Preliminary positions

Framework and approach paper

Ausgrid, Endeavour Energy and Essential Energy

Regulatory control period commencing 1 July 2014

June 2012

AUSTRALIAN ENERGY REGULATOR

Inquiries about this document 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

Request for submissions

Interested parties are invited to make written submissions to the Australian Energy Regulator (AER) regarding this paper by the close of business, 17 August 2012.

Submissions should be sent electronically to: NSWACTelectricity@aer.gov.au

Alternatively, submissions can be mailed to:

Mr Warwick Anderson
General Manager, Network Regulation
Australian Energy Regulator
GPO Box 3131
Canberra ACT 2601

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- clearly identify the information that is the subject of the confidentiality claim
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Enquiries about this paper, or about lodging submissions, should be directed to the Network Regulation branch of the AER on (02) 9230 9133.

Contents

Shortened form

Shortened Form	Extended Form
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
CAM	cost allocation method
CPI	consumer price index
CPI-X	consumer price index minus X
current regulatory control period	1 July 2009 to 30 June 2014
DMEGCIS	demand management and embedded generation connection incentive scheme
DMIA	demand management incentive allowance
DMIS	demand management incentive scheme
DNSP	distribution network service provider
DUOS	distribution use of system
EBSS	efficiency benefit sharing scheme
F&A	framework and approach
GSL	guaranteed service level
IPART	Independent Pricing and Regulatory Tribunal of NSW
MAR	maximum allowable revenue
MCE	Ministerial Council on Energy
MWh	megawatt hours
NECF	National Energy Customer Framework
NEL	National Electricity Law
NEM	National Electricity Market
NER	National Electricity Rules
next regulatory control period	1 July 2014 to 30 June 2019
NSW	New South Wales

Shortened Form	Extended Form
RAB	regulatory asset base
SAIDI	system average interruption duration index
SAIFI	system average interruption frequency index
SCONRRR	Standing Committee on National Regulatory Reporting Requirement
STPIS	service target performance incentive scheme
WAPC	weighted average price cap

Summary

Ausgrid (formerly EnergyAustralia), Endeavour Energy (formerly Integral Energy) and Essential Energy (formerly Country Energy) operate as the distribution network services providers (DNSPs) in New South Wales (NSW).

The process the AER must follow in making a distribution determination for NSW DNSPs for the next regulatory control period, commencing on 1 July 2014, will take place over the final two years of the current regulatory control period.

The AER's functions and powers are set out in the National Electricity Law (NEL) and the National Electricity Rules (NER).

In anticipation of every distribution determination, the AER is required to prepare and publish a framework and approach (F&A) paper.[1] The F&A paper assists a DNSP in preparing its regulatory proposal to the AER by:

- setting out the AER's likely approach (and its reasons for that likely approach) in the distribution determination to the classification of distribution services
- stating the form (or forms) of the control mechanisms to be applied by the distribution determination and the AER's reasons for deciding on control mechanisms of the relevant form (or forms)
- providing a statement of the AER's likely approach to cost allocation based on the guidelines currently in force
- setting out the application of schemes, and any other matters on which the AER thinks fit to give an indication of its likely approach.[2]

The AER's preliminary position on classification, form of control, schemes and approach to cost allocation is summarised in the sections below and discussed in detail in the chapters that follow.

The AER acknowledges the continuing uncertainty around the precise arrangements to be put in place following the NSW Government's announcement to merge the NSW DNSPs. The AER will monitor this situation and consider the implications of the merger before it issues it final F&A paper in November 2012.

Classification of services

In classifying distribution services, the NER requires that the AER must act on the basis that (unless a different classification if clearly more appropriate):

- there should be no departure from a previous classification (if the services have been previously classified), or

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1 NER, cl. 6.8.1(a).
2 NER, cl. 6.8.1.

- if there has been no previous classification–the classification should be consistent with the previously applicable regulatory approach.[3]

The AER's preliminary position is to:

- classify network services as direct control services and further, as standard control services
- separate connection services into four components and classify two components as follows:
  - augmentations as direct control services and further, as standard control services
  - incidental services as direct control services and further, as standard control services
- classify all types 5–7 metering services as direct control services, and further as alternative control services
- classify fee based services as direct control services and further, as alternative control services
- classify quoted services as direct control services and further, as alternative control services.

The AER's likely approach is not to classify types 1–4 metering services and the two remaining connection service components of premises connection assets and extensions.

Control mechanisms

The AER can only accept or approve the control mechanisms in a DNSP's regulatory proposal if it is the same as those set out in the F&A paper.[4] In deciding on the control mechanism for standard controls services and alternative control services, the AER must have regard to clauses 6.2.5(c) and 6.2.5(d) of the NER.

The AER considers that there are net benefits in changing the form of control from the weighted average price cap (WAPC) which currently applies to NSW DNSP, to a revenue cap for standard control services. The AER therefore proposes to apply a revenue cap with a basis of the CPI–X form to standard control services for the 2014–19 regulatory control period.

The AER's preliminary position is to apply price cap regulation to alternative control services in the next regulatory control period.

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3 NER, cll. 6.2.1(d) and 6.2.2(d).
4 NER, cl. 6.12.3(c).

Application of service target performance incentive scheme

The AER's service target performance incentive scheme (STPIS) was developed in accordance with the requirements of the NER.[5]

In its 2009 determination, the AER considered that the NSW DNSPs would collect and monitor service performance data during the 2009–14 regulatory control period.[6] Penalties and rewards were not included during the 2009–14 regulatory control period because the AER considered that the NSW DNSPs did not have robust data on which to set targets. The purpose of monitoring and collecting information was to allow the application of the AER's STPIS to the NSW DNSPs for the regulatory control period commencing on 1 July 2014.

The AER's preliminary position is to apply its STPIS to the NSW DNSPs for the 2014–19 regulatory control period. The STPIS likely to be applied to the NSW DNSPs will include the following components:

- ±5 per cent of the NSW DNSPs' revenue at risk
- the system average interruption duration index (SAIDI) and system average interruption frequency index (SAIFI) parameters of the reliability of supply
- the telephone answering parameter in the customer service
- incentive rates determined in accordance with the STPIS
- DNSP's will be segmented according to the AER's interpretation of the Standing Committee on National Regulatory Reporting Requirement (SCONRRR) feeder categories
- performance targets to be based on average performance over the four years prior to making the 2014–19 distribution determination.
- apply the exclusions set out at clause 3.3 of the STPIS
- no guaranteed service level (GSL) scheme will apply as long as a jurisdictional scheme applies.

Application of efficiency benefit sharing scheme

The AER has developed an EBSS[7] in accordance with the requirements of the NER, which is likely to be applied to the NSW DNSPs in the next regulatory control period. In developing and implementing the EBSS, the AER considered the factors in clause 6.5.8(c) of the NER.

In its 2009 determination, the AER considered that the EBSS would apply to the NSW DNSPs from 1 July 2009.[8] The EBSS will not have a direct financial impact on the NSW DNSPs until

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5 NER, cl. 6.6.2(a).

6 AER, *Final decision: NSW distribution determination 2009–10 to 2013–14*, April 2009, p. 244.

7 AER, *Final decision: Electricity distribution network service providers' efficiency benefit sharing scheme*, June 2008.

the 2014–19 regulatory control period, when the NSW DNSPs will receive carryover benefits or penalties for efficiency gains or losses made during that period.[9]

The EBSS has been designed to provide an incentive for a DNSP to reveal its efficient level of expenditure through the retention of efficiency gains for five years after the year in which the gain is made. The scheme calculates revenue increments or decrements derived from the difference between a DNSP's actual operating expenditure (opex) and the forecast opex approved in its building block determination. It is these increments or decrements that provide for the fair sharing of gains or losses between a DNSP and network users.

The EBSS is symmetrical in nature allowing DNSPs to retain the benefits of an efficiency gain (or bear the costs of an efficiency loss) for the length of the carryover period, regardless of the year of the regulatory control period in which the gain/loss was realised.

The nominal five-year carryover period assumed in the AER's EBSS results in a benefit sharing ratio of approximately 30:70 between a DNSP and its customers.[10] This means that a DNSP will retain approximately 30 percent of the benefits of efficiency gains and customers will retain approximately 70 percent of the benefits.

Application of demand management and embedded generation connection incentive scheme

The NER requirements regarding the application of a demand management and embedded generation connection incentive scheme (DMEGCIS) have been the subject of a recent rule change by the Australian Energy Market Commission (AEMC).[11] To address this rule change, the AER has proposed amendments to the scheme, which applies to the NSW DNSPs in the current regulatory control period.[12] Consultation on these proposed amendments is running concurrently to that for the preliminary F&A paper.[13]

The AEMC is currently undertaking a review of demand-side participation in the National Electricity Market (NEM) through the Power of Choice review. The AEMC is expected to provide final advice to the Ministerial Council on Energy (MCE) in September 2012.

While the AER's approach to the DMEGCIS may require revision at the conclusion of this review, the AER considers that the operation of the scheme is appropriate for the purposes of

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8 AER, *Final decision: Efficiency benefit sharing scheme for the ACT and NSW 2009 distribution determinations*, February 2008.

9 AER, *Final decision: New South Wales distribution determination 2009–10 to 2013–14,* 28 April 2009, p. 245.

10 The EBSS assumes a nominal carryover period of five years, but allows a longer carryover period where the regulatory control period covered by the relevant distribution determination is longer than five years. The carryover period will not exceed ten years. A ten-year carryover period results in a sharing ratio of approximately 50:50.

11 AEMC, *Rule Determination: National Electricity Amendment (Inclusion of embedded generation research into Demand Management Incentive Scheme) Rule 2011*, December 2011.

12 AER, *Demand management incentive scheme for the ACT and NSW 2009 distribution determinations–Demand Management Innovation Allowance Scheme*, November 2008.

13 On 29 May 2012, the AER published its proposed DMEGCIS as well as its accompanying explanatory statement setting out amendments to establish the AER's proposed DMEGCIS. The AER is in the process of consultation on its proposed scheme. The AER is expected to publish its final DMEGCIS by 30 October 2012. The AER's final position on its approach of a DMEGCIS will be set out in November 2012.

the AER's preliminary F&A paper. The AER will consider its position after the Power of Choice review has concluded.

The proposed DMEGCIS will function in the same manner as the scheme which applies in the current regulatory control period. The proposed DMEGCIS is comprised of two parts:

- part A – the demand management innovation allowance (DMIA) which is provided to the DNSP as an annual ex-ante allowance
- part B –allows a DNSP to recover revenue forgone which is directly attributable to a non-tariff demand management project or program approved under part A of the scheme.

Access to recovery of forgone revenue is dependent on the form of control that is applied to the NSW DNSP's standard control services, and the manner in which that form of control affects that DNSP's incentives or disincentives to undertake demand management. The AER considers that, where a revenue cap applies to a DNSP, the recovery of allowed revenues is not dependent on energy sales and as a result, part B of DMEGCIS does not apply to the DNSP. Access to part B of the DMEGCIS will be set out in the final F&A paper for the NSW DNSPs.

In the current regulatory control period, the AER also applied IPART's D-factor scheme to the NSW DNSPs.[14] The AER intends that its amended scheme will apply as its DMEGCIS for the next regulatory control period. For the purposes of the preliminarily positions F&A, the AER intends to apply a DMEGCIS to the NSW DNSPs in the next regulatory control period. The AER also intends to discontinue the application of the D-factor, except insofar as recovery is permitted until the end of the 2015–16 regulatory year for expenditure on projects or programs implemented in the last two years of the current regulatory period.[15] This is consistent with the AER's 2009 distribution determination.[16]

Dual function assets

The AER is required to include in its F&A paper, a determination as to whether or not Part J of chapter 6A of the NER is to be applied to services provided by any dual function assets owned, controlled or operated by NSW DNSPs. The AER's preliminary position is that:

- Part J of chapter 6A of the NER should apply to Ausgrid's dual function assets.
- Part J of chapter 6A of the NER should not apply to Endeavour Energy's dual function assets.

For both DNSPs, this approach is consistent with its preferred approach and is a continuation of the current pricing approach applicable to services provided by these assets. Essential Energy has informed the AER that it has no dual function assets and therefore the AER is not required to set out a preliminary position.[17]

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14 AER, *Final decision: New South Wales distribution determination 2009–10 to 2013–14*, April 2009, p. 265.
15 AER, *Final decision: New South Wales distribution determination 2009–10 to 2013–14*, April 2009, p. 259.
16 AER, *Final decision: New South Wales distribution determination 2009–10 to 2013–14*, April 2009, p. 259.
17 Endeavour Energy, email to AER re: *DNSP Questions*, 9 May 2012.

Other matters

Cost allocation methods

In its 2009 final determination, the AER approved that NSW DNSPs to apply cost allocation methods (CAM) based on the IPART Accounting Separation Code consistent with Part J of chapter 6A of the NER.[18] Given that the transitional rules will expire at the conclusion of the 2009–14 regulatory control period, the AER requires the NSW DNSPs to propose CAMs that are consistent with the AER's cost allocation guidelines.

AER assessment tools

The AER has identified a suite of tools that will assist in its review of the NSW DNSPs regulatory proposals. The assessment tools the AER proposes to utilise include the replacement capital expenditure (capex) tool (repex tool), the augmentation capex tool (augmentation tool) and other benchmarking techniques. These tools will be used in conjunction with other investigation and analysis to form a view as to the reasonableness of a DNSPs regulatory proposal. To be able to utilise these tools, the AER will need to collect the relevant data from the DNSPs.[19]

Consultation process

The F&A paper must be prepared in consultation with the NSW DNSPs and other interested stakeholders.

The AER must commence consultation on its preliminary F&A paper for the NSW DNSPs by 30 June 2012. The AER must also complete and publish the final F&A paper by 30 November 2012. The AER seeks submissions from interested parties by 17 August 2012.

The overview below sets out the proposed process for the preparation and consultation on the F&A.

Overview: Process for preparation of and consultation on F&A paper

Step	Date
Publication of preliminary positions F&A paper	25 June 2012
Stakeholder forum	July 2012*
Submissions on preliminary positions F&A close	17 August 2012
Publication of final F&A paper	30 November 2012

* Subject to sufficient interest from stakeholders

[18] AER, *Final decision NSW electricity distribution network service providers cost allocation method*, March 2008.

[19] It should be noted that tools other than those discussed in the preliminary F&A paper may also be used by the AER during the 2014–19 distribution determination. The adoption of any assessment technique will depend on its suitability in the circumstances.

1. Introduction

The AER is responsible for the economic regulation of monopoly electricity distribution services in the NEM.[20] The AER's functions and powers are set out in the NEL and the NER.

Under chapter 6 of the NER, the AER may classify distribution services to be provided by a DNSP as either 'direct control services' or 'negotiated distribution services'. If a service does not fall within the NER's terms, the AER may not classify it. Once the AER classifies a service, the NER sets out how it must be regulated. The AER must also make distribution determinations for each DNSP.

Ausgrid, Endeavour Energy and Essential Energy (NSW DNSPs) are the three licensed operators of NSW's electricity distribution network. The AER began regulating the provision of electricity distribution network services provided by the NSW DNSPs on 1 January 2008, initially operating under transitional NER provisions.[21] At that time, the NER required the AER to adopt certain aspects of IPART's 2004–09 distribution determination. Consequently, the AER did not undertake an F&A process.

Transitional provisions of the NER do not apply to the distribution determination for the 2014–19 regulatory control period. Rather, Part E of chapter 6 of the NER sets out the relevant procedures. The first phase involves the AER preparing and publishing a preliminary positions paper on its F&A paper by 30 June 2012. The F&A process ends with the AER publishing the final F&A paper by 30 November 2012.

1.1 Nature of framework and approach paper

In anticipation of every distribution determination, the AER is required to prepare and publish an F&A paper. The F&A paper assists DNSPs to prepare its regulatory proposals to the AER by:

- stating the form (or forms) of the control mechanisms to be applied by the distribution determination and the AER's reasons for deciding on the form of control[22]
- setting out the AER's likely approach (and its reasons for that likely approach) in the 2014–19 distribution determination to:
  - the classification of distribution services
  - the application of a STPIS or schemes
  - the application of an EBSS or schemes
  - the application of a DMEGCIS or schemes

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20 NER, cl. 6.1.1.
21 NER, chapter 11.
22 NER, cl. 6.8.1(c).

- any other matters on which the AER thinks fit to give an indication of its likely approach[23]

- providing a statement of the AER's likely approach to cost allocation based on the guidelines currently in force[24]

- a determination as to whether or not Part J of chapter 6A of the NER is to be applied to determine the pricing of any transmission standard control services provided by any dual function assets owned, controlled or operated by the NSW DNSPs.[25] If a DNSP owns, controls or operates dual function assets, it must advise the AER of the value of those assets 24 months prior to the end of the current regulatory control period to enable such a determination.[26]

The control mechanisms applied in the distribution determination must be as set out in the F&A paper.

In all other respects, the F&A paper is not binding on the AER or DNSPs, however:

- the classification of services in a distribution determination must be as set out in the F&A paper unless the AER considers that, in light of a DNSP's regulatory proposal and submissions received in the determination process, there are good reasons for departing from the classification proposed in that paper[27]

- where, in respect of classification of services or any other matter, a DNSP's regulatory proposal puts forward an approach different to that set out in the F&A paper, the AER will expect to see a fully supported argument explaining the different approach. It should detail how circumstances have changed such that a different approach would be more appropriate and necessary to satisfy the requirements of the NEL and NER.[28]

The procedure to be followed by the AER in making a distribution determination is set out in chapter 6, Part E of the NER, and summarised in table 1.1.

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23 NER, cl. 6.8.1(b).

24 NER, cl. 6.15.4(b).

25 NER, cll. 6.8.1(ca) and 6.25(b). A dual function asset means any part of a network owned, operated or controlled by a DNSP which operates between 66 kV and 220 kV. It operates in parallel, and provides support, to the higher voltage transmission network which is deemed by cl. 6.24.2(a) of the NER to be a dual function asset. To avoid doubt:
(a) a dual function asset can only be an asset which forms part of a network that is predominantly a distribution network
(b) an asset which forms part of a network which is predominantly a transmission network cannot be characterised as a dual function asset, through the operation of cl. 6.24.2(a) of the NER.

26 NER, cl. 6.25.

27 NER, cl. 6.12.3(b).

28 NER cl. 6.8.2(c)–(f).

Table 1.1: Procedures for making a distribution determination

Step	Date
AER to publish preliminary positions F&A paper for the NSW DNSPs	25 June 2012
AER to publish F&A paper for NSW DNSPs	30 November 2012
Regulatory proposal and distribution determination	
NSW DNSPs to submit regulatory proposal to the AER	31 May 2013
AER to publish draft distribution determination on the NSW DNSPs	November 2013*
NSW DNSPs may submit a revised regulatory proposal to the AER	December 2013
AER to publish final distribution determination on NSW DNSPSs	30 April 2014
NSW DNSPs to submit initial pricing proposals for AER approval	Mid May 2014
AER to publish approved pricing proposal	Mid June 2014
Distribution determination and approved pricing proposal to commence	**1 July 2014**

* The NER does not provide specific timeframes in relation to publishing the draft decision. Accordingly, this date is indicative only.

Source: NER, chapter 6, Part E.

This preliminary positions paper sets out the likely F&A for the AER's distribution determination for the NSW DNSPs for the regulatory control period commencing 1 July 2014.

1.2 Components of the framework and approach paper

The detailed requirements guiding the AER's likely approach on each component of the F&A paper are discussed in the chapters that follow. To provide context to those chapters, this section outlines the relationships between the various components of the F&A paper.

The first two issues addressed in the preliminary F&A paper are the AER's likely approach to classification of distribution services provided by the NSW DNSPs and the control mechanism(s) that will apply to each class of services.

Service classification occurs at two levels:

1. the AER may choose to classify a distribution service as:

    a. direct control service or

    b. negotiated distribution service.[29]

The AER may also decide against classifying a distribution service. If the AER proposes not to classify a distribution service under clause 6.2.1 of the NER, that service will not be regulated.

[29] NER, cl. 6.2.1(a).

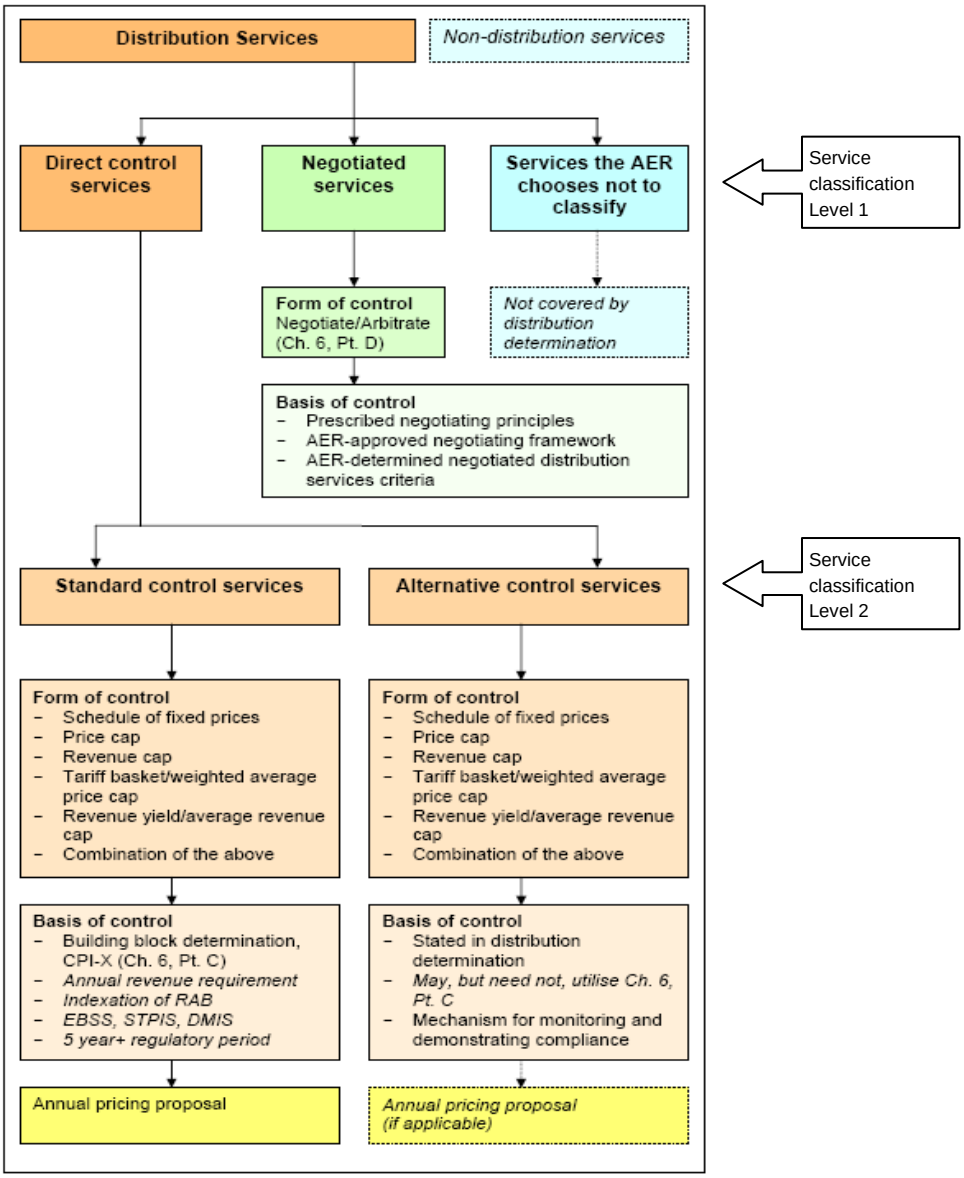
2. where the AER classifies a distribution service as a direct control service it must further classify it as either a:

a. standard control service or

b. an alternative control service.[30]

The classification of the service then determines the control mechanism(s) to be applied to that service and the basis of that control mechanism. This determines the manner that the service and costs associated with providing it are treated in a distribution determination. This is illustrated in figure 1.1.

Figure 1.1: Service classification and control mechanism



Source: NER, chapter 6.

[30] NER, cl. 6.2.2(a).

Distribution services that are not classified will not be subject to the framework for economic regulation of distribution services in chapter 6 of the NER.[31] In addition, non-distribution services cannot be regulated under the NER.

Terms and conditions of access to negotiated distribution services, including the price of those services, will be determined under the negotiate/arbitrate framework set out in Part D of chapter 6 of the NER. The AER is required to assess the DNSP's proposed negotiating framework and the negotiated distribution service criteria.[32] In the event of a dispute, the AER will arbitrate in accordance with these criteria and with regard to the approved framework.[33]

The distribution determination must impose a control on a price of, and or revenue derived from, direct control services.[34] The control mechanism may consist of:

1. a schedule of fixed prices

2. caps on the prices of individual services

3. caps on the revenue to be derived from a particular combination of services

4. tariff basket price control

5. revenue yield control or

6. a combination of any of the above.[35]

For standard control services, the control mechanism must be of the prospective consumer price index (CPI) minus X (CPI-X) form or some incentive-based variant of the prospective CPI minus X form, according to Part C of chapter 6 of the NER.[36] The basis of the control mechanism must be a building block determination made in accordance with Part C of chapter 6 of the NER.[37] The AER's distribution determination must include a decision on how compliance with a relevant control mechanism is to be demonstrated.[38]

For all direct control services, an annual pricing proposal must be submitted to, and approved by, the AER under Part I of chapter 6 of the NER.[39]

The incentive schemes developed by the AER under chapter 6 of the NER apply only to standard control services.[40]

The preliminary F&A paper for the NSW DNSPs must include a statement of the AER's likely approach to cost allocation based on the guidelines then in force and a determination in relation to any dual function assets owned, controlled or operated by the NSW DNSPs.[41]

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31 NER, cl. 6.2.1(a).
32 NER, cl. 6.7.2.
33 NER, cl. 6.22.2(c).
34 NER, cl. 6.2.5(a).
35 NER, cl. 6.2.5(b).
36 NER, cl. 6.2.6(a).
37 NER, cl. 6.2.5(a).
38 NER, cl.6.12.1(13).
39 NER, cl. 6.18.2(a).
40 NER, cll. 6.5.8, 6.6.2 and 6.6.3.

1.3 Transition to Chapter 6 of the NER

The next regulatory control period is the AER's first opportunity to conduct a complete review of the NSW DNSPs under chapter 6 of the NER, rather than pursuant to transitional provisions. This allows the AER an opportunity to consider all relevant issues without the restriction of deeming provisions.

Broadly, the transitional provisions of chapter 6 of the NER relevant to the 2009–14 distribution determination:

- specified the classification of services that the AER was to apply based on IPART's classification that applied to the 2004–09 regulatory control period
- required the AER to assess the DNSPs' negotiable components of direct control services and negotiating framework
- required the AER to assess the DNSPs' control mechanisms for standard control services.

On this occasion, chapter 6 of the NER provides scope for the AER to review the classification of services and control mechanisms to address concerns previously raised by DNSPs and interested parties. In doing this, the AER recognises that it must seek to minimise the impact of the provisions of chapter 6 of the NER on the DNSPs and users. The F&A paper is a key means by which greater certainty can be provided regarding the regulatory framework that will apply to the NSW DNSPs for the 2014–19 regulatory control period.

1.4 Structure of this paper

This paper sets out the AER's preliminary position on the likely F&A for NSW DNSPs for the regulatory control period commencing 1 July 2014. Specifically:

- chapter 2 sets out the likely approach to the classification of distribution services
- chapter 3 outlines the form (or forms) of the control mechanisms to be applied to each class of services by the distribution determination
- chapter 4 sets out the likely approach to the application of the STPIS
- chapter 5 sets out the likely approach to the application of the EBSS
- chapter 6 sets out the likely approach to the application of the DMEGCIS
- chapter 7 sets out the preliminary position with respect to dual function assets
- chapter 8 sets out the likely approach to cost allocation and assessment tools.

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[41] NER, cl. 6.25.

2. Classification of distribution services

2.1 Introduction

This chapter sets out the AER's preliminary position on its likely approach to the classification of the NSW DNSPs' distribution services for the next regulatory control period. The preliminary positions set out in this chapter are not binding on the AER or the NSW DNSPs.[42] The AER will consider alternative proposals on the classification of services submitted by a DNSP or interested party.

The AER may classify the distribution services as either direct control or negotiated distribution services.[43] Further, the AER must classify direct control services as either standard control services or alternative control services.[44] Services not classified by the AER are not regulated under the NER.

Service classification effectively determines two key aspects of the distribution determination. Whether the:

- service should be regulated under a direct price or revenue control, a negotiate/arbitrate framework, or no price or revenue control—that is, the control mechanism that will apply to the service.[45]
- costs of providing the service should be recovered by NSW DNSPs through DUOS tariffs paid by most customers, or through separate tariffs paid by the individual customer requesting the service.[46]

The AER's role in service classification only determines the manner in which a DNSP recovers the costs associated with the distribution services it provides—it does not determine the contestability of these services.[47] For example, the AER's classification of a distribution service as a direct control service does not make a NSW DNSP the exclusive monopoly provider of that service. Likewise, the AER's classification of a distribution service as a negotiated distribution service does not make the service contestable and open to supply by providers other than DNSPs. Contestability is determined by legislation, or other regulatory instruments, and is beyond the control of the AER.

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42 NER, cl. 6.8.1.

43 NER, cl. 6.2.1.

44 NER, cl. 6.2.2.

45 The control mechanism available for each service depends on the classification. The control mechanisms available for direct control services are listed under cl. 6.2.5(b) of the NER. These include revenue caps, average revenue caps, price caps, weighted average price caps, a schedule of fixed prices or a combination of the specified forms of control. Negotiated distribution services are regulated under the negotiate/arbitrate framework set out in Part D of chapter 6 of the NER. Control mechanisms are discussed in greater detail in chapter 3 of the preliminary F&A paper.

46 In general, the costs of providing standard control services would be expected to be recovered through DUOS tariffs paid by all or most customers. Costs of providing alternative control or negotiated distribution services would be expected to be recovered from the individual customers that are the recipients of such services.

47 Contestability concerns whether or not a service is permitted by law or other regulatory instruments of the relevant jurisdiction to be provided by a party other than a DNSP.

2.2 Requirements of the NEL and NER

A distribution determination must include a decision on the classification of the distribution services to be provided by a DNSP during the course of the relevant regulatory control period.[48] Only services within the definition of 'distribution services' in chapter 10 of the NER can be classified. Classification of services forms part of the distribution determination and operates for the regulatory control period for which the determination is made.[49] In the F&A paper, the AER must set out its likely approach to the classification of distribution services in a DNSP's next distribution determination, and its reasons for that approach.[50] If the AER decides against classifying a distribution service, the service is not regulated under the NER.

The classification of services in the distribution determination must be as set out in the F&A paper unless the AER considers that, in light of a DNSP's regulatory proposal and submissions received, there are good reasons for departing from the classification.[51]

Distribution services may be grouped together for the purpose of classification. That is, distribution services may be grouped as direct control services or negotiated distribution services.[52] Similarly, direct control services may be grouped as standard control services or alternative control services.[53] In each case, a single classification applies to each service in the group.

Where the NER require that a particular classification be assigned to a distribution service of a specified kind, the service is to be classified in accordance with that requirement.[54] In all other cases, the factors that will guide the AER's decision on service classification are discussed in the sections that follow. In classifying services that have previously been subject to regulation under the present or earlier legislation, clauses 6.2.1(d) and 6.2.2(d) of the NER set out that the AER must act on the basis that, unless a different classification is clearly more appropriate:

- there should be no departure from a previous classification (if the services have been previously classified), or
- if there has been no previous classification, the classification should be consistent with the previously applicable regulatory approach.[55]

Figure 2.1 below outlines the steps in the distribution service classification process.

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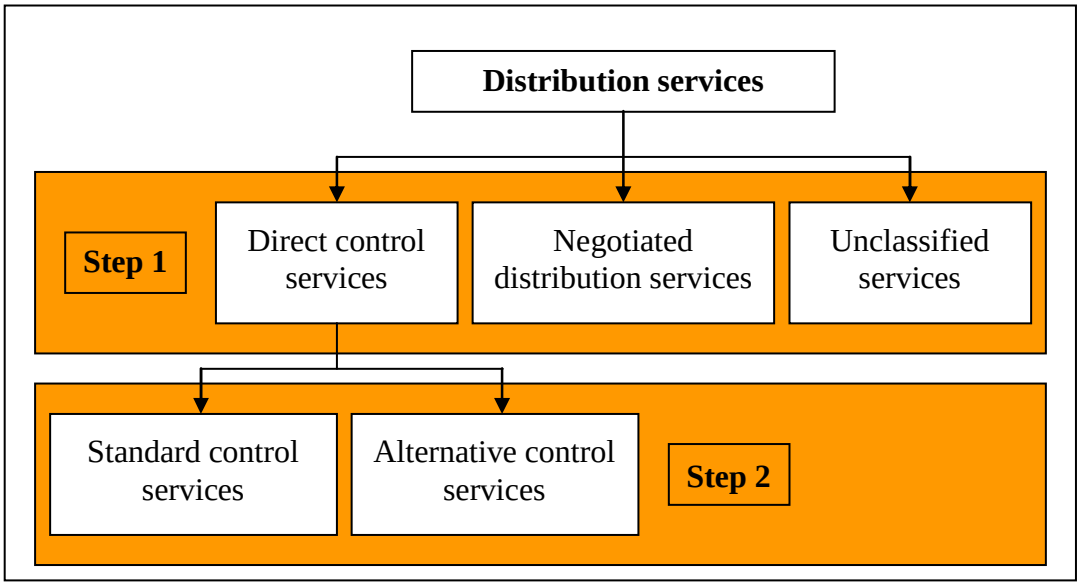
48 NER, cl. 6.12.1(1).
49 NER, cl. 6.2.3.
50 NER, cl.6.8.1(b)(1).
51 NER, cl. 6.12.3(b).
52 NER, cl. 6.2.1(b).
53 NER, cl. 6.2.2(b).
54 NER, cll. 6.2.1(e) and 6.2.2(e).
55 NER, cll. 6.2.1(d) and 6.2.2(d).

Figure 2.1: Distribution service classification process



Source: NER, chapter 6, part B.

2.2.1 Distribution services

Before classifying a distribution service under the NER, it is necessary to understand the meaning of 'distribution service'. The NER defines a distribution service as a service provided by means of, or in connection with, a distribution system.[56]

Distribution system is defined in the NER as a 'distribution network, together with the connection assets associated with the distribution network, which is connected to another transmission or distribution system. Connection assets on their own do not constitute a distribution system'.[57]

Chapter 10 of the NER further expands that distribution services include services provided by means of, or in connection with, the apparatus, equipment, plant or buildings used to convey, and control the conveyance of, electricity to customers (whether wholesale or retail), where these assets are owned, controlled or operated by the DNSP, excluding services provided over a transmission network.

The AER considers that the groups of services, as listed in this preliminary F&A paper are distribution services, including network services, connection services, metering services, public lighting services, fee based services, quoted services and unregulated services.

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[56] This definition paraphrases the definition contained in chapter 10 of the NER. In the case of any inconsistency between the definition in this section and that in the NER, the definition in the NER prevails.

[57] NER, chapter 10.

