

Preliminary positions

Framework and approach paper

ActewAGL

Regulatory control period commencing 1 July 2014

June 2012



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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:

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The AER prefers that all submissions be publicly available to facilitate an informed and transparent consultative process. Submissions will be treated as public documents unless otherwise requested. Parties wishing to submit confidential information are requested to:

- clearly identify the information that is the subject of the confidentiality claim
- provide a non-confidential version of the submission in a form suitable for publication.

All non-confidential submissions will be placed on the AER's website at <u>www.aer.gov.au</u>. For further information regarding the AER's use and disclosure of information provided to it, see the *ACCC/AER Information Policy*, October 2008 available on the AER's website.

Enquiries about this paper, or about lodging submissions, should be directed to the Network Regulation branch of the AER on (02) 9230 9133.

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Shortened forms

Shortened Form	Extended Form
ActewAGL	ActewAGL Distribution
ACT	Australian Capital Territory
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
САМ	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
ICRC	Independent Competition and Regulatory Commission (ACT)
MAAR	maximum allowable average revenue
MCE	Ministerial Council on Energy
MWh	megawatt hours
NEC	National Electricity Code
NEL	National Electricity Law
NEM	National Electricity Market
NER	National Electricity Rules

Shortened Form	Extended Form
next regulatory control period	1 July 2014 to 30 June 2019
PTRM	post-tax revenue model
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

ActewAGL Distribution (ActewAGL) operates as the sole electricity distribution network service provider (DNSP) in the Australian Capital Territory (ACT).

The process the AER must follow in making a distribution determination for ActewAGL 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. 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.

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

Classification of services

In classifying distribution services the NER require 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
- if there has been no previous classification—the classification should be consistent with the previously applicable regulatory approach.¹

The AER's preliminary position is to:

 classify network services as direct control services and further, as standard control services

¹ NER, cll. 6.2.1(d) and 6.2.2(d).

- separate connection services into four components. All four components are classified as direct control services and further classified as follows:
 - premises connection assets as alternative control services
 - extensions as alternative control services
 - augmentations as standard control services
 - incidental services as alternative 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 to 4 metering services.

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.² In deciding on the control mechanism for standard controls services and alternative control services, the AER must have regard to the factors in clauses 6.2.5(c) and 6.2.5(d) of the NER respectively.

For the 2014–19 regulatory control period, the AER considers that there are benefits in changing the current control mechanism for standard control services from an average revenue cap to a revenue cap. Therefore, the AER's preliminary position is to apply a revenue cap with a basis of the CPI–X form to the services classified in chapter 2 of the preliminary F&A paper as standard control services in the 2014–19 regulatory control period.

The AER's preliminary position is to apply price cap regulation to the services classified in chapter 2 of the preliminary F&A paper as alternative control services in the 2014-19 regulatory control period.

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.³

In its 2009 determination for ActewAGL, the AER considered that it would collect and monitor service performance data during the 2009–14 regulatory control period.⁴ Penalties and

² NER, cl. 6.12.3(c). ³ NER al 6.6.2(c)

³ NER, cl. 6.6.2(a).

⁴ AER, *Final decision, ACT distribution determination 2009–10 to 2013–14*, April 2009, p. 112.

rewards were not included during the 2009–14 regulatory control period because the AER considered that ActewAGL 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 national STPIS to ActewAGL for the regulatory control period commencing on 1 July 2014.

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

- ±5 per cent of ActewAGL's 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
- ActewAGL's networks 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 AER's 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 the jurisdictional scheme applies.

Application of efficiency benefit sharing scheme

The AER has developed an EBSS according to the NER, which it is likely to apply to ActewAGL in the next regulatory control period.⁵ In developing and implementing the EBSS, the AER considered the factors in clause 6.5.8(c) of the NER.

In its 2009 determination for ActewAGL, the AER considered that the EBSS would apply from 1 July 2009.⁶ The EBSS will not have a direct financial impact on ActewAGL until the 2014–19 regulatory control period, when it will receive carryover benefits or penalties for efficiency gains or losses made during that period.⁷

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

⁵ AER, Final decision, Electricity distribution network service providers' efficiency benefit sharing scheme, June 2008; AER, Final decision, Australian Capital Territory distribution determination 2009–10 to 2013–14 April 2009, pp. 113-117.

⁶ AER, *Final decision: Efficiency benefit sharing scheme for the ACT and NSW 2009 distribution determinations*, February 2008.

 ⁷ AER, Final decision: Australian Capital Territory distribution determination 2009–10 to 2013–14, 28 April 2009, p. 113.

difference between ActewAGL'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 a 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 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.⁸ 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).⁹ To address this rule change, the AER has proposed amendments to the demand management incentive scheme (DMIS) which applies to ActewAGL in the current regulatory control period.¹⁰ Consultation on these proposed amendments is running concurrently to that for the preliminary F&A paper.¹¹

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 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:

⁸ 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.

⁹ AEMC, Rule Determination: National Electricity Amendment (Inclusion of embedded generation research into Demand Management Incentive Scheme) Rule 2011, December 2011.

¹⁰ AER, Final decision, Australian Capital Territory distribution determination 2009–10 to 2013–14 April 2009, p. 122; AER, Demand management incentive scheme for the ACT and NSW 2009 distribution determinations– Demand Management Innovation Allowance Scheme, November 2008.

¹¹ 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 the AER's final F&A paper to be published in November 2012.

- 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 nontariff 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 ActewAGL's standard control services, and the manner in which that control mechanism 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 ActewAGL.

The AER intends that its amended scheme will apply as its DMEGCIS for the next regulatory control period. For the preliminarily F&A, the AER intends to apply a DMEGCIS to ActewAGL in the next regulatory control period.

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 (transmission pricing rules) of the NER is to be applied to services provided by any dual function assets owned, controlled or operated by ActewAGL. ActewAGL has not informed the AER whether it owns, operates or controls any dual function assets. It has until 30 June 2012 to inform the AER of the value of any of its dual function assets. However, the receipt of this information close to or on 30 June 2012 does not allow the AER to propose a preliminary position.¹² The AER has therefore not set out a preliminary position in this paper.

Other matters

Cost allocation method

For the 2009–14 regulatory control period the transitional rules allowed ActewAGL to use a cost allocation method (CAM) that had regard to the CAM it used when it was regulated by the ACT's Independent Competition and Regulatory Commissioner (ICRC). The transitional rules will expire at the conclusion of the 2009–14 regulatory control period and ActewAGL will need to comply with the AER cost allocation guidelines. The AER will request ActewAGL to propose a CAM that is 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 ActewAGL's regulatory proposal. 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 DNSP's regulatory

¹² The AER requested the dual function assets information from ActewAGL on 30 March 2012.

proposal. To be able to utilise these tools, the AER will need to collect the relevant data from the DNSPs.¹³

Consultation process

The F&A paper must be prepared in consultation with ActewAGL and with other interested parties.

The AER must commence consultation on its preliminary F&A paper for ActewAGL 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

¹³ 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.¹⁴ 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, 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.

ActewAGL is the sole owner and operator of the ACT's electricity distribution network. The AER began regulating the provision of ActewAGL's electricity distribution network services on 1 January 2008, initially operating under transitional NER provisions.¹⁵ At that time, the NER required the AER to adopt certain aspects of ICRC'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 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 a DNSP to prepare its regulatory proposal 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 control¹⁶
- 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
 - any other matters on which the AER thinks fit to give an indication of its likely approach¹⁷

¹⁴ NER, cl. 6.1.1.

¹⁵ NER, Chapter 11.

¹⁶ NER, cl. 6.8.1(c).

- providing a statement of the AER's likely approach to cost allocation based on the guidelines currently in force.¹⁸
- 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 ActewAGL.¹⁹ 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.²⁰

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 ActewAGL, 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 any submissions received in the determination process, there are good reasons for departing from the classification proposed in that paper²¹
- 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.²²

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.

(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) of the NER.

¹⁷ NER, cl. 6.8.1(b).

¹⁸ NER, cl. 6.15.4(b).

¹⁹ 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 and which operates in parallel, and provides support, to the higher voltage transmission network which is deemed by clause 6.24.2(a) of the NER to be a dual function asset. To avoid doubt:

²⁰ NER, cl. 6.25.

²¹ NER cl. 6.12.3(b).

²² 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 ActewAGL	25 June 2012	
AER to publish final F&A paper for ActewAGL	30 November 2012	
Regulatory proposal and distribution determination		
ActewAGL to submit regulatory proposal to the AER	31 May 2013	
AER to publish draft distribution determination on ActewAGL	November 2013*	
ActewAGL may submit a revised regulatory proposal to the AER	December 2013	
AER to publish final distribution determination on ActewAGL	30 April 2014	
ActewAGL 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	

Source: NER, chapter 6, Part E.

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

This preliminary positions paper sets out the likely F&A for the AER's distribution determination for ActewAGL 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 to be addressed in the preliminary F&A paper are the AER's likely approach to classification of distribution services provided by ActewAGL 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. a direct control service or
 - b. a negotiated distribution service.²³

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.

²³ 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.²⁴

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 then 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.

²⁴ NER, cl. 6.2.2(a).

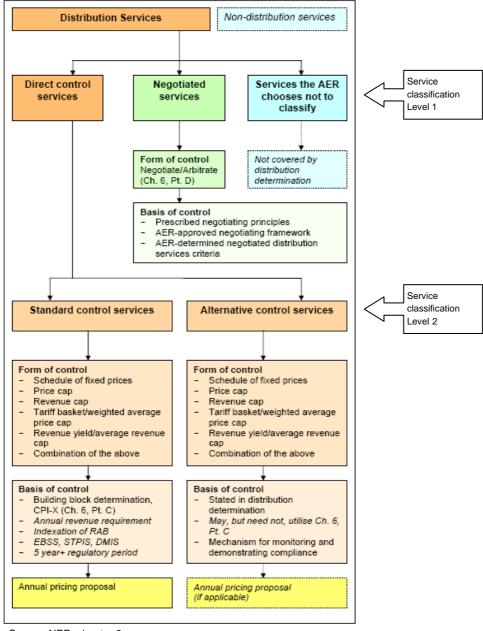


Figure 1.1: Service classification and control mechanism

Source: NER, chapter 6.

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.²⁵ 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

²⁵ NER, cl. 6.2.1(a).

framework and the negotiated distribution service criteria.²⁶ In the event of a dispute, the AER will arbitrate in accordance with these criteria and with regard to the approved framework.²⁷

The distribution determination must impose a control on a price of, and or revenue derived from, direct control services.²⁸ 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.²⁹

For standard control services, the control mechanism must be of the prospective consumer price index minus X (CPI-X) form or an incentive-based variant.³⁰ The basis of the control mechanism must be a building block determination made in accordance with Part C of chapter 6 of the NER.³¹ The AER's distribution determination must include a decision on how compliance with a relevant control mechanism is to be demonstrated.³²

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.³³

The incentive schemes developed by the AER under chapter 6 of the NER apply only to standard control services.³⁴

The preliminary F&A paper for ActewAGL 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 ActewAGL.³⁵

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 ActewAGL under chapter 6 of the NER, rather than pursuant to transitional provisions of the NER. This allows the AER an opportunity to consider all relevant issues without the restriction of deeming provisions.

- ²⁸ NER, cl. 6.2.5(a).
- ²⁹ NER, cl. 6.2.5(b).
- ³⁰ NER, cl. 6.2.6(a).
- ³¹ NER, cl. 6.2.5(a).
- ³² NER, cl.6.12.1(13).
- ³³ NER, cl. 6.18.2(a).
- ³⁴ NER, cll. 6.5.8, 6.6.2 and 6.6.3.
- ³⁵ NER, cl. 6.25.

²⁶ NER, cl. 6.7.2.

²⁷ NER, cl. 6.22.2(c).

