



Final decision

Demand Management and Embedded Generation Connection Incentive Scheme

New South Wales Distribution Network Services Providers

May 2013

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Executive summary

The National Electricity Rules (NER) allows the Australian Energy Regulator (AER) to develop and publish a demand management and embedded generation connection incentive scheme (DMEGCIS). The purpose of the DMEGCIS is to:¹

provide incentives for Distribution Network Service Providers to implement efficient non-network alternatives, or to manage the expected demand for standard control services in some other way, or to efficiently connect Embedded Generators.

On 29 May 2012, the AER published a proposed DMEGCIS and accompanying explanatory statement (proposed 2012 DMEGCIS). The proposed 2012 DMEGCIS was to be applied to Ausgrid, Endeavour Energy, and Essential Energy distribution network service providers (NSW DNSPs) for the 2014–19 regulatory control period.² The explanatory statement accompanying the proposed 2012 DMEGCIS recognised the importance of the Power of Choice review undertaken by the Australian Energy Market Commission (AEMC).

On 17 September 2012, the AER extended the time within which it is required to publish its final decision on the proposed 2012 DMEGCIS, pending completion of the Power of Choice review. With the publication of the Power of Choice Final Report (Final report) in November 2012, the AER is now concluding the proposed 2012 DMEGCIS process.

The AER has decided to conclude the proposed 2012 DMEGCIS process by not amending or replacing the current 2008 scheme³ that is to be applied to the NSW DNSPs. We have made this decision having regard to cl. 6.6.3(b) of the NER and taking into account submissions made on the proposed 2012 DMEGCIS.

As outlined in our March 2013 Information Paper,⁴ we intend to apply the current 2008 current 2008 scheme to the NSW DNSPs for the 2014–15 transitional regulatory control period.⁵ We also intend to commence informal engagement on matters relevant to the form of a new demand management incentive scheme based on the recommendations set out in the Final Report. This informal engagement is likely to take place in parallel with the AEMC's DMEGCIS rule change process.

¹ NER, cl. 6.6.3.

² AER, *Proposed demand management and embedded generation connection incentive scheme, ACT and NSW distribution determinations 2014–19*, May 2012; AER, *Explanatory statement: Proposed demand management and embedded generation connection incentive scheme, NSW distribution network service providers*, May 2012.

³ In NSW, the current 2008 scheme includes a demand management innovation allowance (DMIA) and the D-factor.

⁴ AER, *Information Paper: Demand Management and Embedded Generation Connection Incentive Scheme*, March 2013.

⁵ NER, cl. 11.56.3(a)(4); AER, *Final decision: NSW distribution determination 2009–10 to 2013–14*, April 2009.

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Shortened forms

Shortened form	Full form
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
current regulatory control period	1 July 2009 to 30 June 2014
current 2008 scheme	<p>Demand management incentive scheme for the ACT and NSW 2009 distribution determinations—see Demand management innovation allowance scheme, November 2008 as applied to NSW DNSPs in the AER, Final decision: <i>New South Wales distribution determination 2009–10 to 2013–14</i>, April 2009.</p> <p>This scheme consists of the DMIA and the D-factor component.</p>
DMEGCIS	demand management and embedded generation connection incentive scheme
DNSP	distribution network service provider
DSP	demand side participation
F&A	framework and approach
NEM	National Electricity Market
NER	National Electricity Rules
NSW DNSPs	Ausgrid, Endeavour Energy, and Essential Energy
subsequent regulatory control period	expected to be 1 July 2015 to 30 June 2019
transitional regulatory control period	1 July 2014 to 30 June 2015

1 Introduction

This document sets out the AER's final decision to conclude the proposed 2012 DMEGCIS process in accordance with r. 6.16(e) of the NER (Final decision).

On 29 May 2012, we published the proposed 2012 DMEGCIS and accompanying explanatory statement to be applied to the NSW DNSPs for the 2014–19 regulatory control period.⁶ Submissions on the proposed 2012 DMEGCIS were received in August 2012.⁷

On 17 September 2012, the AER extended the time within which it is required to publish its final decision on the proposed 2012 DMEGCIS under cl. 6.16(g) of the NER. The extension of time was considered necessary in order for the AEMC to finalise its Power of Choice review. The Power of Choice review addressed issues that are directly relevant to the DMEGCIS.