2.2.2 Step 1: Division of distribution services into direct control, negotiated distribution and unregulated services

When classifying distribution services as either direct control services or negotiated distribution services, the AER must have regard to the four factors in clause 6.2.1(c) of the NER:

1. the form of regulation factors in section 2F of the NEL:
    - the presence and extent of any barriers to entry in a market for electricity network services
    - the presence and extent of any network externalities (that is, interdependencies) between an electricity network service provided by a network service provider and any other electricity network service provided by the network service provider
    - the presence and extent of any network externalities (that is, interdependencies) between an electricity network service provided by a network service provider and any other service provided by the network service provider in any other market
    - the extent to which any market power possessed by a network service provider is, or is likely to be, mitigated by any countervailing market power possessed by a network service user or prospective network service user
    - the presence and extent of any substitute, and the elasticity of demand, in a market for an electricity network service in which a network service provider provides that service
    - the presence and extent of any substitute for, and the elasticity of demand in a market for, elasticity or gas (as the case may be)
    - the extent to which there is information available to a prospective network service user or network service user, and whether that information is adequate, to enable the prospective network service user or network service user to negotiate on an informed basis with a network service provider for the provision of an electricity network service to them by the network service provider.[58]
2. the form of regulation (if any) previously applicable to the relevant service or services, and, in particular, any previous classification under the present system of classification or under the present regulatory system (as the case requires)[59]
3. the desirability of consistency in the form of regulation for similar services (both within and beyond the relevant jurisdiction)[60]
4. any other relevant factor.[61]

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58 NEL, s. 2F.
59 NER, cl. 6.2.1(c)(2).
60 NER, cl. 6.2.1(c)(3).
61 NER, cl. 6.2.1(c).

In classifying distribution services that have previously been subject to regulation under the present or earlier legislation, the AER must also follow the requirements of clause 6.2.1(d).

2.2.3 Step 2: Division of direct control services into standard control and alternative control services

In classifying direct control services as either standard control services or alternative control services, the AER must have regard to all of the six factors in clause 6.2.2(c) of the NER:

1. the potential for development of competition in the relevant market and how the classification might influence that potential
2. the possible effects of the classification on administrative costs of the AER, the DNSP and users or potential users
3. the regulatory approach (if any) applicable to the relevant service immediately before the commencement of the distribution determination for which the classification is made
4. the desirability of a consistent regulatory approach to similar services (both within and beyond the relevant jurisdiction)
5. the extent that costs of providing the relevant service are directly attributable to the customer to whom the service is provided, and
6. any other relevant factor.[62]

In classifying direct control services that have previously been subject to regulation under the present or earlier legislation, the AER must also follow the requirements of clause 6.2.2(d) of the NER.

2.3 Overview of current service classification arrangements in NSW

The AER commenced regulating the NSW DNSPs on 1 January 2008, initially operating under transitional provisions set out in the NER.[63] The AER was required to adopt certain aspects of IPART's 2004–09 determination. For the 2014–19 distribution determination the AER is not bound by the transitional provisions of chapter 6 of the NER. Consequently, the AER is able to give detailed consideration to the classification of distribution services under chapter 6 of the NER.

In its 2009 distribution determination, the AER rejected the NSW DNSPs' proposals to vary the deemed classification of services as set out in the transitional provisions of chapter 6 of the NER.[64] Under clause 6.12.1(1) of the transitional provisions, the AER decided that the following classification of services would apply to the NSW DNSPs for the 2009–14 regulatory control period:

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62 NER, cl. 6.2.2(c).

63 NER, chapter 11.

64 Specifically, cl. 6.2.3B(i) and AER, *Draft decision, New South Wales distribution determination 2009-10 to 2013-14*, 2008, p. 17.

- a distribution service provided by the NSW DNSPs that was previously determined by IPART to be a prescribed distribution service (for the purposes of the 2009–14 regulatory control period) was deemed to be classified as a direct control service and further classified as a standard control service.

- a distribution service provided by the NSW DNSPs that was previously classified as an excluded distribution service by IPART, specifically the excluded distribution service of the construction and maintenance of public lighting infrastructure (for the purposes of the 2009–14 regulatory control period) was deemed to be classified as a direct control service and further classified as an alternative control service.

- a distribution service provided by the NSW DNSPs that was previously classified as an excluded distribution service by IPART, and is not the excluded distribution service of the construction and maintenance of public lighting infrastructure (for the purposes of the 2009–14 regulatory control period) was deemed to be classified as an unregulated distribution service.

- the NSW DNSPs have no services classified as negotiated distribution services.[65]

- other distribution services provided by the NSW DNSPs were unclassified and not regulated by the AER under the transitional chapter 6 rules, such as connection services and metering services (types 1-4).[66]

Therefore, all NSW DNSPs have two forms of classification for the current regulatory period:

- one that applies to DUOS and 'miscellaneous' distribution services (standard control)[67]

- alternative control applying to public lighting services in NSW.

Generally, NSW distribution services are currently classified as shown in table 2.1.

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65 Notably, a service provided by means of, or in connection with, Ausgrid's transmission support network and that, but for cl. 6.1.6(d) of the transitional chapter 6 of the NER, would be a negotiated transmission service is deemed to be classified as a negotiated distribution service.

66 AER, *Final decision, New South Wales distribution determination 2009-10 to 2013-14*, 2008, p. 28.

67 'Miscellaneous' distribution services is language adopted from IPART under the transitional provisions. Miscellaneous services are non-routine services related to the distribution of electricity and include special meter readings, meter testing and disconnection for non-payment.

Table 2.1: Current classification of distribution services in New South Wales

Service group	Services included in group*	Current classification
Miscellaneous and monopoly services (including emergency recoverable works)	Miscellaneous services include supply of conveyancing information (desk and field inquiry); meter test; special meter read; disconnection at meter box or pole top; rectification of illegal connection. Monopoly services include design information, certification and inspection; access permit; substation commissioning; notice of arrangement.	Standard control
Metering services types 1–4	Metering services for consumers using over 160 MWh per annum and includes meter testing, reading, checking and processing metering data.	Unregulated
Metering services types 5–7	Metering services for consumers using less than 160 MWh per annum and includes meter testing, reading, checking and processing metering data.	Standard control
Public lighting services	Construction and maintenance of public lighting assets	Alternative control
Customer funded connections	Design and construction of new connection assets; design and connection of customer-funded network augmentations	Unregulated
Customer specific services	Services requested by the customer which may include: asset relocation works; conversion to aerial bundled cable; temporary, stand-by, reserve or duplicate supplies, other customer requested services which are non-standard.	Unregulated

*This is not an exhaustive list of services included in each group.

Source: AER

Prices for the NSW DNSPs' DUOS are regulated using a WAPC. A schedule of fixed prices was developed for the provision of miscellaneous services.

2.4 Issues and AER's considerations

2.4.1 Considerations relevant to classification of services

The NER may direct the AER to classify a service of a specified kind in a particular way. Otherwise it creates a presumption in favour of prior classification unless a different classification is clearly more appropriate.[68]

[68] NER, cl. 6.2.2(e).

Requirements to classify a service of a specified kind in a particular way

Where the NER require a service of a specified kind to be classified as a direct control or negotiated distribution service, or as a standard control or alternative control service (as the case may be), then that service is to be classified according to that requirement.[69] The AER is not aware of any requirement in the NER to this effect relating to distribution services provided by the NSW DNSPs.

Presumption in favour of prior classification consistent with previously applicable regulatory approach (as the case may be)

Where the NER does not require a service to be classified in a particular way, the classification process includes a presumption in favour of the prior classification, or classification consistent with the previously applicable regulatory approach (as the case may be).[70]

With this in mind, the AER must assess whether a different classification is clearly more appropriate, having regard to the factors it must consider in the NER.

The AER's preliminary position is that there are some distribution services where a different classification is clearly more appropriate.

The AER acknowledges the need to classify services to allow flexibility to DNSPs to alter the exact specification (but not the nature) of a service during the regulatory control period. At the same time, the AER needs to provide certainty as to how specific services, particularly new services that may arise during a regulatory control period, are classified. This balance can be achieved by grouping services for the purpose of classification as provided for by the NER.[71]

The AER considers that this approach to service classification has the advantage of classifying a class of activities, rather than the specific activities performed as part of the service. This allows the specific definition or magnitude of services to change whilst maintaining the desired classification. Such broad classifications may be combined with a list of specific services that are included (but not limited to) that classification grouping.

2.4.2 Classification of distribution services

This section considers whether a different classification is clearly more appropriate. Although there is a presumption in favour of the previous regulatory approach for the NSW DNSPs' distribution services, the AER is not constrained by the transitional provisions applicable during the last reset. This provides the AER with its first opportunity to properly consider the suitability of distribution service classifications.

Grouping of services

Clause 6.2.1(b) of the NER provides for the AER to group distribution services for the purposes of classification. If it does so, a single classification made for the group applies to

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69 NER, cll. 6.2.1(e) and 6.2.2(e).
70 NER, cll. 6.2.1(d) and 6.2.2(d).
71 NER, cll. 6.2.1(b) and 6.2.2(b).

each service comprised in the group as if it had been separately classified. Having regard to the previous grouping of services and the grouping of services in other jurisdictions, the AER considers that it is appropriate to group the distribution services provided by the NSW DNSPs as:

- network services
- connection services
- metering services (types 5–7)
- fee based services
- quoted services
- public lighting services.

The NSW DNSPs support, in principle, the above grouping of services but submit that it is important to ensure that services are appropriately grouped and the groupings themselves are appropriate.[72]

Ausgrid has proposed a range of 'new' miscellaneous and monopoly services that it considers necessary to satisfy the requirements of the National Energy Customer Framework (NECF). Examples of 'new' services proposed by Ausgrid include:

- negotiation service—for services provided to connection applicants for negotiated connection contracts to cover the direct costs incurred by Ausgrid in assessing the applicant's application and making a connection offer
- site inspection service—for site inspection services that determine the nature of a connection service sought by a connection applicant
- service orders for retailers to obtain a final read for customer move-outs or to obtain a start meter read where a customer is moving in to a site that has been vacant
- Recovery of debt collection costs— dishonoured transactions.[73]

The AER has briefly reviewed Ausgrid's proposed 'new' services. The AER will seek further details from Ausgrid to understand the specific sections of NECF that give rise to the need for these additional services and how the proposed services differ from services currently provided. Endeavour Energy has indicated that although its review is incomplete, some

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[72] Ausgrid, *Response to the AER's consultation paper on classification of electricity distribution services in NSW and the ACT*, 21 February 2012, p. 2; Endeavour Energy, *Classification of electricity distribution services in the ACT and NSW*, 15 February 2012, p. 1; Essential Energy, *Submission on the classification of distribution services in the ACT and NSW*, 17 February 2012, p. 2. See http://www.aer.gov.au/content/index.phtml/itemId/751252.

[73] Ausgrid, *Response to the AER's consultation paper on classification of electricity distribution services in NSW and the ACT*, 21 February 2012, pp. 16 and 17.

additional services may be required to comply with NECF.[74] The AER will seek the same reasoning for any additional services proposed by Endeavour Energy.

The AER has not invested resources in assessing proposed 'new' services at this time as the NSW Government has announced that it will defer the commencement of reforms under the NECF in NSW until at least 2014.[75]

Appendix A sets out the AER's proposed classification of distribution services for the 2014–19 regulatory control period for each of the NSW DNSPs.[76]

2.4.3 Network services

For the reasons below, the AER considers network services to predominantly relate to services provided over the shared network used to service all network users connected to it. Such services may include the construction, maintenance, repairs, operation, planning and design of the shared network. The AER also considers network services to encompass network extensions and 'emergency recoverable works' which must be performed by the DNSP.[77]

Network services are delivered through the provision and operation of apparatus, equipment, plant and or buildings (excluding connection assets) used to convey, and control the conveyance of, electricity to customers. Such assets include poles, lines, cables, substations, communication and control systems, and involve activities such as inspection, testing, repairs, maintenance, vegetation clearing, asset replacement, asset refurbishment and asset construction services that are not connection services. Network services also include the provision of emergency response works and administrative support for other network services.

Network services encompass a significant proportion of a DNSP's distribution services. The AER considers that this view is consistent with how the NER defines a 'network service'.[78]

Current classifications

The NSW DNSPs' current regulatory framework does not have a group of services called 'network services'. However, the AER is of the view that most of the NSW DNSPs' distribution services are for, or in connection with the use of, the electricity network and provided on a routine basis for the benefit of all customers. For example, maintaining the network, operating the network for DNSP purposes, administrative support such as call centres and billing.

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74 Endeavour Energy, *Classification of electricity distribution services in the ACT and NSW*, 15 February 2012, p. 3.

75 The Hon Chris Hartcher, Minister for Resources and Energy, Special Minister of State, Minister for Central Coast, Media Release – *National Energy Framework to commence in 2014*, 31 May 2012.

76 Excluding 'new' services proposed by Ausgrid.

77 An 'extension' is defined in the NER, glossary. The AER understands there are limited circumstances where the DNSP performs network extensions in NSW.

78 NER, chapter 10. 'Distribution service associated with the conveyance, and controlling the conveyance, of electricity through the network.'

Network services are characteristically provided on a 'standard' or routine basis, with the 'above standard' or non-routine supply of these services generally dealt with as a fee based or quoted service. These assets would be supplied as either:

- a fee based service, if the cost of works can be gauged in advance and therefore a single price can be set, or
- a quoted service, if the price cannot be set in advance and an assessment of the specific request is required.

This is further discussed in sections 2.4.6 and 2.4.7 of this chapter.

Issues and AER's considerations

The AER considers that emergency recoverable works relate to emergency work undertaken by a DNSP to repair damage to the distribution system as a result of an act or omission of a person, for which that person is liable. For example, repairs to a power pole following a motor vehicle accident.

The NSW DNSPs submitted that emergency recoverable works are not 'distribution services'.[79] Ausgrid has stated that emergency recoverable works are better characterised as the activities (rather than the service) the DNSP undertakes to repair the network when it is damaged by the actions of a third person. It is therefore suitable for damages to be recovered under common law principles, where the third party can be identified.[80]

However, the AER's preliminary position is that emergency recoverable works are analogous to emergency response works[81] as part of the normal maintenance and repair to the network to ensure the safe and reliable supply of electricity. Only the DNSP may perform these types of repairs on its assets and this creates a monopoly. For this reason, the AER considers that emergency recoverable works performed to repair part of the distribution network should not be treated differently from other emergency response works or repairs.

Ausgrid further submitted that if emergency recoverable works are distribution services, then including them in the quoted services group goes some way to acknowledging that the costs of such repairs are unpredictable and will depend each time on the nature and extent of the damage incurred.[82] Endeavour Energy submitted that in the alternative, emergency recoverable works should remain classified as standard control services.[83]

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79 Ausgrid, *Response to the AER's consultation paper on classification of electricity distribution services in NSW and the ACT*, 21 February 2012, pp. 27 to 29; Endeavour Energy, *Classification of electricity distribution services in the ACT and NSW*, 15 February 2012, p. 5; Essential Energy, *Submission on the classification of distribution services in the ACT and NSW*, 17 February 2012, p. 1.

80 Ausgrid, *Response to the AER's consultation paper on classification of electricity distribution services in NSW and the ACT*, 21 February 2012, pp. 27 to 29.

81 Works performed by the DNSP to repair the distribution network following a natural disaster or, for example, a lightning strike to a pole.

82 Ausgrid, *Response to the AER's consultation paper on classification of electricity distribution services in NSW and the ACT*, 21 February 2012, p. 28.

83 Endeavour Energy, *Classification of electricity distribution services in the ACT and NSW*, 15 February 2012, p. 5.

The AER considers that emergency recoverable works are a distribution service. However, in terms of classification the AER considers that emergency recoverable works are distinguishable from other network services because the cost of these works may be recovered under common law principles. For this reason, the AER's preliminary position is that emergency recoverable works should not be classified.[84]

In determining the appropriate classification for the NSW DNSPs' network services, the AER has first had regard to all of the factors in clause 6.2.1(c), including the form of regulation factors contained in section 2F of the NEL. This analysis is below.

The NSW DNSPs each hold an electricity distribution licence issued by IPART for a distribution district. Only one electricity distribution licence is issued for each district and prevents the DNSP from distributing or supplying electricity outside of its distribution district. Similarly, section 13 of the *Electricity Supply Act 1995* (NSW) prevents a person from distributing and supplying electricity unless they hold a licence authorising them to do so.

The AER considers these arrangements together effectively amount to an absolute regulatory barrier to entry for the purposes of section 2F(a) of the NEL. This is because each NSW DNSP, as the sole electricity distribution licensee in their distribution district, is the only party that can provide network services within their district. Also, consumers are not permitted to source network services in their district from external providers.

Further, the significant capital costs of entry, and the economies of scale and scope available to the NSW DNSPs as incumbent service providers, are highly likely to make duplication of the NSW DNSPs' shared network by an alternative service provider both commercially unviable and economically inefficient. For sections 2F(b) and 2F(c) of the NEL, the economies of scale and scope available to the NSW DNSPs are also likely to prevent network services being competitively provided by an alternative service provider.

For the purposes of section 2F(e) of the NEL, substitutes for using these network services are few. They are likely to be limited to embedded generation or switching to an alternative energy source, such as natural gas or switching the connection point to the transmission network. The AER considers that these are unlikely to be viable commercial options in most instances.

These factors contribute to the view that the NSW DNSPs possess significant market power in the provision of distribution network services which is unlikely to be mitigated by any countervailing market power possessed by a network service user or prospective network service user.[85] With respect to section 2F(g) of the NEL, even a high degree of information available to users would not neutralise the lack of countervailing market power caused by these other form of regulation factors. For these reasons, the AER considers it appropriate to subject these services to a direct form of control.

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[84] Essential Energy, *Submission on the classification of distribution services in the ACT and NSW*, 17 February 2012, p. 1. Essential Energy submitted that emergency recoverable works should be 'either unclassified or a non-distribution service'.

[85] NEL, s2F(d).

The AER has also had regard to clauses 6.2.1(c)(2) and 6.2.1(c)(3) of the NER and notes that network services are currently subject to a weighted average price cap control form of regulation in NSW — this is also the case in other NEM jurisdictions.

Under clause 6.2.1(d), the AER considers that a price cap control mechanism creates a presumption that network services should be classified as direct control services.

Therefore, having regard to the requirements of clause 6.2.1 of the NER, the AER considers that network services should be classified as direct control services.

Once a service is classified as a direct control service, the AER must then apply all six factors in clause 6.2.2(c) of the NER to determine whether it should be classified as a standard or alternative control service.

The distribution services that have been grouped as 'network services' are currently regulated as distribution services under a price cap control mechanism. According to clause 6.2.2(d) of the NER, this creates a presumption that they should be classified as standard control services unless a different classification is clearly more appropriate. Having regard to all the factors in clause 6.2.2(c) of the NER, the AER considers that there is no basis to move away from this presumption as:

- There is little, if any, potential for the development of competition in the market for network services. The AER considers that its classification will not influence the potential for competition — rather, the absence of competition is due to the NSW DNSPs holding the only distribution licences for NSW in their respective districts and by the requirements of the *Electricity Supply Act.*

- There would be no material effect on administrative costs to the AER, the NSW DNSPs or users or potential users. This is because classifying network services as standard control services involves a similar regulatory approach to that which was applied under the transitional provisions for the current regulatory control period.

- Network services are currently regulated in NSW, and all other NEM jurisdictions, under a control mechanism that incorporates a CPI-X framework (or variant thereof), where the X-factor is determined according to a building block approach. Network tariffs are subject to the annual approval of the AER.

- The nature of network services is that they are provided by a shared network and costs cannot be directly attributed to individual customers.

- There are no other apparent relevant factors that change the AER's proposed classification.

AER's preliminary position

The AER's preliminary position is that the NSW DNSPs' network services (excluding emergency recoverable works) should be classified in a manner consistent with its previous regulatory determination, as no other classification is clearly more appropriate. The AER proposes that emergency recoverable works, while a distribution service, should not be classified under the NER.

On this basis, the AER's preliminary position is that network services should be classified as direct control services, and in turn, as standard control services. This preliminary position is

supported by the AER's assessment against the factors in clauses 6.2.1 and 6.2.2 of the NER.

The AER seeks submissions on its proposed classification of network services (excluding emergency recoverable works) as direct control services, and further, as standard control services.

The AER also seeks views on its preliminary position not to classify emergency recoverable works.

2.4.4 Connection services

Chapter 10 of the NER defines connection services as consisting of entry services and exit services. An entry service is a service provided to serve a generator or group of generators, or a network service provider or group of network service providers, at a single connection point. An exit service is a service provided to serve a distribution customer or a group of distribution customers, or a network service provider or group of network service providers, at a single connection point.

In NSW, the *Electricity Supply Act 1995* (NSW) gives the NSW DNSPs the right to charge customers for certain connection works to allow them to make a connection to the distribution network. If a DNSP elects to charge a customer, the DNSP will activate the *Electricity Supply Act*[86] and the service will be contestable. In situations where the customer is required to fund the connection works (in full or in part), the *Electricity Supply Act* also gives the customers the right to choose who carries out the work required to connect them to the distribution network. This work may require the provision of premises connection assets, extensions to an existing network or augmentation of the existing network. To ensure the distribution network and the customer's connection to the network remain reliable and safe, only Accredited Service Providers (ASPs) may perform this work in NSW. Such choice facilitates competition between providers of these services. The ASP scheme is administered by the NSW Department of Trade and Investment.[87]

An ASP performing contestable work will liaise with the relevant NSW DNSP on the design, construction and/or installation standards required for the particular work.

New South Wales, by virtue of the contestability framework contained in the *Electricity Supply Act,* the *Electricity Supply (General) Regulation* and underpinned by the accreditation scheme for providers of connection services, differs from other NEM jurisdictions. The policy purpose of contestability in NSW is to promote competition and consumer choice. The ASP Scheme was designed to support this policy objective.[88] No contestability framework of this nature exists in other NEM jurisdictions. Consequently, the costs of connection services in other NEM jurisdictions are either directly attributed to an identifiable customer or spread across the entire customer base.

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86 Specifically, s. 31 of the *Electricity Supply Act 1995* (NSW).

87 Endeavour Energy, *Classification of electricity distribution services in the ACT and NSW*, 15 February 2012, p. 1.

88 Endeavour Energy, *Classification of electricity distribution services in the ACT and NSW*, 15 February 2012, p. 1.

Current classification

The NSW regulatory framework does not currently have a group of services called 'connection services'. However, the AER considers that most of the NSW DNSPs' 'monopoly' services fall within this group. In this regard, monopoly services are performed by the NSW DNSPs to facilitate contestable connection works such as inspection, design certification and the provision of access permits. These services support the work of ASPs and the object of the contestability framework to provide consumer choice. Monopoly services are currently classified as standard control services.

Specifically, 'customer funded connections' were previously classified as excluded distribution services by IPART. Consistent with the transitional chapter 6 provisions, the AER deemed customer funded connections to be unregulated distribution services.[89] Therefore, customer funded connections have been subject to IPART's Excluded Distribution Services Rule for the 2009-14 regulatory control period.[90]

Issues and AER's considerations

Connection services will be the subject of a new chapter 5A and amended chapter 6 of the NER and the AER's Connection Charge Guideline (Guideline) which take effect from July 2012. Chapter 5A and the Guideline provide a framework and charging principles for new connections. The NSW DNSPs are concerned that connection services are classified appropriately to avoid a negative impact on the operation of NSW's contestability framework or be inconsistent with the Guideline.[91] Chapter 5A and the Guideline will be in operation before the final F&A is released in November 2012. The AER does not anticipate any changes to the operation of the contestability framework or ASP scheme in NSW, which makes classification of new premises connection assets unnecessary. The NSW Government has the power to derogate the application of chapter 5A and the Guideline.

Based on chapter 5A of the NER, the AER considers that a typical connection can be separated into at least four components. The AER considers that these components of a connection are sufficiently distinct that they may appropriately be classified differently and have different forms of control applied. In general, the distinct components of a connection are:[92]

a. Augmentation of premises connection assets at the retail customer's connection point (premises connection assets)—the AER considers this would include any connection assets located on the retail customer's premises.[93]

b. Extensions— an augmentation that requires the connection of a power line or facility outside the present boundaries of the transmission or distribution network owned, controlled or operated by a Network Service Provider.[94]

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89 AER, *Draft decision, New South Wales distribution determination 2009–10 to 2013–14*, 2008, p. 11.

90 AER, *Draft decision, New South Wales distribution determination 2009–10 to 2013–14*, 2008, p. 17.

91 Ausgrid, *Response to the AER's consultation paper on classification of electricity distribution services in NSW and the ACT*, 21 February 2012, p. 6; Endeavour Energy, *Classification of electricity distribution services in the ACT and NSW*, 15 February 2012, p. 2; Essential Energy, *Submission on the classification of distribution services in the ACT and NSW*, 17 February 2012, p. 4.

92 NER, chapter 5A.

93 Also referred to as 'premises connection assets' at cl 5A.A.1 of the NER.

94 NER, glossary.

c. Augmentations—any augmentation undertaken by a DNSP which is not an extension[95] or network augmentation dedicated to a customer.

d. Incidental services—including the provision of administration, design, certification and inspection services.

The NSW DNSPs broadly support the concept of separating connection services into component parts.[96] They also stress the need for the definitions of connection services to be consistent with the NER and the AER's Guideline.[97]

As a starting point, the costs associated with premises connection assets; extensions; and incidental services components of a connection can be readily attributable to the customer who requires the connection.[98] To achieve efficient price signalling, customers should generally be charged the identifiable costs that they impose on the network. This largely occurs in NSW because of the contestability framework where customers may select an ASP to perform the work requested.

The costs associated with augmentations are less attributable to a particular customer and therefore a standard control classification may be more appropriate. The AER's Guideline allows, in some circumstances, a capital contribution towards the costs of standard control connection services. The method of determining any capital contribution for standard control services is set out in the AER's connection charge Guideline.

Classification of distribution services by component

In determining the appropriate classification for connection services the AER has first had regard to the four factors in clause 6.2.1(c) of the NER, including the form of regulation factors contained in section 2F of the NEL. In this instance, the AER must apply clause 6.2.1(c) to each of the four components of a connection service. It has done so below.

Component a. Premises connection assets

The AER considers that augmentation of premises connection assets at the retail customer's connection point would include any connection assets located on the retail customer's premises.

The AER has considered the factors in clause 6.2.1 of the NER and, for the following reasons considers that it is clearly more appropriate that premises connection assets are unclassified and therefore not regulated by the AER.

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95 Augmentation is defined in the NER. However, the definition provides that network extensions are a subset of an augmentation. The AER considers that extensions and shared network augmentations are sufficiently distinct that differing forms of regulation can be meaningfully applied. As such, the AER considers that augmentation of the shared network needs to be defined as a separate distribution service, and have a form of regulation applied accordingly.

96 Ausgrid, *Response to the AER's consultation paper on classification of electricity distribution services in NSW and the ACT*, 21 February 2012, p. 5; Endeavour Energy, *Classification of electricity distribution services in the ACT and NSW*, 15 February 2012, p. 2; Essential Energy, *Submission on the classification of distribution services in the ACT and NSW*, 17 February 2012, p. 4.

97 Ibid.

98 NER, cl 6.2.2.

New South Wales has a working and competitive market for the provision of premises connection assets by virtue of the *Electricity Supply Act 1995* (NSW) and contestability framework. This low barrier to entry, combined with the high number of ASPs in most regions substantially mitigates any market power possessed by the DNSPs and provides customers with the capacity to negotiate the price for premises connection assets. Where no ASP operates in a region, the DNSP acts as the 'ASP of last resort' under ring-fencing arrangements which provide competitive neutrality.[99] Similarly, the AER considers that for sections 2F(b) and 2F(c) of the NEL, the economies of scale and scope available to the NSW DNSPs is unlikely to prevent premises connection assets being competitively provided through an alternative source because of the contestability framework.

The AER, having regard to clauses 6.2.1(c)(2) and 6.2.1(c)(3) of the NER, notes that the contestability framework distinguishes NSW from other NEM jurisdictions that are subject to a form of control. Relevantly, the AER is proposing that connection services be separated into four components in the Australian Capital Territory (ACT) regulatory review currently underway.[100] In Queensland and South Australia the costs of connection services are recovered through DUOS charges, while in Victoria, connection services are classified as alternative control services.

Under clause 6.2.1(d) of the NER, there is a presumption that the classification should be consistent with the previously applicable regulatory approach unless another approach is clearly more appropriate.

Having regard to the requirements of clause 6.2.1 of the NER, the AER considers that it is clearly more appropriate for premises connection assets to be unclassified and therefore not regulated by the AER in the next regulatory control period.

Component b. Extensions

An extension refers to an augmentation that requires the connection of a power line or facility outside the present boundaries of the transmission or distribution network owned, controlled or operated by a Network Service Provider.

The AER has considered the factors in clause 6.2.1 of the NER, and for the following reasons considers that it is clearly more appropriate that extensions are unclassified and therefore not regulated by the AER.

Similar to premises connection assets, NSW has a working and competitive market for extensions by virtue of its *Electricity Supply Act* and contestability framework. This low barrier to entry, combined with the high number of ASPs in most regions substantially mitigates any market power possessed by the DNSPs and provides customers with the capacity to negotiate the price for an extension. Where no ASP operates in a region, the DNSP acts as the 'ASP of last resort' under ring-fencing arrangements which preserve the customer's ability to negotiate.[101] Similarly, the AER considers that for sections 2F(b) and 2F(c) of the NEL, the

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99 NEL, s. 2F(a), (d), (f) and (g).

100 AER, *Preliminary positions paper, Framework and approach for ActewAGL (ACT), Regulatory control period commencing 1 July 2014*, June 2012, p. 14. However, the AER is proposing to classify the connection components differently as there is no contestability framework in the ACT.

101 NEL, s. 2F(a), (d), (f) and (g).

economies of scale and scope available to the NSW DNSPs is unlikely to prevent extensions being competitively provided through an alternative source because of the contestability framework.

The AER has also considered clauses 6.2.1(c)(2) and 6.2.1(2)(3) of the NER and notes that the contestability framework distinguishes NSW from other NEM jurisdictions where competition is not evident, and are therefore subject to a form of control.

Under clause 6.2.1(d) of the NER, there is a presumption that the classification should be consistent with the previously applicable regulatory approach unless another approach is clearly more appropriate. However, the AER considers that another approach is clearly more appropriate.

Having regard to the requirements of clause 6.2.1 of the NER, the AER considers that extensions should be unclassified and therefore not regulated by the AER in the next regulatory control period.

Component c. Augmentations

Augmentations refer to any work that is performed by a DNSP except:

- an extension; and
- a network augmentation that is dedicated to a customer.

In both instances, a capital contribution from the customer would be requested, thereby activating the NSW contestability framework.[102] The AER considers that connection services that fall within the contestability framework should be unclassified.

The NSW DNSPs each hold the only electricity distribution licence for their respective distribution districts in NSW. The AER therefore considers that the NSW licensing arrangements effectively amount to an absolute regulatory barrier to entry for the purposes of section 2F(a) of the NEL. Similarly, the AER considers that for sections 2F(b) and 2F(c) of the NEL, the economies of scale and scope available to the NSW DNSPs, by virtue of NSW licensing provisions, are also likely to prevent non-dedicated augmentations being competitively provided through an alternative source. Additionally, the NSW DNSPs, in most instances, will not permit augmentations to be performed by an ASP because of the potential impact on safety, security or reliability of the network.[103] The AER therefore considers that the NSW DNSPs possess significant market power in the provision of augmentations that are not an extension.

The AER has also had regard to clauses 6.2.1(c)(2) and 6.2.1(c)(3) of the NER and notes that all connection services are currently subject to a form of control in other NEM jurisdictions.

Under clause 6.2.1(d) of the NER, there is a presumption that the classification should be consistent with the previously applicable regulatory approach unless another approach is clearly more appropriate.

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[102] Section 31, *Electricity Supply Act 1995* (NSW).

[103] Endeavour Energy, *Classification of electricity distribution services in the ACT and NSW*, 15 February 2012, p. 3.

Having regard to the requirements of clause 6.2.1 of the NER, the AER considers that it is clearly more appropriate to classify augmentations as direct control services.

Component d. Incidental services

Incidental services refer to the provision of administration, design information, certification and inspection services. These services should be distinguished from design and construct services, which are contestable in NSW.[104] However, a DNSP will, for example, be required to provide design information and this is the provision of an incidental service.

The AER considers that the licensing arrangements in NSW effectively amount to an absolute regulatory barrier to entry for the provision of incidental services for section 2F(a) of the NEL. Similarly, the AER considers that for sections 2F(b) and 2F(c) of the NEL, the economies of scale and scope available to the NSW DNSPs, because of licensing provisions, are also likely to prevent the provision of incidental services being competitively provided through an alternative source. For example, it is the responsibility of the DNSP to ensure the integrity of the network. The AER therefore considers that the NSW DNSPs possess significant market power in the provision of incidental services.

The AER has also had regard to clauses 6.2.1(c)(2) and 6.2.1(c)(3) of the NER and notes that all connection services are currently subject to a form of control in other NEM jurisdictions. Relevantly, the AER is proposing that connection services be separated into four components in the Australian Capital Territory (ACT) regulatory review currently underway.[105] In Queensland and South Australia the costs of connection services are recovered through DUOS charges, while in Victoria, connection services are classified as alternative control services.

Under clause 6.2.1(d) of the NER, there is a presumption that the classification should be consistent with the previously applicable regulatory approach unless another approach is clearly more appropriate. In this instance, the AER considers that it is clearly more appropriate to classify incidental services as direct control services.

Having regard to the requirements of clause 6.2.1 of the NER, the AER considers the provision of incidental services should be classified as direct control services.

Classification of direct control services by component

The AER's preliminary position is that augmentations and incidental services should be classified as direct control services. Therefore, the AER must apply the factors in clause 6.2.2(c) of the NER to determine whether these components should be classified as standard or alternative control services.

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104 Ausgrid, *Response to the AER's consultation paper on classification of electricity distribution services in NSW and the ACT*, 21 February 2012, pp. 6 and 7.

105 AER, *Preliminary positions paper, Framework and approach for ActewAGL (ACT), Regulatory control period commencing 1 July 2014*, June 2012, p. 14. However, the AER is proposing to classify the connection components differently as there is no contestability framework in the ACT.

Component c. Augmentation

Where the costs associated with augmentations performed by a DNSP are not attributable to a particular customer (that is, non-dedicated) the AER considers that it is clearly more appropriate to classify these services as standard control. This represents a shift away from the current unregulated classification because:

- There is little, if any, potential for the development of competition in the market for non-dedicated augmentations. The AER considers that its classification will not influence the potential for competition — rather, the absence of competition is due to the NSW DNSPs each holding the only distribution licence for their respective distribution districts.
- There would be no material effect on administrative costs to the AER, the NSW DNSPs or users or potential users. This is because classifying non-dedicated augmentations as standard control services involves the cost being shared across the customer base.
- Augmentations are currently regulated in all other NEM jurisdictions under a form of control.
- The nature of non-dedicated augmentations is that they are provided to benefit the shared network and costs cannot be directly attributed to individual customers.
- There are no other apparent relevant factors that change the AER's proposed classification.

For these reasons, the AER considers that it is clearly more appropriate to classify augmentations as standard control services.