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 ICRC's classification that applied to the 2004–09 regulatory control period
- required the AER to assess the DNSP's negotiable components of direct control services, and negotiating framework
- required the AER to assess the DNSP's 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 ActewAGL and interested parties. In doing this, the AER recognises that it must again seek to minimise the impact of chapter 6 of the NER to ActewAGL and its users. The F&A paper is a key means by which greater certainty can be provided regarding the regulatory framework that will apply to ActewAGL 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 ActewAGL 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 on dual function assets
- chapter 8 sets out the likely approach to cost allocation and assessment tools.

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 ActewAGL's distribution services for the 2014—19 regulatory control period. The preliminary positions set out in this chapter are not binding on the AER or ActewAGL.³⁶ The AER will consider alternative proposals on the classification of services submitted by ActewAGL or interested parties.

The AER may classify distribution services as either direct control services or negotiated distribution services.³⁷ Further, the AER must classify direct control services as either standard control services or alternative control services.³⁸ 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.³⁹
- costs of providing the service should be recovered by ActewAGL through distribution use of system (DUOS) tariffs paid by most customers, or through separate tariffs paid by the individual customer requesting the service.⁴⁰

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.⁴¹ For example, the AER's classification of a distribution service as a direct control service does not make ActewAGL the exclusive monopoly provider of that service. Likewise, the AER's classification of a distribution service as a negotiated distribution service does not, of itself, make the service contestable and open to supply by providers other than ActewAGL. Contestability is determined by legislation, or other regulatory instruments, and is beyond the control of the AER.

³⁶ NER, cl. 6.8.1.

³⁷ NER, cl. 6.2.1.

³⁸ NER, cl. 6.2.2.

³⁹ The control mechanism available for each service depend on the classification. The forms of control available for direct control services are listed under clause 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.

⁴⁰ 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.

⁴¹ 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.⁴² 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 only for the regulatory control period for which the determination is made.⁴³ In its 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.⁴⁴ 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.⁴⁵

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.⁴⁶ Similarly, direct control services may be grouped as standard control services or alternative control services.⁴⁷ 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.⁴⁸ 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.⁴⁹

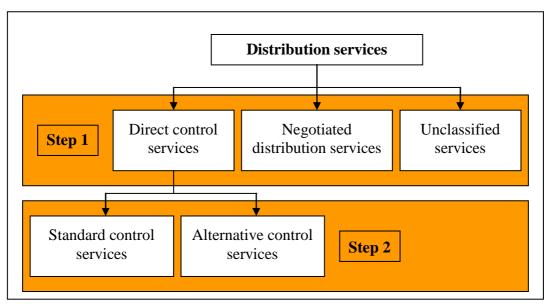
Figure 2.1 outlines the steps in the distribution service classification process.

- ⁴⁴ NER, cl.6.8.1(b)(1).
- ⁴⁵ NER, cl. 6.12.3(b).
- ⁴⁶ NER, cl. 6.2.1(b).
- ⁴⁷ NER, cl. 6.2.2(b). ⁴⁸ NER all 6.2.1(a)
- ⁴⁸ NER, cll. 6.2.1(e) and 6.2.2(e).

⁴² NER, cl. 6.12.1(1).

⁴³ NER, cl. 6.2.3.

⁴⁹ NER, cll. 6.2.1(d) and 6.2.2(d).





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'.⁵⁰

'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'.⁵¹

Chapter 10 of the NER further expands distribution services to 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, but 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, fee based services, quoted services and unregulated services.

⁵⁰ 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.

⁵¹ 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), and
 - 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.⁵²
- 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)
- 3. the desirability of consistency in the form of regulation for similar services (both within and beyond the relevant jurisdiction), and
- 4. any other relevant factor.⁵³

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) of the NER.

⁵² NEL, s. 2F.

⁵³ NER, cl. 6.2.1(c).

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 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.⁵⁴

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 the ACT

The AER commenced regulating ActewAGL on 1 January 2008, initially operating under transitional provisions set out in the NER.⁵⁵ The AER was required to adopt certain aspects of ICRC's 2004—09 determination. For the 2014—19 distribution determination the AER is not bound by the transitional provisions. Consequently, the AER is able to give the classification of services detailed consideration under chapter 6 of the NER.

In its 2009 distribution determination, the AER rejected ActewAGL's proposals to vary the deemed classification of services as set out in the transitional provisions of chapter 6 of the NER.⁵⁶ Under clause 6.12.1(1) of the transitional provisions, the AER decided that the following classification of services would apply to ActewAGL for the 2009—14 regulatory control period:

a distribution service provided by ActewAGL that was previously determined by ICRC 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. Hence, all distribution services provided by ActewAGL (except

⁵⁴ NER, cl. 6.2.2(c).

⁵⁵ NER, chapter 11.

⁵⁶ Specifically, cl. 6.2.3C(c).

the provision and service of meters for customers consuming below 160MWh per annum) were classified as standard control services.

- a distribution service provided by ActewAGL that was previously classified as an excluded distribution service by the ICRC (for the purposes of the 2009—14 regulatory control period) was also deemed to be classified as a direct control service and further classified as an alternative control service. The provision and service of meters for customers consuming below 160MWh per annum was also classified as an alternative control service.
- there were no services classified as negotiated distribution services.
- ActewAGL provides the following unregulated services: street lighting; training; and contestable metering services.⁵⁷

Therefore, ActewAGL has two forms of classification for the current regulatory period:

- one that applies to distribution use of system (DUOS) and 'miscellaneous'⁵⁸ distribution services (standard control), and
- alternative control applying to metering services (for customers consuming less that 160MWh per annum).

Prices for ActewAGL's DUOS and miscellaneous distribution services are regulated using CPI-X applied to maximum allowable average revenue.

Generally, ActewAGL's distribution services are currently classified as shown in table 2.1.

⁵⁷ AER, Final Decision, ACT distribution determination 2009-10 to 2013-14, 28 April 2009, p. 8.

⁵⁸ 'Miscellaneous' distribution services is language adopted from ICRC 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.

Service group	Services included in group*	Current classification
Miscellaneous services (excluding emergency recoverable works)	Supply of conveyancing information (desk and field inquiry); meter test; special meter read; disconnection at meter box or pole top; rectification of illegal connection.	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.	Alternative control
Customer funded connections	Design and construction of new connection assets; design and connection of customer-funded network augmentation.	Standard control
Customer specific services	Services requested by the customer which includes asset relocation works; other customer requested services which are non-standard.	Standard control

Table 2.1: Current classification of services in the Australian Capital Territory

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

Source: AER

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.⁵⁹

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.⁶⁰ The AER is

⁵⁹ NER, cl. 6.2.2(e).

⁶⁰ NER, cll. 6.2.1(e) and 6.2.2(e).

not aware of any requirement in the NER to this effect in relation to distribution services provided by ActewAGL.

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).⁶¹

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.⁶²

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.

ActewAGL submitted that where service groupings and regulatory conventions are in place in the ACT, they have been well considered and developed as responses to issues encountered in the ACT.⁶³ However, the AER considers that its grouping of services is clearly more appropriate for the allocation of services based on nature and impact. The grouping accounts for services that are closely related to each other, whether costs can be attributed to a customer and the available forms of control under the NER.

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 ActewAGL's 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.

⁶¹ NER, cll. 6.2.1(d) and 6.2.2(d).

⁶² NER, cll. 6.2.1(b) and 6.2.2(b).

⁶³ ActewAGL, Classification of electricity distribution services in the ACT and NSW - response to the AER's consultation paper on the F&A for the ACT and NSW electricity network determination 2014-19, February 2012, p. 4.

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 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 electricity distribution services provided by ActewAGL as:

- network services
- metering services (types 5, 6 and 7)
- connection services
- fee based services
- quoted services.

Appendix A sets out the AER's proposed classification of ActewAGL's distribution services for the 2014—19 regulatory control period.

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.

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 ActewAGL's distribution services. The AER considers that this view is consistent with how the NER defines a 'network service'.⁶⁴

Current classifications

ActewAGL's current regulatory framework does not currently have a group of services called 'network services'. However, the AER is of the view that most of ActewAGL's 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.

⁶⁴ 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 discussed in sections 2.4.6 and 2.4.7 of this chapter.

Issues and AER's considerations

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

ActewAGL holds an electricity distribution licence issued by ICRC.⁶⁵ This licence is the only distribution licence currently issued for the ACT. The AER also notes that under the *Utilities Act 2000* (ACT), a person must not provide a utility service except in accordance with a licence.⁶⁶ The prohibition on operating a distribution network without a licence indicates a high barrier to entry. The same legislation also imposes obligations on ActewAGL in relation to operating, maintaining (including repair and replace as necessary) and protecting its supply network to ensure safe, reliable and economic supply to users.⁶⁷

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 ActewAGL, as the sole electricity distribution licensee in the ACT, is the only party that can provide network services within the area prescribed in the licence.

Further, the significant capital costs of entry and the economies of scale and scope available to ActewAGL, as the incumbent DNSP, are likely to make duplication of ActewAGL's 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 ActewAGL are also likely to prevent augmentation of the network being competitively provided by another 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. The AER considers that these are unlikely to be viable commercial options in most instances, primarily because the cost of embedded generators can be prohibitive. Additionally, the ACT's natural gas distribution network is quite small and ActewAGL is the ACT's sole Gas Distribution and Connection Services licence holder.

⁶⁵ A copy of the licence is available on ICRC's website at <u>www.icrc.act.gov.au/utilitieslicensing/current_licencees</u>.

⁶⁶ Section 21 of the *Utilities Act 2000* (ACT). Section 6(a) of the same Act defines a 'utility service' to include 'the distribution of electricity through an electricity network.'

⁶⁷ For example, sections 25, 79 and 80 of the *Utilities Act 2000* (ACT).

These factors contribute to the view that ActewAGL possesses significant market power in the provision of distribution network services which is unlikely to be mitigated by any market power possessed by a network service user or prospective network service user.⁶⁸ With respect to section 2F(g) of the NEL, even a high degree of information available to users would not neutralise the lack of market power caused by the other form of regulation factors. For these reasons, the AER considers it appropriate to subject these services to a direct form of control.

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 control form of regulation in the ACT. This is also the case in other NEM jurisdictions.

Under clause 6.2.1(d), ActewAGL's network services are currently regulated as distribution services under a revenue cap form of control, which the AER considers creates a presumption that they should be classified as direct control services.

Given the above discussion on 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 revenue 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 ActewAGL holding the only distribution licence for the ACT and by the requirements of the *Utilities Act 2000* (ACT).
- There would be no material effect on administrative costs to the AER, ActewAGL 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 the ACT, 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.

⁶⁸ NEL, s2F(d).

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 ActewAGL's network services should be classified in a manner consistent with its previous regulatory determination, as no other classification is clearly more appropriate.

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 views from interested parties on its proposed classification of network services as direct control services, and further, as standard control services.

2.4.4 Metering services (types 5, 6 and 7)

Each connection point in the NEM must have a metering installation.⁶⁹ ActewAGL provides a range of metering services to ACT 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.

The AER notes that 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 MWh per annum are contestable. As a consequence, metering services classified by the AER relates 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 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 the basic requirements of 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 alternative control services. ActewAGL supports this classification, stating that fifty percent of network load is measured

⁶⁹ NER, cl. 7.3.1A(a).

using meters provided in the contestable market. ActewAGL state that it would therefore be unreasonable for metering costs to be recovered in standard control services.⁷⁰

However, types 1 to 4 meters, which include interval meters such as 'smart meters', are contestable and are currently classified as unregulated services.⁷¹

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 provides that a DNSP, as the local network service provider (LNSP), is the responsible person for all types 5, 6 and 7 metering installations.⁷² 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 type 5, 6 and 7 metering installations.⁷³ The Australian Energy Market Commission (AEMC) determines eligibility and registration of Market Participants,⁷⁴ however it is still at ActewAGL'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 ActewAGL providing metering services for type 5, 6 and 7 meters, particularly where ActewAGL has the discretion to licence a Market Participant. Also, the economies of scale and scope favour ActewAGL, particularly where only one meter per premises is necessary for the provision of metering services.