The AEMC released its Final Report on 30 November 2012.⁸ After considering the implications of the AEMC's recommendations, we must now conclude the proposed 2012 DMEGCIS process that commenced in May 2012.

1.1 Proposed 2012 DMEGCIS

The proposed 2012 DMEGCIS set out two key amendments to the current 2008 scheme. These include:

- the adoption of the AEMC's National Electricity Amendment (inclusion of Embedded Generation Research into Demand Management Incentive Scheme) Rule 2011 No. 11.
- the discontinuation of the D-factor component from the commencement of the next regulatory control period. This is subject to the exception that expenditure on projects or programs implemented in the last two years of the period from 1 July 2009 to 30 June 2014 (current regulatory control period) will be recoverable in the first two years of the 2014–19 regulatory control period.⁹

Our view on the proposed 2012 DMEGCIS also highlighted the importance of the Power of Choice review which included consideration of demand-side participation (DSP) in the

⁶ AER, Proposed demand management and embedded generation connection incentive scheme: *ACT and NSW distribution determinations 2014–19*, May 2012; AER, Explanatory statement: *Proposed demand management and embedded generation connection incentive scheme, NSW distribution network service providers*, May 2012.

⁷ Alternative Technology Association, *Submission on proposed demand management & embedded generation connection incentive scheme NSW and ACT*, August 2012; Ausgrid, *Proposed demand management and embedded generation connection incentive scheme*, August 2012; Dugan, D., *Submission email to the AER*, 29 May 2012, Endeavour Energy, *Proposed demand management and embedded generation connection incentive scheme*, July 2012, EnerNOC, *Submission on the proposed demand management and embedded generation connection incentive scheme*, July 2012; Essential Energy, *Proposed demand management and embedded generation connection incentive scheme*, August 2012.

⁸ AEMC, Final report: *Power of choice review—giving consumers options in the way they use electricity*, November 2012, p. 199.

⁹ AER, Explanatory statement: *Proposed demand management and embedded generation connection incentive scheme, NSW distribution network service providers*, May 2012, p. 8.

National Electricity Market (NEM). The AER indicated that it would consider its position on the proposed 2012 DMEGCIS at the conclusion of the Power of Choice review.¹⁰ However, after publication of the proposed 2012 DMEGCIS, we were informed by the AEMC that the Power of Choice review would not be completed until November 2012.

In order to capture any changes resulting from the Power of Choice review, we extended the time to publish our final decision until after its completion. We considered that an extension of time to publish a final decision was necessary due to circumstances beyond our control.¹¹

1.2 AEMC rule changes

1.2.1 Economic regulation of network service providers

On 25 June 2012, we published the preliminary framework and approach (F&A) paper for the NSW DNSP's next distribution determination.¹² In the context of the preliminary F&A paper, we considered it appropriate to apply our proposed 2012 DMEGCIS to the NSW DNSPs for the next regulatory control period.¹³

On 29 November 2012, the AEMC amended the network regulation provisions of the NER. Those amendments provide the AER with greater capacity and flexibility in setting revenues and prices for electricity network service providers. In order for these amendments to take effect as soon as possible, the AEMC inserted transitional rules into the NER. These transitional rules impact the NSW DNSPs.¹⁴

The transitional rules establish a transitional regulatory control period for the NSW DNSPs from 1 July 2014 to 30 June 2015.¹⁵ The subsequent regulatory control period will then operate over the period 1 July 2015 to 30 June 2019.¹⁶

The transitional rules require us to specify that the same D-factor and demand management incentive scheme that applied to the NSW DNSPs in the current regulatory control period (2009–14) be applied in the transitional regulatory control period (2014–15). This is subject to any modifications that are set out in the January 2014 Stage 2 F&A paper.¹⁷ That is, the demand management incentive scheme that applies to the NSW DNSPs currently is to be

¹⁰ AER, Explanatory statement: *Proposed demand management and embedded generation connection incentive scheme, NSW distribution network service providers*, May 2012, p. 8.