Component d. Incidental services

The AER considers that it is clearly more appropriate to classify incidental services as alternative control services. This is because only a DNSP is able to provide incidental services, such as design information relating to its network and certification of works to be performed on its distribution network for the benefit of a customer. In considering the factors in clause of 6.2.2 of the NER, the AER also notes:

- There is no potential for the development of competition in the market for incidental services. The AER considers that its classification will not influence the potential for competition — rather, the absence of competition is due to the NSW DNSPs each holding necessary information on the design and specifications of its network. However, the nature of incidental services is that the customer (probably through an ASP) requesting the service will benefit from the provision of that service, and as such, the costs are directly attributable to an individual customer.

The note to clause 6.2.2(c)(5) of the NER states that:

> In circumstances where a service is provided to a small number of identifiable customers on a discretionary or infrequent basis, and costs can be directly attributed to those customers, it may be more appropriate to classify the service as an alternative control service than as a standard control service.

According to the example, one of the distinguishing features of alternative control services is that the costs of providing these services can be directly attributable to the user and therefore costs do not need to be recovered via DUOS charges. On this basis, although services do not exhibit signs of competition, or potential for competition the AER considers that services can be classified as alternative control services on the cost attribution factor alone.

- There would be limited administrative cost to the NSW DNSPs if incidental services are classified as alternative control services as the associated costs would be clearly attributable to an identifiable customer.

- Relevantly, the AER is proposing that connection services be separated into four components in the Australian Capital Territory (ACT) regulatory review currently underway.[106] In Queensland and South Australia the costs of connection services are recovered through DUOS charges, while in Victoria, connection services are classified as alternative control services.

- There are no other apparent relevant factors that change the AER's proposed classification.

For these reasons, the AER considers that it is clearly more appropriate that incidental services be classified as alternative control services in the next regulatory control period.

AER's preliminary positions

Clause 6.2.2(d) of the NER provides that the AER must act on the basis that there should be no departure from a previous regulatory approach unless another classification is clearly more appropriate. The AER's preliminary position is that the NSW DNSPs' connection services should not be classified in a manner consistent with its current regulatory approach, as another classification is clearly more appropriate.

On this basis, the AER's preliminary position is that the four components of connection services should be classified as follows:

- Premises connection assets should be unclassified and therefore not regulated by the AER.

- Extensions should be unclassified and therefore not regulated by the AER.

- Augmentations should be classified as direct control services, and in turn, as standard control services.

- Incidental services should be classified as direct control services, and in turn, as alternative control services.

This proposed classification is supported by the AER's analysis above.

The AER seeks comments on its preliminary position to classify connection services as follows:

a. Premises connection assets should be unclassified and therefore not regulated by the AER.

b. Extensions should be unclassified and therefore not regulated by the AER.

[106] AER, *Preliminary positions paper, Framework and approach for ActewAGL (ACT), Regulatory control period commencing 1 July 2014*, June 2012, p. 14. However, the AER is proposing to classify the connection components differently as there is no contestability framework in the ACT.

c. Augmentations (performed by a DNSP) should be classified as direct control services, and in turn, as standard control services.

d. Incidental services should be classified as direct control services, and in turn, as alternative control services.

The AER also seeks submissions on whether there are any 'gaps' in its proposed classification of connection services and the operation of chapter 5A of the NER and the AER's connection charge Guideline.

2.4.5 Metering services (types 5, 6 and 7)

Each connection point in the NEM must have a metering installation.[107] The NSW DNSPs provide a range of metering services to NSW consumers. The AER considers that metering is limited to the costs of providing, installing and maintaining standard meters and services provided to non-contestable customers.

Clause 7.2.3(a)(1) of the NER provides that the installation of type 1 to 4 meters, provided to customers who consume greater than 160 megawatt hours (MWh) per annum are contestable. Consequently, metering services classified by the AER relate to metering services for types 5, 6 and 7 meters provided to customers who consume less than 160 MWh per annum.

Current classification

The AER currently regulates all NSW metering services provided to customers with annual consumption less than 160MWh per annum that have either:

- type 5 manually read interval meters. This includes type 5 meters that have 'smart' metering attributes that do not impose higher costs than would be required to provide a standard type 5 interval meter.
- type 6 manually read accumulation meters.
- type 7 'unmetered connections'. For example, a type 7 meter is connected to public lighting to confirm it is operational however no meter reading is recorded.

These types 5, 6 and 7 meters are currently classified as standard control services.

However, types 1 to 4 meters, which include 'smart meters', are contestable and are currently classified as unregulated services.[108]

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107 NER, cl. 7.3.1A(a).

108 In Victoria, the Government designated 'smart meters' as type 5 meters for the mandated roll out. This means that 'smart meters' are not contestable in Victoria. See AER, *Preliminary positions, Framework and approach paper, Citipower, Powercor, Jemena, SP AusNet and United Energy for regulatory control period commencing 1 January 2011*, December 2008, p. 26.

Issues and AER's considerations

Due to the contestable nature of type 1 to 4 meters, the AER's preliminary position is to not classify meter provision services and metering data provision services for customers that are served by types 1 to 4 meters. This is consistent with the current regulatory approach.

Clause 7.2.3(a)(2) of the NER also provides that a DNSP, as the local network service provider (LNSP), is the responsible person for all types 5, 6 and 7 metering installations.[109] As the responsible person, a DNSP may provide a Market Participant with a standard set of terms and conditions on which it will agree to act as the responsible person for all types 5, 6 and 7 metering installations.[110] The Australian Energy Market Commission (AEMC) determine the eligibility and registration of Market Participants,[111] however it is still at each NSW DNSP's discretion to appoint a Market Participant as the responsible person.

Pursuant to section 2F of the NEL, the AER considers that there is a regulatory barrier to any party other than the NSW DNSPs providing metering services for types 5, 6 and 7 meters, particularly where the NSW DNSPs have the discretion to licence a Market Participant. The AER also considers that there are no real substitutes for these services as all customers are required to have a meter.

These factors support the view that the NSW DNSPs possess significant market power in the provision of metering services. Therefore, regulation of these metering services is necessary.

The AER has also had specific regard to clauses 6.2.1(c)(2) and 6.2.1(c)(3) of the NER and notes that all type 5, 6 and 7 metering services are currently subject to a control form of regulation in NSW and all other NEM jurisdictions. This is because customers are required to have a meter.

Having regard to the requirements of clause 6.2.1 of the NER, the AER considers that all type 5, 6 and 7 metering services should be classified as direct control services.

Once a service is classified as a direct control service, the AER must then have regard to all six factors in clause 6.2.2(c) to determine whether it should be classified as a standard or alternative control service.

The costs of type 5, 6 and 7 metering services, as standard control services, are currently recovered through DUOS under a weighted average price cap mechanism. Classifying types 5, 6 and 7 metering services as alternative control services would provide more transparency in the cost of providing these services. This may lead to greater potential for competition in the future.

The AER received submissions in response to its classification of distribution services discussion paper from the NSW DNSPs that types 5, 6 and 7 metering services should remain classified as a standard control service. The DNSPs suggested that increasing

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109 The 'responsible person' is the person who has the responsibility for the provision of a metering installation for a particular connection point, being either the Local Network Service Provider or the Market Participant as described in chapter 7 of the NER.

110 NER, cl. 7.2.3(d).

111 NER, cl. 2.4.

contestability of metering services should not be a driver for classification in NSW.[112] Endeavour Energy submitted that, at a high level, contestability should only be extended where it would deliver the most efficient outcomes.[113] The DNSPs submitted that the provision of metering services to small customers is more efficiently provided as an integrated distribution function and charged through DUOS. The DNSPs also submitted that there would be significant costs in unbundling pricing including the cost of modifying billing processes.[114]

Ausgrid further submitted that the costs of type 5, 6 and 7 metering services cannot be accurately unbundled from standard control services and attributed to the customer. This is because metering services are integral to other network services and do not relate solely to the collection and processing of data for billing purposes.[115]

The AER acknowledges the views the DNSPs' views, however having regard to all the factors in clause 6.2.2(c) of the NER, the AER considers that it is clearly more appropriate to move away from the current classification, for the following reasons:

- There is potential for the development of competition in the market, particularly in the provision of parallel or multiple metering services.

- There would be no material effect on administrative costs of the AER, NSW DNSPs or users or potential users. This is because classifying metering services as alternative control services would still require the DNSPs to forecast metering costs separately, similar to the last regulatory review. However, there may be an increase in the need to ensure the accuracy of these forecasts. Notwithstanding, the metering bill would be issued to the retailer in aggregate. This would result in more transparent metering costs that would encourage greater efficiency. That is, a greater emphasis on forecasting the cost of types 5, 6 and 7 metering services would reduce the likelihood of cross subsidisation between metering services and network services.

- Metering services are currently regulated in NSW through a weighted average price cap recovered through DUOS charges. This is not the case in all NEM jurisdictions. The AER notes that metering services are classified as alternative control services in other jurisdictions including the Australian Capital Territory. The AER is not seeking to create a situation where contestability is introduced as submitted by the NSW DNSPs. However, consistency and potential for competition are factors that the AER must consider when classifying distribution services. Furthermore, where an individual customer requires metering services beyond normal requirements, classification as a standard control service would see these costs smeared across all customers. However, where a customer requests additional or special metering services, classification as alternative control services would enable these services to be charged to the requesting customer.

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112 Ausgrid, *Response to the AER's consultation paper on classification of electricity distribution services in NSW and the ACT*, 21 February 2012, pp. 1 and 20; Endeavour Energy, *Classification of electricity distribution services in the ACT and NSW*, 15 February 2012, p. 4; Essential Energy, *Submission on the classification of distribution services in the ACT and NSW*, 17 February 2012, p. 5.

113 Endeavour Energy, *Classification of electricity distribution services in the ACT and NSW*, 15 February 2012, p. 4.

114 Ausgrid, *Response to the AER's consultation paper on classification of electricity distribution services in NSW and the ACT*, 21 February 2012, pp. 1 and 20; Endeavour Energy, *Classification of electricity distribution services in the ACT and NSW*, 15 February 2012, p. 4; Essential Energy, *Submission on the classification of distribution services in the ACT and NSW*, 17 February 2012, p. 5.

115 Ausgrid, *Response to the AER's consultation paper on classification of electricity distribution services in NSW and the ACT*, 21 February 2012, p. 20.

- The reclassification would enable, but not introduce, the provision of metering installations by third parties providing these services instead of a DNSP. For example, the installation of a second meter that meets a specific customer request.

- The nature of metering services is that the costs of providing the service can be directly attributed to individual customers.

- There are no other apparent relevant factors that change the AER's proposed classification.

For these reasons, the AER considers that it is clearly more appropriate to move away from the presumption that types 5, 6 and 7 metering services should be classified as standard control services.

AER's preliminary position

The AER's preliminary position is that it is clearly more appropriate to classify types 5 to 7 metering services as alternative control services. This is supported by the AER's analysis above.

On this basis, the AER considers that:

- metering services for all type 5, 6 and 7 meters should be classified as direct control services and in turn, as alternative control services

- all other metering services should be unclassified and therefore unregulated by the AER.

The AER seeks comment on its preliminary position to classify metering services (types 5, 6 and 7) as direct control assets, and further, as alternative control services.

2.4.6 Fee based services

Fee based services encompass a standard range of services provided for the benefit of a single customer or sub-set of customers. As the nature and scope of these services are generally homogenous, their costs can be estimated with reasonable certainty. This means that a fixed fee can be set in advance. In other NEM jurisdictions, services of this type have typically been classified as alternative control services and are also usually charged according to a fee structure approved by the AER.

Each NSW DNSP provides a range of fee based services. These services are currently referred to as 'miscellaneous' services. The services involve work on, or in relation to, parts of the NSW DNSPs' distribution network. Therefore, only the DNSP is able to undertake these services.

Ausgrid and Endeavour Energy both commented that fee based services and quoted services (section 2.4.3.5) refer to the manner in which services are charged rather than the nature or characteristics of the service.[116] The AER acknowledges that the types of services that fall

[116] Ausgrid, *Response to the AER's consultation paper on classification of electricity distribution services in NSW and the ACT*, 21 February 2012, p. 2; Endeavour Energy, *Classification of electricity distribution services in the ACT and NSW*, 15 February 2012, p. 1.

within the fee based services group are quite different. However, 'fee based' services are similar in the sense that these services have the common characteristic of being provided to individual customers on an 'as needs' basis.

Current classification

The AER understands that the NSW DNSPs provide the following services on a fee basis:

- special meter readings and testing for types 5 and 6 meters
- supply of conveyancing information (desk inquiry and field visit)
- off-peak conversion
- disconnection visits (when payment has been received)
- disconnections at the meter box/pole top or pillar box
- rectification of illegal connections
- reconnection outside business hours.

These 'miscellaneous' services are classified as standard control services in the current regulatory control period according to transitional provisions in place at the time of the determination.

The fees for these services for the current regulatory control period based on the AER's 2009 distribution determination made under the transitional chapter 6 provisions of the NER.

Issues and AER's considerations

The AER has assessed the requirements of clause 6.2.1 of the NER and considers that fee based services would be more appropriately classified as alternative control services for the next regulatory control period.

The key characteristic of all fee based services is that they involve undertaking works on, or in relation to, parts of the NSW DNSPs' distribution network. Therefore, only the NSW DNSPs, as the owners of their respective distribution networks are able to undertake these works and provide these distribution services, although it may engage a third party to act on its behalf. Also, customers would have limited negotiating power in determining the price and other terms and conditions on which these services are provided.

The AER, following its earlier discussion on network services and having regard to the form of regulation factors set out in section 2F of the NEL, considers that there is a regulatory barrier to any party other than the NSW DNSPs providing fee based services in their distribution district. Furthermore, the economies of scale and scope available to the NSW DNSPs, particularly in relation to their network services, are also likely to prevent fee based services being competitively provided by an alternative service provider. These factors contribute to the view that the NSW DNSPs possess significant market power in the provision of fee based services.

The AER has also had regard to clauses 6.2.1(c)(2) and (3) of the NER and notes that most miscellaneous services, which the AER considers appropriately fall within the fee based

services group, are currently subject to a direct form of control in NSW. Similar arrangements exist in several other NEM jurisdictions.

The AER notes that clause 6.2.1(d) of the NER states that where a distribution service has been subject to regulation, there should be no departure from that classification unless another classification is clearly more appropriate.

Noting the attributes of fee based services provided by the NSW DNSPs, and having regard to the requirements of clause 6.2.1 of the NER, the AER considers that fee based services should be classified as direct control services.

Once a service is classified as a direct control service the AER must then have regard to all six factors in clause 6.2.2(c) of the NER to determine whether the service should be classified as a standard or alternative control service.

Ausgrid submitted that if the AER classifies some 'miscellaneous' services as alternative control services, its preference is for those services to be grouped as quoted services. Ausgrid would still require the charging regime to enable it to at least recover its costs in providing the services.[117] However, the AER proposes that services of a homogenous nature, where the price is reasonably static and can be determined in advance should be grouped as fee based services.

Endeavour Energy and Essential Energy submitted that 'miscellaneous' services, even if grouped as fee based services, should remain classified as standard control services.[118]

Endeavour Energy further submitted that moving to alternative control and developing cost reflective prices may expose customers to price shocks and the DNSPs to revenue shortfalls. The current regulated rates only allow the recovery of the marginal costs of providing the services, and the balance is paid by all customers through DUOS.[119] Essential Energy stated that to achieve full cost reflectivity, each DNSP may have different fees for the same service within NSW. This may create confusion and inefficiencies for users of these services. However, Essential Energy accepted that there is scope to improve cost reflectivity whilst maintaining uniformity of fees charged across NSW.[120]

Fee based services are currently classified as standard control services and subject to price monitoring. Having regard to the factors in clause 6.2.2 of the NER, the AER considers that it is clearly more appropriate to classify these services as alternative control services because:

- There is little if any potential for the development of competition in the market for the specified fee based services. The AER considers that its classification will not influence the potential for competition — rather, the absence of competition is due to the NSW

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117 Ausgrid, *Response to the AER's consultation paper on classification of electricity distribution services in NSW and the ACT*, 21 February 2012, p. 15.

118 Endeavour Energy, *Classification of electricity distribution services in the ACT and NSW*, 15 February 2012, p. 5; Essential Energy, *Submission on the classification of distribution services in the ACT and NSW*, 17 February 2012, p. 1.

119 Endeavour Energy, *Classification of electricity distribution services in the ACT and NSW*, 15 February 2012, p. 5.

120 Essential Energy, *Submission on the classification of distribution services in the ACT and NSW*, 17 February 2012, p. 3.

DNSPs owning the distribution network assets and holding the only distribution licences for their respective distribution districts in NSW.

- There would be no material effect on the administrative costs of the AER, the DNSPs or users or potential users. This is because classifying fee based services as alternative control services would involve regulating them through a price cap.

- The AER also notes that other NEM jurisdictions including Queensland and Victoria regulate similar services charged on a fee basis as alternative control services.[121] The AER is currently proposing the same approach to fee based services in the Australian Capital Territory.[122]

- The costs of providing the services can be directly attributed to identifiable customers.

- There are no other apparent relevant factors that change the AER's proposed classification.

Therefore, the AER's preliminary position, based on the above analysis, is that fee based services should be classified as alternative control services in the next regulatory control period.

AER's preliminary position

The AER's preliminary position is that the NSW DNSPs' fee based services should not be classified in a manner consistent with its previous regulatory determination, as another classification is clearly more appropriate.

On this basis, the AER's preliminary position is that fee based services should be classified as direct control services and, in turn, as alternative control services. The AER's preliminary position is supported by the AER's assessment against the factors in clauses 6.2.1 and 6.2.2 of the NER.

The AER seeks interested parties' views on the proposed classification of fee based services as direct control services, and further as alternative control services.

2.4.7 Quoted services

A quoted service differs from a fee-based service as it is a request made by the customer that requires a unique or tailored service to be provided. The nature and scope of these services are specific to individual customer's needs and the cost of providing the service cannot be estimated without first understanding the customer's specific requirements. This means that the NSW DNSPs must set individual prices for these services once requested and after they have undertaken an assessment of the requested task and the materials and time involved in performing it. It would not be appropriate to set a generic fixed total fee in advance for the provision of these types of services as there is a risk of the customer being over or under charged.

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121 AER, *Queensland final distribution determination,* May 2010, pp. 378–384; *AER, Victorian draft distribution determination–Appendices*, June 2010, pp. 2–3.

122 AER, *Preliminary positions paper, Framework and approach for ActewAGL (ACT), Regulatory control period commencing 1 July 2014*, June 2012, p. 14.

The AER understands that each NSW DNSP provides a range of services on a quoted fee basis to customers. A number of these services are currently referred to as 'miscellaneous' or 'customer specific' services that appropriately fall into the quoted services group.

Current classification

'Miscellaneous' services are classified as standard control services in the current regulatory control period under the transitional chapter 6 provisions, while customer specific services are unregulated.

The AER considers that quoted services, being a range of 'miscellaneous' and 'customer specific' services include:

- Rearrangement of network assets
- Covering low voltage mains
- Non standard data services (type 5–7 metering)
- Ancillary metering services (types 5–7 metering)
- Supply enhancement
- Metering enhancement
- Temporary disconnect/reconnect services
- After hours provision of any service
- Large customer connections
- Auditing of design and construction
- Miscellaneous (including high load escorts, rectification of illegal connections, conversion to aerial bundled cables, provision of service crew/additional crew).

The characteristic of quoted services is that they are non-standard services. Therefore, a fee cannot be determined in advance of a request for the service being received by a DNSP.

Issues and AER's considerations

The NSW DNSPs' submitted that 'some customer specific services...are not distribution services and should not be regulated'.[123]

The NSW DNSPs also submitted that some customer specific services are not distribution services, or alternatively, if they are distribution services, they should be unclassified. Customer specific works include asset relocation works and conversion to aerial bundled cable, performed at the request of the distribution customer. On this basis, the NSW DNSPs

[123] Ausgrid, *Response to the AER's consultation paper on classification of electricity distribution services in NSW and the ACT*, 21 February 2012, pp. 27 and 30; Endeavour Energy, *Classification of electricity distribution services in the ACT and NSW*, 15 February 2012, p. 5; Essential Energy, *Submission on the classification of distribution services in the ACT and NSW*, 17 February 2012, pp. 1 and 5.

submitted that these services are optional services and should not be seen as part of the right of access to a network.[124] Ausgrid further submitted that the NER limits customer specific services to those requested by network users. Therefore, it stated that any services requested by third parties (other than network users) to undertake asset relocation works etc, cannot be customer specific services.[125]

However, it is the AER's preliminary position that, consistent with the Federal Court decision in *Ergon Energy Corporation Ltd v Australian Energy Regulator* [2012] FCA 393, that quoted services are services provided by the DNSP 'in conjunction with' the distribution system.[126] Similar to emergency recoverable works, only the DNSP will carry out customer specific requests. Additionally, grouping these services as quoted services, under an alternative control classification, still permits commercial negotiations to occur between the parties.

The AER's preliminary position on quoted services, including customer specific services, is that they should be classified as alternative control services in the next regulatory control period, having regard to the requirements of clause 6.2.1 of the NER.

As with fee based services, another key characteristic of quoted services is that they involve undertaking work on, or in relation to, parts of a DNSP's distribution network. Therefore, only the NSW DNSPs as the owner of their respective distribution networks, and sole electricity distribution licence holders in their relevant districts are able to undertake these works and provide these distribution services. Albeit that the DNSP may engage a third party to act on its behalf.

On this basis, and having regard to the form of regulation factors in section 2F of the NEL, the AER considers there is a regulatory barrier to any party other than the NSW DNSPs providing quoted services.

The AER therefore considers that NSW arrangements effectively amount to a regulatory barrier to entry for sections 2F(b) and 2F(c) of the NEL. The economies of scale and scope available to the NSW DNSPs, particularly in relation to its network services are also likely to prevent quoted services being competitively provided through an alternative service provider.

These factors support the view that the NSW DNSPs possess significant market power in the provision of quoted services.

The AER has also had regard to clauses 6.2.1(c)(2) and (3) of the NER and notes that quoted services are currently subject to a control form of regulation in NSW. This is also the case in several other NEM jurisdictions.

For the reasons above and having regard to the requirements of clause 6.2.1 of the NER, the AER considers that quoted services should be classified as direct control services.

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[124] Ausgrid, *Response to the AER's consultation paper on classification of electricity distribution services in NSW and the ACT*, 21 February 2012, p. 30; Endeavour Energy, *Classification of electricity distribution services in the ACT and NSW*, 15 February 2012, pp. 5 and 6; Essential Energy, *Submission on the classification of distribution services in the ACT and NSW*, 17 February 2012, p. 3.

[125] Ausgrid, *Response to the AER's consultation paper on classification of electricity distribution services in NSW and the ACT*, 21 February 2012, p. 30.

[126] *Ergon Energy Corporation Ltd v Australian Energy Regulator* [2012] FCA 393 at p. 21, paragraph 54.

Once a service is classified as a direct control service, the AER must then apply all six factors in clause 6.2.2(c) of the NER to determine whether it should be classified as a standard or alternative control service.

Miscellaneous services that, in the AER's preliminary view, fall within the quoted services group are currently classified as standard control services. However, it is the AER's preliminary position that quoted services, being non-standard requests, varying on a case by case basis, and for the benefit of an identifiable customer, should be classified as alternative control services.

Having regard to the factors in clause 6.2.2 of the NER, the AER considers that it is clearly more appropriate to classify quoted services, including customer specific services, as alternative control services because:

- There is little, if any, potential for the development of competition in the market for quoted services. The AER considers that its classification will not influence the potential for competition. That is, where customers request higher than normal standards or services which involve undertaking works on, or in relation to, distribution network assets owned by the NSW DNSPs, there is little scope for competition.

- There would be no material effect on administrative costs of the AER, DNSP or users or potential users. This is because classifying quoted services as alternative control services would involve a similar approach to the NSW DNSPs' current approach to quoting for services where the work involved is more complex or outside business hours.[127]

- Quoted services (except customer specific services) are currently regulated in NSW. Quoted services including customer specific services are regulated in other NEM jurisdictions.

- The nature of quoted services is that the costs of providing these the services can be directly attributed to individual customers. This would result in more transparent costs for quoted services. Furthermore, where an individual customer requires a quoted service, classification as a standard control service would see these costs smeared across all customers.

- There are no other apparent relevant factors that change the AER's proposed classification.

For these reasons, the AER considers that it is clearly more appropriate to move away from the presumption that quoted services should be classified as standard control services and classify these services as alternative control services.

AER's preliminary position

Similar to fee based services, the AER's preliminary position is that the NSW DNSPs' quoted services should not be classified in a manner consistent with its previous regulatory determination, as another classification is clearly more appropriate.

On this basis, the AER's preliminary position is that quoted services should be classified as direct control services and, in turn, as alternative control services. This preliminary position is

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[127] For example, Endeavour Energy, Network Price List 2011–12 For Standard Form Customer Connection Contract, Effective 1 July 2012 at p. 23.

supported by the AER's assessment against the factors in clauses 6.2.1 and 6.2.2 of the NER.

The AER seeks comments on the proposed classification of quoted services as direct control services and further, as alternative control services.

2.4.8 Public lighting

The NSW DNSPs operate and maintain the public lighting system throughout NSW on behalf of more than 173 local councils and other government departments which are responsible for public lighting on state roads and major highways in NSW.

Public lighting services are not defined in the NER. However, in previous distribution determinations for other jurisdictions, the AER has defined the following types of services as public lighting:

- the operation, maintenance, repair and replacement of public lighting assets
- the alteration and relocation of public lighting assets, and
- the provision of new public lighting.[128]

Although public lighting services are not defined in the NER, they do, for the purposes of the NER, constitute electricity distribution services.[129]

Public lighting assets, including all street lights in NSW are connected to the NSW DNSPs' electricity distribution networks.[130] The conveyance of electricity to public lighting assets is not defined as a public lighting service, but rather falls within the definition of a network service. The AER's preliminary position on the classification of network services is in section 2.4.3.1.

Current classification

The classification of public lighting services was deemed under the transitional provisions for the 2009-14 regulatory control period. As such, the construction and maintenance of public lighting assets were classified as a direct control service, and further as an alternative control service for the current regulatory control period.[131]

The regulatory arrangements were established to develop more cost reflective prices for new assets, to improve transparency and reduce cross-subsidisation of costs in the provision of these services.[132]

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128 AER, *Framework and approach paper for Victorian electricity distribution regulation–CitiPower, Powercor, Jemena, SP AusNet and United Energy for regulatory control period commencing 1 January 2010 (final)*, May 2009, pp. 25–26; AER, *Preliminary positions, Framework and approach paper for Aurora Energy Pty Ltd for regulatory control period commencing 1 July 2012*, June 2010, p. 33.

129 See *Ergon Energy Corporation Ltd v Australian Energy Regulator* [2012] FCA 393. The AER will apply this decision until a higher court or legislative amendment changes the position.

130 *Ergon Energy Corporation Ltd v Australian Energy Regulator* [2012] FCA 393

131 NER, chapter 11, appendix 1, cl. 6.2.3B(b).

132 AER, *Final decision, EnergyAustralia distribution determination 2009–10 to 2013–14, Alternative control (public lighting) services*, 2010, p. vi.

AER's discussion paper on public lighting services

In April 2012, the AER released a discussion paper on public lighting services in NSW.[133] The purpose of the discussion paper was to facilitate discussion of alternative regulatory arrangements for public lighting services in the next regulatory period. In addition to outlining the AER's current regulatory approach, a range of regulatory options were canvassed, including two options proposed by Ausgrid and Endeavour Energy.[134] The AER's discussion paper also sought views on the complexity, cost reflectivity and transparency of the current regulatory approach.

The AER received a number of submissions on the discussion paper. The submissions on the preferred regulatory approach for public lighting services varied greatly, including those received from councils. These submissions are addressed below. The AER, DNSPs and customer must be mindful of the impact the merger of the NSW DNSPs may have on the regulatory framework around public lighting. The AER considers that it would be valuable for the DNSPs and customers to explore options to align their preferred approaches.

The AER considers that it would be impracticable to have public lighting classified differently across DNSP distribution districts, given the merger of the NSW DNSPs. Even without the proposed merger, the AER would find it impracticable to have public lighting classified differently with some councils operating in two distributor districts.

Issues and AER's considerations

Some of the matters raised in submissions are beyond the limited scope of the F&A process. However, where matters are relevant to the determination process they will be considered at the appropriate time in the context of each DNSP's regulatory proposal.[135]

Submissions which are within the scope of the F&A process are considered below in the context of the NER requirements.

Other issues raised in submissions to the AER

Several common themes emerged from the submissions received which are not relevant to the F&A process. These included:

- the valuation of the inherited residual asset base being excessive.[136]

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133 In that discussion paper, the AER incorrectly referred to Energex as an appellant in the matter of *Ergon Energy Corporation Ltd v Australian Energy Regulator* [2012] FCA 393. The AER has corrected this error.

134 These proposals were provided at the AER's request to assist it in devising the discussion paper and do not form part of Ausgrid of Endeavour Energy's regulatory proposals to be submitted to the AER by 31 May 2013. Also, the proposals should not be considered to be the final view of Ausgrid of Endeavour Energy.

135 A number of submissions seek action from the AER on contestability. The AER's role in service classification only determines the manner in which a DNSP recovers the costs associated with the distribution service is provides. Please refer to p. 1 of this paper for a further explanation on the AER's limitations on contestability.

136 Bankstown City Council, *Submission on public lighting services in NSW*, 10 May 2012, pp. 1 and 3; Southern Sydney Regional Organisation of Councils (SSROC), *Submission on public lighting services in NSW*, 11 May 2012, p. 1; Northern Sydney Regional Organisation of Councils (NSROC), *Submission on public lighting services in NSW*, 11 May 2012, p. 1; Central NSW Councils (Centroc), *Submission on public lighting services in NSW*, 9 May 2012, p. 2; South East Regional Organisation of Councils (SEROC), *Submission on public lighting services in NSW*, 10 May 2012, p. 2. TTEG, *Submission on public lighting services in NSW on behalf*

- a request for the AER to reassess the valuation of the inherited residual asset base for the 2014–19 regulatory control period.[137]

- a request for access to the full public lighting pricing model and underlying assumptions from the outset of the next distribution determination process.[138]

- concerns over the pricing complexity and lack of transparency in accounts received from the DNSP,[139] making reconciliation of each account problematic.[140]

- claims that bills do not meet the reasonableness test of the NSW Public Lighting Code administered by the NSW Department of Trade and Investment.[141]

- the average age of each asset class in the local government area does not relate to the real age of the asset.[142]

Submissions received by the AER

Submissions on matters relevant to classification of public lighting services are summarised below.

TTEG and Essential Energy submitted that public lighting services should be classified as negotiated distribution services, or unclassified.[143] However, the vast majority of existing public lighting assets are owned by the NSW DNSPs. This creates a near monopoly supply position. The *Electricity Supply Act 1995* (NSW) and the NSW Code of Practice Contestable Works apply only to the installation of new public lighting assets, but not to the maintenance or replacement of existing public lighting assets. As such, there are limited situations for other

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of WSROC, May 2012, p. 6. Submissions can be viewed at www.aer.gov.au/content/index.phtml/itemId/753307.

137 Bankstown City Council, *Submission on public lighting services in NSW*, 10 May 2012, p. 1; TTEG, *Submission on public lighting services in NSW on behalf of WSROC*, May 2012, p. 7.

138 Bankstown City Council, *Submission on public lighting services in NSW*, 10 May 2012, pp. 1 and 3; SSROC, *Submission on public lighting services in NSW*, 11 May 2012, p. 1; NSROC, *Submission on public lighting services in NSW*, 11 May 2012, p. 1; Centroc, *Submission on public lighting services in NSW*, 9 May 2012, p. 2; SEROC, *Submission on public lighting services in NSW*, 10 May 2012, p. 2; TTEG, *Submission on public lighting services in NSW on behalf of WSROC*, May 2012, p. 5.

139 Bankstown City Council, *Submission on public lighting services in NSW*, 10 May 2012, pp. 1 and 3; SSROC, *Submission on public lighting services in NSW*, 11 May 2012, p. 1; NSROC, *Submission on public lighting services in NSW*, 11 May 2012, p. 1; Centroc, *Submission on public lighting services in NSW*, 9 May 2012, p. 2; SEROC, *Submission on public lighting services in NSW*, 10 May 2012, p. 2; TTEG, *Submission on public lighting services in NSW on behalf of WSROC*, May 2012, p. 7.

140 TTEG, *Submission on public lighting services in NSW on behalf of WSROC*, May 2012, p.7.

141 The 'reasonableness test' is set out in clause 13.1 of the NSW Public Lighting Code. It provides, in part, that bills must contain at least the 'details of the number and type of lights and any other information reasonably necessary for the customer to verify the accuracy of an amount charged on the bill'. Bankstown City Council, *Submission on public lighting services in NSW*, 10 May 2012, p. 4; SSROC, *Submission on public lighting services in NSW*, 11 May 2012, p. 1; NSROC, *Submission on public lighting services in NSW*, 11 May 2012, p1; Centroc, *Submission on public lighting services in NSW*, 9 May 2012, p. 2; SEROC, *Submission on public lighting services in NSW*, 10 May 2012, p. 3.

142 Bankstown City Council. *Submission on public lighting services in NSW*, 10 May 2012, p. 4; SSROC, *Submission on public lighting services in NSW*, 11 May 2012, p. 3. It was stated that in some extreme cases, similarly aged adjacent assets on either side of a council boundary can have capital expenditure charges differing by seven fold.

143 TTEG, *Submission on public lighting services in NSW on behalf of WSROC*, May 2012, p. 9; Citelum Australia, *Submission on public lighting services in NSW, May 2012*, at p. 35; Essential Energy, *Submission on public lighting services in NSW*, 21 May 2012, pp. 1 to 2.

entities, such as private contractors, to provide public lighting services (for example, lighting in a recreational park). The AER understands that there are only a small number of public lighting assets that are owned by councils and other customers.

In addition to the absence of a contestability framework for existing public lighting assets, TTEG, Councils and DNSPs submitted that the current regulatory approach has not changed the level of competition or the prospect for competition in public lighting services in NSW.[144] TTEG and Councils also submitted that to exit the current regulatory approach, customers would have to first pay the DNSPs' high claimed residual asset charges.[145] They claim that the cost of this would most likely be prohibitive. The AER considers that notwithstanding Councils being able to exit the current regulatory approach, the issue of the NSW DNSPs owning the majority of public lighting assets would remain a barrier to alternative providers conducting maintenance and replacement work.

Specifically, Bankstown City Council submitted that the AER should 'pave the way' to make public lighting services either a negotiated service or a reasonably contestable one as a minimum, similar to the South Australian model.[146] In its 2010 decision the AER noted that South Australian customers possess significant bargaining power under a tiered pricing structure and the option of providing, operating and maintaining their own street lights.[147] However, for the above reasons the AER considers that classifying all public lighting services as negotiated distribution services is not, at this time, consistent with the requirements of the NER.[148]

The AER also received submissions from Councils seeking interim tariffs to facilitate the adoption of 'emerging technologies'.[149] It was submitted that public lighting is entering a period of rapid change with technologies such as LEDs, light emitting plasma and others emerging quickly.