These factors support the view that ActewAGL possesses significant market power in the provision of these metering services. Therefore, regulation of these 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 regulation in the ACT 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.

⁷⁰ ActewAGL, Classification of electricity distribution services in the ACT and NSW, Response to the AER consultation paper, February 2012, p. 8.

⁷¹ 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.

⁷² 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.

⁷³ NER, cl. 7.2.3(d).

⁷⁴ NER, cl. 2.4.

Type 5, 6 and 7 metering services are currently regulated through a form of revenue control. Having regard to clause 6.2.2(d) of the NER, this creates a presumption that they should be classified as alternative 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, for the following reasons:

- There is potential for the development of competition in the market for metering services, particularly in the provision of parallel or multiple metering services. The AER considers that its classification will not influence the potential for competition.
- There would be no material effect on administrative costs to the AER, ActewAGL or users or potential users. This is because the AER is retaining the current classification of these services.
- Metering services are currently regulated in the ACT through a total revenue control mechanism for each class of meter, although this is not the case in all NEM jurisdictions.
- 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 there is no basis to move away from the presumption that types 5, 6 and 7 metering services should be classified as alternative control services.

AER's preliminary position

The AER's preliminary position is that ActewAGL's metering services should be classified in a manner consistent with the current regulatory approach, as no other classification is clearly more appropriate. This is supported by the AER's analysis above.

On this basis, the AER considers that:

- Type 5, 6 and 7 metering services 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 services, and further, as alternative control services.

2.4.5 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 a single connection point.

Current classification

Basic connection services in the ACT are currently classified as standard control services and charged within DUOS. That is, the costs of connection services are spread across the customer base.

ActewAGL's regulatory framework does not currently have a group of services called 'connection services'. However, the AER considers that most of ActewAGL's 'monopoly' services fall into this group. Monopoly services are services that only ActewAGL can perform to facilitate connection works.

Issues and AER's considerations

Connection services are 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 2012.⁷⁵ Chapter 5A and the Guideline provide a framework and charging principles for new connections. ActewAGL is concerned that connection services are classified appropriately so as to not impede the operation of the Guideline.⁷⁶

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:⁷⁷

- a. Augmentation of premises connection assets at the retail customer's connection point (premises connection assets)⁷⁸—the AER considers this would include any connection assets located on the retail customer's premises.
- 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.⁷⁹
- c. Augmentations (insofar as it involves more than an extension)⁸⁰—any augmentation undertaken by a DNSP which is not an extension or network augmentation dedicated to a customer.
- d. Incidental services—including the provision of administration, design, certification and inspection services.

ActewAGL broadly supports the concept of separating connection services into component parts where the AER intends to reclassify part of the connection service.⁸¹

⁷⁵ Once the final legislative changes and Guideline have been introduced, it is possible that minor adjustments may be required to the classification of connection services during the F&A process.

⁷⁶ ActewAGL, Classification of electricity distribution services in the ACT and NSW, Response to the AER consultation paper, February 2012, p. 4.

⁷⁷ NER, chapter 5A.

⁷⁸ Also referred to as 'premises connection assets' at cl 5A.A.1 of the NER.

⁷⁹ National Electricity Rules, glossary.

⁸⁰ 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.

As a starting point, the costs associated with the premises connection assets; extensions; and incidental services components of a connection can be readily attributable to the customer who requires the connection.⁸² To achieve efficient price signalling, customers should generally be charged the identifiable costs that they impose on the network.

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.

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. This includes the form of regulation factors contained in section 2F of the NEL.

ActewAGL holds the only electricity distribution licence in the ACT. The AER therefore considers that these 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 ActewAGL, because of its licence provisions, are also likely to prevent connection services being competitively provided through an alternative source. The AER therefore considers that ActewAGL possesses significant market power in the provision of connection services.

The AER has also considered 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 the ACT and other NEM jurisdictions except New South Wales, which operates within a contestability framework.

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.

For the reasons above and having regard to the requirements of clause 6.2.1 of the NER, the AER considers that connection services (which includes the four components identified above) should be classified as direct control services.

Once a service is classified as a direct control service, the AER must then apply the factors in clause 6.2.2(c) of the NER to determine whether it should be classified as a standard or alternative control service. ActewAGL accepts that, in principle, it may be more appropriate to re-classify as alternative control those services where the cost can be clearly attributed to particular users. ActewAGL acknowledges that this approach would be consistent with the AER's connection charge Guideline.⁸³

⁸¹ ActewAGL, Classification of electricity distribution services in the ACT and NSW, Response to the AER consultation paper, February 2012, pp. 12 and 14.

⁸² NER, cl 6.2.2.

⁸³ ActewAGL, Classification of electricity distribution services in the ACT and NSW, Response to the AER consultation paper, February 2012, p. 14.

In this instance, the AER must apply clause 6.2.2(c) to each of the four components of a connection service to determine whether each component should be classified as a standard of alternative control service.

a. Premises connection assets

The AER considers that augmentations 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 6.2.2 of the NER and, for the following reasons considers that it is clearly more appropriate to classify premises connection assets as alternative control services because:

There is little potential for the development of competition in the market for premises connection assets. The AER considers that its classification will not influence the potential for competition — rather, the absence of competition is due to ActewAGL holding the only distribution licence for the ACT. However, the nature of premises connection assets is that the customer requesting the service will benefit from the provision of that service. Therefore, 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 some administrative costs to ActewAGL if premises connection assets are classified as alternative control services as ActewAGL would need to amend its billing process to raise accounts to identifiable customers.
- As outlined above, the transitional provisions deemed the classification of all connection services as standard control services.
- Relevantly, the AER is proposing that connection services be separated into four components in the New South Wales regulatory review currently underway.⁸⁴ 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.

⁸⁴ AER, Preliminary positions paper, Framework and approach for Ausgrid, Endeavour Energy and Essential Energy, Regulatory control period commencing 1 July 2014, June 2012, p. 20.

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

b. Extensions

An extension refers 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 6.2.2 of the NER and, for the following reasons considers that it is clearly more appropriate to classify extensions as alternative control services because:

- There is little potential for the development of competition in the market for extensions. The AER considers that its classification will not influence the potential for competition rather, the absence of competition is due to ActewAGL holding the only distribution licence for the ACT.
- There would be some administrative cost to ActewAGL if extensions are classified as alternative control services as ActewAGL would need to amend its billing process.
- As outlined above, the transitional provisions deemed the classification of all connection services as standard control services.
- The nature of an extension is that the customer requesting the service will benefit from the provision of that service, and as such, the costs are directly attributable to an individual customer.⁸⁵
- Relevantly, the AER is proposing that connection services be separated into four components in the New South Wales regulatory review currently underway. In Queensland and South Australia the costs of standard connection services are recovered through DUOS charges, while in Victoria, standard connection services are classified as alternative control services.
- There are no other apparent relevant factors that change the AER's proposed classification.

Having regard to the requirements of clause 6.2.2 of the NER, the AER's preliminary position is that it is clearly more appropriate to classify extensions as alternative control services.

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.

⁸⁵ NER, cl. 6.2.2(c)(5). Also refer to the earlier discussion on premises connection assets where the AER considers that services can be classified as alternative control services on the cost attribution factor alone.

As discussed above, the costs associated with augmentations are less attributable to a particular customer and therefore the AER considers that there is no basis to move away from the current standard control classification because:

- There is little, if any, potential for the development of competition in the market for augmentations. The AER considers that its classification will not influence the potential for competition rather, the absence of competition is due to ActewAGL holding the only distribution licence for the ACT and by the requirements of the *Utilities Act 2000* (ACT).
- There would be no material effect on administrative costs to the AER, ActewAGL or user or potential user. This is because classifying augmentations as standard control services involves a similar regulatory approach to that which was applied under the transitional provisions for the current regulatory control period.
- Augmentations, previously referred to as a 'monopoly' services, are currently regulated in the ACT, and all other NEM jurisdictions, under a form of control.
- The nature of augmentations is that they are provided to benefit the broad customer base 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 there is no basis to move away from the presumption that augmentations should be classified as standard control services.

d. Incidental services

Incidental services refer to the provision of administration, design information, certification and inspection services. The AER understands that incidental services are provided to support design and constructions works to ActewAGL's distribution network that have been requested by a customer.

The AER considers that it is clearly more appropriate to classify incidental services as alternative control services. This allows for the cost of incidental services to be charged to the customer where appropriate. In considering the factors in clause of 6.2.2 of the NER, the AER also notes:

- There is little 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 ActewAGL holding the only distribution licence for the ACT.
- There would be limited administrative cost to ActewAGL if incidental services are classified as alternative control services as ActewAGL would need to amend its billing process to attribute costs to identifiable customers.
- As outlined above, the transitional provisions deemed the classification of all connection services as standard control services.

- The nature of incidental services is that the customer requesting the service will benefit from the provision of that service, and as such, the costs are directly attributable to an individual customer.⁸⁶
- Relevantly, the AER is proposing that connection services be separated into four components in the New South Wales regulatory review currently underway.⁸⁷ In Queensland and South Australia the costs of standard connection services are recovered through DUOS charges, while in Victoria, standard 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 position

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 ActewAGL's 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 connection services should be classified as direct control services, and in turn, the four components of connection services should be classified as follows:

- Premises connection assets should be classified as alternative control services.
- Extensions should be classified as alternative control services.
- Augmentations should be classified as standard control services.
- Incidental services should be classified as alternative control services.

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

The AER is seeking comments on its preliminary position to classify connection services as direct control services, and in turn:

- a. Premises connection assets as alternative control services
- b. Extensions as alternative control services
- c. Augmentations as standard control services

⁸⁶ NER, cl. 6.2.2(c)(5). Also refer to the earlier discussions on premises connection assets and extensions, where the AER considers that services can be classified as alternative control services on the cost attribution factor alone.

⁸⁷ AER, Preliminary positions paper, Framework and approach for Ausgrid, Endeavour Energy and Essential Energy, Regulatory control period commencing 1 July 2014, June 2012, p. 20.

d. Incidental services 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.

ActewAGL 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 ActewAGL's distribution network. Therefore, only ActewAGL is able to undertake these services.

The AER acknowledges that the types of services that fall 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 ActewAGL provides some of the following services on a fee basis:⁸⁸

- the energisation of a new connection
- the de-energisation of an existing premises
- meter test
- special meter reading
- replace meter to facilitate renewable energy installation
- the provision of temporary supplies.

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 were approved by the AER under the transitional chapter 6 provisions.

⁸⁸ The fixed fees are charged for services to standard residential or similar installations carried out in normal business hours unless otherwise state. See ActewAGL Electricity Networks Schedule of charges 2011-12: Miscellaneous charges at <u>www.actewagl.com.au/About-us/The-ActewAGL-network/Electricity-network/Electricity-network/Electricity-network/Electricity-network/Electricity-network/Electricity-network-prices.aspx</u>

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 ActewAGL's distribution network. Therefore, only ActewAGL, as the owner of the ACT's distribution network is 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 ActewAGL providing fee based services. Furthermore, the economies of scale and scope available to ActewAGL, particularly in relation to its 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 ActewAGL possesses 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 the ACT. 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 ActewAGL 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.

