up from the average cost of extra capacity of \$90/kVA for transmission and \$95/kVA for peaking generation plant in 2012 dollars, as would be used in RIT-D evaluations).
- kVA and benefit calculation methods to be the same as those used for RIT-D evaluations.
- DMBSS incentives to be included in the "i factor" in the year following a secured commitment to reduce demand.

⁸ AER, *Stage 2 Framework and Approach paper for Ausgrid*, January 2014, p 32 (AER, Stage 2 Framework and Approach, Jan 2014).

⁹ Ausgrid, *Regulatory Proposal: 1 July 2014 to 30 June 2019*, 30 May 2014, p. 19 (Ausgrid, Regulatory Proposal, May 2014).

¹⁰ Ausgrid, Regulatory Proposal, May 2014, p. 24.

Ausgrid also proposed to share benefits with customers on a 50/50 basis with customers' share of the market benefits of DNSP demand management being reflected through lower transmission and generation charges in customers' bills.

Although opportunities for demand management at a local level are uncertain, Ausgrid considered that 10 to 15 MW of load reduction per annum (representing \$1 to 1.5 million in incentives) is a reasonable estimate of the annual opportunity for demand management projects under its proposed scheme.¹¹

12.3 AER's assessment approach

The rules require us to have regard to several factors in developing and implementing a DMIS for Ausgrid.¹² These are:

- Benefits to consumers
 - the need to ensure that benefits to electricity consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme
 - the willingness of customers or end users to pay for increases in costs resulting from implementing DMIS.
- Balanced incentives
 - the effect of a particular control mechanism (i.e. price as distinct from revenue regulation) on a distributor's incentives to adopt or implement efficient non-network alternatives
 - the effect of classification of services on a distributor's incentive to adopt or implement efficient embedded generator connections
 - the extent the distributor is able to offer efficient pricing structures
 - the possible interactions between DMIS and other incentive schemes.

We had regard to these factors in considering the proposed approach to the DMIS for Ausgrid as set out in our Stage 2 F&A for the NSW DNSPs.¹³

12.4 Reasons for draft decision

Consistent with our decisions for the transitional regulatory control period, we will not apply the Part B foregone revenue component of the DMIA or the D-factor in the 2015–19 regulatory control period due to the move to a revenue cap.

However, as the D-factor operates on a two-year lag, Ausgrid will be able to recover the costs and foregone revenues of applicable demand management projects relevant to the 2009–14 regulatory control period in the 2015–19 regulatory control period.

Our Stage 2 F&A stated that our intention to develop and implement a new DMIS for the 2015–19 regulatory control period was dependent on the progress of the rule change process arising from the

¹¹ Ausgrid, Regulatory Proposal, Attachment 3.03, *Application of Demand Management Embedded Generator Connection Incentive Scheme (DMEGCIS) proposal*, May 2014, p. 2.

¹² NER, cl 6.6.3(b).

¹³ AER, *Stage 2 Framework and Approach*, January 2014, pp. 33–35.

AEMC's Power of Choice review.¹⁴ At the time of this draft decision, the AEMC expect to commence consultation on the rule change requests received in the first quarter of 2015.

The Total Environment Centre (TEC) provided a submission which addressed reform of the DMIS. In addition to discussing its current rule change request to the AEMC on the Power of Choice review, the TEC advocated for a more effective demand management incentive scheme and requested that we use our discretion to revise the operation and guidelines of the current DMIS in lieu of any rule change.¹⁵ The TEC also considered Ausgrid's proposed DMBSS and submitted that the proposed \$100 per kVA incentive should be limited to a 50 per cent share of upstream benefits to the network and this limit only reached where we determine that the cost-benefit analysis of the proposed non-network solution is extremely favourable.¹⁶

A submission was also received from the Public Interest Advocacy Centre (PIAC) which supported immediate reform of the current DMIS. In particular, the PIAC recommended that a new scheme be developed in which demand management was central to DNSPs' activities rather than supplementary. The PIAC also supported Ausgrid's DMBSS as an interim measure before a revised scheme is introduced and submitted that it is likely that the scheme will need targets and possibly penalties for non-compliance.¹⁷ The Consumer Challenge Panel also submitted that we should consider using rewards and penalties to encourage new approaches to demand management.¹⁸

We do not intend to pre-empt consultation on the AEMC's review of the current demand management arrangements by commencing a separate consultation process on a new DMIS before the outcomes of the review are finalised. Quite apart from the unnecessary complications and inefficiencies that a parallel policy process would create, the confines of a distribution revenue review make it ill-suited to driving regulatory reform.