It was further submitted that the current regulatory approach, which implicitly assumes relative stability in technologies, does not deal with emerging lighting technologies. Additionally, the lengthy and complex pricing process means that the new product being priced is likely to

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144 Bankstown City Council, *Submission on public lighting services in NSW*, 10 May 2012, p. 5; SSROC, *Submission on public lighting services in NSW*, 11 May 2012, p. 4; NSROC, *Submission on public lighting services in NSW*, 11 May 2012, p. 1; Centroc, *Submission on public lighting services in NSW*, 9 May 2012, p. 2; SEROC, *Submission on public lighting services in NSW*, 10 May 2012, p. 5; TTEG, *Submission on public lighting services in NSW on behalf of WSROC*, May 2012, p. 13; Ausgrid, *Response to the AER on the approach to the regulation of public lighting*, May 2012, p. 3; Essential Energy *Submission on public lighting services in NSW*, 21 May 2012, p. 2.

145 Bankstown City Council, *Submission on public lighting services in NSW*, 10 May 2012, p. 2; SSROC, *Submission on public lighting services in NSW*, 11 May 2012, p. 4; NSROC, *Submission on public lighting services in NSW*, 11 May 2012, p1; Centroc, *Submission on public lighting services in NSW*, 9 May 2012, p. 4; SEROC, *Submission on public lighting services in NSW*, 10 May 2012, p. 6; TTEG, *Submission on public lighting services in NSW on behalf of WSROC*, May 2012, p. 9.

146 Bankstown City Council, *Submission on public lighting services in NSW*, 10 May 2012, p. 5.

147 AER, *Final framework and approach paper ETSA Utilities 2010–15*, 2008, pp. 26–28.

148 TTEG, *Submission on public lighting services in NSW on behalf of WSROC*, May 2012, pp. 11 and 12 submit that classifying public lighting services as negotiated distribution services is preferable to a classification of alternative control services.

149 Bankstown City Council, *Submission on public lighting services in NSW*, 10 May 2012, p. 6; SSROC, *Submission on public lighting services in NSW*, 11 May 2012, p. 4; NSROC, *Submission on public lighting services in NSW*, 11 May 2012, p. 1; Centroc, *Submission on public lighting services in NSW*, 9 May 2012, p. 4; SEROC, *Submission on public lighting services in NSW*, 10 May 2012, p. 8.

have been superseded by the time the price is set. On that basis, the Councils proposed an interim tariff for new lighting technologies to allow trials to take place without undergoing the AER's pricing approval process.[150]

The AER considers that there is scope for new luminaire types or new technologies to be treated as a negotiated service. The AER seeks further submissions on the treatment of new luminaire types. It should be noted that the AER has classified 'new public lighting technologies' in Tasmania as negotiated services.[151]

The AER seeks submissions on the treatment of new luminaire types or new technologies in the provision of public lighting services.

Classification of distribution services

In considering the form of regulation factors under section 2F of the NEL, the AER is of the preliminary view that there are significant barriers to entry to the provision of public lighting services in NSW by other public lighting service providers. While the NSW DNSPs do not have a legislative monopoly over the provision of public lighting services, because ownership of public lighting assets largely rest with the NSW DNSPs, effectively this is the case for existing assets.

While there is some limited scope for other entities to provide some public lighting services, the NSW DNSPs appear to benefit from the economies of scale and scope, derived from the provision of network services, in providing public lighting services.[152] Additionally, there is no contestability framework for the provision of public lighting services by third parties on assets owned by the NSW DNSPs. Consequently, competition in public lighting has been limited.[153]

In relation to section 2F(e) of the NEL, while some substitutes for providing public lighting services are available, it is unlikely to be a viable commercial option for customers to move away from the DNSP, who own almost all of the existing public lighting assets. Councils and Ausgrid submit that the current complex regulatory regime would make it difficult to negotiate rules by which third parties could repair, modify, replace or add lighting assets to the DNSPs' existing wooden distribution poles.[154]

With regard to section 2F(g) of the NEL, it does not appear to the AER that consumers of public lighting services would have sufficient information to negotiate on an informed basis with the NSW DNSPs. As outlined above, there are concerns around the lack of transparency regarding the terms on which public lighting services are provided to consumers.

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150 Ibid.

151 AER, *Final framework and approach paper, Aurora Energy Pty Ltd for the regulatory control period commencing 1 July 2012*, 29 November 2010, p. 37.

152 NEL, ss 2F(b) and (c).

153 Ausgrid, *Response to the AER on the approach to the regulation of public lighting*, May 2012, p. 3; Bankstown City Council, *Submission on public lighting services in NSW*, 10 May 2012, p. 5; SSROC, *Submission on public lighting services in NSW*, 11 May 2012, p. 4; NSROC, *Submission on public lighting services in NSW*, 11 May 2012, p1; Centroc, *Submission on public lighting services in NSW*, 9 May 2012, p. 4; SEROC, *Submission on public lighting services in NSW*, 10 May 2012, p. 5.

154 SSROC, *Submission on public lighting services in NSW*, 11 May 2012, p. 4; SEROC, *Submission on public lighting services in NSW*, 10 May 2012, p. 5. Citelum Australia, *Submission on public lighting services in NSW, May 2012*, at p. 35 submit 'there is merit in classifying public lighting services as negotiated distribution services on the provision that customers understand their rights and obligations'.

These factors support the view that the NSW DNSPs possess significant market power in the provision of services for existing public lighting assets.

The AER has specifically considered clauses 6.2.1(c)(2) and 6.2.1(c)(3) of the NER and notes that public lighting services are currently subject to a form of control in all NEM jurisdictions except the Australian Capital Territory, where public lighting is not owned by the DNSP but rather the Territory Government. The AER notes that South Australia and Victoria (for new public lighting assets only) have a more 'light handed' regulatory approach. However, there is greater contestability to facilitate negotiation between customers and DNSPs in these jurisdictions.[155]

Having regard to the requirements of clause 6.2.1 of the NER, the AER considers that all public lighting services should be classified as direct control services for the 2014—19 regulatory control period.

Classification of direct control services

Once a service is classified as a direct control service, the AER must then have regard to the six factors in clause 6.2.2(c) of the NER in deciding whether that service should be further classified as a standard or alternative control service.

Having regard to the factors under clause 6.2.2(c) of the NER, the AER does not consider that there is a need to move away from the current classification of public lighting services as alternative control services for the following reasons:

- classification of public lighting services as alternative control services provides scope for third parties and new entrants to provide public lighting services for new public lighting assets. The same applies to the limited number of current assets not owned by the NSW DNSPs.
- the classification of public lighting services as alternative control services may encourage the entry of other potential service providers in the long term if a contestability regime is implemented.
- there would be no material effect on administrative costs to the AER, NSW DNSPs or users or potential users. This is because the AER is not changing the current classification of these services.
- the costs of providing public lighting services can be directly attributed to a specific set of customers, including local councils and other government agencies. The AER considers that it is appropriate for these customers to incur the associated costs for these services.

For these reasons, the AER considers that there is no basis to move away from the presumption that public lighting services should be classified as alternative control services.

The AER seeks comments from interested parties on the proposed classification of public lighting services as direct control services and further, as alternative control services.

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[155] AER, *Final framework and approach paper ETSA Utilities 2010–15*, 2008, pp. 26–28; AER, *Preliminary positions, Framework and approach paper – Citipower, Powercor, Jemena, SP Ausnet and United Energy for the regulatory control period commencing 1 July 2012*, December 2008, p. 45.

AER's preliminary position

For the reasons outlined above, the AER's preliminary position is that public lighting services should be classified in a manner consistent with the previous regulatory determination,[156] as no other classification is clearly more appropriate. This is supported by the AER's assessment against the factors in clauses 6.2.1 and 6.2.2 of the NER.

2.5 AER's preliminary position on service classification

Except where the NER require that a service of a specified kind be classified in a particular way, in classifying distribution services that have previously been subject to regulation under the present or earlier legislation, the NER require the AER to act on the basis that, unless a different classification is clearly more appropriate:

- there should be no departure from a previous classification if the services have been previously classified
- if there has been no previous classification — the classification should be consistent with the previously applicable regulatory approach.

Having regard to the requirements of the NER and NEL, and the regulatory approach to distribution services provided by the NSW DNSPs in the current regulatory control period, the AER's preliminary position is that distribution services should be grouped and classified as set out in table 2.2.

Table 2.2: Proposed classification of distribution services in NSW

AER service group	Proposed classification of distribution services	Proposed classification of direct control services
Network services (excluding emergency recoverable works which are unclassified)	Direct control	Standard control
Connection services		
Premises connection assets	Unclassified	
Extensions	Unclassified	
Augmentations	Direct control	Standard control
Incidental services	Direct control	Alternative control
Metering services (types 5, 6 and 7)	Direct control	Alternative control
Fee based services	Direct control	Alternative control
Quoted services	Direct control	Alternative control
Public lighting services (excluding	Direct control	Alternative control

[156] NER, cl. 6.2.2(d).

AER service group	Proposed classification of distribution services	Proposed classification of direct control services
new public lighting technologies)		
Metering services (types 1 to 4)	Unclassified	

Source: AER

The AER's preliminary position is that having considered and assessed the classifications currently in place for all services against the factors in clauses 6.2.1 and 6.2.2 of the NER, it is clearly more appropriate to classify the services as detailed above.

The NER also requires the AER to have regard to the desirability of consistency in the regulatory approach and form of regulation within and beyond specific NEM jurisdictions. The preliminary positions set out in this paper aim to achieve consistency with the current treatment of services in NSW where appropriate.

However, consistency between NEM jurisdictions may not be achieved immediately. That said, the AER considers greater consistency in how similar services are classified across NEM jurisdictions is a medium to long term objective to the extent possible. The AER considers that different classifications for similar services may continue to be appropriate given differing circumstances (such as different legislative barriers to contestability that apply to similar services) between jurisdictions.

In the context of the presumption in favour of the previous classification, the AER is satisfied that the preliminary positions set out in this paper do not impose unnecessary costs on the NSW DNSPs.

3. Control Mechanisms

3.1 Introduction

This chapter sets out the AER's proposed control mechanisms to be applied to NSW DNSPs' direct control services for the next regulatory control period. The AER's preliminary position is to apply a revenue cap to services classified as standard control services, and a price cap to services classified as alternative control services.

On 4 April 2012, the AER released a discussion paper on control mechanisms on standard control services in NSW and the Australian Capital Territory (ACT) (Control mechanisms paper).[157] The AER received submissions on the Control mechanisms paper which are discussed below.

Standard control services

The application of a revenue cap to standard control services is a departure from the existing WAPC control mechanism. In considering the appropriate control mechanism, the AER has had regard to the factors set out in clause 6.2.5(c) of the NER, as well as three additional relevant factors:

- volume risk and revenue recovery
- price flexibility and stability
- incentives for demand side management.[158]

The AER's consideration of the possible control mechanisms against those factors revealed both positive and negative attributes associated with the revenue cap and the WAPC. In determining its preliminary position for a revenue cap the AER's key conclusion is that the benefits from a higher likelihood of recovery of efficient costs under a revenue cap outweigh the detriments of within period price instability and weak efficient pricing incentives.

The AER considers that a WAPC provides a lower likelihood of a DNSP recovering efficient costs. Under a WAPC, revenue varies with the volume of sales, and the majority of a DNSP's costs are fixed and correlated to peak demand. Therefore, if the actual volume of sales is higher than forecast, a DNSP will recover revenue above efficient costs. This may result in opportunity for a DNSP to recover revenue above efficient costs. If the DNSP understates sales volume forecasts or rebalances tariffs to increase the price on services with increasing sales volumes, the DNSP will obtain higher revenue with little effect on costs. The AER is aware of situations where substantial over recovery has taken place under the WAPC, caused by higher than forecast sales volumes and, potentially, advantageous tariff rebalancing (see appendix B).

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157 AER, *Discussion Paper—Matters relevant to the framework and approach, ACT and NSW DNSPs 2014–2019– Control mechanisms for standard control electricity distribution services in the ACT and NSW*, April 2012. (AER, *Control mechanisms paper*, April 2012.)

158 AER, AER, *Control mechanisms paper*, April 2012.

The AER considers that the theoretical incentives for efficient pricing provided by the WAPC have resulted in little practical benefit in DNSPs' pricing. The AER has considered the pricing approaches of Essential Energy, Endeavour Energy and the Victorian DNSPs and compared these to Ausgrid's submission of improved pricing efficiency under the WAPC. The AER considers that apart from Ausgrid's pricing, pricing efficiency in relation to other DNSPs has not materially improved since the introduction of WAPCs in the previous regulatory period.[159] Further, in the previous regulatory control period, which exhibited increasing sales volumes, and therefore increased opportunity for tariff rebalancing, pricing structures became less efficient.

In relation to a revenue cap, the AER is concerned with price instability within a regulatory control period caused by the overs and unders account.[160] However, the AER's analysis shows that the magnitude of adjustments in the overs and unders account are minor when compared to other

Overall, the AER considers that there is a net benefit in moving to a revenue cap for standard control services.

Alternative control services

The AER considers there are overall advantages in reclassifying a range of monopoly and miscellaneous services from standard to alternative control services to better reflect the nature of these services.

Consistent with the AER's proposed view in chapter 2 of the preliminary F&A paper that these services need to be more cost reflective, a price cap is considered the most appropriate control mechanism. The AER expects that quoted services will have a basis of control that would constitute a formula based approach rather than fixed prices. For public lighting, the AER proposes to continue the current price cap control mechanism, with the prices to be determined using a combination of an asset base roll forward for older assets, and an annuity approach for lighting constructed after 2009.

3.2 Requirements of the NEL and NER

A distribution determination must impose controls over the prices of direct control services, and/or the revenue to be derived from direct control services.[161] The AER's F&A paper must state the form (or forms) of the control mechanisms to be applied by the distribution determination to direct control services and the AER's reasons for deciding on control mechanisms of the relevant form or forms.[162] Direct control services can be classified as

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159 The previous regulatory control period for the Victorian DNSPs was 2006–10. The previous regulatory control period in NSW was 2004–09.

160 The overs and unders account adjusts prices within a regulatory control period, taking into account any difference between forecast and actual sales volume. It ensures that the revenues remain capped for a regulatory control period.

161 NER, cl. 6.2.5(a).

162 NER, cl. 6.8.1(c).

standard control services or alternative control services. Different control mechanisms may apply to each of these classifications, or to different services within the same classification.

The AER can only accept or approve the control mechanisms in a DNSP's regulatory proposal if they are the same as those set out in the F&A paper.[163]

3.2.1 Available control mechanisms

The AER's consideration of the control mechanisms to apply to direct control services comprises of two parts:

- the control mechanism[164]
- the basis of the control mechanism.[165]

Clause 6.2.5(b) of the NER sets out the control mechanisms that may be applied to both standard and alternative control services:

- a schedule of fixed prices
- caps on the prices of individual services (price cap)
- caps on the revenue to be derived from a particular combination of services (revenue cap)
- tariff basket price control (WAPC)
- revenue yield control (average revenue cap)
- a combination of any of the above.

Clause 6.2.6 of the NER sets out the basis of control mechanisms for standard control services and alternative control services.

3.2.2 Standard control services

In deciding on a control mechanism to apply to standard control services, the AER must have regard to the factors in clause 6.2.5(c) of the NER:

- the need for efficient tariff structures
- the possible effects of the control mechanism on administrative costs of the AER, the DNSP and users or potential users
- the regulatory arrangements (if any) applicable to the relevant service immediately before the commencement of the distribution determination

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163 NER, cl. 6.12.3(c).
164 NER, cl. 6.2.5(b).
165 NER, cl. 6.2.6(a).

- the desirability of consistency between regulatory arrangements for similar services (both within and beyond the relevant jurisdiction)
- any other relevant factor.

The AER proposed in its Control mechanisms paper to have regard to three other factors which it considers are relevant to assessing the most appropriate control mechanism:

- volume risk and revenue recovery
- price flexibility and stability
- incentives for demand side management.[166]

The basis of the control mechanism for standard control services must be the prospective CPI–X form or some incentive-based variant thereof under Part C of chapter 6 of the NER.[167]

3.2.3 Alternative control services

The AER must have regard to the factors listed in clause 6.2.5(d) of the NER in deciding on a control mechanism for alternative control services:

- the potential for the development of competition in the relevant market and how the control mechanism might influence that potential
- the possible effects of the control mechanism on administrative costs of the AER, the DNSP and users or potential users
- the regulatory arrangements (if any) applicable to the relevant service immediately before the commencement of the distribution determination
- the desirability of consistency between regulatory arrangements for similar services (both within and beyond the relevant jurisdiction)
- any other relevant factor.

The control mechanism must have a basis stated in the distribution determination.[168] This may, but need not, utilise elements of Part C of chapter 6 of the NER with or without modification. For example, the control mechanism may, but need not, use a building block approach or incorporate a pass-through mechanism.[169]

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166 AER, AER, *Control mechanisms paper*, April 2012.
167 NER, cl. 6.2.6(a).
168 NER, cl. 6.2.6(b).
169 NER, cl. 6.2.6(c).

3.3 Control mechanism for standard control services

3.3.1 Current regulatory arrangements for NSW DNSPs

In its 2009 distribution determination, the AER applied a WAPC to NSW DNSPs' standard control services. Under clause 6.2.5(c1)(1) of the transitional chapter 6 of the NER, the AER was required to continue with the WAPC as previously applied by IPART.[170]

For the NSW 2014–19 distribution determinations, the AER is no longer bound by the transitional provisions in the NER, and will instead, apply chapter 6 of the NER in relation to the control mechanism to be applied.

3.3.2 AER consultation on control mechanism for standard control services

The Control mechanisms paper set out the AER's initial preference for a revenue cap to be applied to the NSW DNSPs' standard control services over the next regulatory control period. The AER received six submissions in response to the discussion paper.

The Control mechanisms paper set out the factors in clause 6.2.5(c) that the AER must consider in deciding on the control mechanism for standard control services. The AER also proposed to have regard to three additional relevant factors set out above.

The Control mechanisms paper referred to the relevant factors as 'objectives'.[171] Ausgrid submitted that the criteria proposed by the AER resulted in too many objectives and gave rise to inherent conflicts, inconsistency and a lack of transparency.[172] Ausgrid stated that the AER should revise its evaluation approach by adopting the National Electricity Objective (NEO) as a single over-arching objective and assess the matters which it must have regard to in the context of the proposed control mechanism and its likely contribution to the achievement of the NEO.[173]

The AER acknowledges that the factors listed in clause 6.2.5(c) of the NER, and the proposed additional relevant factors, are not 'objectives'. The AER is required to make its decision in a manner that is or is likely to contribute in the achievement of the NEO.[174] The AER must have regard to the relevant factors as required in clause 6.2.5(c) of the NER when making such a decision.

The AER maintains its view that it should consider the three additional factors when making its decision on the appropriate control mechanism for standard control services. The AER accepts that the requirement to consider multiple factors when making a decision, as required by the NER, may lead to conflict or divergence between some of those factors. The AER will

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170 AER, *Final Decision –New South Wales Distribution Determination 2009–10 to 2013–14*, 28 April 2009, p. 46.

171 AER, *Control mechanisms paper*, April 2012, pp. 6, 15.

172 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 5; Essential Energy, *submissions to Matters relevant to the framework and approach: ACT and NSW DNSPs 2014–19 – Discussion Paper April 2012 (Control Mechanisms),* p. 1.

173 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, pp. 1, 4–5.

174 NEL, s. 16.

therefore use its discretion and exercise judgement when weighing the relevant factors to decide on the appropriate control mechanism.

A summary of the issues raised in submissions received by the AER is presented in table 3.1.

Table 3.1 Summary of submissions

Criteria	Submissions
The need for efficient tariff structures	Ausgrid and Essential Energy submitted that the incentives for efficient pricing should have a high priority in determining the control mechanism.[175] Further, it was submitted that the WAPCs are superior to revenue caps because WAPCs provide better commercial incentives for efficient pricing. Ausgrid submitted that it has implemented various cost-reflective tariffs to reduce its commercial risks under the WAPCs.[176]
Volume risk (who bears it) and revenue recovery	Ausgrid considered this criterion should be given a high ranking of importance.[177] Ausgrid and Essential Energy submitted that revenue should not be limited by the forecast revenues where variations in cost as a result of variation from forecast volumes occur.[178] It was considered that revenue recovery above forecast under the WAPCs reflects underlying economic conditions rather than windfall gains to the DNSPs or any gaming by the DNSPs.[179] Ausgrid and Essential Energy submitted that DNSPs are best placed to bear volume risks.[180] Essential Energy disagreed with the AER's view that actual volumes under the WAPCs is consistently above forecast.[181] Ausgrid submitted 2009–10 actual volumes are lower than forecast.[182]
Incentive for demand side management	Ausgrid and Essential Energy submitted that demand management incentives should not be an assessment criterion for control mechanism; or alternatively, it should have a low ranking of priority.[183] Ausgrid submitted that demand management should be dealt with in a separate incentive scheme. Ausgrid does not agree there is a trade-off between pricing efficiency and demand side management. Ausgrid submitted that the revenue cap encourages inefficient demand management outcomes.[184] Total Environment Centre (TEC) submitted that a revenue cap should be used because it removes DNSPs' incentives to increase demand and consumption.[185]

175 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 5; Essential Energy, *submissions to Matters relevant to the framework and approach: ACT and NSW DNSPs 2014-2019 - Discussion Paper April 2012 (Control Mechanisms),* p. 1.

176 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism,* 30 April 2012,pp. 9-10.

177 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 5.

178 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 16.

179 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 17; Essential Energy, *submissions to Matters relevant to the framework and approach: ACT and NSW DNSPs 2014-2019 - Discussion Paper April 2012 (Control Mechanisms),* p. 3.

180 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 15; Essential Energy, *submissions to Matters relevant to the framework and approach: ACT and NSW DNSPs 2014-2019 - Discussion Paper April 2012 (Control Mechanisms),* p. 34.

181 Essential Energy, *submissions to Matters relevant to the framework and approach: ACT and NSW DNSPs 2014-2019 - Discussion Paper April 2012 (Control Mechanisms),* p. 4.

182 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 10.

183 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 4; Essential Energy, *submissions to Matters relevant to the framework and approach: ACT and NSW DNSPs 2014-2019 - Discussion Paper April 2012 (Control Mechanisms),* p. 2.

184 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 18.

185 Headberry Partners and Bob Lim & Co, *Does Current Electricity Network Regulation Actively Minimise Demand Side Responsiveness in the NEM - A report for the Total Environment Centre*, June 2008.

Criteria	Submissions
Administration costs	Ausgrid and Essential Energy submitted that there is little difference in administrative costs under revenue caps and WAPCs.[186] Ausgrid submitted that it would be detrimental to consumers if it were to loss its expertise under the WAPCs due to a change to a revenue cap at the regulatory determination.[187] Essential Energy considered that changing the control mechanism is unlikely to have major cost impacts.[188]
Price flexibility and price stability	Endeavour Energy submitted that the control mechanism should focus on efficient and predictable prices.[189] Ausgrid and Essential Energy submitted that revenue recap produces higher price fluctuation due to the overs and unders account.[190] The DNSPs also submitted price flexibility is broadly similar for all forms of control. AGL submitted that network prices have a flow-on effect on retail pricing and that price stability and predictability is important. AGL considered that although WAPCs provide greater price stability, there is potential for price instability and gaming under the WAPCs because of the current side constraints being applied to broadly defined tariff categories, rather than to individual tariffs.[191]
Consistency with other jurisdictions Consistency with current regulatory control period	Ausgrid, Endeavour Energy and Essential Energy submitted that consistency of control mechanism across regulatory periods is desirable.[192]
Other issues	Ausgrid submitted that the Control mechanisms paper incorporated too many objectives and gave rise to conflicts, inconsistency and a lack of transparency.[193] AGL submitted the AER should consider an F&A approach that includes DNSPs working with the retailers and consumers when proposing network tariffs changes.[194]

Source: Submissions to AER's Control mechanisms paper.

3.3.3 Issues and AER considerations––standard control services

The following sections set out the AER's considerations on the control mechanism for standard control services against each of the relevant factors:

186 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 21; Essential Energy, *submissions to Matters relevant to the framework and approach, ACT and NSW DNSPs 2014-2019 - Discussion Paper April 2012 (Control Mechanisms),* p. 4.

187 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 21.

188 Essential Energy, *submissions to Matters relevant to the framework and approach: ACT and NSW DNSPs 2014-2019 - Discussion Paper April 2012 (Control Mechanisms),* p. 4.

189 Endeavour Energy, *Submission - Form of regulation to apply for the 2014 to 2019 regulatory period*, 4 May 2012.

190 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 20; Essential Energy, *submissions to Matters relevant to the framework and approach, ACT and NSW DNSPs 2014-2019 - Discussion Paper April 2012 (Control Mechanisms),* p. 5.

191 AGL, *submission on AER NSW Control Mechanism 2014 Price Review*, 2 May 2012, p. 3.

192 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 22; Endeavour Energy, *submission - Form of regulation to apply for the 2014 to 2019 regulatory period*, 4 May 2012; Essential Energy, *submissions to Matters relevant to the framework and approach, ACT and NSW DNSPs 2014-2019 - Discussion Paper April 2012 (Control Mechanisms),* p. 5.

193 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p.1.

194 AGL, *submission on AER NSW Control Mechanism 2014 Price Review*, 2 May 2012, p. 2.

- volume risk and revenue recovery
- the need for efficient tariff structures
- incentives for demand side management
- the possible effects of the decision on administrative costs of the AER, DNSPs and users or potential users
- price flexibility and stability
- the desirability of consistency between regulatory arrangements for similar services (both within and beyond the relevant jurisdiction)
- the regulatory arrangements (if any) applicable to the relevant service immediately before the commencement of the distribution determination.

Volume risk and revenue recovery

The Control mechanisms paper set out that a control mechanism should provide DNSPs with an opportunity to recover efficient costs, while limiting revenue recovery above the volume of sales forecast. After reviewing the submissions, the AER considers this factor should be revised so the AER has regard to 'whether a control mechanism provides DNSPs with an opportunity to recover efficient costs, while limiting revenue recovery above such costs'.[195]

A revenue cap fixes revenue regardless of the volume of services provided by the DNSP. If the DNSP recovers more than the Maximum Allowable Revenue (MAR) in one year, it will be required to decrease the price of its services in the following years. Similarly, if the DNSP recovers less than the MAR in one year, then it can increase the price of its services in the following years. In both cases, the consumer will bear the volume risk as prices change within the regulatory control period. Ausgrid and Essential Energy submitted that volume risk should rest with the DNSP, not the consumer. This is because DNSPs are the best party to manage that risk.[196] The AER agrees with this view and considers this a negative feature of revenue caps.

While a DNSP's total revenue is fixed over the regulatory control period, its profit is not. If the actual volume of services is greater than expected, then costs of providing these services will increase, reducing profit. The impact on profits will depend on the accuracy of forecasts and the relationship between volumes and costs. Ausgrid submitted that the profit risk under the revenue cap is determined by the DNSPs cost function.[197] The AER considers that a large proportion of a DNSP's costs are not responsive to small variations in the volume of sales. Consequently, profit under a revenue cap is likely to be more stable and revenue is closer to efficient costs.

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195 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 16; Essential Energy, *submissions to Matters relevant to the framework and approach: ACT and NSW DNSPs 2014-2019 - Discussion Paper April 2012 (Control Mechanisms)*, p. 4.

196 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p.15; Essential Energy, *submissions to Matters relevant to the framework and approach: ACT and NSW DNSPs 2014-2019 - Discussion Paper April 2012 (Control Mechanisms)*, p. 4.

197 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 16.

The AER considers that a WAPC provides a low likelihood of a DNSP recovering their efficient costs. Given that most of a DNSP's costs are fixed and correlated to peak demand, if the actual volume of sales varies from its forecast, the DNSP's revenue will vary from costs. The AER considers that the variability of revenue and profit under the WAPC may result in:

- an incentive for a DNSP to understate volume of sales forecasts at the time of the regulatory determination. While the AER rigorously assesses the forecasts proposed by the DNSPs, the AER is concerned with the overall accuracy of volume forecasts.

- an incentive to increase the price on services with increasing sales quantities. If the volumes of sales are determined independent of DNSPs' pricing decisions, then DNSPs may be able to adjust prices to increase profits. If the DNSP can increase the price of those services (or service components) for which sales are increasing most rapidly, and decrease prices of those services for which sales are not increasing rapidly, then the DNSP will earn revenue above its forecast. Where the increase in sales does not correspond to an increase in marginal costs, there is an incentive for the DNSP to set inefficient prices.

- the DNSP bearing the volume risk during the regulatory control period. As variations in revenue arising from variation in the forecast volume of sales does not result in an adjustment to prices in the following regulatory control period, consumers do not face the risk of price adjustments within a regulatory control period. The AER considers that DNSPs are the appropriate party to bear this volume risk. As submitted by Ausgrid, DNSPs have influence over forecasts, prices and costs, and are therefore in the best position to manage volume risk.[198]

Appendix B provides examples of the revenue recovery outcomes under the WAPC from the Victorian DNSPs over the 2006–10 regulatory control period. The example shows the potential for substantial over recovery of revenue by DNSPs under the WAPC. In the Victorian DNSPs example, there was over recovery of revenue of $568 million (real $2010) above the adjusted forecast. This represents an over recovery of revenue of 8.28 per cent annually for each DNSP. Volume of sales forecasts result in a degree of forecast error that will result in windfall gains and losses to consumers from year to year. However, these gains and losses should balance out over time if forecasts are not biased. The observed outcome of consistent over recoveries suggests bias in favour of the DNSPs, which is not in the long term interest of consumers.

Ausgrid reported an $8.3 million (real $2010) revenue recovery above the adjusted forecast for the 2009–10 financial year.[199] Ausgrid submitted that as this accounts for less than 1 per cent of revenue, the difference should not concern the AER.[200] The AER does not agree with this view. The fact Ausgrid was able to recover revenue above forecast in this environment highlights the one sided nature of revenue variations from forecasts under the WAPC and the potential for over recovery where actual sales exceed forecast.

Taking into account appendix B, the AER considers the outcomes under a WAPC for volume risk and revenue recovery are::

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198 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p.15

199 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 20

200 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 20

- potential windfall gains from understated volume forecasts at the time of the regulatory determination

- potential gains or losses from changing market conditions and profit maximising behaviour such as rebalancing tariff increases toward services/tariff components where sales are increasing

- the assigning of volume risk to the DNSP. This results in efficiency gains due to a DNSP's ability to manage fluctuations.

Volume risks associated with a WAPC could be mitigated by the adoption of a correction factor that provides an adjustment when demand forecasts exceed a predetermined level. This could significantly lessen the more adverse effects of a WAPC. The inclusion of a correction factor into a WAPC has not been explicitly considered in this preliminary F&A paper.

The AER welcomes submissions from interested parties on such an approach.

Efficient tariff structures

Clause 6.2.5(c)(1) of the NER requires the AER to have regard to the need for efficient tariff structures. The AER considers that efficient tariff structures will occur where the control mechanism provides an incentive for DNSPs to set efficient prices. The AER considers that, efficient prices are those that reflect the cost of providing the service.

The control mechanism will be accompanied by an annual assessment of prices for standard control services by the AER. This assessment includes compliance with the pricing principles and side constraints as required under clauses 6.18.5 and 6.18.6 of the NER:

- the expected revenue to be recovered under each tariff class lies between stand alone and avoidable cost

- taking into account the long run marginal cost when setting the price for each component of each service

- taking into account transaction costs and the likely responsiveness of customers to price signals

- abiding by side constraints limiting the movement of prices from one regulatory year to the next in each tariff class

The AER has also taken into account other factors external to the control mechanism that impact the incentives for efficient pricing include:

- the extent to which retailers pass through distribution prices to consumers

- the responsiveness of consumers to changes in distribution prices.

Ausgrid and Essential Energy submitted that the incentives for efficient pricing should have a high priority in determining the control mechanism.[201] The AER agrees with these submissions and considers that while external factors may limit and reduce these incentives in some cases, the underlying incentive of each control mechanism provides the basis for DNSPs to set efficient prices.

The possible incentives for DNSPs setting prices under a WAPC are that it can:

- efficiently reduce the price of price sensitive services towards marginal cost. As revenue increases when the volume of sales increases under a WAPC, DNSPs have an incentive to reduce the price on these services towards cost. The DNSP is then able to increase prices for price insensitive services to maximise profit and still satisfy the WAPC constraint. This is the incentive required to create Ramsey pricing, which is the most efficient form of pricing for electricity distribution services.[202]

- increase the price on services with increasing sales volumes. Where the volume of sales is unresponsive to changes in distribution prices, DNSPs maximise profit by increasing the price on these services (or elements of these services) which result in increasing sales. The DNSP then decreases the prices of services with falling, or lower growth in sales to satisfy the WAPC constraint. Where the quantity used by customers is increasing this results in an incentive to increase usage charges despite low marginal costs for such services.

Ausgrid submitted that the implementation of efficient pricing from 2008–09 to 2012–13 was brought about by the incentives under the WAPC. Ausgrid further submitted that it:

> will not be compensated under the WAPC for the loss of revenue associated with actual energy consumption being below the AER forecast used to set the X-factor. In light of the extent of the increase in our commercial risk exposure under the WAPC caused by the deterioration of our volume environment, Ausgrid was compelled for commercial reasons to pursue tariff reforms to deliver a better alignment between our revenue and cost functions.[203]

The AER agrees there is an incentive for efficient pricing under these conditions. However, the AER considers that the same incentives and improvements are not evident across all NEM DNSPs subject to WAPCs, especially in regard to the previous regulatory period. appendix B provides analysis of pricing trends by Essential Energy, Endeavour Energy and the Victorian DNSPs under the WAPC. The AER found that the improvements demonstrated by Ausgrid in the current regulatory period were not evident across the other DNSPs subject to the WAPC. Furthermore, in the conditions of higher than forecast sales quantities in the previous regulatory period, pricing efficiency deteriorated under the WAPC.

Taking into account Appendix B and submissions from interested parties, the AER considers that a WAPC control mechanism:

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201 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 5; Essential Energy, *submissions to Matters relevant to the framework and approach: ACT and NSW DNSPs 2014-2019 - Discussion Paper April 2012 (Control Mechanisms)*, p. 1.

202 AER, *Discussion Paper - Matters relevant to the framework and approach - Control mechanisms for standard control electricity distribution services in the ACT and NSW*, April 2012. Appendix A.

203 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p.11.

- provides a theoretical incentive for DNSPs to set efficient prices, especially where the volume of sales is below forecast.

- has not in practice resulted in material increases in pricing efficiency where it has been applied in previous regulatory control period across Victorian and NSW DNSPs

- may, where actual sales volumes exceed forecasts, create an incentive for DNSPs to set inefficient prices by rebalancing tariffs to attain additional revenue.

A revenue cap may provide an incentive for inefficient pricing in certain circumstances. As revenue is fixed under the revenue cap, decreases in cost result in increases in profit. This results in an incentive for the DNSP to increase prices above costs on price sensitive services.