ActewAGL submitted that services should be excluded from standard control services where the cost is attributable to a customer. ActewAGL identifies energising and de-energising premises, temporary connections and removing, repositioning or upgrading services at the customer's request as example services where it takes a fee for service approach. Where the work required is larger or more complex, ActewAGL will provide a quote for the service.⁸⁹

ActewAGL also acknowledge that the classification of such services as standard control services makes it difficult for charges to be cost reflective and to introduce new services and charges. However ActewAGL also submitted that the revenue it raises from fee based

⁸⁹ ActewAGL, Classification of electricity distribution services in the ACT and NSW, Response to the AER consultation paper, February 2012, p. 8.

services is minor, representing less than 1 per cent of its network charges. On that basis, it claims that the costs of separately regulating fee based services as alternative control services would excessively raise the regulatory overhead cost of providing these services.⁹⁰

It seems that ActewAGL, while agreeing that specific services with associated costs directly attributed to the provision of the service should not be shared across the customer base, also suggests that changing the classification would not result in any benefit to customers.⁹¹

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 fee based services. The AER considers that its classification will not influence the potential for competition — rather, the absence of competition is due to ActewAGL owning the distribution network assets, holding the only distribution licence for the ACT and by the requirements of the *Utilities Act 2000* (ACT).
- There would be no material effect on administrative costs of the AER, the DNSP or users or potential users. This is because classifying fee based services as alternative control services would involve regulating them through a price cap. Therefore, ActewAGL would be required to continue to submit charges to the AER for approval for each fee based service.
- The AER also notes that other NEM jurisdictions including Queensland and Victoria regulate similar services charged on a fee basis as alternative control services.⁹² The AER is currently proposing the same approach to fee based services for New South Wales electricity distribution businesses.⁹³
- 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.

Without further evidence from ActewAGL to support its submission that an alternative control classification would not result in any net benefit to customers, and considering the requirements of the NER, the AER's preliminary position 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 ActewAGL's fee based services should not be classified in a manner consistent with its previous regulatory determination, as another classification is clearly more appropriate.

⁹⁰ ActewAGL, Classification of electricity distribution services in the ACT and NSW, Response to the AER consultation paper, February 2012, p. 8.

⁹¹ ActewAGL, Classification of electricity distribution services in the ACT and NSW, Response to the AER consultation paper, February 2012, p. 8.

⁹² AER, Queensland final distribution determination, May 2010, pp. 378-384; AER, Victorian draft distribution determination - Appendices, June 2010, pp. 2-3.

⁹³ AER, Preliminary positions paper, Framework and approach for NSW DNSPs, Regulatory control period commencing 1 July 2014, June 2012, p. 31.

For the reasons above, 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 submissions on its preliminary position to classify fee based services as direct control services and, in turn 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 services cannot be estimated without first understanding the customer's specific requirements. This means that ActewAGL must set individual prices for these services once requested and after it has 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.

ActewAGL 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 the AER considers appropriately fall into the quoted services group.

Current classification

ActewAGL provides all fee based services on a quoted service basis where the work is of greater complexity or outside normal business hours.⁹⁴ The AER acknowledges that ActewAGL may provide other services on a quoted fee basis that are not specified in its schedule of 'miscellaneous' charges.

Quoted services are classified as standard control services in the current regulatory control period under the transitional chapter 6 provisions.

The AER considers that quoted services include:

- Rearrangement of network assets
- Covering low voltage mains
- Non standard data services (types 5—7 metering)
- Ancillary metering services (types 5—7 metering)
- Supply enhancement
- Metering enhancement

⁹⁴ See ActewAGL Electricity Networks Schedule of charges 2011-12: Miscellaneous charges at <u>www.actewagl.com.au/About-us/The-ActewAGL-network/Electricity-network/Electricity-network/Prices.aspx</u>.

- 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.

Issues and AER's considerations

ActewAGL submit that 'some customer specific services are not distribution services and should not be regulated'.⁹⁵

Customer specific works include asset relocation works and conversion to aerial bundled cable, performed at the request of the distribution customer. Without further details or examples from ActewAGL, the AER is unable to consider this submission in detail at this time. Therefore, 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.⁹⁶ Only the DNSP will carry out customer specific services on its distribution network. Additionally, grouping these services as quoted services, under an alternative control classification, still permits commercial negotiations to occur between the parties.

The AER therefore proposes that quoted services should be classified as alternative control services in the next regulatory control period, considering 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 ActewAGL as the owner of the distribution network, and the ACT's sole electricity distribution licence holder is able to undertake quoted services. Albeit that the DNSP may engage a third party to act on its behalf.

For the reasons above, 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 ActewAGL providing quoted services.

The AER therefore considers that the ACT arrangements effectively amount to an absolute regulatory barrier to entry for sections 2F(b) and 2F(c) of the NEL. The economies of scale and scope available to ActewAGL, particularly in relation to its network services are also likely

⁹⁵ ActewAGL, Classification of electricity distribution services in the ACT and NSW, Response to the AER consultation paper, February 2012, p. 11.

⁹⁶ Ergon Energy Corporation Ltd v Australian Energy Regulator [2012] FCA 393 at p. 21, paragraph 54.

to prevent quoted services being competitively provided through an alternative service provider.

These factors support the view that ActewAGL possesses 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 the ACT. 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.

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 and customer specific 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 as alternative control services because:

- There is little, if any, potential for the development of competition in the market for quoted services. That is, where customers request higher than normal standards or services than normal which involve undertaking works on, or in relation to, distribution network assets owned by ActewAGL, 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 ActewAGL's current approach to quoting services where the work involved is more complex or outside business hours.⁹⁷
- Quoted services are currently regulated in the ACT, and in several 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.

⁹⁷ See ActewAGL Electricity Networks Schedule of charges 2011-12: Miscellaneous charges at <u>www.actewagl.com.au/About-us/The-ActewAGL-network/Electricity-network/Electricity-network-prices.aspx</u>.

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 ActewAGL's quoted services should not be classified in a manner consistent with its previous regulatory determination, as another classification is clearly more appropriate. ActewAGL submit that the cost of separately regulating non-routine services as alternative control services would excessively raise the regulatory overhead cost of providing these services.⁹⁸ However, the AER does not agree to spreading the cost of large and complex works across the customer base when the costs can be clearly attributed to a customer.

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 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 preliminary position to classify quoted services as direct control services and, in turn as alternative control services.

2.5 AER's preliminary position on services 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 ActewAGL 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.

⁹⁸ ActewAGL, Classification of electricity distribution services in the ACT and NSW, Response to the AER consultation paper, February 2012, p. 8.

AER service group	Proposed classification of distribution services	Proposed classification of direct control services
Network services	Direct control	Standard control
Connection services		
Premises connection assets	Direct control	Alternative control
Extensions	Direct control	Alternative control
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
Metering services (types 1 to 4)	Unregulated	

Table 2.2: Proposed classification of distribution services in the ACT

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 the ACT 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 acknowledges ActewAGL's submission that service definitions and descriptions emerge from a variety of circumstances specific to the jurisdiction⁹⁹ and 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. While this statement is correct, the AER does not support ActewAGL's submission that there is little to be gained from a national approach.¹⁰⁰

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 ActewAGL.

⁹⁹ ActewAGL, Classification of electricity distribution services in the ACT and NSW, Response to the AER consultation paper, February 2012, p. 10.

¹⁰⁰ Ibid.

3. Control Mechanisms

3.1 Introduction

This chapter sets out the AER's proposed forms of the control mechanisms to be applied to ActewAGL's 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.

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) which set out the AER's preliminary position in relation to control mechanisms.¹⁰¹ The AER also 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 average revenue cap control mechanism. In reaching this preliminary position, 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.¹⁰²

The AER has considered the costs and benefits of revenue caps, average revenue caps and WAPCs against these factors. In determining its preliminary position for a revenue cap the AER considers that the benefits from a higher likelihood of recovering efficient costs under a revenue cap outweigh the detriments of within period price instability and weak efficient pricing incentives.

The AER considers a move away from the average revenue cap in the next regulatory period is appropriate. This is because, the AER considers a revenue cap better satisfies the relevant factors, including those the AER must have regard to under clause 6.2.5(c) of the NER. Specifically, the average revenue cap does not provide a high likelihood of recovering efficient costs and provides DNSPs incentives to set inefficient prices.

Alternative control services

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

¹⁰¹ 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.)

¹⁰² AER, Control mechanisms paper, April 2012.

the nature of these services, which tend to be customer specific. Consistent with the AER's proposed view expressed 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.

3.2 Requirements of the NEL and NER

A distribution determination sets out controls over the prices of direct control services, and or the revenue to be derived from direct control services.¹⁰³ 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.¹⁰⁴ Direct control services can be classified as 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. That is, the control mechanisms to apply in the distribution determination must be as set out in the F&A paper.¹⁰⁵

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 mechanism¹⁰⁶
- the basis of the control mechanism.¹⁰⁷

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 the control mechanisms for standard control services and alternative control services.

¹⁰³ NER, cl. 6.2.5(a).

¹⁰⁴ NER, cl. 6.8.1(c).

¹⁰⁵ NER, cl. 6.12.3(c).

 ¹⁰⁶ NER, cl. 6.2.5(b).
 ¹⁰⁷ NER, cl. 6.2.6(a).

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 following 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
- 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 in deciding on the control mechanism for standard control services:

- volume risk and revenue recovery
- price flexibility and stability
- incentives for demand side management.¹⁰⁸

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.¹⁰⁹

3.2.3 Alternative control services

The AER must have regard to the following 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.

¹⁰⁸ AER, *Control mechanisms paper*, April 2012.

¹⁰⁹ NER, cl. 6.2.6(a).

The control mechanism must have a basis stated in the distribution determination.¹¹⁰ 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.¹¹¹

3.3 Control mechanism for standard control services

3.3.1 Current regulatory arrangements for ActewAGL—average revenue cap

The ACT is currently the only jurisdiction within the NEM where an average revenue cap is applied to a DNSP's standard control services. An average revenue cap, or 'revenue yield control', caps the average revenue per unit of electricity sold that a DNSP can recover. The cap is calculated by dividing the Maximum Allowable Revenue (MAR) by a unit (or units) of output, usually kilowatt hours (kWh). The DNSP complies with this constraint by setting prices so the average revenue is equal to or less than the MAR per unit of output.

In its 2009 determination, the AER applied an average revenue cap to ActewAGL's standard control services. Under clause 6.2.5(c1)(2) of the transitional provisions of the NER, the AER was required to continue with the control mechanism that the ICRC applied in the 2004–09 regulatory control period.¹¹²

For the 2014–19 distribution determination, 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 the control mechanism for standard control services

The AER received six submissions from interested parties on its –Control mechanisms paper.

The Control mechanisms paper set out the AER's initial preference for a revenue cap to be applied to ActewAGL's standard control services over the next regulatory control period.¹¹³

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

¹¹⁰ NER, cl. 6.2.6(b).

¹¹¹ NER, cl. 6.2.6(c).

AER, Final Decision, Australian Capital Territory Distribution Determination 2019-10 to 2012-13, 28 April 2009

¹¹³ 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.

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. ¹¹⁴ ActewAGL submitted that the external factors largely override the incentives provided under the control mechanism and therefore it should take a low priority. ¹¹⁵ ActewAGL further submitted that it has implemented various cost-reflective tariffs under the average revenue cap.
Volume risk (who bears it) and revenue recovery	ActewAGL, 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. ¹¹⁶ ActewAGL considered volume risks should be shared between the DNSPs and the customers. ¹¹⁷ ActewAGL submitted the AER should consider a 'Q-factor' adjustment ¹¹⁸ to reduce the sensitivity of DNSPs' revenue to volume fluctuation above or below the forecast. ¹¹⁹
Incentive for demand side management	ActewAGL submitted that it does not consider the average revenue cap provides 'very low' incentives to undertake demand side management. ¹²⁰ ActewAGL submitted it has implemented various tariffs (including time-of-use tariffs) to provide customers with incentives to use energy more efficiently. ¹²¹ Ausgrid and ActewAGL considered that the revenue cap encourages inefficient demand management outcomes. ¹²² Total Environment Centre (TEC) submitted that a revenue cap should be used because it removes DNSPs' incentives to increase demand and consumption. ¹²³
Administration costs	ActewAGL submitted that the average revenue cap has the lowest administration costs. ¹²⁴

¹¹⁴ 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.