¹¹ NER, r. 6.16(g)(2).

¹² AER, Preliminary positions: *Framework and approach paper, Ausgrid, Endeavour Energy and Essential Energy, Regulatory control period commencing 1 July 2014*, June 2012.

¹³ AER, Explanatory statement: *Proposed demand management and embedded generation connection incentive scheme, NSW distribution network service providers*, May 2012, p. 8.

¹⁴ AEMC, Rule determination: *National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012 No. 9*, November 2012.

¹⁵ NER, cl. 11.55.2; Transitional Chapter 6, cl. 6.11.2.

¹⁶ NER, cl. 11.55.1. The subsequent regulatory control period is defined as the regulatory control period that immediately follows the transitional regulatory control period. The subsequent regulatory control period will commence on 1 July 2015. DNSPs can propose the length of the subsequent regulatory control period under cl. 11.56.4(k) of the NER. If the DNSP proposes a period of four regulatory years, the AER must approve that period as the regulatory control period.

¹⁷ NER, cl. 11.56.3(a)(4). The Stage 2 F&A paper is required under cl. 11.56.4(l)(2) of the NER.

applied as the 'default' in the transitional regulatory control period, subject to any modifications. These modifications can include, for example, changing the incentives under the scheme, or deciding not to apply the scheme at all.¹⁸

1.2.2 Inclusion of embedded generation research into the demand management incentive scheme

In December 2011, an amendment was made to the NER so that it now refers to the AER including embedded generation research into its demand management incentive scheme.¹⁹ This was discussed in the proposed 2012 DMEGCIS.²⁰

1.3 Next steps following the AEMC's Final report

The majority of the recommendations set out in the Final Report require changes to the NER. Similarly, much of our work to implement the recommendations, including developing a new demand management incentive scheme, are predicated on the AEMC making appropriate changes to the NER. The precise timing of when the new rules will take effect is currently unclear.

We intend to commence informal engagement on matters relevant to the form of a new demand management incentive scheme based on the recommendations set out in the Final Report. This informal engagement is likely to take place in parallel with the AEMC's rule change process. Further information about this engagement, as well as our intended timing to develop a new scheme to apply subsequent to the current regulatory control period, is set out in our March 2013 Information Paper.²¹

¹⁸ NER, cl. 11.56.3(a)(4).

¹⁹ AEMC, Rule determination: *National Electricity Amendment (inclusion of Embedded Generation Research into Demand Management Incentive Scheme) Rule 2011 No. 11*, December 2011.

²⁰ AER, Explanatory statement: *Proposed demand management and embedded generation connection incentive scheme, NSW distribution network service providers*, May 2012, p. 6.

²¹ AER, Information paper: *Demand management and embedded generation connection incentive scheme*, March 2013.

2 Requirements of the National Electricity Rules

In developing and implementing a DMEGCIS, the AER must have regard to the requirements of cl. 6.6.3(b) of the NER. These requirements are set out in section 3.2 of the Final decision and were also discussed in the proposed 2012 DMEGCIS.²²

Clause 6.6.3(c) of the NER allows the AER to amend or replace a scheme that is developed and published.

2.1 Consultation process

The distribution consultation procedures set out in Part G, chapter 6 of the NER apply to the AER's proposed amendments to the DMEGCIS.²³ These consultation procedures require us to publish a final decision on the DMEGCIS which sets out:

- the scheme or amendment
- the provision of the NER under which or for the purposes of which the scheme or amendment is being prepared, made or developed or is being reviewed
- the reasons for the scheme or amendment
- the reasons for the outcome of any review.²⁴

Clause 6.16(f) of the NER also requires us to consider any submissions made in response to the proposed 2012 DMEGCIS and provide a response to the issues raised.