In practice, the incentive for DNSPs to set inefficient prices under a revenue cap is likely to be limited. This is because the majority of a DNSP's costs result from connections and augmentations to its network. Therefore, the incentive for a DNSP to decrease costs through pricing is likely to result in shifts away from other energy prices and towards fixed, peak, capacity and demand prices. Appendix A of the Control mechanisms paper set out that under a DNSP's current tariff structures, shifts towards these prices are likely to lead to increases in efficiency.[204]

Price flexibility and stability

The AER maintains its view set out in the Control mechanisms paper that price flexibility is broadly similar for all forms of control, as it is limited by the side constraints and the NER pricing principles. Submissions from the DNSPs support this view.[205]

In terms of price stability, both the WAPC and revenue cap are subject to various annual price adjustments specified under the NER. These include cost pass throughs, jurisdictional scheme obligations, tribunal decisions and transmission prices passed on to the DNSPs from the Transmission Network Service Providers (TNSPs).[206] Further, the AER notes that the primary difference between a WAPC and a revenue cap is the overs and unders account.

The AER considers that the revenue cap can result in sizable price fluctuations within a regulatory control period due to the operation of the overs and unders account. That is, prices have to be adjusted during the regulatory control period to account for any difference between forecast and actual sales volumes for compliance with the revenue cap. While there is no

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204 AER, *Discussion Paper - Matters relevant to the framework and approach - Control mechanisms for standard control electricity distribution services in the ACT and NSW*, April 2012, Appendix A.

205 AER, *Discussion Paper - Matters relevant to the framework and approach - Control mechanisms for standard control electricity distribution services in the ACT and NSW*, April 2012, p. 13. Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 20; Essential Energy, *submissions to Matters relevant to the framework and approach: ACT and NSW DNSPs 2014-2019 - Discussion Paper April 2012 (Control Mechanisms),* p. 4. ActewAGL, *Control mechanisms for standard control services in the ACT and NSW - response to the Australian Energy Regulator's discussion paper on the Framework and Approach for the 2014-19 electricity network determinations*, May 2012, p. 14.

206 In recent years, decisions made by the Australian Competition Tribunal on the AER's regulatory determinations have resulted in significant increases in the total revenue to be recovered by the DNSPs.

overs and unders account under the WAPCs, there still may be some price fluctuations under this control mechanism.

Under the WAPCs, lagged quantity weights based on previous years are updated annually and affect the weightings applied to tariffs and tariff components. AGL submitted that a WAPC provides an opportunity for gaming and do not guarantee price predictability.[207] This is because side constraints are applied to broadly defined tariff categories. Therefore, prices for certain individual tariffs can fluctuate significantly as the DNSPs raise prices on tariffs where it expects volume of sales to increase, and decrease prices on tariffs where volume of sales is expected to fall. This is discussed in appendix B.

Further, as discussed in the Control mechanisms paper, WAPC can result in greater price jump across regulatory control periods compared to a revenue cap.[208] This issue is particularly pronounced if a trend of falling demand has set in throughout the regulatory control period, prompting a large upward adjustment in the X-factors (and hence prices) for the next regulatory control period under the WAPCs. In contrast, the volume forecasts are updated annually under a revenue cap. This would mean that prices would rise gradually over the regulatory period (rather than jump up at the end of the period) if a trend of falling demand was evident.

The size of the overs and unders adjustment associated with a revenue cap is reflective of sales volume volatility. Under the revenue cap, the risk of actual volumes being different to forecast volumes falls on the customers in the form of fluctuating prices within a regulatory control period. While this may be undesirable, the AER does not consider that the outcome under the WAPCs is necessarily superior due to the sensitivity of the WAPCs to volume forecasting five years in advance. Under the WAPC, volume forecasts are crucial as they contribute to the setting of the price constraint over the entire five year regulatory period. Thus, if the volume forecasts are not robust at the time of the regulatory determination, the price path would be set incorrectly with the result of possible consumer detriment. Previous regulator in Tasmania was also concerned with this undesirable attribute of the WAPC.[209]

There are a large number of factors impacting on the accuracy of volume forecasting at the time of the regulatory determination. These include biased forecasts submitted by the DNSPs, and events that can take place at anytime during the five year regulatory period: changes in customer composition, technological change, roll-out of embedded generation (e.g. small scale solar), social and economic conditions, political uncertainties and weather variability. It can also be difficult for a DNSP and regulator to divorce their five year forecasts from recent events, such as a financial crisis, to determine an objective five year forecast. Ausgrid submitted that to counter the uncertainty associated with volume forecasting, NSW DNSPs have had to set efficient prices to minimise commercial risks.[210] The incentive for efficient pricing was discussed above.

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207 AGL, *submission on AER NSW Control Mechanism 2014 Price Review*, 2 May 2012, p. 3.

208 AER, *Discussion Paper - Matters relevant to the framework and approach, ACT and NSW DNSPs 2014-2019 - Control mechanisms for standard control electricity distribution services in the ACT and NSW*, April 2012, p. 13.

209 OTTER, *2007 Investigation of Prices for Electricity Distribution Services on Mainland Tasmania, Decision and Statement of Reasons – Form of Regulation*, March 2006, p. 27.

210 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 11.

Submissions from the DNSPs and the retailer note that price fluctuations under the revenue cap are undesirable.[211] Although the AER agrees with this view, it considers that the price fluctuations could be mitigated by introducing tolerance limits to size of the overs and unders adjustment in any one year.

Incentives for demand side management

The AER considers that the incentive for demand side management should be a factor in determining the control mechanism. The benefits of demand side management include more efficient use of network assets resulting in lower prices for network users, benefits for the environment and, importantly, a reduction in peak demand allowing augmentation expenditures to be avoided or deferred.[212]

The AER does not agree that demand management incentives should be excluded from its consideration on the control mechanism. As noted in the AEMC's Power of Choice Review and the control mechanism (along with other factors inherent in the regulatory determination) can influence the DNSPs' decisions to conduct demand side management.[213] The incentives for demand management has been taken into account in the decision on the control mechanism in past AER distribution determinations and in decisions made by previous jurisdictional regulators.[214] On this basis, the AER considers that demand management incentives should be considered.

Consistent with its Control mechanisms paper, the AER considers that a WAPC may provide a disincentive to undertake demand side management in the short and long run because a DNSP's profits are directly linked with the volume of electricity distributed.[215] The disincentive to undertake demand side management under the WAPC has also been discussed in the Power of Choice Review and in a submission made by Headberry Partners to the AER.

In its submission to the Control mechanisms paper, Ausgrid submitted that there is no trade-off between pricing efficiency and demand side management under the WAPCs. Ausgrid emphasised that efficient prices under the WAPC will encourage customers to make efficient consumption decisions. This enables DNSPs to make efficient investment decisions on demand management and/or network investment.[216] The AER agrees with the benefits of efficient pricing. However, the AER considers even in an efficient pricing environment, DNSPs still have a disincentive to conduct demand side management under a WAPC. This is consistent with the AEMC's direction paper on the Power of Choice review that when marginal revenue is above marginal cost under a WAPC, a DNSP will have a disincentive to

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211 AGL, *submission on AER NSW Control Mechanism 2014 Price Review*, 2 May 2012, p. 3.

212 Peak demand is generally referred to as the maximum load on a section of the network over a very short time period.

213 AEMC, *Power of Choice Review Directions Paper - Supplementary Paper: Demand Side Participation and Profit Incentives for Distribution Network Businesses*, 23 March 2012, pp.19-24.

214 AER, *Proposed positions - Framework and approach paper - Classification of services and control mechanisms - Energex and Ergon Energy 2010–15*, July 2008, p. 45.

215 AEMC, *Power of Choice Review Directions Paper - Supplementary Paper: Demand Side Participation and Profit Incentives for Distribution Network Businesses*, 23 March 2012, pp. 19-24; Headberry Partners and Bob Lim & Co, *Does Current Electricity Network Regulation Actively Minimise Demand Side Responsiveness in the NEM - A report for the Total Environment Centre*, June 2008.

216 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012,pp. 2, 18.

conduct demand side management.[217] The AER considers that marginal revenue will often exceed marginal cost even under efficient pricing, because the DNSPs' annual revenue requirements are based on large fixed costs.

The AER considers that a revenue cap can provide an incentive to undertake demand management, at least in the short run.[218] Under a revenue cap, a DNSP's revenue is fixed over the regulatory control period and it is able to maximise profits by reducing costs. As a result, a DNSP has an incentive to undertake demand side management projects or programs that reduce demand which reduce the need to incur capital costs.

ActewAGL submitted that a revenue cap may lead to excessive demand side management as a DNSP seeks to reduce costs to increase its profits.[219] The AER considers that the risk of excessive demand is not significant, as this risk can be mitigated by implementing an incentive scheme such as the STPIS. By providing financial incentives for meeting target performance, the STPIS acts to balance the opportunity for a business to increase profits by reducing costs to the detriment of customer service quality.

Administration costs

Clause 6.2.5(c)(2) of the NER requires the AER to consider the possible effects of the control mechanism on administrative costs of the AER, DNSPs, users and potential users.

Consistent with its Control mechanisms paper, the AER considers there is little difference in administrative burden caused by revenue caps and WAPCs under a building block framework. Submissions from the DNSPs supported this view.[220]

Ausgrid submitted that it would be detrimental to consumers if it were to loss its expertise under the WAPCs due to a change to a revenue cap at the regulatory determination.[221] Essential Energy considered that changing the control mechanism is unlikely to have major cost impacts.[222] The AER considers that regardless of the control mechanism, the DNSPs are required employ similar forecasting and pricing processes in developing a regulatory proposal. The AER agrees with Essential Energy that the administrative costs of changing the control mechanism are likely to be minimal.

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217 AEMC, *Power of Choice Review Directions Paper - Supplementary Paper: Demand Side Participation and Profit Incentives for Distribution Network Businesses*, 23 March 2012, pp.19-24.

218 In the long run, DNSPs' incentive to undertake demand side management is diminished. This is because under the building block framework, a DNSP may have an incentive to increase the size of the regulated asset base if it is confident that the allowed return exceeds actual funding costs.

219 ActewAGL, *Control mechanisms for standard control services in the ACT and NSW - response to the Australian Energy Regulator's discussion paper on the Framework and Approach for the 2014-19 electricity network determinations*, May 2012, p. 8.

220 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 21; Essential Energy, *submissions to Matters relevant to the framework and approach: ACT and NSW DNSPs 2014-2019 - Discussion Paper April 2012 (Control Mechanisms),* p. 4.

221 Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 21.

222 Essential Energy, *submissions to Matters relevant to the framework and approach: ACT and NSW DNSPs 2014-2019 - Discussion Paper April 2012 (Control Mechanisms),* p. 4.

Consistency across jurisdictions

Currently, there are different forms of control mechanisms being applied to standard control services across the NEM. The WAPC is applied in NSW, South Australia and Victoria; a revenue cap is applied in Queensland and Tasmania and an average revenue yield is applied in the ACT. The AER considers that the pursuit of consistent control mechanisms across jurisdictions is a matter to consider in the medium to longer term. For this F&A process, the AER will focus on control mechanisms that best meet the other assessment criteria outlined in section 3.3.2.

Consistency across regulatory control periods

For the NSW 2014–19 distribution determinations, the AER is not constrained by the transitional provisions in chapter 6 of the NER and is therefore not required to continue with the WAPC as applied by the IPART. While consistency across regulatory periods may be desirable, the AER proposes to give more weight to other assessment criteria outlined in section 3.3.2.

The AER seeks submissions on its preliminary position to apply a revenue cap control mechanism to standard control services.

3.4 Control mechanism for alternative control services

The AER's F&A paper must state the form, or forms, of the control mechanisms that will be applied to alternative control services during the next regulatory control period. The AER's preliminary position is to apply price cap regulation in the next regulatory control period to the NSW DNSPs' alternative control services.

3.4.1 Current regulatory arrangements for NSW DNSPs

In its 2009 distribution determination, public lighting services were the only services deemed to be alternative control services during the 2009–14 regulatory control period. The AER applied a schedule of fixed prices as the control mechanism to apply to public lighting services.[223]

3.4.2 Issues and AER's considerations––alternative control services

The AER's proposed preliminary position is to apply a price cap to the following alternative control services:

- incidental services (a component of connection services)[224]
- metering services (types 5–7)

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223 AER, *Final Decision –New South Wales Distribution Determination 2009–10 to 2013–14*, 28 April 2009, pp.402-403.

224 As stated in chapter 2, most of the NSW DNSPs' 'monopoly services' fall within the 'connection services' group. Incidental services include the provision of administration, design, certification and inspection services.

- fee based services
- public lighting services.

The AER expects that quoted services will have a basis of control that would constitute a formula based approach rather than fixed prices.

The following subsections set out the AER's consideration of the factors in clause 6.2.5(d) of the NER that it must have regard to in deciding on the appropriate control mechanism for alternative control services.

The regulatory arrangements applicable in the current regulatory control period

Clause 6.2.5(d)(3) of the NER requires the AER to have regard to the current regulatory arrangements applicable to the NSW DNSPs.

Incidental services, metering services (types 5–7), fee based services and quoted services

Incidental services, types 5–7 metering services, fee based services and quoted services are currently classified as standard control services and are regulated under WAPCs.[225] The AER's preliminary position is to change the classification of these services to alterative control services, and apply a price cap control mechanism to these services, except quoted services. The AER expects that quoted services will have a basis of control that would constitute a formula based approach rather than fixed prices.

Public lighting

The construction and maintenance of public lighting assets is currently classified as an alternative control service. For the current regulatory control period, the AER imposed:

- a schedule of fixed prices for the assets constructed before 1 July 2009 developed using a building block approach,
- a schedule of fixed prices in the first year for assets constructed after 1 July 2009 developed using an annuity capital charge approach, and
- a price path, such as CPI, for the remaining years of the regulatory control period.[226]

Maintenance charges are calculated separately depending on the type of luminaire in use and respective lamp replacement rates. This approach was developed in response to numerous issues raised about public lighting services in the lead up to the 2009–14 distribution determination in NSW. Some of these included prices not reflecting the costs of services and cross-subsidisation.

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225 AER, *Final decision*, *New South Wales distribution determination 2009-10 to 2013-14*, 2009, p. 28.

226 AER, *Final decision, New South Wales distribution determination 2009–10 to 2013–14*, 2009, pp. 328.

Price caps and schedules of fixed prices are largely the same mechanism, with the only difference being that a price cap allows the DNSPs to charge below the allocated price on some or all of the services.

The AER's preliminary position is to apply a price cap control mechanism to public lighting services.

The influence on the potential for development of competition

In chapter 2 of the preliminary F&A paper, the AER considered the potential for competition when classifying NSW DNSPs' direct control services as either standard or alternative control services. The AER considered that there is competition in the provision of most of the services that the AER proposes to classify as alternative control services.[227]

The AER does not consider that its proposed control mechanism, which reflects the classification of alternative control services, will have a significant impact on the potential to develop competition.

Administrative costs

Clause 6.2.5(d)(2) of the NER requires the AER to consider the possible effects of the control mechanism on the administrative costs of the AER, DNSPs and users or potential users.

Incidental services, metering services (types 5–7), fee based services and quoted services

The AER has proposed classifying incidental services, type 5–7 metering services, fee based services and quoted services as alternative control services. As a result of this classification, the AER considers that a new control mechanism for each service type is necessary. The AER considers administration costs will be primarily influenced by the basis of control. The AER therefore considers that the choice of control mechanism will not have any material impact on administration costs.

The AER recognises that the proposed change of control mechanism for all these services will potentially result in some additional administrative costs to the NSW DNSPs. Such an increase is expected to be largely transitional in nature, so that administrative costs are likely to reduce over time. The AER considers the change in basis of control will create greater cost reflectivity for the charges of these services and more appropriate charges to end users in a user-pays environment. The AER considers these benefits warrant a short term increase in administrative costs.

Public lighting

The AER considers administration costs will be primarily influenced by any changes to the current control mechanism. As no substantive changes are proposed, it is anticipated there will be no material impact on the administrative costs for the AER, DNSPs or consumers of public lighting services.

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[227] Incidental services have been classified on the ability to attribute the costs to identifiable customers.

The desirability of consistency

Clause 6.2.5(d)(4) of the NER requires the AER to have regard to the desirability of consistency between regulatory arrangements for similar services, both within and beyond the relevant jurisdiction.

The AER notes that different classification and control mechanisms are applied across NEM jurisdictions to the alternative control services proposed in this paper. For example, in Victoria, the operation, repair, replacement and maintenance of public lighting services are regulated through a price cap.[228] There is no automatic escalation applied to these prices.[229] In Queensland, a variant of a schedule of fixed prices is applied to all public lighting services.[230]

While consistency is generally desirable, the AER considers the pursuit of consistency in forms of control across jurisdictions should not be the primary consideration in the selection of a control mechanism to apply to the NSW DNSPs alternative control services. This is because each jurisdiction is assessed on a case by case basis and as result of this assessment, the most appropriate control mechanism is applied.

Any other relevant factor

Clause 6.2.5(d)(5) of the NER requires the AER to have regard to any other relevant factor in deciding on the control mechanism. The AER considers that cost reflectivity is a relevant factor.

Consistent with its approach to the alternative control services discussed above, the AER considers the control mechanism to apply to these services should, where possible, deliver transparent and cost reflective prices. The AER considers that price caps are more appropriate than other control mechanisms. Under a price cap, the unit costs of inputs can be capped, but not the overall individual service. This creates greater cost reflective prices. Further, unit cost inputs (such as labour rates) can be reviewed through the annual pricing proposal and be published, providing greater transparency.

The AER considers that other control mechanisms such as revenue caps would not, by themselves, provide the same level of transparency or cost reflectivity as these are reliant on the frequency of services. For example, a revenue cap could see large charges for services when its demand is low but see a dramatic fall in charges when the demand is high.

Ausgrid submitted that a WAPC should be applied to public lighting services because it allows flexibility in implementing new technologies throughout the period.[231] While the AER agrees that WAPCs can provide greater flexibility, the AER considers that price caps are preferable. This is because, if competition were to develop in the provision of some or all of these

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228 AER, *Final Framework and approach paper for Victorian electricity distribution regulation – Citpower, Powercor, Jemema, SP AusNet and United Energy – Regulatory control period commencing 1 January 2011,* May 2009, p. 68

229 AER, *Final framework and approach paper, Energex and Ergon Energy 2010-15*, 2008, pp. 20-23.

230 AER, *Final framework and approach paper, Victorian electricity distribution regulation 2001-2016*, 2009, pp. 44-50.

231 Ausgrid, *submission on AER Discussion Paper public lighting in NSW*, May 2012, p. 9.

services, price caps would ensure that regulated prices for individual services would reasonably reflect the efficient cost of providing these services.

On this basis, the AER considers that, with regard to other relevant factors, a price cap form of regulation for all of the alternative control services specified is more appropriate.

AER's position on the basis of control for alternative control services

The basis of the control mechanism is the method used to calculate the revenue to be recovered or prices to be set for a group of services. Clause 6.2.6(b) of the NER states that for alternative control services, the control mechanism must have a basis stated in the distribution determination.

The AER is able to apply a control mechanism to a DNSP's alternative control services as set out under chapter 6, Part C of the NER. This involves applying the building block approach, although the AER may only apply certain elements of the building block approach. Alternatively, the AER may implement a control mechanism that does not use the building block approach.

Incidental services, metering services (types 5–7), fee based services and quoted services

The AER proposes to apply a price cap control mechanism to regulate all alternative control services for the next regulatory control period.

Through the distribution determination process the AER will confirm a basis of control mechanism for incidental services, type 5–7 metering services, fee based services and quoted services.

Public lighting services

The AER's preliminary position on the basis of the control mechanism to apply to public lighting services is to apply:

- a continuation of the building block approach for all assets constructed before 1 July 2009
- a continuation of the annuity capital charges for all assets constructed after 1 July 2009 until 30 June 2014
- an annuity capital charge approach to construct prices in the first year for all assets constructed after 1 July 2014
- a price path, such as CPI, for the remaining years of the regulatory control period.

Maintenance charges will be calculated separately depending on the type of luminaire in use and respective lamp replacement rates.

The AER issued a discussion paper on public lighting services in the lead up to the F&A process. The aim of the discussion paper was for interested parties to raise issues with the current approach to public lighting services and to provide any submissions for the approach to adopt in next regulatory control period.[232] As part of this process, the AER released a discussion paper on public lighting services (Discussion paper–Public lighting) in April 2012.[233] The AER received numerous submissions from interested parties on the Discussion paper–Public lighting, including submissions from council groups; WSROC, SSROC, Central NSW Councils, Bankstown City Council, NSROC and SEROC (the Councils).[234]

At the request of the AER, the NSW DNSPs proposed two possible approaches for future regulation of public lighting.[235] Ausgrid submitted a building block approach under a service pricing regime.[236] Under this approach Ausgrid submitted that customers would pay a standard charge for the provision of public lighting services of a particular type, regardless of the age of the asset or detail of its construction. Ausgrid further submitted that a simplified categorisation of services could be achieved by grouping lighting assets together and using an average price for assets providing similar services. In all, 22 service asset pools were proposed, with a matching suite of 17 operation and maintenance related prices.[237]

Endeavour Energy submitted that the current approach should be continued. Endeavour Energy also submitted that it preferred to retain the current capital charges: a single charge for assets constructed prior to 30 June 2009 (based on a RAB roll forward) and a list of annuity charges for all assets constructed post 1 July 2009.[238]

Aside from the options proposed by the DNSPs, the AER considers it would also be feasible to maintain the current regulatory approach with the introduction of a new schedule of prices for assets constructed from 1 July 2014. However, the Councils submitted that this approach would be overly complex and difficult to administer while providing minimal, if any, benefits to customers.[239]

The AER acknowledges the complexity of the current approach, which results in multiple billable elements for public lighting services. The current approach was determined by the

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232 AER, *Discussion Paper, Matters relevant to the framework and approach NSW DNSPs 2014—19, Public lighting services*, April 2012.

233 AER, *Discussion Paper, Matters relevant to the framework and approach NSW DNSPs 2014—19, Public lighting services*, April 2012.

234 Council submissions to AER Discussion paper on public lighting in NSW, May 2012:
WSROC, *submission on Public lighting services in NSW*, May 2012.
Central NSW Councils, submission on Public lighting services in NSW, May 2012.
SSROC, submission on Public lighting services in NSW, 11 May 2012.
Bankstown City Council, submission on Public lighting services in NSW, 10 May 2012.
NSROC, *submission on Public lighting services in NSW*, 11 May 2012.
SEROC, *submission on Public lighting services in NSW*, 10 May 2012.

235 AER, email to NSW DNSPs on 7 February 2012.

236 Ausgrid, *Possible options to improve regulation and pricing of public lighting services for Ausgrid's customers*, 2012.

237 Ausgrid, *Possible options to improve regulation and pricing of public lighting services for Ausgrid's customers*, 2012.

238 NSW public lighting, *Endeavour Energy's initial position discussion*, 2012.

239 Council submissions to the AER Public lighting in NSW Discussion Paper, May 2012.

AER with an aim to ensure that older depreciated (and less costly) assets did not adversely interfere with the efficient pricing of newer public lighting assets.[240]

The AER received submissions from the Councils supporting both Endeavour Energy and Ausgrid's proposals in reducing administration costs compared to a continuation of the current approach. The Councils generally supported Ausgrid's simpler approach but considered there is a need to see further evidence of cost reflectivity and likely price outcomes.[241]

In terms of consistency with the current control mechanism, the approach submitted by Endeavour Energy is essentially a continuation of the current approach, with some simplification of the list of prices for new public lighting assets. Ausgrid's proposed approach is a new basis of control from that currently in place. In terms of classification of services and the control mechanism of these services, there is variation between jurisdictions of the NEM. This highlights the unique nature of the legislative and economic circumstances across jurisdictions with regard to public lighting and the complexity it presents in adopting a consistent approach.

The AER is concerned that pricing based on the simplified groupings submitted by Ausgrid are unlikely to be cost-reflective and may result in cross-subsidisation[242] that the current approach was designed to remove.[243] Further, the AER considers that Ausgrid's approach of averaging costs may result in less transparency and even further difficulty for councils to understand its bills and the nature of the relationship between costs and prices.

Ausgrid submitted that cost reflective pricing is not compromised with its proposed approach despite not having individual prices for individual assets. Ausgrid submitted that cost reflectivity should reflect the service provision reasonably represented by averages of the cost of the service provided, and pools of assets, rather than each individual asset.[244] The AER does not agree with this position because where costs are identifiable and assignable to particular users, the prices charged to users should reflect such costs.

The Councils submitted that cost reflectivity is an important feature of any proposed model but considered it could not determine the extent to which Ausgrid's approach would reflect prices without further modelling.[245]

In summary, the AER considers that there is a trade off between the detail required for more accurate and cost reflective pricing approach for public lighting and the simplicity that is inherent in an average pricing approach. While simpler average prices might appear to provide greater transparency, the underlying basis on which the averages have been formed are likely to be much less transparent when a bill for public lighting services is received.

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240 AER, *Final decision, EnergyAustralia distribution determination 2009-10 to 2013-14, Alternative control (public lighting) services*, 2010, p. vi.

241 Council submissions to the AER Public lighting in NSW Discussion Paper, May 2012.

242 For example, when councils with predominantly new public lighting assets were generally being charged less than the cost of supplying that service, while councils with older assets were being over-charged.

243 AER, *Final decision, EnergyAustralia distribution determination 2009-10 to 2013-14, Alternative control (public lighting) services*, 2010, p. vi.

244 Ausgrid, *Ausgrid submission to the AER Public lighting in NSW Discussion Paper*, May 2012, p. 7.

245 Council submissions to the AER Discussion paper on public lighting in NSW, May 2012.

The AER seeks submissions on its preliminary position on the control mechanism to be applied to public lighting services.

3.4.3 Standard control mechanism

The AER's preliminary position is to apply a revenue cap to the services classified in chapter 2 of the preliminary F&A paper as standard control services in the next regulatory control period with a basis of the CPI–X form. The AER's preliminary position is based on the following considerations under clause 6.2.5(c) of the NER:

- a revenue cap is one of the control mechanisms listed in clause 6.2.5(b) of the NER that can be applied in the next regulatory control period.[246]
- the AER considers that DNSPs may have a weak incentive to set efficient prices under the revenue cap compared to a WAPC. However, there are provisions in place under clause 6.18 of the NER that require the AER to consider the efficiency of tariff structures as part of the pricing proposal process.[247]
- the AER considers that a revenue cap provides a higher likelihood of the recovery of efficient costs, while limiting recovery above such costs, compared to a WAPC
- the AER considers that DNSPs have an incentive to undertake demand side management under a revenue cap.
- the AER considers that the burden of administrative costs for adopting a revenue cap is broadly similar to implementing a WAPC.
- the AER considers that while revenue caps can result in a higher level of price instability compared to the WAPCs within regulatory control periods it can result in less price instability between regulatory control periods.

In preparing its final F&A paper, the AER will consider whether a different form of control is more appropriate in light of submissions received from stakeholders.

The AER seeks submission on the appropriate control mechanism for standard control services

3.4.4 Alternative control mechanism

The AER's preliminary position is to apply price cap regulation in the next regulatory control period to:

- incidental services (a component of connection services)
- metering services (types 5–7)
- fee based services
- quoted services

246 NER cl. 6.2.5(b)(3).
247 NER, cl 6.2.5(c)(1).

- public lighting services.

The AER's preliminary position is based on the following considerations under clause 6.2.5(d) of the NER:

- a price cap is one of the control mechanisms listed in clause 6.2.5(b) of the NER that can be applied in the next regulatory control period[248]
- the AER considers that a price cap promotes accurate price signals to the market through cost-reflective prices
- the AER considers that competition for alternative control services is limited at this point in time. However, where the development of competition is possible, the transparent and cost reflective nature of prices under the price cap will enable competitors to assess prices and make informed market entry decisions
- the AER considers administrative costs will be primarily influenced on the basis of control and less by the choice of control mechanism for the specified alternative control services
- the AER considers a consistent application of price cap regulation to all alternative control services is desirable
- in regard to public lighting the AER considers a price cap is consistent with the current schedule of fixed prices.

In preparing its final F&A paper, the AER will consider whether a different form of control is more appropriate in light of submissions received from stakeholders.

The AER seeks submission on the appropriate control mechanism for alternative control services

[248] NER cl. 6.2.5(b)(3).

4. Application of a service target performance incentive scheme

4.1 Introduction

This chapter presents the AER's preliminary position on its likely approach and reasons for applying a STPIS to the NSW DNSPs in the 2014–19 distribution determination. A final position on the AER's likely approach must be published by the AER by 30 November 2012. The specification of how the STPIS is to apply to the NSW DNSPs will be included in the AER's next distribution determination for the NSW DNSPs.[249]

The STPIS provides financial incentives for DNSPs to maintain and improve service performance. Under an incentive regulation framework, DNSPs have an incentive to reduce costs. Cost reductions are beneficial to both the DNSP and its customers where service performance is maintained or improved. However, cost efficiencies achieved at the expense of service performance are not always desirable. The STPIS seeks to ensure that increased financial efficiency does not result in deterioration of service performance for customers.

The STPIS operates as part of the building block determination. Through the s-factorcomponent of the STPIS, DNSPs are penalised (or rewarded) for diminished (or improved) service compared to predetermined targets.[250] These penalties or rewards are an adjustment to the annual revenue that DNSPs earn under the control mechanism. In addition to the s-factor, the STPIS may also include a GSL component, which sets threshold levels of service and provides for direct payment to customers that experience service worse than the predetermined level.

4.2 Recommendation

The AER has developed an STPIS in accordance with the requirements of the NER, which is likely to be applied to the NSW DNSPs in the next regulatory control period. [251] In developing and implementing the STPIS, the AER has had regard to the factors in clause 6.6.2(b) of the NER.

4.2.1 Current arrangements for New South Wales DNSPs

In its 2009 determination for the NSW DNSPs, the AER considered that under clause 6.6.2(h) of the transitional chapter 6 provisions of the NER, it would collect and monitor service performance data during the 2009–14 regulatory control period.[252] However, the scheme did

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249 NER, cll. 6.3.2(a)(3) and 6.12.1(9).

250 The s–factor functions as an additional multiplier in the calculation of allowed revenue or prices for standard control services. The s–factor multiplier ensures that increments and decrements apply to allow revenues or prices when service performance is above/below targeted performance.

251 NER, cl. 6.6.2(a); AER, *Electricity distribution network service providers: Service Target Performance Incentive Scheme*, November 2009 (AER, *STPIS*, November 2009).

252 AER, *Final decision: NSW distribution determination 2009–10 to 2013–14*, April 2009, p. 244.

not provide for any financial penalties or rewards. The purpose of monitoring and collecting information was to allow the application of the AER's national distribution STPIS (national STPIS) to the NSW DNSPs for the regulatory control period commencing on 1 July 2014. The AER considered that the application of the national STPIS for the next regulatory control period would be the subject of consultation under the F&A process.[253]

Penalties and rewards were not included in the current regulatory control period because the AER considered the NSW DNSPs did not have relevant data on which to set targets.[254] However, the AER required the NSW DNSPs to collect the data during the 2009–14 regulatory control period. By requiring this data to be collected, the AER considered it would have sufficient robust data on which to set targets for the next regulatory control period.[255]

The AER has since modified the reporting requirements and decided that the collection of momentary average interruption frequency index (MAIFI) data is not required.[256] The AER considered that before it could require the NSW DNSPs to collect MAIFI data, it would need to conduct further analysis of the costs of requiring the DNSPs to implement systems to collect the data against the benefits of applying the MAIFI parameter.

4.3 AER's national distribution STPIS

The AER is required to develop and publish a scheme to provide incentives (which may include targets) for DNSPs to maintain and improve performance.[257] The AER developed the national STPIS according to this requirement.[258]

4.3.1 Structure of the national STPIS

The national STPIS has four components:

- reliability of supply
- quality of supply
- customer service
- GSL.[259]

These components can apply in isolation, or in combination with each other, within a distribution determination. However, no quality of supply parameters are currently specified for inclusion in the national STPIS.[260]

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253 AER, *Final decision: NSW distribution determination 2009–10 to 2013–14*, April 2009, p. 244.
254 AER, *Final decision: NSW distribution determination 2009–10 to 2013–14*, April 2009, p. 244.
255 AER, *Final decision: NSW distribution determination 2009–10 to 2013–14*, April 2009, p. 244.
256 AER, *Final decision, NSW distribution determination 2009–10 to 2013–14*, April 2009, p. 244; MAIFI refers to the total number of customer interruptions of one minute or less, divided by the total number of distribution customers.
257 NER, cl. 6.6.2(a).
258 AER, *STPIS*, November 2009.
259 AER, *STPIS*, November 2009, cl. 2.3(a).
260 AER, *STPIS*, November 2009, cl. 4.1.

S-factor

The s-factor is the percentage of revenue increment or decrement that applies in each regulatory year. It is based on service quality performance from each preceding year. Only the first three components of the STPIS contribute to the s-factor. Application of one or more of these components takes the form of a financial reward or penalty for outperforming, or underperforming, against predetermined service targets. The s-factor component is symmetrical as penalties are incurred at the same rate as rewards. The maximum revenue at risk under the s-factor is ±5 per cent of a DNSP's revenue for each year of the regulatory control period.[261]

Reliability of supply component

Three parameters are available under the reliability of supply component of the national STPIS which include:

- unplanned SAIDI
- unplanned SAIFI
- MAIFI.[262]

Performance targets for these parameters are usually based on a DNSP's average historical performance over the previous five years.[263] This allows the STPIS to recognise variations in performance across a DNSP's network.

The incentive rates for the reliability of supply component are used in calculating the s-factor. It is based on the value that customers place on reliability of supply, that is, the value of customer reliability (VCR) determined in the national STPIS.[264]

Customer service component

There are four parameters in the customer service component of the national STPIS:

- telephone answering
- streetlight repair
- new connections

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261 AER, *Final decision Victorian electricity distribution network service providers Distribution determination 2011–15*, October 2010, p. 738. The AER retains discretion as part of the national STPIS to change this figure where doing so would satisfy the objectives in cl. 1.5 of the national STPIS. The AER exercised this discretion when it applied a ±7 per cent cap on revenue at risk to SP AusNet.

262 SAIDI refers to the sum of the duration of each sustained customer interruption (in minutes) divided by the total number of distribution customers. SAIFI refers to the total number of sustained customer interruptions divided by the total number of distribution customers.

263 This data is adjusted where necessary to take into account improvements in reliability which have been included in the DNSPs' expenditure program, and adjusted for any other material factors expected to affect network reliability performance.

264 AER, *STPIS*, November 2009, cl. 3.2.2(a).

- response to written enquiries.[265]

Of these, the STPIS provides that telephone answering will be included as a parameter for each DNSP. One or more of the remaining parameters may apply under the customer service component, where application of that parameter would satisfy the objectives of the scheme.

As with reliability of supply, customer service parameter performance targets are based on average performance over the previous five years. Unlike targets for the reliability of supply component of the STPIS, targets for this component apply to the distribution network as a whole, and are not segmented.

The maximum revenue at risk for all customer service parameters in aggregate is ± 1 per cent of a DNSP's revenue for each year of the regulatory control period.[266] The maximum revenue at risk for any individual parameter is ±0.5 per cent of revenue for each year of the regulatory control period.[267]

Under the national STPIS, the incentive rate for the telephone answering parameter is set at either minus 0.040 per cent per unit or a value determined from an applicable assessment of the value that customers attribute to the level of service proposed.[268] This incentive rate is the revenue increment or decrement that the DNSP receives for a single unit variation in performance against the telephone answering parameter.