- ¹¹⁶ Ausgrid, Ausgrid submission on AER consultation paper on Form of Control Mechanism, 30 April 2012, p. 16.
- ¹¹⁷ 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. 6.
- ¹¹⁸ A 'Q' factor adjustment reduces the sensitivity of the DNSP's revenue to outturn volume that is different to the forecast volume determined at the time of the distribution determination.
- ¹¹⁹ 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. 7.
- ¹²⁰ 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.
- ¹²¹ In addition, ActewAGL also pointed out that its maximum demand and capacity charges in several commercial tariffs have further strengthened price signals to customers and provided incentives to use the network more efficiently.
- ¹²² Ausgrid, Ausgrid submission on AER consultation paper on Form of Control Mechanism, 30 April 2012, p. 18; 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.
- ¹²³ 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.
- ¹²⁴ 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.

¹¹⁵ 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. 10.

Criteria	Submissions
Price flexibility and price stability	ActewAGL submitted that price flexibility is broadly similar for all forms of control. ¹²⁵ AGL also submitted that a revenue recap produces higher price fluctuations due to the overs and unders account.
	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. ¹²⁶
Consistency with other jurisdictions Consistency with current regulatory control period	ActewAGL submitted that the AER has not placed sufficient weight on the requirement to have regard to the average revenue cap currently in place. ¹²⁷
Other issues	ActewAGL submitted that as there is clearly no superior control mechanism, it is not appropriate to change from the current control mechanism to a revenue cap. ¹²⁸
	AGL submitted the AER should consider an F&A approach that includes DNSPs working with the retailers and consumers when proposing network tariffs changes. ¹²⁹

Source: Submissions to the 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:

- 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)

¹²⁵ 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. 15.

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

¹²⁷ 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, pp. 3-4.

¹²⁸ 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. 5.

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

the regulatory arrangements (if any) applicable to the relevant service immediately before the commencement of the distribution determination.

Volume risk and revenue recovery

The AER's 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 to 'whether a control mechanism provides DNSPs with an opportunity to recover efficient costs, while limiting revenue recover above such costs'.¹³⁰

A revenue cap fixes revenue regardless of the volume of services provided by the DNSP. If the DNSP recovers more than the MAR in one year, it will be required to decrease the price of its services in the following year. Similarly, if the DNSP recovers less than the allowable MAR in one year, it can increase the prices 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, Essential Energy and ActewAGL submitted that volume risk should rest with the DNSP, not the consumer. This is because DNSPs are best placed to manage such risk.¹³¹ 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 DNSP's cost function.¹³² 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 closer to efficient costs.

The AER considers that average revenue caps and WAPCs provide a low likelihood of a DNSP recovering its efficient costs. Given that the majority 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 variability of revenue and profit under WAPCs and average revenue caps results in an incentive for the DNSP to understate sales forecasts in its regulatory proposals. While the AER rigorously tests the forecasts proposed by the DNSPs, the AER is concerned with the accuracy of sales volume forecasts.

DNSPs that operate under WAPCs and average revenue caps have incentives to adjust tariffs within a regulatory control period to attain additional revenue. Where additional revenue

¹³⁰ 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.

¹³¹ 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; 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. 7.

¹³² Ausgrid, Ausgrid submission on AER consultation paper on Form of Control Mechanism, 30 April 2012, p. 16.

is attained through adjustments to prices that do not reflect changes in the costs of providing the service, DNSPs are able to make windfall gains. This is discussed in detail below.

Under WAPCs and average revenue caps, DNSPs bear the full forecast volume risk which result in revenue and profit variations. This is because under WAPCs and average revenue caps, there are no adjustment mechanisms such as an unders and overs account. Ausgrid and Essential Energy submitted that volume risk should rest with the DNSP, not the consumer. This is because DNSPs are best placed to manage that risk.¹³³ The AER agrees with this view and considers this a negative feature of revenue caps.

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 efficient tariff structures are more likely to occur where the control mechanism provides an incentive for DNSPs to set efficient prices. Broadly speaking, 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. The assessment includes compliance with the pricing principles and side constraints under clauses 6.18.5 and 6.18.6 of the NER. The AER has taken into account the following:

- the expected revenue to be recovered under each tariff class lie 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 on the incentives for efficient pricing including:

- Iong run incentives to increase regulatory asset bases
- 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.¹³⁴ ActewAGL submitted that the external

¹³³ 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.

¹³⁴ 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.

factors largely override the incentives provided by the control mechanism and therefore it should take a low priority.¹³⁵ 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 the control mechanism provides the basis for DNSPs to set efficient prices.

Under an average revenue cap, revenues are linked to kWh sales. Therefore, there is an incentive for DNSPs to set tariffs which promote distribution of additional kWhs as opposed to prices which reflect the costs of providing the service.

The incentives for DNSPs setting prices under an average revenue cap include:

- reducing the price of price sensitive kWh services. Setting marginal prices (kWh distribution) below marginal cost for price sensitive services increases consumption of the service. This also increases profits where the incremental cost of providing the service is low. This is the case even if the marginal benefit to customers is less than the marginal cost of providing the service.
- reducing the availability of capacity management tariffs. The DNSP has a incentive not to provide capacity management tariffs where the revenue from additional sales outweighs the marginal cost of providing the additional capacity. This is also the case where the benefits to customers of the additional units sold are less than the costs of providing it.
- adding capacity to the network before its demand arises. Where the marginal cost of additional capacity is less than the marginal revenue gained from selling additional units the DNSP has an incentive to build additional network capacity regardless of the net benefit to customers.

In the Control mechanisms paper, the AER did not closely consider the incentives outlined above under the average revenue cap.

The incentive for DNSPs setting prices under a revenue cap is to increase the price on price sensitive services. Where price increases result in decreases in the volume of sales the overall cost of supply decreases. With fixed revenue, decreases in costs result in increases in profit.

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

- efficiently reducing the price of price sensitive services towards marginal cost. As a DNSP's revenue increases when the volume of sales increases under a WAPC, DNSP's have an incentive to reduce the price on price sensitive 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.¹³⁶
- inefficiently increase the price on services with increasing sales quantities. Where demand is unresponsive to changes in distribution prices, DNSPs maximise profit by increasing the price on these services (or elements of these services) with increasing

¹³⁵ 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, pp. 11-12.

¹³⁶ 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.

sales. The DNSP then decreases the prices of services with falling 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.

The AER has undertaken an assessment of the implementation of efficient pricing under the WAPC using examples from NSW and Victorian DNSPs in its NSW preliminary F&A paper.¹³⁷ The AER considers that while WAPCs provide a strong theoretical incentive for DNSPs to price efficiently, in practice, this has not generally been the case across the NEM. In its NSW preliminary F&A paper, the AER also considered that under specific circumstances, WAPCs provide an incentive for DNSPs to increase prices that take advantage of increasing sales quantities.

Price flexibility and stability

The AER maintains its view set out in the Control mechanisms paper that price flexibility is broadly similar for a revenue cap, WAPC and average revenue cap, as it is limited by side constraints and the NER pricing principles. Submissions from the DNSPs support this view.¹³⁸ Ausgrid submitted that the choice of the control mechanism can influence the incentive to set efficient prices through the flexibility under the side constraint.¹³⁹

In terms of price stability, all control mechanisms are subject to various annual price adjustments specified under the NER. These include cost pass throughs, jurisdictional scheme obligations, tribunal decisions¹⁴⁰ and transmission price passed on to the DNSPs by the Transmission Network Service Providers (TNSPs). Further, the AER considers that the primary difference between WAPCs, average revenue caps and revenue caps is the overs and unders account.

The AER considers that a revenue cap can result in sizable price fluctuation within the regulatory 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 overs and unders account under a WAPC and the existing average revenue cap applied in the ACT, these control mechanisms can also result in price fluctuations. Under the WAPCs and the average revenue cap, lagged quantity weights based on previous years are updated annually and affect the weightings applied to tariffs and tariff components. AGL submitted that WAPCs provide an opportunity for gaming and do not guarantee price predictability.¹⁴¹ 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.

¹³⁷ AER, Preliminary positions Framework and approach paper Ausgrid, Endeavour Energy and Essential Energy, Regulatory control period commencing 1 July 2014, appendix B.

¹³⁸ 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.

¹³⁹ Ausgrid, Ausgrid submission on AER consultation paper on Form of Control Mechanism, 30 April 2012, p. 18.

¹⁴⁰ In recent years, decisions made by the Australian Competition Tribunal on the AER's regulatory determinations have resulted in significant increase in the total revenue to be recovered by the DNSPs.

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

Similar to WAPCs, the average revenue cap can result in greater price jump across regulatory periods compared to a revenue cap. This issue is particularly pronounced if a trend of falling demand has set in throughout the regulatory period, prompting a large upward adjustment in the X-factors (and hence prices) for the next regulatory period under the average revenue cap. 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 average revenue cap and the WAPCs is necessarily superior due to the sensitivity of these latter forms of control to volume forecasts are crucial as they contribute to the setting of the price constraint over the entire five year regulatory control 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 Queensland and Tasmania was also concerned with this undesirable attribute of the average revenue cap and the WAPCs.¹⁴²

There are many 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.

AGL submitted that excessive price fluctuations or changes to the tariff structure under the revenue cap may be detrimental to consumers.¹⁴³ Although the AER agrees with this view, it considers that the price fluctuations could be mitigated through the form of the overs and unders account, including, potentially, the introduction of 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 deciding on the control mechanism. The benefits of demand side management includes more efficient use of network assets resulting in lower prices for network users, benefits for the environment, and importantly–reduction in peak demand allowing augmentation expenditures to be avoided or deferred.¹⁴⁴

¹⁴² QCA, Final Determination – Regulation of Electricity Distribution, May 2001, p. 31; OTTER, 2007 Investigation of Prices for Electricity Distribution Services on Mainland Tasmania, Decision and Statement of Reasons – Form of Regulation, March 2006, p. 27.

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

¹⁴⁴ Peak demand is generally referred to as the maximum load on a section of the network over a very short time period.

The AER considers that an average revenue cap may not provide sufficient incentives for a DNSP to undertake demand side management. Under the average revenue cap, there is a direct link between the DNSPs' revenue and the quantity of electricity delivered. Provided that the marginal revenue is greater than the marginal cost of providing services, it would be profitable for DNSPs to make additional sales. In this situation, DNSPs have an incentive to maximise network utilisation, expand connections to large customers in low-cost, high density areas and to reduce connections to small customers in high-cost, low density areas. The DNSPs may not be inclined to conduct demand management, if such projects would lead to a fall in demand across customer groups and result in less revenue.

Previous jurisdictional regulators have recognised this deficiency associated with the average revenue cap. In a consultation paper, the Office of the Regulator-General (ORG) discussed that an average revenue cap encourages DNSPs "to undertake network augmentation in order to sell more kWh, even when such augmentation may not be efficient".¹⁴⁵ Similarly, IPART considered that there may be a financial disincentive for the DNSPs to use appropriate demand management practices under an average revenue cap.¹⁴⁶

In its submission, to the Control mechanisms paper, ActewAGL submitted that that average revenue caps provide 'very low' incentives to undertake demand side management.¹⁴⁷ ActewAGL submitted that it has implemented various tariffs (including time-of-use tariffs) to provide customers with incentives to use energy more efficiently.¹⁴⁸ While the AER recognise the merits in ActewAGL's submission, it is cognisant that the smart meters and interval meters have not been widely deployed for the majority of residential and small business customers in the ACT. More significantly, the AER is concerned that there is an inherent conflict between the average revenue cap and the incentive for demand management.

The AER considers that a revenue cap can provide an incentive to undertake demand management, at least in the short run.¹⁴⁹ Under a revenue cap, a DNSP's revenue is fixed during the regulatory control period and it is able to maximise profits by reducing costs. As a result, DNSPs have an incentive to undertake demand side management projects or programs that reduce demand and hence 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.¹⁵⁰ The AER considers that the risk of

¹⁴⁵ ORG (1999), Consultation Paper NO. 5: Tariff Basket Form of Price Control: Detailed Proposal, December 1999, p. 22.