We must also publish a notice of the making of the final decision on the proposed 2012 DMEGCIS.²⁵

²² AER, Explanatory statement: *Proposed demand management and embedded generation connection incentive scheme, NSW distribution network service providers*, May 2012, p. 9.

²³ AER, Explanatory statement: *Proposed demand management and embedded generation connection incentive scheme, NSW distribution network service providers*, May 2012, p. 9.

²⁴ NER, cl. 6.16(e)(1).

²⁵ NER, cl. 6.16(e)(2).

3 Final decision

The AER's Final decision is to conclude the proposed 2012 DMEGCIS process by not amending or replacing the current 2008 scheme for the NSW DNSPs. We have made this decision by having regard to cl. 6.6.3(b) of the NER and taking into account submissions made on the proposed 2012 DMEGCIS. The current 2008 scheme will continue to apply until we develop a new scheme under cl. 6.6.3(c) of the NER.

3.1 Issues raised in submissions and the AER's response

A number of the submissions received by the AER on its proposed 2012 DMEGCIS recognise the importance of providing appropriate incentives for DNSPs to implement demand management programs and practices.²⁶ Similarly, submissions received from Alternative Technology Association (ATA) and EnerNOC recognise the importance of providing appropriate incentives for DNSPs to implement demand management programs and practices.²⁷ ATA and EnerNOC also submitted that DNSPs need to be given a strong motivation to change their business practices. They further submitted that this could be achieved by making efficient non-network solutions more profitable and establishing mandatory minimum targets for the proportion of peak demand growth to be met through efficient non-network solutions.²⁸

We note that these are the same concerns set out in the Final Report. The Final Report notes that network businesses may not be reacting to current incentives in the way intended with respect to pursuing efficient DSP projects.²⁹ The recommendations set out in the Final Report are aimed at improving the incentives for DNSPs to engage in DSP. For this reason, we consider it important that any future demand management incentive scheme to be applied to the NSW DNSPs takes account of these recommendations.

Submissions from the NSW DNSPs and Total Environment Centre Inc. (TEC) note that the AER's proposal to remove the D-factor from the proposed 2012 DMEGCIS reduces any incentive for service providers to adopt demand management programs and practices.³⁰ As

²⁶ City of Sydney, *Submission on Preliminary Positions Framework and Approach Paper—Ausgrid*, 15 August 2012, pp. 5–6; Alternative Technology Association, *Submission on proposed demand management & embedded generation connection incentive scheme NSW and ACT*, August 2012, pp. 2–3; EnerNOC, *Submission on the proposed demand management and embedded generation connection incentive scheme*, July 2012 pp. 1–2.

²⁷ Alternative Technology Association, *Submission on proposed demand management & embedded generation connection incentive scheme NSW and ACT*, August 2012, pp. 2–3; EnerNOC, *Submission on the proposed demand management and embedded generation connection incentive scheme*, July 2012 pp. 1–2.

²⁸ Alternative Technology Association, *Submission on proposed demand management & embedded generation connection incentive scheme NSW and ACT*, August 2012, p. 3, EnerNOC, *Submission on the proposed demand management and embedded generation connection incentive scheme*, July 2012.

³⁰ Ausgrid, *Proposed demand management and embedded generation connection incentive scheme*, August 2012; pp. 2–3; Endeavour Energy, *Proposed demand management and embedded generation connection incentive scheme*, July 2012, p. 1; Essential Energy, *Proposed demand management and embedded generation connection incentive scheme*, August 2012, p. 1; NSW DNSPs', *Response to the AER's Preliminary Framework and Approach Paper, Regulatory Control Period Commencing 1 July 2014*, 17 August 2012,

an alternative, these submissions suggest that a simplified D-factor could be applied as the new scheme that is to be developed. In their joint submission, the NSW DNSPs also noted that a simplified D-factor would address the issues and complexities identified by the AER and improve consumer price outcomes over the longer term.³¹ TEC submitted that there would be benefits arising from utilising a simplified D-factor as it would:

....make a broader range of demand management options cost effective and would allow network service providers to justify implementing longer term programs where the main benefits are external and the internal benefits are longer term or otherwise difficult to quantify for the purposes of claiming the incentive.³²

The current 2008 scheme means that the D-factor which currently applies to the NSW DNSPs will continue to apply until such time we implement a new scheme. However, because the AER's Stage 1 F&A set out that a revenue caps will apply to the NSW DNSPs in the transitional regulatory control period and the subsequent regulatory control period, this will impact on the application of the D-factor.