Guaranteed service levels

The purpose of the GSL component of the scheme is to provide payments directly to customers if the level of service experienced falls below the performance thresholds specified in the national STPIS. The GSL component can operate independently or concurrently with the s-factor component of the scheme. Where a jurisdictional GSL scheme applies to the DNSP, it applies in place of the GSL component under the national STPIS.[269] If that jurisdictional scheme ceases to impose obligations on the DNSP in the next regulatory control period, the AER may choose to apply the GSL component of the national STPIS.[270]

Reporting requirements

The national STPIS requires a DNSP to report its performance against all applicable parameters on an annual basis, in accordance with any applicable regulatory information instrument issued by the AER.[271]

4.4 AER approach

Clauses 6.8.1(b)(2) of the NER states that the F&A paper should set out the AER's likely approach (together with its reasons for the likely approach), in the next distribution

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265 AER, *STPIS*, November 2009, cl. 5.1(a).
266 AER, *STPIS*, November 2009, cl. 5.2(a).
267 AER, *STPIS*, November 2009, cl. 5.2(b).
268 AER, *STPIS*, November 2009, cl. 5.3.2(a)(1).
269 AER, *STPIS*, November 2009, cl. 6.1(a).
270 AER, *STPIS*, November 2009, cl. 6.1(b).
271 AER, *STPIS*, November 2009, cl. 7.1.

determination to the application of a STPIS to the DNSPs. In developing and implementing the STPIS and forming its preliminary position, the AER must take into account:

- 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
- any regulatory obligation or requirement to which the DNSPs is subject
- the past performance of the distribution network
- any other incentives available to the DNSPs under the NER or a relevant distribution determination
- the need to ensure that the incentives are sufficient to offset any financial incentives the service provider may have to reduce costs at the expense of service levels
- the willingness of the customer or end user to pay for improved performance in the delivery of services
- the possible effects of the scheme on incentives for the implementation of non-network alternatives.[272]

The AER must also:

- consult with the authorities responsible for the administration of relevant jurisdictional electricity legislation[273]
- ensure that service standards and service targets (including GSLs) set by the scheme do not put at risk the DNSP's ability to comply with relevant service standards and service targets (including GSLs) as specified in jurisdictional electricity legislation.[274]

Addressing the NER requirements

Table 4.1 sets out how the AER has met the relevant NER requirements in developing the STPIS.

[272] NER, cl. 6.6.2(b)(3).
[273] NER, cl. 6.6.2(b)(1).
[274] NER, cl. 6.6.2(b)(2).

Table 4.1: AER response to NER requirements in developing the STPIS

Rule requirement	AER response
Clause 6.6.2(b)(3)(i) of the NER The AER must take into account 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.	The national STPIS provides a symmetrical financial incentive for DNSPs to maintain and improve service performance. Customers benefit from the scheme's application by receiving improved service levels, or lower prices that reflect diminished service levels. The AER considers that the benefits likely to result from the national STPIS are sufficient to warrant any reward or penalty under the scheme.
Clause 6.6.2(b)(3)(ii) of the NER The AER must take into account any regulatory obligation or requirement to which the DNSP is subject.	The AER has set out that it will take into account any regulatory obligations or requirements in setting performance targets under the scheme. The GSL component of the STPIS will not apply where a jurisdictional scheme is in place. The amendments to the STPIS have not altered how the AER will take into account any regulatory obligations or requirements.
Clause 6.6.2(b)(3)(iii) of the NER The AER must take into account the past performance of the distribution network.	Performance targets under the national STPIS are to be set at the average of the last five years performance (as available), adjusted for any planned reliability improvements or any other factors that are expected to materially affect network reliability performance.
Clause 6.6.2(b)(3)(iv) of the NER The AER must take into account any other incentives available to the DNSP under the NER or a relevant distribution determination.	In developing the national STPIS, the AER has taken into account incentives provided under the CPI minus X regulatory framework, the EBSS and DMEGCIS as set out in the NER and developed by the AER.
Clause 6.6.2(b)(3)(v) of the NER The AER must take into account the need to ensure that the incentives are sufficient to offset any financial incentives the service provider may have to reduce costs at the expense of service levels.	Incentive rates are calculated based on customer's willingness to pay. Given the scheme is symmetrical, where penalties are incurred at the same rate as rewards, the AER considers that there is a strong incentive for a DNSP not to reduce costs at the expense of service levels. The STPIS is flexible to allow incentive rates to be increased or decreased as appropriate. The incentive rates will be considered as part of the distribution determination. A ±5 per cent cap on the revenue at risk is applied under the national STPIS, this establishes the maximum reward a DNSP can earn from improved service levels and limits the penalty incurred from diminishing service levels. The rationale for the cap for the national STIPS is discussed in the final decision for the national scheme.[275] The amendments made to the s-factor formula improve the balance between the financial incentives under a capped scheme.[276]

[275] AER, *Final decision: Electricity distribution network service providers: service target performance incentive scheme,* June 2008*:* pp. 15–17.

[276] AER, *Final decision: Electricity distribution network service providers: service target performance incentive scheme*, May 2009, pp. 7–9.

Rule requirement	AER response
Clause 6.6.2(b)(3)(vi) of the NER The AER must take into account the willingness of the customer or end user to pay for improved performance in the delivery of services.	The incentive rates are calculated using the VCR which reflects the willingness of the customer to pay for improved levels of service. The AER has updated the VCR values set out in version 1.0 of the national STPIS as it considers the most recent documented and robust data should be used to reflect the VCR.[277]
Clause 6.6.2(b)(3)(vii) of the NER The AER must take into account the possible effects of the scheme on incentives for the implementation of non-network alternatives.	The AER has taken into account the possible effects of the STPIS on incentives for the implementation of non-network alternatives. The AER intends that the national STPIS be as neutral as possible regarding the level of reliability provided by network solutions vis-à-vis non-network alternatives.
Clause 6.6.2(b)(1) of the NER The AER must consult with the authorities responsible for the administration of relevant jurisdictional electricity legislation.	The AER has consulted with the authorities responsible for the administration of relevant jurisdictional electricity legislation in the development of the amendments to the STPIS. The AER contacted these authorities to facilitate the consultation process. A number of authorities provided submissions on the proposed national STPIS and met with AER to discuss the proposed amendments to the scheme.[278]
Clause 6.6.2(b)(2) of the NER The AER must ensure that service standards and service targets (including GSL) set by the scheme do not put at risk the DNSP's ability to comply with relevant service standards and service targets (including GSL) as specified in jurisdictional electricity legislation.	Service standards and service targets as specified in jurisdictional legislation will be funded through the capital and operating expenditure requirements of a DNSP. The impact of these improvements will be considered when setting performance targets under the STPIS. The amendments to the STPIS do not put at risk a DNSP's ability to comply with relevant service standards and service targets specified in jurisdictional electricity legislation. The GSL component of the scheme will not apply where a jurisdictional GSL scheme is imposed, therefore, the national STPIS will not put at risk a DNSP's ability to comply with GSLs in jurisdictional electricity legislation.

Source: AER, *Electricity distribution network service providers: Service Target Performance Incentive Scheme*, November 2009; AER analysis.

4.5 Reasons for recommendation

The following discussion examines the key features of the national STPIS and sets out the AER's proposed application of the STPIS to the NSW DNSPs in the 2014-19 regulatory control period.[279]

[277] AER, *Final decision: Electricity distribution network service providers: service target performance incentive scheme,* May 2009, pp. 14–15.

[278] AER, *Final decision*: E*lectricity distribution network service providers: service target performance incentive scheme*, November 2009, ch. 5, Appendix A.

[279] AER, *STPIS*, November 2009.

4.5.1 S-factor

Timing

Annual performance must be measured over a full year from 1 July until 30 June inclusive.[280] Therefore, the NSW DNSPs will be required to measure performance under the STPIS from 1 July 2014.

Revenue at risk

The national STPIS sets a maximum ±5 per cent of revenue at risk. That is, the maximum amount that a DNSP can be penalised or rewarded under the s-factor component of the national STPIS is ±5 per cent of its total allowed revenue for any year of the regulatory control period.[281] This amount is distributed across all parameters (and in the case of reliability of supply parameters, all segments of the network), with the weighting assigned to each reflecting the value of that measure to customers.

The AER will generally set revenue at risk under the s-factor at ±5 per cent for all DNSPs. Exceptions to this may be considered and implemented in the distribution determination, where an alternative proposal submitted by a DNSP satisfies the objectives of clause 1.5 of the national STPIS and the objectives contained in clause 6.6.2 (b)(3) of the NER.

The AER's preliminary position is to place ±5 per cent of each NSW DNSP's revenue at risk under the STPIS. The AER considers that the structure of the STPIS will ensure that the amount of any reward or penalty paid will be proportionate to the value customers place on the associated change in performance levels. The AER also considers that the distribution of the revenue at risk across performance parameters (and where applicable network segments) and the targets and incentive rates applied will deliver this result.

STPIS applied within a control mechanism

The explanatory statement which accompanied the national STPIS sets out:

> How the s-factor will be incorporated into the form of control will be outlined for each business during consultation on its framework and approach for a distribution determination.[282]

The AER's preliminary position is that the s-factor will be incorporated into the control mechanism, as specified in chapter 3 of the preliminary positions F&A paper.

S Bank Mechanism

The AER recognises that the s-factor may cause volatility in prices when service performance varies from the target performance year to year. Consequently, the STPIS includes a mechanism that allows a DNSP to delay the action of a revenue increment or decrement, or a portion of the revenue increment or decrement, for one regulatory year.

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280 AER, *STPIS*, November 2009, cl. 2.4.

281 AER, *STPIS*, November 2009, cl. 2.5(a); AER, *Final decision: Victorian electricity distribution network service providers Distribution determination 2011–15*, October 2010, p. 738. The AER retains discretion as part of the national STPIS to change this figure where doing so would satisfy the objectives in cl. 1.5 of the national STPIS. The AER exercised this discretion when it applied a ±7 per cent cap on revenue at risk to SP AusNet.

282 AER, *Explanatory statement and Discussion paper–Proposed Electricity DNSPs–STPIS*, April 2008, p. 10.

Reliability of supply component

Parameters

As discussed above, the STPIS allows for the potential inclusion of three parameters for reliability of supply; unplanned SAIDI, unplanned SAIFI and MAIFI. The AER's preliminary position is that the SAIDI and SAIFI parameters will apply under the national STPIS to the NSW DNSPs.

The STPIS provides that the DNSPs' network must be segmented to measure reliability performance. The STPIS incorporates the use of the familiar, and commonly used SCONRRR feeder categories for this purpose are as follows:

- CBD
- urban
- short rural
- long rural.[283]

The STPIS allows network areas to be segmented by a method other than feeder type where the alternative meets the objectives of the scheme set out in clause 1.5 of the national STPIS.[284]

The NSW jurisdictional service incentive scheme uses the SCONRRR feeder categories. The AER's preliminary position is that the NSW DNSPs' networks will be segmented according to the AER's interpretation of the SCONRRR feeder categories; CBD, urban, short rural and long rural. The NSW DNSPs already collect its reliability data in this form.

Performance targets

Performance targets under the national STPIS are to be based, to the extent possible, on average performance over the past five years. This data will be modified to reflect any reliability improvements that have affected (or are expected to affect) service reliability, or other factors that materially affect network reliability performance.[285] Any proposal by a DNSP to modify the performance targets must be accompanied by an appropriate justification.[286] Targets for each applicable parameter, and each segment to which the parameter is applied, will be set on this basis at the time of the 2014–19 distribution determination.

The NSW DNSPs have been reporting reliability data to the AER during the 2009–14 regulatory control period.[287] The AER acknowledges that the NSW DNSPs will be unable to provide five years of data on which to set performance targets. The NSW DNSPs will have submitted four years of performance data in time for the AER to make its final distribution decision for the 2014–19 regulatory control period. The AER considers that four years of data

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283 AER, *STPIS*, November 2009, appendix A.
284 AER, STPIS, November 2009, cl. 3.1(d).
285 AER, *STPIS*, November 2009, cll. 3.2.1 (a)(1) and (2).
286 AER, *STPIS*, November 2009, cl. 3.2.1(b).
287 AER, *Final decision: NSW distribution determination 2009–10 to 2013–14*, April 2009, p. 244.

is sufficient for it to set performance targets as it is consistent with clause 3.2.1(c) of the national STPIS. This alternative methodology is also consistent with the objectives of the national STPIS.[288] Targets for each parameter are set for segments of the distribution network identified, for example, by feeder type. This allows the STPIS to recognise variations in performance across a DNSP's network.

The AER's preliminary position is that the NSW DNSPs' performance targets under the STPIS should be based on average performance over the four years prior to making its distribution determination for the 2014–19 regulatory control period, subject to modifications required under clauses 3.2.1(a) and (b) of the national STPIS.

Incentive rates

Incentive rates under the national STPIS are based on the value that customers place on supply reliability.

The NSW DNSPs will be required to propose incentive rates in accordance with the methodology set out in the national STPIS. However, DNSPs may propose an alternative VCR. Should a NSW DNSP propose an alternative VCR, it must provide the AER with the methodology used to calculate and set the value and research, supporting its regulatory proposal.

Incentive rates will be calculated in the AER's 2014 distribution determination and will apply for the duration of the next regulatory control period.

Exclusions

The AER considers that for SAIFI and SAIDI, sustained interruptions caused by transmission or generation failures are excluded from the scheme. The following exclusions, contained in clause 3.3 of the national STPIS, will apply to the NSW DNSPs:

- load shedding due to generation shortfall
- automatic load shedding due to the operation of under frequency relays following the occurrence of a power system under-frequency condition
- load shedding at the direction of the Australian Energy Market Operator (AEMO) or a system operator
- load interruptions caused by failure of the shared transmission network
- load interruptions caused by a failure of transmission connection assets except where the interruptions were due to inadequate planning of transmission connections and the DNSP is responsible for transmission connection planning
- load interruptions caused by the exercise of any obligation, right or discretion imposed on or provided for under jurisdictional electricity legislation applying to a DNSP.[289]

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[288] AER, *STPIS*, November 2009, cl. 1.5.

[289] AER, *STPIS*, November 2009, cl. 3.3(a).

Customer service component

Parameters

The AER's preliminary position is that the telephone answering parameter in the customer service component of the STPIS should be applied to the NSW DNSPs in the next regulatory control period. The telephone answering measure in the STPIS does not apply to calls abandoned by the customer within 30 seconds of a call within the queue for response by a human operator. The NSW DNSPs may propose the application of other customer service parameters under the national STPIS.[290]

Revenue at risk

The revenue at risk for all customer service parameters will be no more than 1 per cent of total revenue for each year of the regulatory control period.[291] The maximum revenue at risk for any individual parameter is ±0.5 per cent of revenue for each year of the regulatory control period.[292] The AER's preliminary position is that a maximum value of ±0.5 per cent will be attached to the telephone answering parameter in the next regulatory control period.

Performance targets

Clause 5.3.1(a) of the national STPIS provides that performance targets for each customer service performance parameter are to be based on average performance over the past five years.[293]

The NSW DNSPs have been monitoring and reporting on the telephone answering component to the AER as required by the annual reporting RIN process.

The AER's preliminary position is that the NSW DNSPs will provide appropriate justification of any required modifications to its historic performance data in order to justify its proposed performance targets for application in the STPIS.

Any other parameters proposed by the NSW DNSPs should be accompanied by proposed targets developed on a comparable basis.

Incentive rate

The incentive rate for the telephone answering parameter is set by the national STPIS at minus 0.040.[294] For other customer service parameters proposed by the NSW DNSPs, the appropriate incentive rates should be based on the value that customers attribute to the level of service proposed.

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290 AER, *STPIS*, November 2009, cl. 5.4(b).
291 AER, *STPIS*, November 2009, cl. 5.2(a).
292 AER, *STPIS*, November 2009, cl. 5.2(b).
293 AER, *STPIS*, November 2009, cl. 5.3.1(a).
294 AER, *Electricity distribution network service providers: Service Target Performance Incentive Scheme*, November 2009, cl. 5.3.2(a).

Incentive rates will be calculated at the commencement of the regulatory control period (in the distribution determination) and will apply for the duration of the regulatory control period.

Exclusions

Clause 5.4 (a) of the national STPIS provides that:

> Where the impact of an event is allowed to be excluded from the calculation of a revenue increment or decrement under the reliability of supply component of this scheme (under clause 3.3), the impact of that event may be excluded from the calculation of a revenue increment or decrement for the telephone answering parameter.

Where the NSW DNSPs propose other customer service parameters in its regulatory proposals, it may also propose appropriate exclusions for these parameters.

4.5.2 GSL payments

In NSW, distribution network licences under the *Electricity Supply Act 1995* (NSW) require DNSPs to maintain various design, reliability and performance conditions.[295] Condition 17 the Design, reliability and performance licence imposes various obligations on DNSPs to make payments to customers where performance levels fall below the requisite standards for frequency interruption and duration.[296] Given the presence of this jurisdictional scheme, the AER considers that it is not necessary to apply a GSL scheme to the NSW DNSPs.

4.5.3 Conclusion

The AER's preliminary position is to apply the AER's national STPIS, subject to the exceptions discussed above, to the NSW DNSPs for the next regulatory control period.

The AER seeks submissions on its preliminary position to apply the national STPIS to the NSW DNSPs.

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295 Minister for Energy, *Design, reliability and performance licence conditions for DNSPs*, December 2007, made under item 6(1)(b) of Schedule 2 of the *Electricity Supply Act 1995* (NSW).

296 Minister for Energy, *Design, reliability and performance licence conditions for DNSPs*, December 2007, Licence condition 17, pp. 7–8.

5. Application of efficiency benefit sharing scheme

5.1 Introduction

This chapter presents the AER's preliminary position on its likely approach to the application of an EBSS to the NSW DNSPs in the next distribution determination, and its reasons for the likely approach. The AER's final position on its likely approach to an EBSS for NSW DNSPs must be published before 30 November 2012. The AER's next distribution determination for the DNSPs will include detailed specification of how any applicable EBSS will apply in the next regulatory control period.[297]

An EBSS operates in conjunction with the ex ante incentive framework, to provide DNSPs with a continuous incentive to reduce opex. It provides this continuous incentive by ensuring that DNSPs retain efficiency gains for five years before passing it to distribution network users.[298] It also removes the incentive to overspend in the opex base year to receive a higher opex allowance in the following regulatory control period.

5.2 Recommendation

The AER has developed an EBSS[299] according to the requirements of the NER, which is likely to be applied to the NSW DNSPs in the next regulatory control period. In developing and implementing the EBSS, the AER has considered the factors in clause 6.5.8(c) of the NER.

5.2.1 Current arrangements for New South Wales DNSPs

In its 2009 determination, the AER considered that the EBSS would apply to the NSW DNSPs from 1 July 2009.[300] The EBSS will not have a direct financial impact on the NSW DNSPs until the 2014–19 regulatory control period, when the NSW DNSPs will receive carryover benefits or penalties for efficiency gains or losses made during 2009-14.[301]

5.3 AER's national distribution EBSS

The AER is required to develop and publish a scheme or schemes that provide for a fair sharing of efficiency gains and losses between DNSPs and distribution network users.

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297 NER, cll. 6.3.2(a)(3) and 6.12.1(9).

298 AER, *Final decision: Electricity distribution network service providers' efficiency benefit sharing scheme–appendix E,* June 2008, p. 7.

299 AER, *Final decision: Electricity distribution network service providers' efficiency benefit sharing scheme*, June 2008.

300 AER, *Final decision: Efficiency benefit sharing scheme for the ACT and NSW 2009 distribution determinations*, February 2008.

301 AER, *Final decision: New South Wales distribution determination 2009–10 to 2013–14,* 28 April 2009, p. 245.

The efficiency gains (or losses) derived from the opex of DNSPs for a regulatory control period are the forecast benchmark opex accepted or substituted by the AER for that regulatory control period.[302]

The EBSS is designed to provide an incentive for a DNSP to reveal its efficient level of expenditure through the retention of efficiency gains for five years after the year in which the gain is made. When the AER developed the national EBSS, it chose a five year carryover period (the length of a standard regulatory control period). This results in a sharing ratio between the DNSP and its respective customers of 30:70.[303]

Where an efficiency gain is realised due to an opex underspend, a DNSP will retain the benefit of the efficiency gain for the duration of the carryover period. After this time the price reductions as a result of the efficiency gain are passed on to customers through the setting of a lower revealed opex benchmark for the next regulatory control period. In this way, the DNSP will retain 30 per cent of the total benefits of the efficiency gain, and the remaining 70 per cent is passed on to customers.

The EBSS is symmetrical in nature, allowing the DNSP to retain the benefits of an efficiency gain or bear the costs of an efficiency loss for the length of the carryover period, regardless of the year in which the gain or loss was realised within the regulatory control period.

5.4 AER approach

Clause 6.8.1(b)(3) of the NER requires the AER's F&A paper to set out its likely approach, and reasons for that approach, to applying the EBSS to the NSW DNSPs in the next distribution determination. In forming its preliminary position on how the EBSS will apply to the DNSPs, the AER has had regard to chapter 6 of the NER, particularly the factors set out in clause 6.5.8(c).

In implementing the EBSS, clause 6.5.8(c) of the NER requires the AER to have regard to:

- the need to ensure that benefits to distribution network users likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for DNSPs
- the need to provide DNSPs with a continuous incentive, so far as is consistent with economic efficiency, to reduce opex and, if the scheme extends to capex, capex
- the desirability of both rewarding DNSPs for efficiency gains and penalising DNSPs for efficiency losses
- any incentives the DNSP may have to capitalise expenditure
- the possible effects of the scheme on incentives for the implementation of non-network alternatives.[304]

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302 NER, cl. 6.5.8(a).

303 AER, *Final decision: Electricity distribution network service providers' efficiency benefit sharing scheme*, June 2008, pp. 17–18.

304 NER, cl. 6.5.8(c).

5.4.1 Addressing the NER requirements

Table 5.1 sets out how the AER has considered the relevant NER requirements in developing the EBSS.

Table 5.1: AER response to NER requirements in developing the EBSS

Rule requirement	AER response
Clause 6.5.8(c)(1) of the NER In developing and implementing an EBSS the AER must have regard to 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.	The AER considers that the EBSS will provide greater certainty to the DNSPs on how actual opex will be used to assess opex forecast proposals in future regulatory control periods and will provide a continuous incentive to improve efficiency. Consequently, the AER considers that the EBSS will consistently encourage efficient and timely expenditure throughout the regulatory control period, which provides an incentive for a DNSP to reveal its efficient opex. This will allow the AER to better determine the efficiency of opex forecasts for future regulatory control periods, and over time, the benefits will be passed on to distribution network users. In deciding not to apply the scheme to capex, the AER considered the benefits to distribution network users likely to result from the scheme. Modelling undertaken by the AER demonstrated that when deferred capex is not excluded from capex forecasts it was possible for DNSPs to obtain significant benefits from the scheme despite the total social benefit of a capex deferral being negative.[305] The AER concluded that if the scheme also applied to capex, the benefits to distribution network users likely to result from the scheme would not be sufficient (and could in fact be negative) to warrant the reward under the scheme for DNSPs. Therefore, the AER considers the benefit to distribution network users, in the context of applying an EBSS to opex, is sufficient to warrant the rewards and penalties envisaged to DNSPs in the EBSS.
Clause 6.5.8(c)(2) of the NER In developing and implementing an EBSS the AER must have regard to the need to provide DNSPs with a continuous incentive, so far as is consistent with economic efficiency, to reduce opex and, if the scheme extends to capex, capex.	The AER considers continuous incentives are necessary if the EBSS is to encourage DNSPs to reveal its efficient opex. Modelling undertaken by the AER demonstrated that when a DNSP either makes a one-off reduction to opex, an ongoing reduction to opex, or shifts costs between years, the benefit (or penalty) of doing so is the same irrespective of the regulatory year in which the change occurs.[306] Furthermore, the benefit (or penalty) is shared between DNSPs and distribution network users according to the sharing ratio. Further modelling undertaken by the AER demonstrated that a cumulative scheme applied to capex would provide a continuous incentive for DNSPs to reduce capex.[307] However, for the scheme to operate effectively, capex deferred from one regulatory control period to another must not be included in a DNSP's capex allowance for the regulatory control period into which the capex is deferred. The AER considers that it is not practicable to exclude from a DNSP's capex allowance any capex that has been deferred from a previous regulatory control period. If deferred capex is not excluded from

305 AER, *Explanatory statement: Proposed electricity distribution network service providers efficiency benefit sharing scheme–appendix C,* April 2008, pp. 37–44.

306 AER, *Final decision: Electricity distribution network service providers' efficiency benefit sharing scheme–appendix B,* June 2008, pp. 23–35.

307 AER, *Final decision, Electricity distribution network service providers' efficiency benefit sharing scheme–appendix C,* June 2008, pp. 36–43.

Rule requirement	AER response
	subsequent capex allowances under an EBSS applied to capex, such a scheme would not provide a DNSP with a continuous incentive to reduce capex. Under such a scheme, DNSPs would also have an incentive to defer capex to the next period even when it is not efficient to do so. The AER considers the provision of a continuous incentive to reduce opex through the EBSS is consistent with economic efficiency. This is not the case with capex in the context of the EBSS.
Clause 6.5.8(c)(3) of the NER In developing and implementing an EBSS the AER must have regard to the desirability of both rewarding DNSPs for efficiency gains and penalising DNSPs for efficiency losses.	The AER has examined the appropriateness of applying negative carryovers. Modelling undertaken of the EBSS highlights that the application of both positive and negative carryovers is necessary for the scheme to provide a constant incentive to improve efficiency.[308] Further, without the application of both negative and positive carryover amounts, DNSPs would have a significant incentive to shift opex into the base year of the regulatory control period in order to increase its forecasts for the following regulatory control period. It follows that in the absence of applying both positive and negative carryovers, the EBSS would not in practice provide a DNSP with the incentive to reveal its efficient costs. The AER considers it is acceptable to apply both positive and negative carryovers that reward and penalise DNSPs for efficiency gains and losses incurred respectively.
Clause 6.5.8(c)(4) of the NER In developing and implementing an EBSS the AER must have regard to any incentives that DNSPs may have to capitalise expenditure.	An important outcome of the EBSS is that it provides a continuous incentive to improve the efficiency of opex throughout the regulatory control period. In only applying the EBSS to opex, a DNSP may have the incentive to shift opex to capex, particularly later in the regulatory control period. The AER recognises this potential incentive and will require DNSPs to advise the AER of any changes to its capitalisation policy. To address any incentive to inappropriately capitalise opex, the AER will adjust the forecast and actual opex figures used to calculate the carryover amounts to account for any changes in capitalisation policy.
Clause 6.5.8(c)(5) of the NER In developing and implementing an EBSS the AER must have regard to the possible effects of the scheme on incentives for the implementation of non-network alternatives.	The AER considers that the EBSS will not distort the incentives for DNSPs to undertake non-network alternatives because any associated opex will be excluded from the EBSS. Given that the EBSS does not apply to capex, the incentive later in the regulatory control period to reduce capex is less than the incentive to reduce opex. Consequently, where expenditure for non-network alternatives is operational in nature, DNSPs may have a greater incentive later in the regulatory control period to augment networks rather than implement non-network alternatives. By excluding opex for non-network alternatives from the EBSS, the AER considers the impact on the incentive to augment networks rather than

[308] AER, *Explanatory statement: Proposed electricity distribution network service providers efficiency benefit sharing scheme–appendix B,* April 2008, pp. 24–36.

Rule requirement	AER response
	implement non-network alternatives will be neutral.

Source: AER, *Final decision: Electricity distribution network service providers' efficiency benefit sharing scheme*, June 2008, pp. 19–20; AER analysis.

5.5 Reasons for recommendation

As discussed above, the AER must have regard to a number of factors in clause 6.5.8(c) of the NER in implementing the EBSS. A detailed discussion of these factors can be found in the AER's final decision for its EBSS.[309]

In forming its preliminary position, the AER has had regard to the factors in clause 6.5.8(c) of the NER, and considers that:

- the benefits to NSW distribution network users derived from the EBSS are sufficient to warrant the financial reward or penalty that the NSW DNSPs may incur. This is because the NSW DNSPs' customers would receive 70 per cent of the efficiency gains realised by the NSW DNSPs under the EBSS.[310] As the EBSS is symmetrical any efficiency losses would also be shared between customers and the NSW DNSPs, so that the potential for financial penalty is balanced.[311] The symmetry of the scheme also provides balance so that incentives are not skewed in favour of incurred efficiencies only during the first years of the regulatory control period. This will also remove the perceived tendency towards strategic deferral of opex to the final years of the regulatory control period in order to create an artificially high base year for further forecasts

- the EBSS will provide a continuous incentive for the NSW DNSPs to achieve opex efficiencies throughout the regulatory control period, as any efficiency gains or losses realised within the regulatory control period are retained for the length of the carryover period, regardless of the year in which the gain or loss is realised[312]

- the EBSS will counter any artificial incentive to capitalise expenditure by requiring the NSW DNSPs to report any changes to its respective capitalisation policy to the AER. The AER will adjust the forecast and outturn opex figures used to determine the carryover amounts to account for any changes in capitalisation policy[313]

- the exclusion of costs associated with demand side management from consideration under the EBSS will remove any deterrents to the use of non-network alternatives that might otherwise arise under the EBSS.[314]

The EBSS allows the NSW DNSPs to propose 'uncontrollable' cost categories for exclusion from the scheme.[315] These categories must be proposed by each of the NSW DNSPs in its

309 AER, *Final decision: Electricity distribution network service providers' efficiency benefit sharing scheme*, June 2008.
310 NER, cl. 6.5.8(c)(1).
311 NER, cl. 6.5.8(c)(3).
312 NER, cl. 6.5.8(c)(2).
313 NER, cl. 6.5.8(c)(4).
314 NER, cl. 6.5.8(c)(5).
315 AER, *Final decision: Electricity distribution network service providers' efficiency benefit sharing scheme*, June 2008, p. 6.

respective regulatory proposal for the 2014–19 regulatory control period for consideration in the AER's distribution determination.

When making a decision on whether or not to approve an uncontrollable cost category, the AER will have regard to whether the cost category is genuinely beyond the control of the NSW DNSPs. In proposing uncontrollable opex categories, the NSW DNSPs will be required to maintain and provide disaggregated opex figures in support of any proposed uncontrollable opex categories to allow proper administration of the EBSS. The AER considers that opex for uncontrollable cost categories will not be assumed to be efficient for the purposes of forecasting costs for future regulatory control periods. Therefore, the AER considers that the efficiency of base year costs for these categories will need to be established in the NSW DNSPs' regulatory proposals.

5.5.1 Conclusion

The AER's preliminary position is to apply the AER's national EBSS to the NSW DNSPs for the next regulatory control period.

The AER seeks submissions from interested parties on its proposed application of the national EBSS.

6. Application of a demand management and embedded generation connection incentive scheme

6.1 Introduction

This chapter presents the AER's preliminary position on its approach to the application of a DMEGCIS to the NSW DNSPs in the 2014–19 distribution determination, and its reasons for the approach. The AER is required to specify how any applicable DMEGCIS is to apply in its distribution determination for the NSW DNSPs for the next regulatory control period.[316]

The NER requirements regarding the application of DMEGCIS have been the subject of a recent rule change by the AEMC.[317] To address this rule change, the AER has proposed amendments to the scheme, which applies to the NSW DNSPs in the current regulatory control period.[318] On 29 May 2012, the AER published its proposed DMEGCIS as well as its accompanying explanatory statement setting out amendments to establish the AER's proposed DMEGCIS. The AER is in the process of consultation on its proposed scheme. The AER is expected to publish its final DMEGCIS by 30 October 2012. The AER's final position on its approach of a DMEGCIS will be set out in November 2012.

The AEMC is currently undertaking a review of demand-side participation in the NEM through the Power of Choice review. The AEMC is expected to provide its final advice to the MCE in September 2012. While the AER's approach to the DMEGCIS may require revision at the conclusion of this review, the AER considers that the operation of the scheme is appropriate for the purposes of the AER's preliminary F&A paper. The AER will consider its position after the Power of Choice review has concluded. The proposed DMEGCIS will function in the same manner as the scheme which applies in the current regulatory control period.

Demand management refers to the implementation of any strategy to address growth in annual or peak demand. DNSPs can seek to undertake demand management through a variety of mechanisms, such as incentives for customers to change its demand patterns, operational efficiency programs or load control technologies. Embedded generation also provides DNSPs with non-network augmentation alternatives by promoting cost effective connection methods for the purpose of demand management. Therefore, demand management and innovative connection of embedded generators can provide efficient alternatives to network investments by deferring the need for traditional augmentation to relieve network constraints.

The purpose of a DMEGCIS is to provide incentives for DNSPs to implement efficient non-network alternatives, or to manage the expected demand for standard control services in

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316 NER, cll. 6.3.2(a)(3) and 6.12.1(9).

317 AEMC, *Rule Determination: National Electricity Amendment (Inclusion of embedded generation research into Demand Management Incentive Scheme) Rule 2011*, December 2011.

318 AER, *Demand management incentive scheme for the ACT and NSW 2009 distribution determinations– Demand Management Innovation Allowance Scheme*, November 2008.

some other way, or to efficiently connect embedded generators.[319] It operates in conjunction with existing incentives in the regulatory framework to achieve these objectives.

The AER's DMEGCIS consists of two parts. The first is the demand management innovation allowance (DMIA). This is an ex-ante allowance in addition to the annual revenue requirement, designed to promote demand management projects or programs (including those relating to the efficient connection of embedded generators). The second element is a forgone revenue component, which allows a DNSP to recover forgone revenues that are directly attributable to a non-tariff demand management project or program approved under the DMIA.

6.2 Recommendation

The AER intends to apply its proposed DMEGCIS to the NSW DNSPs in the next regulatory control period. In developing the DMEGCIS, the AER has had regard to the factors in clause 6.6.3(b) of the NER. The AER must also have regard to these factors in implementing the DMEGCIS.

The AER also intends to discontinue the application of the IPART D-factor scheme.

However, the AER considers that expenditure on demand management projects or programs that were implemented in the final two years of the 2009–14 regulatory control period under the D-factor scheme will be recoverable in the first two years of the 2014–19 regulatory control period. This is consistent with the AER's 2009 determination for the NSW DNSPs.[320]

6.2.1 Current arrangements for the NSW DNSPs

In its 2009 determination for the NSW DNSPs, the AER has applied a demand management incentive scheme that contained two components.[321] The first component of the scheme was the AER's DMIA that provides a payment for demand management related activities in accordance with clause 6.12.1(9) of the transitional chapter 6 of the NER. The second component includes the IPART's D-factor scheme which was adopted by the AER to apply in the current regulatory control period.[322]

The D-factor works in conjunction with the WAPC control mechanism that applies to the NSW DNSPs in the current regulatory control period.[323] The D-factor scheme permits a DNSP to recover the forgone revenues associated with demand management projects or programs.[324]

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319 NER, cl. 6.6.3(a).