¹⁴⁶ IPART, *Discussion Paper - Form of Economic Regulation for NSW Electricity Network Charges*, August 2001, p. 13.

¹⁴⁷ 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.

¹⁴⁸ In addition, ActewAGL also pointed out that its maximum demand and capacity charges in several commercial tariffs have further strengthened price signals to customers and provided incentives to use the network more efficiently.

¹⁴⁹ 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.

¹⁵⁰ 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.

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.

As DNSPs' profit incentives regarding demand management are similar under both the WAPCs and the average revenue cap, the AER does not consider that WAPC provides incentives for demand management.

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.

The AER considers there are no significant differences in administration costs in relation to revenue caps, WAPCs and average revenue caps. In its submission, ActewAGL considered that the in relation to other forms of control, average revenue caps have the lowest administration costs.¹⁵¹ ActewAGL further submitted that there are higher administrative costs under the revenue cap due to the operation of the overs and unders account.¹⁵² Further, administration costs under WAPCs increases because of the need to determine reasonable estimates for new or changed tariffs.¹⁵³ The AER considers that ActewAGL has not taken into account that more resources are necessary to ensure the robustness of the sales volume forecasts under both the WAPCs and the average revenue cap.

Further, the AER considers that the administration costs under WAPCs and average revenue caps are largely comparable. Under both control mechanisms, DNSPs would need to submit historical data to demonstrate to the AER that the DNSP has complied under these control mechanisms. Further, the process of determining reasonable estimates for new or changed tariffs is broadly the same under WAPCs and average revenue caps.¹⁵⁴

ActewAGL submitted that the administration costs of changing the control mechanism are likely to be significant.¹⁵⁵ The costs submitted by ActewAGL are related:

• to the overs and unders account that operate under the revenue cap

¹⁵¹ 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.

¹⁵² 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.

¹⁵³ 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.

¹⁵⁴ AER, *Final Decision - Australian Capital Territory Distribution Determination 2009–10 to 2013–14*, 28 April 2009, p.185. The process of determining reasonable estimates for new or changed tariffs under the average revenue cap was developed through reflecting the approach applied to WAPC for the NSW DNSPs.

¹⁵⁵ 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.

- the incorporation of new tariff structures in the WAPC
- side constraint formulas.¹⁵⁶

The AER considers that regardless of the control mechanism, DNSPs are required undertake similar forecasting and pricing processed in putting together a regulatory proposal. Further, the AER considers that the administration costs associated with changing the control mechanism is expected to be largely transitional in nature. As a result, these costs are likely to reduce over time.

Consistency across jurisdictions

Currently, different control mechanisms apply to standard control services across the NEM. The ACT is the only jurisdiction where an average revenue cap is applied to standard control services, while the revenue cap and WAPC are being applied in other jurisdictions. For the purposes deciding on a control mechanism for standard control services in the current F&A process, the AER proposes to place more weight on the other relevant factors it has had regard to as outlined in section 3.3.2.

Consistency across regulatory control periods

For the ACT 2014–19 distribution determination the AER is not constrained by the transitional provisions in chapter 6 of the NER and is therefore not required to continue with the average revenue cap as applied by the ICRC. While consistency across regulatory periods may be desirable, the AER proposes to give more weight to other relevant factors outlined in section 3.3.2.

The AER seeks submissions on its preliminary position to apply a revenue cap 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 apply to alternative control services during the next regulatory control period. The AER's preliminary position is to apply a price cap to ActewAGL's alternative control services.

3.4.1 Current regulatory arrangements for ActewAGL

In the AER's 2009 determination, types 5–7 metering services were deemed to be a direct control service, and in turn an alternative control service.¹⁵⁷

Consistent with the approach applied by the ICRC, the AER's 2009–10 determination established the control mechanism to apply to ActewAGL's alternative control services to be a revenue cap based on a building block analysis, with maximum allowable revenues (MAR) to be escalated each year by CPI.

¹⁵⁶ 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.

¹⁵⁷ AER, Final Decision, ACT distribution determination 2009-10 to 2013-14, 28 April 2009, p. 8.

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:

- Three components of connection services comprising of
 - premises connection assets
 - extensions
 - incidental services
- metering services (type 5–7 metering services only)
- fee based 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 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 provides that, in deciding on the control mechanism to apply to alternative control services, the AER must have regard to the current regulatory arrangements applicable to ActewAGL.

Fee based, quoted and connection services are currently regulated under the average revenue cap as standard control services.¹⁵⁸ Given that the AER's preliminary position is to classify these as alternative control services, it has also proposed a more appropriate control mechanism to best suit each service type. In a submission to the AER, ActewAGL supported this view, noting that a light handed 'fee for service' approach would be more appropriate than the existing revenue cap.¹⁵⁹ As a consequence, the AER's preliminary position is to apply a price cap to each type of service.

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 ActewAGL's direct control services as either standard or alternative control services. The AER considered that there is little competition in the provision of all the services that the AER proposes to classify as alternative control services.

¹⁵⁸ AER, *Final decision, Australian Capital Territory distribution determination 2009-10 to 2012-13, 28 April 2009,* p. 8.

¹⁵⁹ ActewAGL, Response to the AER's consultation paper on the framework and approach for the ACT and NSW electricity distribution determinations 2014-19, February 2012, p. 12.

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 cost

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, ActewAGL and users or potential users.

The AER has proposed classifying fee based, quoted and connection services as alternative control services. As a result of this classification, the AER considers a new control mechanism for each of these service types 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 type 5–7 metering services will potentially result in some additional administrative costs to ActewAGL. 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 warrants a short term increase in administrative costs.

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 has considered the different control mechanisms applied to excluded distribution services across the NEM, most likely to be classified as alternative control services. For example, in Victoria, non-contestable excluded services are regulated through a price cap.¹⁶⁰ In NSW and Queensland, a variant of a schedule of fixed prices is applied to these services. The AER considers that while different control mechanisms are applied across the NEM, each jurisdiction has applied consistent control mechanisms to similar services within the regulatory control period.

While consistency is generally desirable, the AER considers the pursuit of consistency in control mechanisms across the NEM should not be the primary consideration in the selection of a control mechanism to apply to ActewAGL's alternative control services. This is because services provided by DNSPs are assessed on a case by case basis and as result of this assessment; the most appropriate control mechanism is applied.

Finally, under clause 6.2.5(d)(3) consideration should be given to the consistent application of a control mechanism between regulatory arrangements for similar services within the jurisdiction.

¹⁶⁰ 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

Given the above considerations, the AER considers that it is appropriate to apply price caps to fee based, connection¹⁶¹ and types 5–7 metering services.¹⁶²

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 does not consider that there are any other relevant factors in deciding on the control mechanism to apply to ActewAGL's standard metering services in the next regulatory control period.

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

Clause 6.2.6(b) of the NER sets out 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 basis for the control mechanism that does not use the building block approach.

The AER proposes to apply a price cap control mechanism to regulate all alternative control services for the next regulatory control period. The AER has not provided a preliminary position on the basis of control at this time. However, the AER expects that quoted services will have a basis of control that would constitute a formula based approach rather than fixed prices.

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

3.5 AER's preliminary position on the control mechanisms

3.5.1 Control mechanism for standard control services

The AER's preliminary position is to apply a revenue cap to the services classified in chapter 2 as standard control services in the next regulatory control period with a basis of the CPI–X form. The AER consider that there are net benefits in shifting from the existing average revenue cap to a revenue cap. The AER's preliminary position is based on the following considerations:

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 period.¹⁶³

¹⁶¹ Limited to the three components of premises connection assets, extensions and incidental services.

¹⁶² However, the AER expects that quoted services will have a basis of control that would constitute a formula based approach rather than fixed prices.

¹⁶³ NER cl. 6.2.5(b)(3).

- the AER considers that a revenue cap provides benefits in terms of recovery of efficient costs.
- the AER considers that DNSPs do not have a strong underlying incentive to set efficient prices under the revenue cap. However, there are provisions in place under clause 6.18 of the NER requires the AER to consider the efficiency of tariff structures as part of the pricing proposal process.¹⁶⁴
- the AER considers that price flexibility under the WAPC, average revenue cap, and revenue cap, are similar.
- the AER considers that while revenue caps can result in a higher level of price instability compared to average revenue caps and WAPCs within regulatory control periods it can result in less price instability between regulatory control periods.
- 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 WAPCs and an average revenue cap.

In preparing its final F&A paper, the AER will consider whether a different control mechanism(s) is more appropriate in light of submissions received from stakeholder.

3.5.2 Control mechanism for alternative control services

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

- Three components of connection services comprising of
 - premises connection assets
 - extensions
 - incidental services
- metering services (types 5–7 metering services only)
- fee based services.

The AER's preliminary position is based on the following considerations:

- 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.¹⁶⁵
- The AER considers that competition for alternative control services is currently limited. 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.

¹⁶⁴ NER, cl 6.2.5(c)(1).

¹⁶⁵ NER cl. 6.2.5(b)(2).

- The application of price caps to connection, fee based and types 5–7 metering services is consistent with regulation in other NEM jurisdictions.
- The AER considers that it is appropriate to change the control mechanism from a revenue cap to price cap for types 5–7 metering services. This is because a price cap will promote accurate price signals to the market through cost-reflective prices.
- The AER considers the above benefits outweigh the detriments caused by the likely short term increase in administration costs.

In preparing its final F&A paper, the AER will consider whether different control mechanisms are more appropriate after reviewing submissions from stakeholders.

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 ActewAGL 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 specifications of how the STPIS is to apply to ActewAGL will be included in the AER's next distribution determination for ActewAGL.¹⁶⁶

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-factor component of the STPIS, DNSPs are penalised (or rewarded) for diminished (or improved) service compared to predetermined targets.¹⁶⁷ 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 it is likely to apply to ActewAGL in the next regulatory control period.¹⁶⁸ 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 ActewAGL

In its 2009 determination, the AER considered that under clause 6.6.2(h) of the transitional chapter 6 provisions of the NER, ActewAGL would collect and monitor service performance data during the 2009–14 regulatory control period.¹⁶⁹ However, the scheme did 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 ActewAGL for the regulatory control period commencing on 1 July 2014. The AER considered

¹⁶⁶ NER, cll. 6.3.2(a)(3) and 6.12.1(9).

¹⁶⁷ 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 or below targeted performance.

¹⁶⁸ NER, cl. 6.6.2(a); AER, *STPIS*, November 2009.

¹⁶⁹ AER, Final decision, ACT distribution determination 2009–10 to 2013–14, April 2009, p. 112.

that the application of the national STPIS for the next regulatory control period would be the subject of consultation under the F&A process.¹⁷⁰

Penalties and rewards were not included in the current regulatory control period because the AER considered ActewAGL did not have relevant data on which to set targets.¹⁷¹ However, the AER required ActewAGL 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.¹⁷²

The AER has since modified the reporting requirements and decided that the collection of momentary average interruption frequency index (MAIFI) data is not required.¹⁷³ The AER considered that before it could require ActewAGL to collect MAIFI data, it would need to conduct further analysis. The AER would have to analyse the costs of requiring ActewAGL to implement systems to collect MAIFI 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.¹⁷⁴ The AER developed the national STPIS according to this requirement.¹⁷⁵

4.3.1 Structure of the national STPIS

The national STPIS has four components:

- reliability of supply
- quality of supply
- customer service
- GSL¹⁷⁶

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.¹⁷⁷

¹⁷⁰ AER, *Final decision: ACT distribution determination 2009–10 to 2013–14*, April 2009, p. 112.

AER, Final decision: ACT distribution determination 2009–10 to 2013–14, April 2009, p. 112.