A modified 2008 scheme may need to apply to take into account the change of the control mechanism. The AER will consult with the NSW DNSPs on this issue before the Stage 2 F&A paper is published

3.2 Consideration of factors set out in the NER

In continuing to apply the current 2008 scheme, we have had regard to the six factors outlined in cl. 6.6.3(b) of the NER. Our response to these factors is set out in table 3.1 below.

Table 3.1 AER response to NER requirements

NER requirement	The AER's consideration
Clause 6.6.3(b)(1) of the NER	In the proposed 2012 DMEGCIS, we considered that the benefits to consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for the NSW DNSPs. In reaching this view, we noted that the proposed 2012 DMEGCIS that it encourages the implementation efficient connection of embedded generators. This position does not change under our approach in the final decision.
The need to ensure that benefits to consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for DNSPs.	We consider that the current 2008 scheme already contemplates the inclusion of efficient connection of embedded generators. The proposed 2012 DMEGCIS did not expand the current access criteria, nor develop specific access criteria for embedded generator connection projects or programs. We consider that these projects or programs are within the scope of the current 2008 scheme. Following this, our final decision will not exclude these activities from providing long term efficiency benefits for consumers. We also note that in striking the appropriate balance, the operation of the current 2008 scheme may result in cost impacts within a regulatory control period where the benefits are unlikely to be obtained until later regulatory control periods. Further, we consider that the implementation of demand management initiatives and efficient connection of

pp. 69–71; Total Environment Centre Inc, *Submission to the AER: Preliminary Framework and Approach Paper–Ausgrid*, 15 August 2012, pp. 6–7.

³¹ NSW DNSPs', *Response to the AER's Preliminary Framework and Approach Paper, Regulatory Control Period Commencing 1 July 2014*, 17 August 2012, p. 71.

³² Total Environment Centre Inc, *Submission to the AER: Preliminary Framework and Approach Paper–Ausgrid*, 15 August 2012, p. 7.

embedded generators are likely to provide long term efficiency gains to energy consumers that will outweigh any short term price increases.

The current 2008 scheme can promote initiatives which reduce investment in new infrastructure through either deferral of, or removal of the need for, network augmentation and/or expansion expenditures. It could also be used to implement initiatives which result in a more efficient use of existing infrastructure. Such initiatives may lead to lower:

- demand overall
- network investment
- customer electricity prices.

Further, we note that the DMIA is provided on a 'use it or lose it' basis. Therefore we do not consider the DMIA to be overly burdensome on end users that bear this cost in the long term. We also consider that increases in tariffs as a result of the scheme's implementation are expected to be minimal. Further, given the current minimal usage of the DMIA by the DNSPs, there is likely to be little impact on consumers under the scheme.