320 AER, *Final decision: New South Wales distribution determination 2009–10 to 2013–14*, April 2009, p. 259.

321 AER, *Final decision: New South Wales distribution determination 2009–10 to 2013–14,* April 2009, p. 259; AER, *Demand management incentive scheme for the ACT and NSW 2009 distribution determinations–Demand Management Innovation Allowance Scheme*, November 2008.

322 AER, *Final decision: New South Wales distribution determination 2009–10 to 2013–14,* April 2009, Appendix K; IPART's Demand Management Consultation Group, *Guidelines on the Application of the D–factor in the Tribunal's 2004 NSW Electricity Distribution Pricing Determination*, April 2005, p. 1; clause 11.4; IPART, *NSW Electricity Distribution Pricing 2004–05 to 2008–09*, June 2004, p. 20.

323 Compliance with the WAPC requires that the weighted average of all standard control service charges should only increase from year to year due to inflation and an X factor set for that regulatory year in a distribution

6.3 AER's DMEGCIS scheme

The AER may, in accordance with the distribution consultation procedures, develop and publish a DMEGCIS or schemes to provide incentives for DNSPs 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.[325] Although the AER does not have a DMEGCIS national scheme, it has applied consistent demand management incentive schemes in each jurisdiction.[326]

6.3.1 Structure of the AER's DMEGCIS

Part A– the DMIA

The DMIA is provided as an annual ex-ante allowance, in the form of additional revenue to the DNSP, at the commencement of each regulatory year. The total allowance is apportioned in equal amounts in each year of the regulatory control period. DNSPs can propose an expenditure profile, which differs from equal apportionment, so long as the total allowance is not exceeded.

The amount provided to each DNSP is based on the AER's consideration of the costs of the proposed demand management projects or programs, and is scaled according to the relative size of each DNSP's average annual revenue allowance.

Demand management projects or programs

Demand management projects or programs are undertaken by DNSPs to meet customer demand. DNSPs manage this by shifting or reducing demand for standard control services through non-network alternatives or other means. The overall aim of a demand management project or program should be to meet customer demand without increasing supply through network augmentation.

Embedded generators can provide load support for distribution networks at times of peak demand. Such generation can also reduce transmission losses as embedded generating units

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determination. The D–factor is an extra factor in this equation. It allows prices to increase year on year to recover the direct costs of demand management and associated forgone revenue.

324 IPART, Demand Management Consultation Group: *Guidelines on the Application of the D–factor in the Tribunal's 2004 NSW Electricity Distribution Pricing Determination*, April 2005, p. 1; cl. 11.4, IPART, *NSW Electricity Distribution Pricing 2004–05 to 2008–09*, June 2004, p. 20.

325 NER, cl. 6.6.3 (a).

326 AER, *Final decision: Australian Capital Territory distribution determination 2009–10 to 2013–14*, April 2009; AER, *Demand management incentive scheme for the ACT and NSW 2009 distribution determinations–Demand Management Innovation Allowance Scheme*, November 2008; AER, *Final decision: Queensland distribution determination 2010–11 to 2014–15*, May 2010; AER, *Final decision, South Australia distribution determination 2010–11 to 2014–15*, May 2010; AER, *Final decision–Demand management incentive scheme–Energex, Ergon Energy and ETSA Utilities 2010–15,* October 2008; AER, *Demand Management Incentive Scheme–Energex, Ergon Energy and ETSA Utilities 2010–15*, October 2008; *Final decision, Victorian electricity distribution network service providers, Distribution determination 2011–2015*, October 2010; AER, *Final decision – Demand management incentive scheme–Jemena, CitiPower, Powercor, SP Ausnet and United Energy – 2011–2015*, April 2009; AER, *Demand Management Incentive Scheme–Jemena, CitiPower, Powercor, SP Ausnet and United Energy 2011–2015*, April 2009.

are located close to the electrical loads it supplies. The AER considers that embedded generation offers distribution network users an alternative to consume from the network, to potentially improve the effectiveness of tariff based demand management activities. On this basis, the AER considers that an appropriate project or program targeted to the efficient connection of embedded generators falls within the scope of a demand management project or program under the DMEGCIS.

Demand management projects or programs can be broad-based, which aim to reduce demand over the entire network, or peak projects or programs, which target specific network constraints at the location and time of the constraint. Projects or programs proposed by DNSPs may be innovative, and designed to explore efficient demand management mechanisms and or build capability and capacity for demand management within the network.

Part B–recovery of forgone revenue

Part B of the DMEGCIS allows a DNSP to recover revenue forgone which is directly attributable to a non-tariff demand management project or program approved under part A of the scheme.

Access to recovery of forgone revenue is dependent on the control mechanism that is applied to a DNSP's standard control services, and the manner in which that form of control affects that DNSP's incentives or disincentives to undertake demand management. The AER considers that, where a revenue cap applies to a DNSP, the recovery of allowed revenues is not dependent on energy sales and as a result, part B of DMEGCIS does not apply to the DNSP.

Under forms of control where revenue is at least partially dependent on the quantity of electricity sold (e.g. a price cap or an average revenue cap), a DNSP has a disincentive to reduce electricity sales. To remove this disincentive, the AER will allow a DNSP to recover forgone revenue in accordance with part B of the DMEGCIS.

Access to part B of the DMEGCIS will be set out in the final F&A paper for the NSW DNSPs. The AER's proposed DMEGCIS sets out that access to part B of the scheme is dependent on the control mechanism which is to apply to a DNSP's standard control services.

The AER does not specify a capped amount of forgone revenue which can be recovered. The foregone revenue that can be recovered will be limited to approved revenue forgone resulting from a successful non-tariff demand management project or program established under part A of the scheme. Further, forgone revenue must relate to the regulatory control period to which the scheme applies rather than previous or future regulatory control periods.

6.4 AER approach

Clause 6.8.1(b)(4) of the NER requires the AER's F&A paper to set out its approach, and reasons for that approach, in applying a DMEGCIS (if applicable) to the DNSPs in the next distribution determination. The AER must have regard to the factors in clause 6.6.3(b) of the NER in implementing the DMEGCIS:

- 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

- 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
- the extent the DNSP is able to offer efficient pricing structures
- the possible interaction between a DMEGCIS and other incentives schemes
- the willingness of the customer or end user to pay for increases in costs resulting from the implementation of the scheme
- the effect of classification of distribution services on a DNSP's incentive to adopt or implement efficient embedded generator connections.

6.4.1 Addressing the NER requirements

Table 6.1 below sets out how the AER had regard to the factors in clause 6.6.3(b) of the NER in developing the DMEGCIS, and in proposing amendments to that scheme (which are still being considered in accordance with the distribution consultation procedures).[327] The AER intends to apply the DMEGCIS to the NSW DNSPs in the next regulatory control period. The AER considers that its regard to the factors in clause 6.6.3(b) of the NER, as set out in the table below will also be relevant to applying the DMEGCIS to the NSW DNSPs in the next regulatory control period.

[327] AER, *Proposed Demand Management and Embedded Generation Connection Incentive Scheme–ACT and NSW distribution determinations*, May 2012; AER, Explanatory Statement: Proposed Demand Management and Embedded Generation Connection Incentive Scheme–New South Wales Distribution Network Service Providers, May 2012.

Table 6.1: AER response to NER requirements in developing the DMEGCIS

Rule requirement	The AER's consideration
Clause 6.6.3(b)(1) of the NER 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.	A DMEGCIS must be designed so that the costs to consumers resulting from the associated adjustment to regulated revenues do not exceed the benefits expected to result from the scheme. In striking the appropriate balance, it must be recognised that the operation of the scheme may result in cost impacts within a regulatory control period where the benefits are unlikely to be revealed until later periods. The AER considers that the DMEGCIS will encourage the implementation of demand management initiatives and efficient connection of embedded generators. These activities are likely to provide long term efficiency gains to energy consumers that will outweigh any short term price increases. The DMEGCIS is designed to: ▪ facilitate investigation and pursuit by DNSPs of efficient, broad-based and or innovative demand management projects or programs that have the potential to lead to the implementation of efficient non-network solutions within and beyond the regulatory control period ▪ facilitate investigation and pursuit by DNSPs of cost-effective and innovative means of connecting embedded generators, that will potentially improve the effectiveness of tariff based demand management initiatives and the efficiency of electricity networks generally ▪ encourage a more complete management of the demand for standard control services. The DMEGCIS 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. The DMEGCIS could also be used to implement initiatives which result in a more efficient use of existing infrastructure. The AER considers that the DMEGCIS is designed to provide additional incentives for DNSPs to conduct demand management which are additions to those present within the broader regulatory framework. The AER considers that increases in tariffs as a result of the scheme's implementation will be minimal.
Clause 6.6.3(b)(2) of the NER 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.	In developing the DMEGCIS, the AER has had regard to the effects that particular control mechanisms have on the incentives or disincentives for DNSPs to undertake demand management. The AER accepts that incentives for demand management may be affected by the control mechanism applied to a DNSP's standard control services. The AER considers that where a revenue cap applies to a DNSP, the recovery of allowed revenues is not dependent on energy sales, and as a result, part B of the scheme will not apply. However, under forms of control where revenue is at least partially dependent on the quantity of electricity sold (e.g. a price cap or an average revenue cap), a DNSP has a disincentive to reduce electricity sales. To remove this disincentive, the AER will allow a DNSP subject to such a control mechanism to recover forgone revenue in accordance with part B of the scheme. Should the AER adopt a revenue cap control mechanism for the next regulatory period, part B of the DMEGCIS will not apply to the DNSPs. The AER considers that part B of the DMEGCIS sufficiently addresses the effect of certain forms of control on the incentives for the NSW DNSPs to implement

Rule requirement	The AER's consideration
	efficient non-network alternatives.
Clause 6.6.3(b)(3) of the NER The extent the DNSP is able to offer efficient pricing structures.	In developing its DMEGCIS, the AER has had regard to the extent that DNSPs are able to offer efficient pricing structures. This is so that at a particular point in the network, the price of electricity reflects the true costs of supply at that location at a particular time. The AER considers that efficient pricing structures can assist the effectiveness of demand management programs. Further, the DMEGCIS will provide incentives for DNSPs to investigate demand management projects or programs including tariff-based demand management initiatives.
Clause 6.6.3(b)(4) of the NER The possible interaction between a DMEGCIS and other incentive schemes.	The AER has had regard to the effect that the application of the scheme will have on the incentives created by the EBSS and STPIS, and vice versa in the development of the DMEGCIS. **EBSS** Opex spent on non-network alternatives, including demand management expenditure, will be excluded from the actual and forecast opex amounts used to calculate carryover gains or losses under the EBSS. Therefore, DNSPs will not be penalised under the EBSS for increases in opex resulting from demand management expenditure not included in the distribution determination. Expenditure under the DMIA will also be excluded under the EBSS, and will not result in penalties for DNSPs under the EBSS. **STPIS** The AER is aware of the perceived disincentive to implement non-network alternatives to augmentation created by the reliability performance measures in its STPIS. This is because incentives to undertake demand side management or cost-effective connections of embedded generators may be diminished in the absence of an adjustment to targets or an exclusion to recognise a greater risk that targets will not be met. However, the AER considers it important that the STPIS remains neutral in its application to network and non-network measures, and maintains that the risk associated with non-network alternatives is better placed with a DNSP than with its customers. Where aspects of performance are within a DNSP's control, the associated risk should also lie with the DNSP. Therefore, the AER does not consider that the application of the DMEGCIS will negatively interact with the incentives created by either the EBSS or STPIS, or that these schemes will hinder the effectiveness of the DMEGCIS.
Clause 6.6.3(b)(5) of the NER The willingness of the customer or end user to pay for increases in costs resulting from the implementation of the scheme.	The AER has had regard to the extent to which customers are willing to pay for any increase in costs that may arise from the implementation of the 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. The AER considers that its proposed DMEGCIS is likely to have minimal impact on customer prices, and is appropriate at this time. The DMEGCIS is expected to encourage DNSPs to undertake demand management initiatives which will provide long term efficiency gains to energy users.
Clause 6.6.3(b)(6) of the NER The effect of classification of distribution services, as determined in accordance with	Clause 6.6.3(b)(6) of the NER was included in the rule change implemented by the AEMC on 22 December 2011. The AER has had regard to the extent to which the classification of distribution services affects a DNSP's incentive to adopt or implement efficient embedded

Rule requirement	The AER's consideration
clause 6.2.1, on a DNSP's incentive to adopt or implement efficient Embedded Generator Connections.	generator connections. An embedded generator is a generator that owns, operates or controls a generating unit, connected within a distribution network that does not have direct access to the transmission network.[328] More generally, it is associated with generators located with or near the electrical loads supplied by the system, such as those operated by customers as an alternative to consumption from the DNSP's network.[329] The AEMC's rule change was implemented to address the following issues: ▪ a likely increase in the use of embedded generators as a result of government focus on climate change policies ▪ perceived imbalance between the incentives for network reliability and safety and the incentive to manage connection costs[330] The AER recognises that embedded generators contribute to the aim of deferring or reducing the need for traditional network augmentation in accordance with the objectives of clause 6.6.3 of the NER. The AER considers that the magnitude of the DMIA set out in the DMEGCIS remains appropriate in the current circumstances to take into account the explicit inclusion of both demand management and connection of embedded generators.

Source: AER analysis.

6.5 Reasons for recommendation

As discussed above, the AER must have regard to the factors in clause 6.6.3(b) of the NER in implementing the DMEGCIS. The AER may also have regard to other factors in implementing a DMEGCIS. In forming its preliminary position, the AER has had regard to the following additional factors:

- electricity consumption is historically very peaky, with peak demand increasing each year. Since 2005, average demand has grown by 0.5 per cent and peak demand has increased by 1.8 per cent.[331] Existing electricity distribution networks are sufficient in meeting demand, except during peak periods. Effective demand management promotes the efficient use of current network assets. Further, demand management can reduce or defer the need for augmentation capex to meet capacity requirements. Efficient investment in electricity networks can reduce upward pressure on prices for customers.

- the Commonwealth Government's 'clean energy' initiatives are likely to provide a focus on demand side participation. Customer's demand for electricity sourced from the distribution network may become more elastic with the availability of efficient embedded generators, increasing the effectiveness of demand management.[332]

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328 NER, chapter 10.

329 AEMC, Rule Determination*: National Electricity Amendment (Inclusion of embedded generation research into Demand Management Incentive Scheme) Rule 2011 No.11, December 2011*, p. 19

330 AEMC, Rule Determination*: National Electricity Amendment (Inclusion of embedded generation research into Demand Management Incentive Scheme) Rule 2011 No.11, December 2011*, pp. 19–21.

331 AEMC, *Directions paper: power of choice— giving consumer's options in the way they use electricity*, March 2012, p. 8.

332 AEMO, *2011 Electricity Statement of Opportunities for the National Electricity Market: Update*, March 2012, p. 2. While electricity demand, specifically peak demand, has had an upward historical trend, AEMO discussed in this update that due to changes in energy consumption, it was appropriate to reduce forecast energy

- the DMIA encourages the development of demand management capability and capacity of DNSPs, which is likely to provide greater efficiency in the national electricity market (NEM). The long term aim of the DMEGCIS is for DNSPs to proactively identify possible roles for demand management as a low-cost alternative to augmentation of its network to address specific network constraints, rather than relying on the presence of incentives.

Overall, a DMEGCIS provides incentives for the NSW DNSPs to seek out and undertake demand management as an alternative to traditional network augmentation in accordance with the national electricity objective.[333]

6.5.1 Conclusion

The AER's preliminary position is to apply the AER's proposed DMEGCIS to the NSW DNSPs for the next regulatory control period. The AER also intends to discontinue the application of the D-factor scheme, except insofar as recovery is permitted until the end of the 2015–16 regulatory year for expenditure on projects or programs implemented in the last two years of the current regulatory period.

The AER seeks submissions on its preliminary position to apply the DMEGCIS to the NSW DNSPs.

consumption by 5 per cent. AEMO attributed this decline to energy efficiency programs and rooftop solar photovoltaic systems.

[333] NEL, s. 7.

7. Dual function assets

7.1 Introduction

This chapter set outs the AER's preliminary position on whether Part J of chapter 6A of the NER should be applied to determine the pricing of transmission standard control services provided by dual function assets. It also sets out the reasons for the AER's approach. A dual function asset is:

> any part of a network owned, operated or controlled by a DNSP which operates between 66 kV and 220 kV and which operates in parallel, and provides support, to the higher voltage transmission network which is deemed by clause 6.24.2(a) to be a dual function asset. For the avoidance of doubt:
>
> (a) a dual function asset can only be an asset which forms part of a network that is predominantly a distribution network; and
>
> (b) an asset which forms part of a network which is predominantly a transmission network cannot be characterised as a dual function asset, through the operation of clause 6.24.2(a).[334]

In its 2009 determination for the NSW DNSPs, the AER was required to apply the transitional provisions set out in the NER to the NSW DNSPs.[335] The transitional provisions deemed that chapter 6 of the NER applied to Ausgrid's transmission support network.[336] The transitional provisions required the AER to divide Ausgrid's revenue calculated under Part C of the transitional provisions of the NER.[337] Accordingly, the revenue was divided into transmission standard control revenue and distribution standard control revenue, based on the approved cost allocation method.[338] The chapter 6 transitional provisions specified that the pricing rules under chapter 6A of the NER applied to the revenue attributed to transmission standard control services and distribution pricing rules applied to the other portion.[339]

The transitional provisions of the NER applied only for the 2009–14 regulatory control period. Ausgrid proposed a rule change to the AEMC relating to distribution assets owned and operated by DNSPs which may serve a function supporting the transmission network.[340] In response, the AEMC made a rule determination which amended chapter 6 of the NER to include chapter N which deals with the pricing arrangements for dual function assets.[341]

AEMC's rule determination recognised a DNSP's dual function assets as being part of the distribution assets for regulatory purposes.[342] However, it requires a DNSP to notify the AER of the value of its dual function assets. The AER is then required to make a determination in its F&A paper as to whether or not Part J of chapter 6A the NER should apply.

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334 NER, chapter 10.
335 NER, Appendix 1.
336 NER, Appendix 1, cl. 6.1.6
337 NER, Appendix 1, cl. 6.12.1A
338 AER, *Final decision, New South Wales distribution determination 2009-10 to 2013-14*, 2008, p. 28.
339 NER, Appendix 1, cl. 6.12.1A.
340 EnergyAustralia, *Rule change proposal to AEMC: Incidental transmission services undertaken by DNSPs*, 21 March 2007.
341 AEMC, Rule Determination, *Economic Regulation of Transmission Services Undertaken by Distributors*, Rule 2008, 26 June 2008
342 AEMC, Rule Determination, *Economic Regulation of Transmission Services Undertaken by Distributors*, Rule 3 of 2008, 26 June 2008.

7.2 Requirements of the NER

The NER[343] states that the F&A paper must include the AER's determination under clause 6.25(b) as to whether or not Part J of chapter 6A of the NER will be applied to determine the pricing of any transmission standard control services provided by any dual function assets owned, controlled or operated by NSW DNSPs.

The NER sets out that if the dual function asset, if not for Part N of the NER, would be considered as providing prescribed or negotiated transmission services, then those services are deemed to be standard control or negotiated distribution services respectively.[344] It is therefore necessary to determine the current classification (prescribed or negotiated) of the transmission service provided by these assets in order to ensure that the services provided are correctly allocated to the appropriate distribution service.

The NER require a DNSP to inform the AER of the value of its dual function assets 24 months prior to the end of the current regulatory period.[345]

In making its determination as to the applicable pricing methodology, the AER must consider whether the value of the DNSP's dual function assets is a material proportion of its regulated asset base (RAB). In making this decision, the AER must consider whether regulating prices under chapter 6 of the NER rather than under Part J of chapter 6A of the NER:[346]

- would result in materially different prices for distribution customers (connected to the distribution network or relevant dual function assets)
- whether the materiality of the different prices is likely to impact on future consumption, production and investment decisions by actual or potential network users and
- any other matter the AER considers relevant.[347]

The AER must also consult with the DNSPs and interested parties in relation to this matter.[348]

7.3 Issues and AER's considerations

Ausgrid and Endeavour Energy informed the AER of the value of their relevant assets as set out in the table below.[349] Essential Energy advised the AER that it did not have any dual function assets and therefore the value is zero.[350]

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343 NER, cl. 6.8.1(ca).
344 NER, cl. 6.24.2.
345 NER, cl. 6.25(a).
346 NER, cl. 6.25(b).
347 NER, cl. 6.25(c).
348 NER, cl. 6.25(b).
349 Ausgrid, email, AER *Dual function assets questions*, 4 May 2012; Endeavour Energy, email, *DNSP questions*, 9 May 2012.
350 Essential Energy, email, *Re. Questions*, 17 May 2012.

The relevant amounts are the value of the dual function assets as at 1 July 2012. The values provided are therefore provisional. Table 7.1 sets out the value and current pricing approaches for the dual function assets.

Table 7.1: Dual function asset value and current pricing approach (units as stated)

DNSP	Dual function assets ($ m)	Proportion of distribution SCS[351] RAB (%)	Current period pricing
Ausgrid	1721.92	12.3	Transmission pricing
Endeavour Energy	154.7	2.5	Distribution pricing
Essential Energy	0	0	n/a

Source: AER, *Final decision, New South Wales distribution determination 2009-10 to 2013-14*, 2008; Ausgrid, email, AER *Dual function assets questions*, 4 May 2012; Endeavour Energy, email, *DNSP questions*, 9 May 2012; Essential Energy, email, *Re. Questions*, 17 May 2012. Proportion as a percentage is based on the AER's forecast roll forward of the RAB as at the end of the current regulatory control period.

In response to information requests, Ausgrid and Endeavour Energy indicated that it prefers to continue with its current pricing approach.[352] That is, Ausgrid preferred to continue transmission pricing under chapter 6A of the NER. Similarly, Endeavour Energy prefers to continue distribution pricing under chapter 6 of the NER.[353] Ausgrid confirmed that the assets are currently providing prescribed transmission services.[354] Endeavour Energy also confirmed that the dual function assets, if not for these rules, would be providing prescribed transmission services.[355]

The AER considers that Ausgrid's dual function assets are a material proportion of its RAB. Ausgrid currently applies transmission pricing to the transmission standard control services provided by these assets. If distribution pricing is to be applied going forward, it could create a material price difference on distribution prices that impacts on future consumption, production and investment decisions. This would also be a change from the current approach and could increase administrative costs for Ausgrid. The AER therefore considers that the current approach should be continued in the next regulatory control period.

Endeavour Energy indicated that it had applied the broadest possible interpretation to the definition of dual function assets in identifying the relevant assets.[356] It also indicated that no appreciable price differences would arise if transmission pricing were to be applied.[357]

Subject to further information from interested parties, the AER is inclined to agree with Endeavour Energy's submission that no appreciable price differences would arise if the

[351] Standard control services.

[352] Ausgrid, email, AER *Dual function assets questions*, 4 May 2012; Endeavour Energy, email, *DNSP questions*, 9 May 2012.

[353] Ausgrid, email, AER *Dual function assets questions*, 4 May 2012; Endeavour Energy, email, *DNSP questions*, 9 May 2012.

[354] Ausgrid, email, AER *Dual function assets questions*, 4 May 2012.

[355] Endeavour Energy, email, *DNSP questions*, 9 May 2012.

[356] Endeavour Energy, email, *DNSP questions*, 9 May 2012.

[357] Endeavour Energy, email, *DNSP Dual function assets questions*, 9 May 2012.

current distribution pricing approach is changed to transmission pricing. Without an appreciable pricing difference, continuing distribution pricing should have little impact on future consumption, production and investment decisions. The AER therefore considers that Endeavour Energy should continue its current approach in the next regulatory control period. This position is also consistent with the AER giving weight to continuing the current approach.

7.4 AER's preliminary position on dual function assets

Ausgrid

The AER's preliminary position under clause 6.8.1(ca) of the NER is to make a determination under clause 6.25(b) of the NER that Part J of chapter 6A of the NER should apply to transmission standard control services provided by Ausgrid in the next regulatory control period.

Endeavour Energy

The AER's preliminary position under clause 6.8.1(ca) of the NER is to make a determination under clause 6.25(b) of the NER that Part J of chapter 6A of the NER should not apply to transmission standard control services provided by Endeavour Energy in the next regulatory control period.

Essential Energy

The AER is not required to make a determination under clause 6.8.1(ca) of the NER because Essential Energy does not provide any transmission standard control services as it does not own, operate or control any dual function assets.

The AER seeks submissions from interested parties on its proposed approach to dual function assets. Specifically, that Part J of chapter 6A of the NER:

a. should apply to Ausgrid in the next regulatory control period

b. should not apply to Endeavour Energy in the next regulatory control period.

8. Other matters

8.1 Cost allocation method

8.1.1 Introduction

This chapter set outs the AER's preliminary position on the application of cost allocation methods (CAMs) under clause 6.15 of the NER to the NSW DNSPs and the reasons for this position.

The cost allocation guidelines (guidelines) set out arrangements to manage the attribution of direct costs and the allocation of shared costs by DNSPs between difference categories of distribution services. A CAM will set out these cost allocations.

8.1.2 Recommendation

The AER will request the NSW DNSPs to submit proposed CAMs to commence from 1 July 2014 and comply with the requirements of the NER. The AER has considered the timeframes set out under clause 6.15.4(d) of the NER.

8.1.3 Issues and AER considerations

The AER approved the NSW DNSPs' existing cost allocation methods (CAMs) on 31 March 2008.[358] The CAMs were approved under the transitional chapter 6 provisions (the transitional provisions).[359] Clause 6.15.5 of the transitional provisions sets out that:[360]

> 'The Accounting Separation Code for Electricity Distributors in NSW prepared by the IPART and in force immediately before the start of the regulatory control period 2009–2014 in relation to the NSW Distribution Network Service Providers are deemed to be Cost Allocation Guidelines made by the AER for the regulatory control period 2009–2014'.

Clause 6.15.6(b) of the transitional provisions sets out that:[361]

> (b) The Cost Allocation Method proposed by a NSW Distribution Network Service Provider must:
>
> (1) give effect to and be consistent with the Cost Allocation Guidelines; and
>
> (2) be prepared using, as far as practicable but subject to subparagraph (1), the same cost allocation method as it last used when preparing its regulatory accounts for submission to the IPART.

358 AER, *Final decision NSW electricity distribution network service providers cost allocation method*, March 2008.
359 Set out in appendix 1 to Chapter 11 of the NER.
360 NER (transitional Chapter 6 rules), cl. 6.15.5.
361 NER (transitional Chapter 6 rules), cl. 6.15.6(b).

The transitional provisions only apply to the NSW DNSPs for the 2009–14 regulatory control period.[362] As set out above, the transitional provisions apply different guidelines and requirements to those applied under clause 6.15.3 of the NER.

The NER states that the guidelines must give effect to and be consistent with the cost allocation principles.[363] Further, the requirement in clause 6.15.6(b) of the transitional provisions is an additional requirement to the NER. The only requirement under the NER is that the NSW DNSPs' CAMs will give effect to, and be consistent with, the guidelines.[364]

The NSW DNSPs' current CAMs are inconsistent with the AER's guidelines. In particular, the existing CAMs of the NSW DNSPs do not comply with clause 3.2(a)(3)A. or 3.2(a)(7) of the AER's guidelines. Therefore, the AER considers that the NSW DNSPs' existing CAMs will require revision.

The revised CAMs of the NSW DNSPs will have a significant impact on the regulatory proposals for the 2014–19 regulatory control period. The CAMs will ideally be determined prior to the submission of the NSW DNSPs' regulatory proposals for the 2014–19 regulatory control period.

8.1.4 Conclusion

The AER will request each NSW DNSP to submit a proposed CAM to commence from 1 July 2014 that comply with the requirements of the NER.

8.2 AER assessment tools

The AER has identified a suite of tools that will assist in its review of regulatory proposals. The assessment tools the AER proposes to utilise include the replacement capex tool (repex tool), the augmentation capex tool (augmentation tool) and other benchmarking techniques.

These tools will be used in conjunction with other investigation and analysis to form a view as to the reasonableness of a DNSPs regulatory proposal. Additional tools and benchmarking techniques may be developed by the AER over time and applied in a distribution determination (subject to consultation in a draft determination).

To be able to utilise these tools, the AER will need to collect the relevant data from the DNSPs.

8.2.1 Replacement capital expenditure tool

The AER will use the repex tool to analyse the NSW DNSPs asset replacement expenditure. The repex tool is a high-level probability-based tool that forecasts replacement needs for various asset categories based on the age and unit costs of a DNSPs asset base. The AER

362 NER, cl. 11.15.2(a) and (b).
363 NER, cl. 6.15.3(b)(1).
364 NER, cl. 6.15.4(b).

has utilised the repex tool in the 2010 Victorian determination, and recently in the 2012 Aurora determination.[365]

The repex tool enables the AER to use data provided by the NSW DNSPs to estimate future replacement volumes, and in turn, the likely cost of asset replacement. The AER is able to use the repex tool to benchmark a DNSPs proposed service lives and unit replacement costs for various assets against those that the DNSP and other DNSPs have achieved in the past.

The repex tool, combined with related analysis, provides the AER with an indication of the likely level of replacement and cost required by the NSW DNSPs to achieve the capex objectives.[366] It follows that the AER can then determine whether the replacement expenditure proposed by the NSW DNSPs forms part of a total forecast capex that reasonably reflects the capex criteria.[367]

8.2.2 Augmentation capital expenditure tool

The AER will use the augmentation tool to assist in its assessment of the NSW DNSPs augmentation capex. The augmentation tool splits up the network into various segments such as zone substations, high voltage feeders, and distribution transformers. It takes into account current and expected changes in utilisation and, based on this information, estimates the likely timing and cost of augmentation.

The augmentation tool takes account of the main internal drivers of augmentation capex that may differ between DNSPs, namely peak demand growth and its impact on asset utilisation. This enables the AER to use data provided by the NSW DNSPs to determine intra and intercompany benchmarks from actual historical augmentation levels. These in turn can be used to identify elements of a DNSP's augmentation capex forecast requiring more detailed review and inform the appropriate expenditure allowances.

The augmentation tool, combined with related analysis, provides the AER with an indication of the likely cost of augmentation required by the NSW DNSPs to achieve the capex objectives.[368] It follows that the AER can then determine whether the augmentation capex proposed by the NSW DNSPs forms part of a total forecast capex that reasonably reflects the capex criteria.[369]

8.2.3 Information requirements

The assessment tools will allow the AER to compare costs proposed by the NSW DNSPs with the DNSPs past performance and against other jurisdictions. To be useful and informative, the AER will require the relevant data to be able to effectively utilise these tools. The AER may also require data for the development and application of any additional assessment

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365 AER, *Final decision: Victorian electricity distribution network service providers, distribution determination 2011–2015,* October 2010; AER, *Final distribution determination: Aurora Energy Pty Ltd 2012–13 to 2016–17,* April 2012.

366 NER, cll. 6.5.7 (a)(3)–(4). The combination of analysis tools provides the AER with an indication of the level of replacement capex required by the NSW DNSPs to maintain the quality, reliability and security of supply of standard control services, and maintain the reliability, safety and security of the distribution system.

367 NER, cl. 6.5.7(c).

368 NER, cll. 6.5.7 (a)(3)–(4).

369 NER, cl. 6.5.7(c).

tools. The AER will issue regulatory proposal RINs on the NSW DNSPs prior to the receipt of the regulatory proposals.[370]

Information requirements have changed significantly since the 2009–14 regulatory proposal RINs were served on the NSW DNSPs. For the next regulatory control period, the NSW regulatory proposal RINs will contain data requirements for application of the AER's assessment tools including the repex tool, augmentation tool, and benchmarking.

[370] NEL, s. 28.

Appendix A— Proposed classification of distribution services

Table A.1: Ausgrid proposed distribution service classifications[371]

AER service group	Activities included in service group	Ausgrid services description	AER proposed classification 2014–19	Current classification 2009–14
Network services	Emergency recoverable works	Work to repair damage to the distribution network cause by a third party	Unclassified	Standard control
	Constructing the network	Network construction (other than construction of connection assets provided contestably) Project planning and works management (works program development, procurement, vendor management, contract management, work scheduling and dispatching) Management of environmental issues Asset deployment and commissioning Asset relocation (other than those undertaken at a customer's request) Works to fix damage to the network (other than emergency recoverable works) Training (e.g. safety) Operational technology supporting the network	Standard control	Standard control
	Maintaining the network	Asset maintenance and network/asset performance management including:	Standard control	Standard control

[371] Source: Ausgrid's response to AER's questions to the DNSPs on classification of services, 18 May 2012.