AER, Final decision: ACT distribution determination 2009–10 to 2013–14, April 2009, p. 112.

¹⁷³ AER, *Final decision: ACT distribution determination 2009–10 to 2013–14*, April 2009, p. 112; MAIFI refers to the total number of customer interruptions of one minute or less, divided by the total number of distribution customers.

¹⁷⁴ NER, cl. 6.6.2(a).

¹⁷⁵ AER, STPIS, November 2009.

¹⁷⁶ AER, *STPIS*, November 2009, cl. 2.3(a).

¹⁷⁷ 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.¹⁷⁸

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.¹⁷⁹

Performance targets for these parameters are usually based on a DNSP's average historical performance over the previous five years.¹⁸⁰ 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.¹⁸¹

Customer service component

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

- telephone answering
- streetlight repair
- new connections

¹⁷⁸ 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 clause 1.5 of the national STPIS. The AER applied this discretion when it applied a ±7 per cent cap on revenue at risk to SP AusNet.

¹⁷⁹ 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.

¹⁸⁰ This data is adjusted where necessary to take into account improvements in reliability which have been included in the DNSP's expenditure program, and adjusted for any other material factors expected to affect network reliability performance.

¹⁸¹ AER, *STPIS*, November 2009, cl. 3.2.2(a).

response to written enquiries.¹⁸²

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.¹⁸³ The maximum revenue at risk for any individual parameter is ± 0.5 per cent of revenue for each year of the regulatory control period.¹⁸⁴

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.¹⁸⁵ 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.¹⁸⁶ 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.¹⁸⁷

Reporting requirements

The 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.¹⁸⁸

4.4 AER approach

Clause 6.8.1(b)(2) of the NER sets out 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

¹⁸² AER, *STPIS*, November 2009, cl. 5.1(a).

¹⁸³ AER, *STPIS*, November 2009, cl. 5.2(a).

¹⁸⁴ AER, *STPIS*, November 2009, cl. 5.2(b).

¹⁸⁵ AER, *STPIS*, November 2009, cl. 5.3.2(a)(1).

¹⁸⁶ AER, *STPIS*, November 2009, cl. 6.1(a).

¹⁸⁷ AER, *STPIS*, November 2009, cl. 6.1(b).

¹⁸⁸ AER, *STPIS*, November 2009, cl. 7.1.

determination to the application of a STPIS to ActewAGL. 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 ActewAGL is subject
- the past performance of the distribution network
- any other incentives available to ActewAGL 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.¹⁸⁹

The AER must also:

- consult with the authorities responsible for the administration of relevant jurisdictional electricity legislation¹⁹⁰
- 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.¹⁹¹

Addressing the NER requirements

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

¹⁸⁹ NER, cl. 6.6.2(b)(3).

¹⁹⁰ NER, cl. 6.6.2(b)(1). ¹⁹¹ 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	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
The AER must take into account the need to ensure that the incentives are sufficient to offset any financial	or decreased as appropriate. The incentive rates will be considered as part of the distribution determination.
incentives the service provider may have to reduce costs at the expense of service levels.	A \pm 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. ¹⁹² The amendments made to the s-factor formula improve the balance between the financial incentives under a capped scheme ¹⁹³ .

¹⁹² AER, Final decision, *Electricity distribution network service providers: service target performance incentive scheme*, June 2008, pp. 15–17.

 ¹⁹³ 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. ¹⁹⁴
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. ¹⁹⁵
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, *Final decision, Electricity distribution network service providers: service target performance incentive scheme*, June 2008; 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 ActewAGL in the next regulatory control period.¹⁹⁶

¹⁹⁴ AER, Final decision: Electricity distribution network service providers: service target performance incentive scheme, May 2009, pp. 14–15.

¹⁹⁵ AER, *Final decision: Electricity distribution network service providers: service target performance incentive scheme*, November 2009, ch. 5, appendix A.

¹⁹⁶ 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.¹⁹⁷ Therefore, ActewAGL 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.¹⁹⁸ 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 ActewAGL'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 customer's 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 that:

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.¹⁹⁹

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 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 from 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.

¹⁹⁷ AER, *STPIS*, November 2009, cl. 2.4.

¹⁹⁸ 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 clause 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.

¹⁹⁹ 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 ActewAGL.

The STPIS provides that the DNSP's 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
- Iong rural.²⁰⁰

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.²⁰¹

The AER's preliminary position requires ActewAGL's networks to be segmented according to the AER's interpretation of the SCONRRR feeder categories; CBD, urban, short rural and long rural. Although ActewAGL already collects reliability data in this form, the AER considers that ActewAGL does not currently employ the CBD or rural long feeder categories.

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 impact network reliability performance.²⁰² Any proposal by a DNSP to modify the performance targets must be accompanied by appropriate justification.²⁰³ 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.

ActewAGL has been reporting reliability data to the AER during the 2009–14 regulatory control period.²⁰⁴ The AER acknowledges that ActewAGL will be unable to provide five years of data on which to set performance targets. ActewAGL 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 is sufficient for it to set

²⁰⁰ AER, *STPIS*, November 2009, appendix A.

²⁰¹ AER, *STPIS*, November 2009, cl. 3.1(d).

²⁰² AER, *STPIS*, November 2009, cl. 3.2.1 (a)(1) and (2).

²⁰³ AER, *STPIS*, November 2009, cl. 3.2.1(b).

AER, Final decision: ACT distribution determination 2009–10 to 2013–14, April 2009, p. 112.

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.²⁰⁵

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 ActewAGL's 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.

ActewAGL 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 ActewAGL propose an alternative VCR, it must provide the AER with the methodology used to calculate the value and research supporting its regulatory proposal.

Incentive rates will be calculated and set in the AER's 2014–19 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 ActewAGL:

- 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
- Ioad interruptions caused by failure of the shared transmission network
- Ioad 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
- Ioad interruptions caused by the exercise of any obligation, right or discretion imposed on or provided for under jurisdictional electricity legislation applying to a DNSP.²⁰⁶

²⁰⁵ AER, *STPIS*, November 2009, cl. 1.5.

²⁰⁶ 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 ActewAGL 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. ActewAGL may propose the application of other customer service parameters under the national STPIS.²⁰⁷

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.²⁰⁸ The maximum revenue at risk for any individual parameter is ± 0.5 per cent of revenue for each year of the regulatory control period.²⁰⁹ 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.²¹⁰

ActewAGL 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 ActewAGL 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 ActewAGL 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 0.040.²¹¹ For other customer service parameters proposed by ActewAGL, the appropriate incentive rates should be based on the value that customers attribute to the level of service proposed.

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.

²⁰⁷ AER, *STPIS*, November 2009, cl. 5.4(b).

²⁰⁸ AER, *STPIS*, November 2009, cl. 5.2(a).

²⁰⁹ AER, *STPIS*, November 2009, cl. 5.2(b).

²¹⁰ AER, *STPIS*, November 2009, cl. 5.3.1(a).

²¹¹ AER, *Electricity distribution network service providers: Service Target Performance Incentive Scheme*, November 2009, cl. 5.3.2(a).

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 ActewAGL propose other customer service parameters in its regulatory proposal, it may also propose appropriate exclusions for these parameters.

4.5.2 GSL payments

In the ACT, the Consumer Protection Code applies to all utilities under Part 4 of the *Utilities Act 2000* (ACT).²¹² Schedule 1 of the Consumer Protection Code specifies various minimum service standards. Underperformance compared to these standards requires the payment of rebates to customers by ActewAGL.²¹³ Given the presence of this jurisdictional scheme, the AER considers that it is not necessary to apply a GSL scheme to ActewAGL

4.5.3 Conclusion

The AER's preliminary position is to apply the AER's national STPIS, subject to the exceptions discussed above, to ActewAGL for the next regulatory control period.

The AER seeks submissions on its preliminary position to apply the national STPIS to ActewAGL.

²¹² Utilities (consumer protection code) determination 2010 (No 2), July 2010.

²¹³ Utilities (consumer protection code) determination 2010 (No 2), July 2010, cl. 11.

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 ActewAGL 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 ActewAGL must be published before 30 November 2012. The AER's next distribution determination for ActewAGL will include detailed specification of how any applicable EBSS will apply in the next regulatory control period.²¹⁴

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.²¹⁵ 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 according to the requirements of the NER, which it is likely to apply to ActewAGL in the next regulatory control period.²¹⁶ 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 ActewAGL

In its 2009 determination, the AER considered that the EBSS would apply to ActewAGL from 1 July 2009.²¹⁷ The EBSS will not have a direct financial impact on ActewAGL until the 2014–19 regulatory control period, when it will receive carryover benefits or penalties for efficiency gains or losses made during 2009–14.²¹⁸

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.

²¹⁴ NER, cll. 6.3.2(a)(3) and 6.12.1(9).

²¹⁵ AER, Final decision: Electricity distribution network service providers' efficiency benefit sharing scheme– appendix E, June 2008, p. 7.

²¹⁶ AER, *Final decision: Electricity distribution network service providers' efficiency benefit sharing scheme*, June 2008.

²¹⁷ AER, Final decision: Efficiency benefit sharing scheme for the ACT and NSW 2009 distribution determinations, February 2008.

AER, Final decision, Australian Capital Territory distribution determination 2009–10 to 2013–14, 28 April 2009, p. 113.

The efficiency gains (or losses) derived from the opex of DNSPs for a regulatory control period are measured against the forecast benchmark opex accepted or substituted by the AER for that regulatory control period.²¹⁹

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 (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 30:70.²²⁰

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 retail 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 ActewAGL in the next distribution determination. In forming its preliminary position on how the EBSS will apply to ActewAGL, 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.²²¹

²¹⁹ NER, cl. 6.5.8(a).

AER, Final decision, Electricity distribution network service providers' efficiency benefit sharing scheme, June 2008, pp. 17–18.

²²¹ 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 EBSS

Rule requirement	AER response
Clause 6.5.8(c)(1) of the NER	The AER considers that the EBSS will provide greater certainty to ActewAGL 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 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.	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. ²²² 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. ²²³ 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. ²²⁴ 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 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

²²² AER, *Explanatory statement: Proposed electricity distribution network service providers efficiency benefit sharing scheme - appendix C, April 2008, pp. 37–44.*

 ²²³ AER, *Final decision, Electricity distribution network service providers' efficiency benefit sharing scheme–appendix B,* June 2008, pp. 23–35.

 ²²⁴ 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.
	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. ²²⁵
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.	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 desirable 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	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.
In developing and implementing an EBSS the AER must have regard to any incentives that DNSPs may have to capitalise expenditure.	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.
	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.
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.	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

²²⁵ 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.²²⁶

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 ActewAGL's users derived from the EBSS are sufficient to warrant the financial reward or penalty that ActewAGL may incur. This is because ActewAGL's customers would receive 70 per cent of the efficiency gains realised by ActewAGL under the EBSS.²²⁷ As the EBSS is symmetrical any efficiency losses would also be shared between customers and ActewAGL, so that the potential for financial penalty is balanced.²²⁸ 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 ActewAGL 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 realised²²⁹
- the EBSS will counter any artificial incentive to capitalise expenditure, by requiring ActewAGL 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 policy²³⁰
- 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.²³¹

The EBSS allows ActewAGL to propose 'uncontrollable' cost categories for exclusion from the scheme.²³² These categories must be proposed by ActewAGL in its regulatory proposal for

²²⁶ AER, *Final decision: Electricity distribution network service providers' efficiency benefit sharing scheme*, June 2008.

²²⁷ NER, cl. 6.5.8(c)(1).

²²⁸ NER, cl. 6.5.8(c)(3).

²²⁹ NER, cl. 6.5.8(c)(2).

²³⁰ NER, cl. 6.5.8(c)(4).

²³¹ NER, cl. 6.5.8(c)(5).

AER, Final decision, Electricity distribution network service providers' efficiency benefit sharing scheme, June 2008, p. 6.