We acknowledge the need to reform the existing demand management incentive arrangements and the importance of demand management in deferring the need for network augmentation by alleviating network utilisation during peak usage periods. The move to a revenue cap form of control, thereby removing any disincentive for distributors to reduce the quantity of electricity sold by pursuing demand management initiatives, and more robust obligations to consider non-network alternatives in order to satisfy RIT-D requirements provide distributors with opportunities to improve and expand their demand management programs.

Beyond increasing opportunities, we recognise the importance of strengthening demand management incentives in order to defer network augmentation. A benefit sharing scheme, such as that proposed by Ausgrid, could well be effective in strengthening incentives in this regard. However, we consider that such proposals deserve the full scrutiny of a consultative rule change process by the AEMC and a subsequent scheme development process by the AER to ensure a robust outcome. For these reasons, we have determined to not introduce Ausgrid's proposed DMBSS at this time and adopted the position proposed in the Stage 2 F&A to approve DMIA allowances consistent with their current scale.

¹⁴ AER, *Stage 2 Framework and Approach*, January 2014, p. 32. For information regarding the AEMC's Power of Choice Review, see <http://www.aemc.gov.au/Major-Pages/Power-of-choice>. The AEMC received a proposed rule change from COAG Energy Ministers and the Total Environment Centre.

¹⁵ Total Environment Centre, *Submission to the Australian Energy Regulator Issues Paper on the NSW Electricity Distribution Businesses' Regulatory Proposals*, August 2014, p. 5 (TEC, *Submission to NSW Distribution Regulatory Proposals*, Aug 2014).

¹⁶ TEC, *Submission to NSW Distribution Regulatory Proposals*, August 2014, p. 6.

¹⁷ The Public Interest Advocacy Centre, *Moving to a new paradigm: submission to the Australian Energy Regulator's NSW electricity distribution network price determination*, August 2014, pp. 20 & 104.

¹⁸ Consumer Challenge Panel, *Submission to the AER from the Consumer Challenge Panel regarding NSW DNSP regulatory proposals 2014–19*, August 2014, p. 33.

We intend to introduce a revised DMIS as soon as practicable following the AEMC's rule change process. It is likely that transitional rules will be required to allow the revised scheme to apply within the 2015–19 regulatory control period.

Ausgrid has set out its proposed demand management projects for the 2015–19 regulatory control period, including those it proposed to fund through the DMIS.¹⁹ The DMIS provides for an ex post review of claims for funding through the DMIS.²⁰ We do not need to make a decision at this time on whether Ausgrid's proposed projects are consistent with, or likely to be consistent with, the criteria for funding under the DMIS.

Ausgrid proposed a number of demand management costs as part of its total forecast capital expenditure and operating expenditure building blocks. Our DMIS states that costs recovered under the DMIS must not be included in the forecast capital or operating expenditure approved in the distribution determination, or under any other incentive scheme in that determination. Ausgrid will not be able to obtain funding under the DMIS for demand management activities already funded through the forecast capital expenditure or operating expenditure building blocks. Our decision on Ausgrid's demand management related capital expenditure or operating expenditure building blocks can be found in attachments 6 and 7 respectively.

¹⁹ Ausgrid, Regulatory Proposal, Attachment 6.12, *Demand Management operating expenditure plan*, May 2014, pp. 23–40.
²⁰ AER, *DMIA for ACT and NSW distributors*, Nov 2008, pp. 3–4.