AER service group	Activities included in service group	Ausgrid services description	AER proposed classification 2014–19	Current classification 2009–14
		Performance and condition monitoring Asset optimisation Asset maintenance program management Asset replacement program management Asset refurbishment program management Asset performance reporting Network systems maintenance Asset retirement		
	Operating the network for DNSP purposes	Network/asset operations: network control and operation, outage management, emergency management field operations, pole replacement, vegetation management, inspection and testing, commissioning of assets Customer interactions (including in relation to network product development, customer service management, complaints and enquiries, record management, debt collection and disconnections) Market operations: includes revenue management, network billing and disputes, processing and publication of notifications of new connections and alterations, market notifications of retailer changes EHS management (risk assessment, monitoring, program management, reporting and training) GIS (Dial Before You Dig services) Compliance monitoring and reporting External stakeholder interaction (industry, regulatory,	Standard control	Standard control

AER service group	Activities included in service group	Ausgrid services description	AER proposed classification 2014–19	Current classification 2009–14
		government) Pricing and regulatory affairs Financial and commercial management and reporting.		
	Planning the network	Network/asset planning (asset needs assessment, asset investment planning, asset management planning, asset delivery planning. Includes risk and feasibility assessment, estimating and cost planning) Regulatory planning Demand management planning Network business strategy development, strategic initiatives development and management (including business improvement/efficiency initiatives) Participation in industry planning Governance, policies, procedures, standards	Standard control	Standard control
	Designing the network	Design standards and designing the network		
	Emergency response	Outage management, emergency management (for example, reinstatement of network after natural disaster)		
	Administrative support	Includes call centres, network claim processing, network billing		
Metering services (types 5–7)	Commissioning of metering and load control equipment Provision of type 5–7 meters Scheduled meter read	Metering procurement Meter data management and delivery Metering installation Meter reading	Alternative control	Standard control

AER service group	Activities included in service group	Ausgrid services description	AER proposed classification 2014–19	Current classification 2009–14
	Unscheduled meter reading – non-chargeable Metering investigation Maintaining and repairing meters and load control equipment	Unscheduled meter reading–non-chargeable Metering investigations/on-site inspections and testing Metering maintenance		
Connection services				
Premises connection assets	Includes any connection assets located on the retail customer's premises	Design and construction of premises connection assets (where these services are provided contestably) Part design and construction of connection assets that are not available contestably, (generally as a result of safety, reliability or security reasons). These parts of project works that are performed and funded by the DNSP	Unclassified	Unregulated
Extensions	An augmentation that requires the connection of a power line or facility outside the present boundaries of the transmission or distribution network owned, controlled or operated by a NSP	An augmentation that requires the connection of a power line or facility outside the present boundaries of the transmission or distribution network owned, controlled or operated by a NSP	Unclassified	Unregulated
Augmentations	Augmentations (insofar as it involves more than an extension)–any augmentation or network augmentation undertaken by a DNSP not dedicated to a customer which is not an extension	Part design and construction of connection assets that are not available contestably, (generally as a result of safety, reliability or security reasons). These parts of project works that are performed and funded by the DNSP	Standard control	Unregulated
Incidental services	Includes the provision of administration, design, certification and inspection	Includes the provision of administration, design, certification and inspection services.	Alternative control	Unregulated

AER service group	Activities included in service group	Ausgrid services description	AER proposed classification 2014–19	Current classification 2009–14
	services.			
Fee based services	Specification and design inquiry fees De-energisation and re-energisation Re-test Supply abolishment Temporary supply service Fault response – not DNSP fault Wasted attendance	Specification and design inquiry fees De-energisation and re-energisation Re-test Supply abolishment Temporary supply service Fault response–not DNSP fault Wasted attendance	Alternative control	Standard control
Quoted services	Rearrangement of network assets Covering of low voltage mains Non standard data services (type 5–-7metering) Ancillary metering services (type 5–7) Supply enhancement Metering enhancement Temporary disconnect/reconnect services After hours provision of any service Large customer connections Auditing of design and construction Miscellaneous (including high load escorts, rectification of illegal connections, conversion to aerial bundled cables,	Rearrangement of network assets Covering of low voltage mains Non standard data services (type 5–7 metering) Ancillary metering services (type 5–7) Supply enhancement Metering enhancement Temporary disconnect/reconnect services After hours provision of any service Large customer connections Auditing of design and construction Miscellaneous (including high load escorts, rectification of illegal connections, conversion to aerial bundled cables, provision of service crew/additional crew) Asset relocations (including undergrounding) and related	Alternative control	Customer specific services are unregulated, while other quoted services were standard control

AER service group	Activities included in service group	Ausgrid services description	AER proposed classification 2014–19	Current classification 2009–14
	provision of service crew/additional crew)	support services, conversion to aerial bundled cable requested by a third party		
Public lighting services	Provision, construction and maintenance of public lighting	Construction, repairs and maintenance of street lighting assets	Alternative control	Alternative control

Table A.2: Endeavour Energy proposed distribution service classifications[372]

AER service group	Activities included in service group	Endeavour Energy services description	AER proposed classification 2014-19	Current classification 2009-14
Network services	Emergency recoverable works	Work to repair damage to the distribution network cause by a third party	Unclassified	Standard control
	Constructing the network	Network construction (other than construction of connection assets provided contestably) Project planning and works management (works program development, procurement, vendor management, contract management, work scheduling and dispatching) Management of environmental issues Asset deployment and commissioning Works to fix damage to the network (other than emergency recoverable works) Training (e.g. safety) Operational technology supporting the network	Standard control	Standard control
	Maintaining the network	Performance and condition monitoring Asset optimisation Asset maintenance program management Asset replacement program management Asset refurbishment program management	Standard control	Standard control

372 Source: Endeavour Energy's response to AER's questions to the DNSPs on classification of services, 9 May 2012.

AER service group	Activities included in service group	Endeavour Energy services description	AER proposed classification 2014-19	Current classification 2009-14
		Asset performance reporting Network systems maintenance Asset retirement Zone substation maintenance Distribution substation maintenance Distribution overhead mains maintenance, Distribution Underground mains maintenance Protection and control scheme maintenance OLI/GLO Vegetation management		
	Operating the network for DNSP purposes	Network/asset operations: network control and operation, field operations, pole replacement, vegetation management, inspection and testing, commissioning of assets Customer interactions (including in relation to network product development, customer service management, complaints and enquiries, record management, debt collection and disconnections) Market operations: includes revenue management, network billing and disputes, processing and publication of notifications of new connections and alterations, market notifications of retailer changes EHS management (risk assessment, monitoring, program management, reporting and training) GIS (Dial Before You Dig services) Compliance monitoring and reporting	Standard control	Standard control

AER service group	Activities included in service group	Endeavour Energy services description	AER proposed classification 2014-19	Current classification 2009-14
		External stakeholder interaction (industry, regulatory, government) Pricing and regulatory affairs Financial and commercial management and reporting.		
	Planning the network	Network/asset planning (asset needs assessment, asset investment planning, asset management planning, asset delivery planning. Includes risk and feasibility assessment, estimating and cost planning) Regulatory planning Demand management planning Network business strategy development, strategic initiatives development and management (including business improvement/efficiency initiatives) Participation in industry planning Governance, policies, procedures, standards	Standard control	Standard control
	Designing the network	Design standards and designing the network		
	Emergency response	Outage management, emergency management (for example, reinstatement of network after natural disaster)		
	Administrative support	Includes call centres, network claim processing, network billing		
Metering services (types 5–7)	Commissioning of metering and load control equipment Provision of type 5–7 meters	Metering procurement, metering installation. Meter data management and delivery Metering installation	Alternative control	Standard control

AER service group	Activities included in service group	Endeavour Energy services description	AER proposed classification 2014-19	Current classification 2009-14
	Scheduled meter read Unscheduled meter reading – non-chargeable Metering investigation Maintaining and repairing meters and load control equipment	Meter reading Unscheduled meter reading – non-chargeable Metering investigations/on-site inspections and testing Metering maintenance		
Connection services				
Premises connection assets	Includes any connection assets located on the retail customer's premises	Design and construction of premises connection assets (where these services are provided contestably) Part design and construction of connection assets that are not available for contestability, (generally as a result of safety, reliability or security reasons). These parts of project works that are performed and funded by the DNSP	Unclassified	Unregulated
Extensions	An augmentation that requires the connection of a power line or facility outside the present boundaries of the transmission or distribution network owned, controlled or operated by a NSP	An augmentation that requires the connection of a power line or facility outside the present boundaries of the transmission or distribution network owned, controlled or operated by a NSP	Unclassified	Unregulated
Augmentations	Augmentations (insofar as it involves more than an extension)–any augmentation or network augmentation not dedicated to a customer which is not an extension undertaken by a DNSP	Part design and construction of connection assets that are not available for contestability, (generally as a result of safety, reliability or security reasons). These parts of project works that are performed and funded by the DNSP	Standard control	Unregulated
Incidental services	Includes the provision of administration, design, certification and inspection	Includes the provision of administration, design, certification and inspection services.	Alternative control	Unregulated

AER service group	Activities included in service group	Endeavour Energy services description	AER proposed classification 2014-19	Current classification 2009-14
	services.			
Fee based services	Specification and design inquiry fees De-energisation and re-energisation Re-test Supply abolishment Temporary supply service Fault response – not DNSP fault Wasted attendance	Specification and design inquiry fees De-energisation and re-energisation Re-test Supply abolishment Temporary supply service Fault response–not DNSP fault Wasted attendance	Alternative control	Standard control
Quoted services	Rearrangement of network assets Covering of low voltage mains Non standard data services (type 5–7 metering) Ancillary metering services (type 5–7) Supply enhancement Metering enhancement Temporary disconnect/reconnect services After hours provision of any service Large customer connections Auditing of design and construction Miscellaneous (including high load escorts, rectification of illegal connections, conversion to aerial bundled cables, provision of service crew/additional crew)	Rearrangement of network assets Covering of low voltage mains Non standard data services (type 5–7 metering) Ancillary metering services (type 5–7) Supply enhancement Metering enhancement Temporary disconnect/reconnect services After hours provision of any service Large customer connections Auditing of design and construction Miscellaneous (including high load escorts, rectification of illegal connections, conversion to aerial bundled cables, provision of service crew/additional crew)	Alternative control	Customer specific services are unregulated, while other quoted services were standard control

AER service group	Activities included in service group	Endeavour Energy services description	AER proposed classification 2014-19	Current classification 2009-14
Public lighting services	Provision, construction and maintenance of public lighting	Construction, repairs and maintenance of street lighting assets. Asset relocations (including undergrounding) and related support services, conversion to aerial bundled cable requested by a third party	Alternative control	Alternative control

Table A.3: Essential Energy proposed distribution service classifications[373]

AER service group	Activities included in service group	Essential Energy services description	AER proposed classification 2014-19	Current classification 2009-14
Network services	Emergency recoverable works	Work to repair damage to the distribution network caused by a third party	Unclassified	Standard control
	Constructing the network	Network construction (other than construction of connection assets provided contestably) Project planning and works management (works program development, procurement, vendor management, contract management, work scheduling and dispatching) Management of environmental issues Asset deployment and commissioning Works to fix damage to the network (other than emergency recoverable works) Training (e.g. safety) Operational technology supporting the network	Standard control	Standard control
	Maintaining the network	Performance and condition monitoring Asset optimisation Asset maintenance program management Asset replacement program management Asset refurbishment program management	Standard control	Standard control

[373] Source: Essential Energy's response to AER's questions to the DNSPs on classification of services, 11 May 2012.

AER service group	Activities included in service group	Essential Energy services description	AER proposed classification 2014-19	Current classification 2009-14
		Asset performance reporting Network systems maintenance Asset retirement		
	Operating the network for DNSP purposes	Network/asset operations: network control and operation, field operations, pole replacement, vegetation management, inspection and testing, commissioning of assets Customer interactions (including in relation to network product development, customer service management, complaints and enquiries, record management, debt collection and disconnections) Market operations: includes revenue management, network billing and disputes, processing and publication of notifications of new connections and alterations, market notifications of retailer changes EHS management (risk assessment, monitoring, program management, reporting and training) GIS (Dial Before You Dig services) Compliance monitoring and reporting External stakeholder interaction (industry, regulatory, government) Pricing and regulatory affairs Financial and commercial management and reporting.	Standard control	Standard control
	Planning the network	Network/asset planning (asset needs assessment, asset investment planning, asset management planning, asset delivery planning. Includes risk and feasibility assessment, estimating and cost planning)	Standard control	Standard control

AER service group	Activities included in service group	Essential Energy services description	AER proposed classification 2014-19	Current classification 2009-14
		Regulatory planning Demand management planning Network business strategy development, strategic initiatives development and management (including business improvement/efficiency initiatives) Participation in industry planning Governance, policies, procedures, standards		
	Designing the network	Design standards and designing the network		
	Emergency response	Outage management, emergency management (for example, reinstatement of network after natural disaster)		
	Administrative support	Includes call centres, network claim processing, network billing		
Metering services (types 5–7)	Commissioning of metering and load control equipment Provision of type 5–7 meters Scheduled meter read Unscheduled meter reading–non-chargeable Metering investigation Maintaining and repairing meters and load control equipment	Metering procurement, metering installation. Meter data management and delivery Metering installation Meter reading Unscheduled meter reading – non-chargeable Metering investigations/on-site inspections and testing Metering maintenance	Alternative control	Standard control

AER service group	Activities included in service group	Essential Energy services description	AER proposed classification 2014-19	Current classification 2009-14
Connection services				
Premises connection assets	Includes any connection assets located on the retail customer's premises	Design and construction of premises connection assets (where these services are provided contestably) Part design and construction of connection assets that are not available for contestability, (generally as a result of safety, reliability or security reasons). i.e. parts of project works that are performed and funded by the DNSP	Unclassified	Unregulated
Extensions	An augmentation that requires the connection of a power line or facility outside the present boundaries of the transmission or distribution network owned, controlled or operated by a NSP	An augmentation that requires the connection of a power line or facility outside the present boundaries of the transmission or distribution network owned, controlled or operated by a NSP	Unclassified	Unregulated
Augmentations	Augmentations (insofar as it involves more than an extension)–any augmentation or network augmentation not dedicated to a customer which is not an extension undertaken by a DNSP	Part design and construction of connection assets that are not available for contestability, (generally as a result of safety, reliability or security reasons). i.e. parts of project works that are performed and funded by the DNSP	Standard control	Unregulated
Incidental services	Includes the provision of administration, design, certification and inspection services.	Includes the provision of administration, design, certification and inspection services.	Alternative control	Unregulated
Fee based services	Specification and design inquiry fees De-energisation and re-energisation Re-test	Specification and design inquiry fees De-energisation and re-energisation Re-test	Alternative control	Standard control

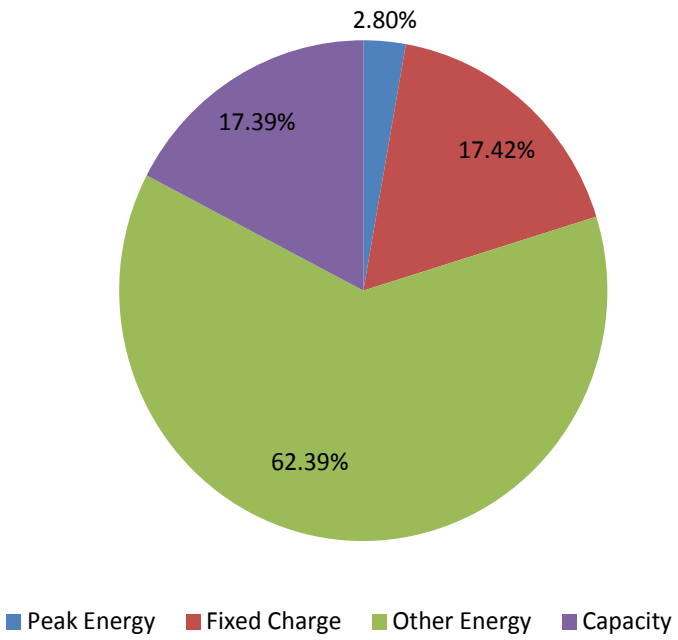
AER service group	Activities included in service group	Essential Energy services description	AER proposed classification 2014-19	Current classification 2009-14
	Supply abolishment Temporary supply service Fault response – not DNSP fault Wasted attendance	Supply abolishment Temporary supply service Fault response–not DNSP fault Wasted attendance		
Quoted services	Rearrangement of network assets Covering of low voltage mains Non standard data services (type 5–7 metering) Ancillary metering services (type 5–7) Supply enhancement Metering enhancement Temporary disconnect/reconnect services After hours provision of any service Large customer connections Auditing of design and construction Miscellaneous (including high load escorts, rectification of illegal connections, conversion to aerial bundled cables, provision of service crew/additional crew)	Rearrangement of network assets Covering of low voltage mains Non standard data services (type 5–7 metering) Ancillary metering services (type 5–7) Supply enhancement Metering enhancement Temporary disconnect/reconnect services After hours provision of any service Large customer connections Auditing of design and construction Miscellaneous (including high load escorts, rectification of illegal connections, conversion to aerial bundled cables, provision of service crew/additional crew)	Alternative control	Customer specific services are unregulated, while other quoted services were standard control
Public lighting services	Provision, construction and maintenance of public lighting	Construction, repairs and maintenance of street lighting assets Asset relocations (including undergrounding) and related support services, conversion to aerial bundled cable requested by a third party	Alternative control	Alternative control

Appendix B—Control mechanisms

Appendix A of the Control mechanisms paper outlined the AER's consideration of efficient pricing structures. Broadly, the AER considered the inefficient nature of energy based charges that are unrelated to the networks peak periods and capacity.[374] Ausgrid submitted that the restructuring of network tariffs away from other energy charges (including flat, inclining block and off-peak/shoulder tariffs), towards peak, capacity and fixed charges are evidence of the closer alignment of its revenue function to its cost function.[375] The AER agrees with the improved efficiency created by Ausgrid's restructuring.

Figures B.1–B.3 show revenue recovery by tariff type for Endeavour Energy and Essential Energy tariffs in 2004–05, 2008–09 and 2012–13 (forecast).

Figure B.1 Endeavour Energy and Essential Energy 2004–05 revenue recovery by tariff type

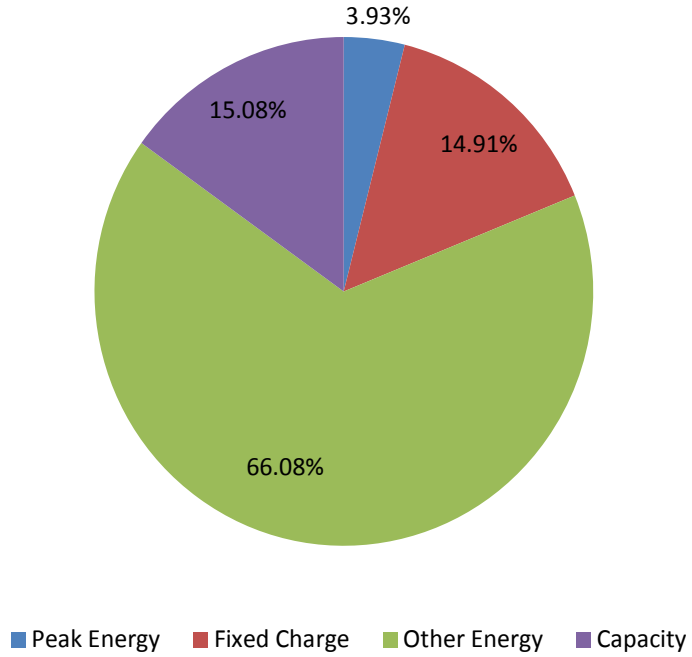


Source: AER analysis.

[374] AER, *Discussion Paper Control mechanisms,* April 2012, appendix A.

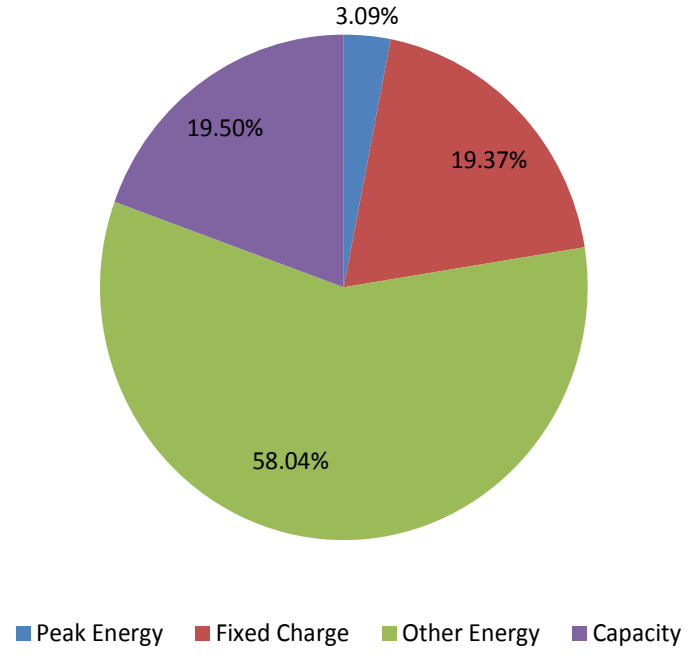
[375] Ausgrid, *Ausgrid submission on AER consultation paper on Form of Control Mechanism*, 30 April 2012, p. 12.

Figure B.2 Endeavour and Essential Energy 2008–09 revenue recovery by tariff type



Source: AER analysis.

Figure B.3 Endeavour and Essential Energy 2012–13 revenue recovery (forecast) by tariff type



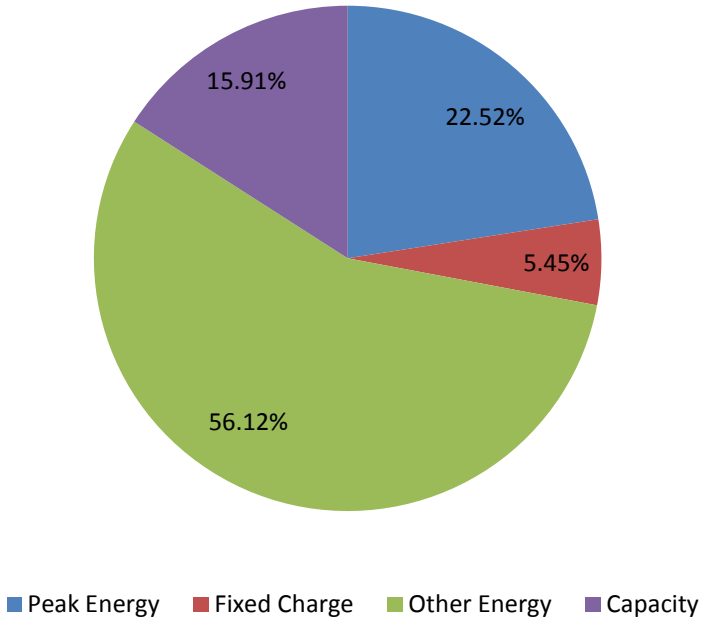
Source: AER analysis.

Figures B.1–B.3 show that only small decreases resulted in the proportion of revenue derived from other energy charges implemented by Endeavour Energy and Essential Energy under the WAPC from 2004–05 to 2012–13. Further, in comparing figures B.1 to B.2, the proportion

of revenue derived from other revenue over the 2004–09 regulatory control period actually increased by 3.69 per cent.

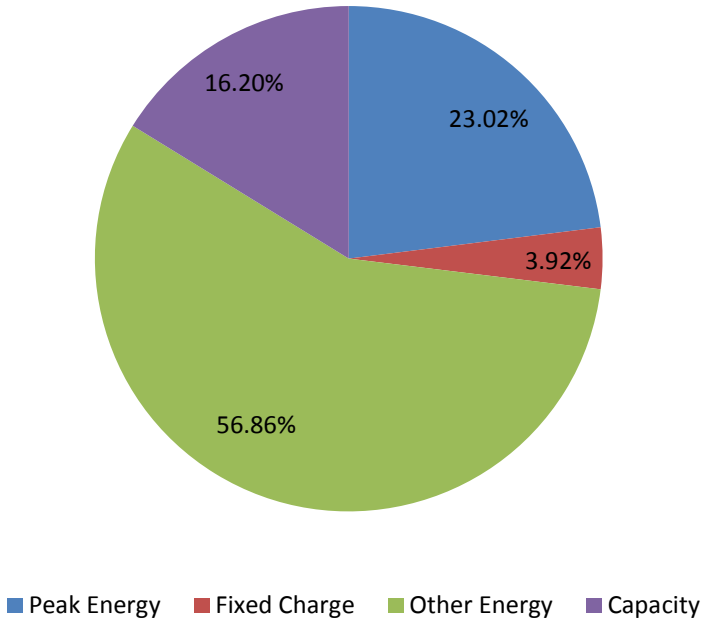
Figures B.4 and B.5 show revenue recovery by tariff type for the Victorian DNSPs in 2006 and 2010.

Figure B.4 Victorian DNSPs 2006 revenue recovery by tariff type



Source: AER analysis.

Figure B.5 Victorian DNSPs 2010 revenue recovery by tariff type



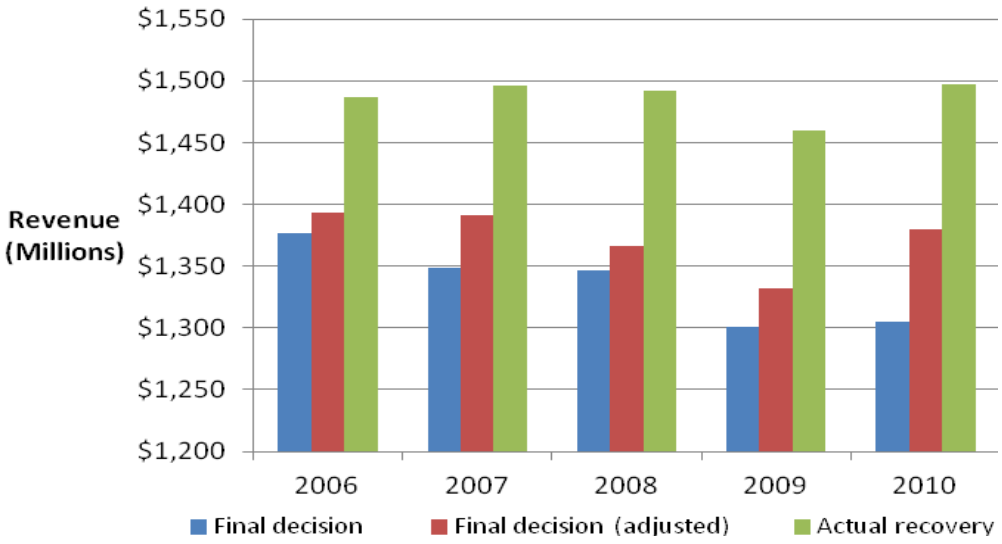
Source: AER analysis.

Figures B.4–B.5 demonstrate that only small decreases in the proportion of revenue derived from other energy charges by the Victorian DNSPs occurred from 2006–10.

Figures B.1–B.5 demonstrate that the decrease in the proportion of other energy charges shown by Ausgrid is not widespread across NEM DNSPs under WAPCs. This was particularly the case over the previous regulatory control period, which was not characterised by lower than forecast consumption.

Figure B.6 compares forecast and actual revenue recovered by the Victorian DNSPs throughout the 2006–10 regulatory control period.

Figure B.6 Total Victorian DNSP revenue recover 2006–10



Source: AER analysis.

Figure B.6 demonstrates that the Victorian DNSPs recovered revenue substantially above forecast throughout the period, averaging a recovery of 8.28 per cent above forecast annually (a total over recovery of $568 million (real $2010) over the period).[376] This demonstrates the large fluctuations in revenue that can occur under a WAPC as a result of variations from forecast demand and prices.

The AER considers that during the regulatory control period DNSPs were able to make windfall gains by increasing the price (above the general increase specified in the WAPC) of components of particular services experiencing sales growth above its forecast. For example, table B.1 compares forecast and actual sales volumes, prices and revenue of United Energy (one of the Victorian DNSPs in the analysis above) under its standard residential customer tariff (Low voltage small rate 1).

[376] The adjusted forecast includes updates for actual CPI, L and S factors.

Table B.1 United Energy standard residential customer tariffs 2006—2010 (units as stated)

	2006	2007	2008	2009	2010
Forecast fixed charge ($ per year)	23.12	23.39	23.22	23.03	23.01
Actual fixed charge ($ per year)	23.89	18.14	18.01	17.86	17.84
Fixed charge forecast volume (no. of customers)	548 736	554 842	562 719	566 858	572 196
Fixed charge actual volume (no. of customers)	542 384	546 269	551 986	555 647	561 538
Forecast usage charge-block one (c/kWh)	4.61	4.67	4.64	4.60	4.59
Actual usage charge-block one(c/kWh)	4.77	5.55	5.77	5.98	5.98
Forecast usage-block one (MWh)	918 899	941 061	960 305	975 338	991 996
Actual usage-block one (MWh)	992 556	1 015 170	1 041 835	1 051 027	1 039 423
Forecast usage charge-block two (c/kWh)	3.54	3.58	3.56	3.53	3.53
Actual usage charge-block two (c/kWh)	3.66	3.81	3.88	3.85	3.85
Forecast usage-block two (MWh)	1 568 901	1 606 739	1 639 595	1 665 262	1 693 704
Actual usage-block two (MWh)	1 621 455	1 591 088	1 661 709	1 685 262	1 701 918
Total forecast revenue ($000)	55 092	56 933	57 596	57 900	58 728
Total forecast revenue actual demand ($000)	58 345	60 193	61 127	61 122	60 662
Total actual revenue ($000)	60 302	66 270	70 011	72 804	72 143

Source: AER analysis.

Table B.1 demonstrates how United Energy increased the volumetric usage prices throughout the period (above its forecast) while decreasing fixed charges to fall within the WAPC constraint. As volumetric usage was higher than forecast, it resulted in a large increase in revenue while the decrease in revenue from the drop in fixed charges was small because actual customer numbers were below forecast.

The last three rows in table B.1 demonstrate that the largest increase in revenue is caused by the combination of higher tariffs with higher usage. If tariffs had increased as forecast (see Total forecast revenue actual demand row), the increase in revenue over the regulatory control period from higher than forecast sales is relatively small, being $19.5 million (real $2010). When the adjustments to tariffs are taken into account, that is, the higher than

forecast demand is combined with higher tariffs, the increase in revenue is larger being $83.8 million (real $2010).

Appendix C—AER benchmarking

Table C.1: AER benchmarking

Determination	Technique	Ratio
NSW/ACT distribution determination 2009–14 The AER and Wilson Cook & Co Engineering and Management Consultants (Wilson Cook) undertook capex and opex benchmarking in the 2009–14 NSW/ACT distribution determination.	Capex benchmarking Benchmarks were only applied to non-system capex. System capex was excluded on the basis that it was driven by business-specific factors, leading to unreliable comparisons between different DNSPs.[377]	▪ Non-system capex/customer ▪ Non-system capex/size ▪ IT capex/customer ▪ IT capex/size
	Opex benchmarking Opex benchmarking utilised ratio and trend analysis and multiple regression analysis.	▪ Opex/size ▪ Opex/customers ▪ Opex/MW ▪ Opex/km
QLD/SA final distribution determination 2010–15 The AER undertook benchmarking in an overall scheme of activities.	Capex benchmarking The AER utilised ratio and trend analysis for capex benchmarking.	▪ Capex/RAB ▪ Non-system capex / customers ▪ Non-system capex/ line length ▪ Non-system capex/ maximum demand ▪ Non-system capex / energy consumption
	Opex benchmarking The AER also utilised ratio and trend analysis for opex benchmarking.	▪ Opex / line length ▪ Opex/ customers

[377] Wilson Cook, *Main Report,* October 2008, p. v.

Determination	Technique	Ratio
		▪ Opex/RAB ▪ Opex/energy consumption ▪ Opex/maximum demand ▪ Opex per kilometre / energy consumption per kilometre ▪ Opex per kilometre / RAB per kilometre ▪ Opex per kilometre/ customers per kilometre ▪ Opex per kilometre/ maximum demand per kilometre
Victorian final distribution determination 2011–15 The 2011–15 Victorian distribution determination included comparative ratio analysis of capex and opex.	Capex benchmarking The AER and Nuttall Consulting (Nuttall) jointly conducted ratio analysis of Victorian DNSPs to test its efficiency against DNSPs in the National Electricity Market (NEM). The analysis considered three states with customer numbers greater than one million (Victoria, NSW and Queensland).[378] The AER then undertook a two stage process to derive results:[379] ▪ comparisons of capex ratios for Victoria against NSW and Queensland ▪ regression analysis including all NEM DNSPs ▪ each ratio was compared across Victoria, NSW and Queensland.	▪ Capex/RAB ▪ Capex/Line length ▪ Capex/Customer ▪ Capex/Energy distributed ▪ Capex/Peak demand ▪ Customers/Line length (km) ▪ Load profile (MW/GWh)[380]

[378] AER, *Final decision, Victorian distribution determinations 2011–2015,* October 2010, p. 100, attachment H.
[379] AER, *Final decision, Victorian distribution determinations 2011–2015,* October 2010, p. 100–104, attachment H.
[380] AER, *Final decision, Victorian distribution determinations 2011–2015,* October 2010, p. 100–104, attachment H.

Determination	Technique	Ratio
	Opex benchmarking The AER compared historical opex levels across three states (Victoria, NSW and Queensland) and individual DNSPs.	▪ Opex/RAB ▪ Opex/Line length ▪ Opex/Customer numbers ▪ Opex/Energy distributed ▪ Opex/Demand ▪ Customers/Line length (km) (Both of these ratios were plotted against the above capex ratios to 'normalise' the capex ratios for density)[381]
Aurora 2012–17 draft distribution determination For the purpose of examining the reasonableness of Aurora's costs, the AER undertook new customer connections unit cost benchmarking and reinforcement capex and opex ratio analysis in its draft distribution determination.	New customer connections–Unit cost benchmarking Due to limitations of the comparability of volume data across DNSPs, the AER undertook unit cost benchmarking of new customer connections across some Australian states (Tasmania, Victoria, Queensland and South Australia). The AER used two proxies for new connections: construction value added ($ million) and dwelling units completed. The AER considered the benchmarking results of both proxies together with one another due to limitations on each proxy.[382]	New customer connections capex/construction value ($ million) (Construction value added ($ million) and dwelling units completed were used as a proxy for new connection volumes) New customer connections capex/dwelling unit constructed (Dwelling units constructed was used as a proxy for new connection volumes).[383]
	Reinforcement capex and opex – Comparative ratio benchmarking The draft determination also included reinforcement capex and opex benchmarking which involved comparative ratios. The AER compared Aurora to other DNSPs based on customer density, load density, peak demand and	▪ Reinforcement capex ($ million)/MW growth ▪ Customers/line length (km) ▪ MW/km

381 AER, *Final decision, Victorian distribution determinations 2011–2015,* October 2010, p. 100–104, attachment H. Regressions of Opex/RAB vs Customers/Line length (km) and Opex/Line length vs. Customers/Line length (km).

382 AER, *Aurora 2012–17 draft distribution determination,* p. 127–8, attachment 5.

383 AER, *Aurora 2012–17 draft distribution determination*, p. 127–8, attachment 5.

Determination	Technique	Ratio
	customer numbers. The AER chose to use customer density, as load density would not have altered the outcome.[384]	▪ Opex ($)/line length (km)Opex/customer ▪ Opex/electricity distributed ▪ Opex/peak demand ▪ Opex/RAB
Powerlink 2012–17 draft distribution determination The AER undertook ratio analysis on Queensland's historical energy intensity and opex benchmarking for the Powerlink 2012–17 draft distribution determination.	Historical energy intensity To consider Powerlink's demand forecast, the AER took Queensland's decreasing energy intensity into account.	▪ GWh/$b GSP ▪ GWh/capita ▪ Peak demand (MW)/GSP (index)
	Opex benchmarking There are two key factors the AER can adjust for when considering efficient benchmark opex: density and size. Typically, more opex is required for less dense networks, partly due to increased travel costs. Size is important because larger TNSPs will benefit from economies of scale. The AER used load density (megawatts per kilometre of line) to normalise the results. The AER considered load density as the appropriate measure, given the size in TNSPs differs substantially.	▪ Opex/RAB (%) ▪ Opex/Line length ($/km) ▪ Opex/Energy distributed ($/GWh) ▪ Opex/Peak demand ($/MW) ▪ Load density (MW/km).

Source: AER, *Draft decision, NSW distribution determination 2009–10 to 2013–14,* November 2008; AER, *Draft decision, NSW distribution determination 2009–10 to 2013–14,* April 2009; AER, *Draft decision, ACT distribution determination 2009–10 to 2013–14,* November 2008; AER, *Draft decision, ACT distribution determination 2009–10 to 2013–14*, April 2009; Wilson Cook, *Main Report,* October 2008; AER, *Final decision; AER, Draft decision, Queensland distribution determination 2010–11 to 2014–15,* November 2009; AER, *Final decision, Queensland distribution determination 2010–11 to 2014–15,* May 2010; AER, *Draft decision, South Australia distribution determination 2010–11 to 2014–15,* November 2009; AER, *Final decision, South Australia distribution determination 2010–11 to 2014–15,* May 2010; AER, *Final decision, Victorian distribution determinations 2011–2015,* October 2010, attachment H; AER, *Aurora 2012–17 draft distribution determination,* attachment 5–6; AER, *Powerlink 2012–17 draft distribution determination*, Attachment 2; EMC[a], *Demand forecast review,* 6 September 2011; AER, *Powerlink 2012–17 draft distribution determination,* Attachment 4.

[384] Due to density and size differences across DNSPs in the NEM, direct comparison of capex or opex ratios may not be informative. To normalise the results for a broader analysis, opex ratios were plotted against customer density (customer numbers per km of line). Load density (average peak demand per km of line) is another potential normaliser, but can result in unexplained inconsistencies between peak demand and energy distributed figures.