<p>Clause 6.6.3(b)(2) of the NER</p> <p>The effect of a particular control mechanism (i.e. price – as distinct from revenue – regulation) on a DNSP's incentives to adopt or implement efficient non-network alternatives.</p>	<p>The AER's Stage 1 F&A set out that a revenue cap will apply to the NSW DNSPs in the transitional regulatory control period and the subsequent regulatory control period.³³ This will impact on the application of the D-factor.</p> <p>A modified 2008 scheme may need to apply to take into account the change in control mechanism.</p> <p>The AER is of the view that any modification can be undertaken in the Stage 2 F&A paper in January 2014. The AER will consult with the NSW DNSPs on this issue before the Stage 2 F&A paper is published.</p>
<p>Clause 6.6.3(b)(3) of the NER</p> <p>The extent the DNSP is able to offer efficient pricing structures.</p>	<p>In developing the current 2008 scheme, the AER noted the NSW DNSPs had undertaken minimal demand management projects and programs and that there was little information on the efficient costs of these initiatives. There is still limited information on efficient costs of demand management projects or programs in NSW due to the limited use of DMIA to fund it. However, we consider that the DMIA allowance is sufficient for the DNSP to initiate a number of small-scale, or a single larger-scale demand management project or program during a regulatory control period.</p> <p>We consider that the current 2008 scheme is still necessary to allow DNSPs to trial tariff based demand management projects or programs. Such programs will provide information on efficient pricing for demand management, and on the customer reactions to price signals. We note there is potential for DNSPs to undertake demand management projects and programs to influence the DNSP's tariffs. The current 2008 scheme provides incentives for DNSPs to investigate demand management projects or programs including tariff-based demand management initiatives.</p>
<p>Clause 6.6.3(b)(4) of the NER</p> <p>The possible interaction between a DMEGCIS and other incentive</p>	<p>The AER does not consider that the continued application of the current 2008 scheme will negatively interact with the incentives created by the Efficiency Benefit Sharing Scheme (EBSS) and Service Target Performance Incentive Scheme (STPIS). Further, the AER does not consider that these schemes will hinder the effectiveness of the current 2008 scheme. These are two separate schemes with different focuses that do</p>

³³ AER, Stage 1 framework and approach paper: *Ausgrid, Endeavour Energy and Essential Energy, Transitional regulatory control period 1 July 2014 to 30 June 2015, Subsequent regulatory control period 1 July 2015 to 30 June 2019*, March 2013, p. 43.

schemes. not directly interact with demand management.

The AER acknowledges that maintaining the current 2008 scheme may interact with the incentives created under the EBSS. To counter this, the AER will continue to exclude demand management costs from the EBSS.

Similarly, the STPIS is designed to provide financial incentives for DNSPs to maintain and improve service performance. The STPIS seeks to ensure that increased financial efficiency does not result in deterioration of service performance for customers. This does not directly interact with demand management.

The AER has had regard to the extent customers are willing to pay for any increases in costs that may arise from the implementation of the current 2008 scheme. The AER is not aware, at present, of any substantive reports or studies that have been undertaken on customer willingness to pay for demand management in the NEM.

Clause 6.6.3(b)(5) of the NER We consider that as the current 2008 scheme provides a modest DMIA, and it has had minimal impact on customer prices, it is still appropriate. The current 2008 scheme is expected to encourage DNSPs to undertake small scale demand management initiatives which will provide long term efficiency gains to energy users. Therefore, the modest DMIA fund will enable DNSPs to conduct demand management trials of a more experimental nature. This will provide greater information on customer's willingness to pay, without resulting in significant customer price increases.

The willingness of the customer or end user to pay for increases in costs resulting from the implementation of the scheme.

Further, to date, the D-factor has resulted in very small increases in customer prices. The limit on demand management cost recovery under the D-factor is equal to the avoided distribution costs of the demand management which limits future customer price increases. Continuing the D-factor will allow DNSPs to trial projects that will provide information on customer willingness to pay for demand management.

Clause 6.6.3(b)(6) of the NER

The effect of classification of distribution services, as determined in accordance with clause 6.2.1, on a DNSP's incentive to adopt or implement efficient Embedded Generator Connections.

As outlined in the proposed 2012 DMEGCIS, the AER considers that the existing DMIA criteria in the current 2008 scheme are broad enough to cover demand management projects or programs that seek to investigate means of efficient embedded generator connections.³⁴ The AEMC is also of the view that the existing framework is sufficient for DNSPs to propose innovative projects or programs that encompass demand management projects or programs generally or which promote innovation in the connection of embedded generators.³⁵

Source: AER analysis.

³⁴ AER, Explanatory statement: *Proposed demand management and embedded generation connection incentive scheme, NSW distribution network service providers*, May 2012, p. 19.

³⁵ AEMC, Rule determination: *National Electricity Amendment (inclusion of Embedded Generation Research into Demand Management Incentive Scheme) Rule 2011 No. 11*, December 2011, p. 22.