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 ActewAGL. In proposing uncontrollable opex categories, ActewAGL 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 ActewAGL's regulatory proposal.

5.5.1 Conclusion

The AER's preliminary position is to apply the AER's national EBSS to ActewAGL for the next regulatory control period.

The AER seeks submissions on its preliminary position to apply the national EBSS to ActewAGL.

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 ActewAGL 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 ActewAGL for the next regulatory control period.²³³

The NER requirements regarding the application of DMEGCIS have been the subject of a recent rule change by the AEMC.²³⁴ To address this rule change, the AER has proposed amendments to the scheme, which applies to ActewAGL in the current regulatory control period.²³⁵ 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 nonnetwork alternatives, or to manage the expected demand for standard control services in

²³³ NER, cll. 6.3.2(a)(3) and 6.12.1(9).

²³⁴ AEMC, Rule Determination: National Electricity Amendment (Inclusion of embedded generation research into Demand Management Incentive Scheme) Rule 2011, December 2011.

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.²³⁶ 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 ActewAGL 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.

6.2.1 Current arrangements for ActewAGL

In its 2009 determination, the AER considered that its DMIS would apply to ActewAGL for the 2009–14 regulatory control period, as required under clause 6.12.1(9) of the transitional chapter 6 provisions of the NER.²³⁷ This scheme consists of two components. The first component is an ex-ante allowance known as DMIA. The second component allows a DNSP to recover forgone revenue which is directly attributable to a non-tariff demand management program approved under DMIA.

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 nonnetwork alternatives, or to manage the expected demand for standard control services in some other way, or to efficiently connect embedded generators.²³⁸ Although the AER does not have a DMEGCIS national scheme, it has applied consistent demand management incentive schemes in each jurisdiction.²³⁹

²³⁶ NER, cl. 6.6.3(a).

 ²³⁷ AER, Final decision: Australian Capital Territory distribution determination 2009–10 to 2013–14, April 2009, p.
 122; AER, Demand management incentive scheme for the ACT and NSW 2009 distribution determinations– Demand Management Innovation Allowance Scheme, November 2008.

²³⁸ NER, cl. 6.6.3 (a).

²³⁹ AER, Final decision: New South Wales 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 2011–15, October 2010; AER, Final decision– Demand management incentive scheme–Jemena, CitiPower, Powercor, SP Ausnet and United Energy–2011–

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 are located close to the electrical loads it supplies. The AER considers that embedded generation offers distribution network users an alternative to consumption 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 control mechanism affects that DNSP's incentives or disincentives to undertake demand management. The AER

^{2015,} April 2009; AER, Demand Management Incentive Scheme–Jemena, CitiPower, Powercor, SP Ausnet and United Energy 2011–15, April 2009.

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 ActewAGL. 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 sets out how the AER had regard to the factors in clause 6.6.3(b) of the NER in developing the DMEGCIS, and also in proposing amendments to that scheme (which are still

being considered in accordance with the distribution consultation procedures).²⁴⁰ The AER intends to apply the DMEGCIS to ActewAGL 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 below will also be relevant to applying the DMEGCIS to ActewAGL in the next regulatory control period.

²⁴⁰ 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–ActewAGL, May 2012.

Table 6.1: AER response to NER requirements in developing DMEGCIS

Rule requirement	The AER's consideration
	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:
Clause 6.6.3(b)(1) of the NER The need to ensure that benefits	 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
to consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for DNSPs.	 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.
	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.
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.	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 ActewAGL to implement 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

The AER's consideration

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.

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

STPIS

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.

Clause 6.6.3(b)(4) of the NER

The possible interaction between a DMEGCIS and other incentive schemes.

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.

Clause 6.6.3(b)(6) of the NER

The effect of classification of distribution services, as determined in accordance with clause 6.2.1, on a DNSP's incentive to adopt or implement efficient Embedded Generator Connections. 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 in developing the DMEGCIS. 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 impacts 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 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 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.²⁴¹ More generally, it is associated with generators located with or near the electrical loads supplied by the system, such

²⁴¹ NER, ch.10.

Rule requirement	The AER's consideration	
	as those operated by customers as an alternative to consumption from the DNSP's network. ²⁴² 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 costs²⁴³ 	
	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.²⁴⁴ 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.²⁴⁵
- the DMIA encourages the development of demand management capability and capacity of DNSPs, which is likely to provide greater efficiency in the NEM. The long term aim of the DMEGCIS is for DNSPs to proactively identify possible roles for demand

²⁴² AEMC, Rule Determination, National Electricity Amendment (Inclusion of embedded generation research into Demand Management Incentive Scheme) Rule 2011 No.11, December 2011, p. 19.

²⁴³ 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.

AEMC, Directions paper: power of choice- giving consumer's options in the way they use electricity, March 2012, p. 8.

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 consumption by 5 per cent. AEMO attributed this decline to energy efficiency programs and rooftop solar photovoltaic systems.

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 ActewAGL to seek out and undertake demand management as an alternative to traditional network augmentation in accordance with the national electricity objective.²⁴⁶

6.5.1 Conclusion

The AER's preliminary position is to apply the AER's proposed DMEGCIS to ActewAGL for the next regulatory control period.

The AER seeks submissions on its preliminary position to apply the DMEGCIS to ActewAGL.

²⁴⁶ NEL, s. 7.

7. Dual function assets

7.1 Introduction

This chapter set outs the AER's preliminary position as to whether or not Part J of Chapter 6A of the NER is to be applied to determine the pricing of transmission standard control services provided by dual function assets. It also sets out the reasons for that 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).²⁴⁷

In its 2009 distribution determination, the AER was required to conform to the transitional provisions set out in the NER for ActewAGL.²⁴⁸ Previously, the NER was silent on how to approach distribution assets—if any—owned and operated by ActewAGL, which in fact provided transmission services (dual function assets). In 2008, the AEMC amended the NER in relation to transmission standard control services provided *by* dual function assets.²⁴⁹ The AEMC provided the AER an opportunity to make the decision on the appropriate pricing rules that should apply to transmission standard control services. This opportunity is provided at the F&A stage of the regulatory determination process.

7.2 Requirements of the NER

The NER 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 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 a DNSP.²⁵⁰

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.²⁵¹ 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.

²⁴⁷ NER, Glossary.

²⁴⁸ NER, Appendix 1.

AEMC, Rule Determination, Economic Regulation of Transmission Services Undertaken by Distributors, Rule 2008, 26 June 2008

²⁵⁰ NER, cl. 6.8.1(ca).

²⁵¹ NER, cl. 6.24.2

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.²⁵²

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, would:²⁵³

- 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
- any other matter the AER considers relevant.²⁵⁴

The AER must also consult with the DNSPs and interested parties in relation to these matters. $^{\rm 255}$

7.3 Issues and AER's considerations

Under clause 6.25(a) of the NER, if ActewAGL owns, operates or controls dual function assets it must inform the AER by 30 June 2012. After reviewing the information provided, the AER must make a determination as to whether Part J of chapter 6A of the NER should apply to transmission standard control services provided by these dual function assets.

ActewAGL has not informed the AER whether it owns, operates or controls any dual function assets. ActewAGL has until 30 June 2012 to inform the AER of the value of any of its dual function assets. However, the receipt of this information close to or on 30 June 2012 does not allow the AER to put forward a determination in the preliminary F&A paper.²⁵⁶

In these circumstances the AER will not include a determination as to whether or not Part J of chapter 6A of the NER will apply to pricing of transmission standard control services provided by any dual function assets owned, controlled or operated by ActewAGL.²⁵⁷ If ActewAGL provides the AER an asset value for any dual function assets, the AER will publish this information and seek submissions from interested parties before publishing its final F&A paper.

²⁵² NER, cl. 6.25(a).

²⁵³ NER, cl. 6.25(b).

²⁵⁴ NER, cl. 6.25(c)(3).

²⁵⁵ NER, cl. 6.25(b).

²⁵⁶ The AER requested the dual function assets information from ActewAGL on 30 March 2012.

²⁵⁷ Under NER, cl. 6.8.1(ca).

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 ActewAGL. It also sets out the reasons for the AER's approach.

The cost allocation guidelines (guidelines) set out arrangements to manage the attribution of direct costs and the allocation of shared costs by ActewAGL between different categories of distribution services. A CAM will set out these costs allocations.

8.1.2 Recommendation

The AER will request ActewAGL to submit a proposed CAM to commence from 1 July 2014 that complies 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 ActewAGL's existing CAM on 31 March 2008.²⁵⁸ This CAM was approved under the transitional chapter 6 provisions of the NER.²⁵⁹ Clause 6.15.8(b) of the NER states:²⁶⁰

The Cost Allocation Method proposed by the ACT Distribution Network Service Provider must:

(1) be prepared using, as far as practicable, the same cost allocation method as it last used when preparing its regulatory accounts for submission to the ICRC; and

(2) subject to subparagraph (1), be consistent with the Cost Allocation Principles.

The transitional rules only apply to ActewAGL for the 2009–14 regulatory control period.²⁶¹ The requirement in clause 6.15.8(b) of the transitional provisions is an additional requirement to the NER. ActewAGL's CAM will give effect to, and be consistent with, the guidelines.²⁶² Clause 6.15.3(b)(1) of the NER sets out that the guidelines 'must give effect to and be consistent with the Cost Allocation Principles'.

ActewAGL's existing CAM is inconsistent with the AER guidelines. Amongst other matters, the existing CAM does not comply with clause 3.2(a)(3)A or clause 3.2(a)(7) of the AER

²⁵⁸ AER, Final decision ActewAGL cost allocation method, March 2008.

²⁵⁹ Set out in appendix 1 to Chapter 11 of the NER.

²⁶⁰ NER (transitional Chapter 6 rules), cl. 6.15.8(b).

²⁶¹ NER, cl. 11.15.2(a) and (b).

²⁶² NER, cl. 6.15.4(b).

guidelines. Therefore, the AER considers that ActewAGL's existing CAM will require revision for the next regulatory control period.

ActewAGL's CAM will have a significant impact on its regulatory proposal for the 2014–19 regulatory control period. ActewAGL's CAM, will ideally be determined in advance of the date that ActewAGL is required to lodge its regulatory proposal for the 2014–19 regulatory control period.

8.1.4 Conclusion

The AER proposes to request ActewAGL to submit a proposed CAM to commence from 1 July 2014 that complies with the requirements of the NER. The AER has considered the timeframes set out under clause 6.15.4(d) of the NER.

8.2 AER assessment tools

The AER has identified a suite of tools that will assist in its review of ActewAGL's regulatory proposal. The assessment tools the AER proposes to utilise include the repex 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 ActewAGL's 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 has utilised the repex tool in the 2010 Victorian determination, and the 2012 Aurora determination.²⁶³

The repex tool enables the AER to use data provided by ActewAGL 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 ActewAGL to achieve the capex objectives.²⁶⁴

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.

²⁶⁴ NER cll. 6.5.7(a)(3) and 6.5.7(a)(4). This combination of analysis tools provides the AER with an indication of the level of replacement capex required by ActewAGL to maintain the quality, reliability and security of supply of standard control services, and maintain the reliability, safety and security of the distribution system.

It follows that the AER can then determine whether the replacement expenditure proposed by ActewAGL forms part of a total forecast capex that reasonably reflects the capex criteria.²⁶⁵

8.2.2 Augmentation capital expenditure tool

The AER will use the augmentation tool to assist in its assessment of ActewAGL's 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 ActewAGL to determine intra and intercompany benchmarks from actual historical augmentation levels. These in turn can be used to identify elements of ActewAGL'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 ActewAGL to achieve the capex objectives.²⁶⁶ It follows that the AER can then determine whether the augmentation capex proposed by ActewAGL forms part of a total forecast capex that reasonably reflects the capex criteria.²⁶⁷

8.2.3 Information requirements

The assessment tools will allow the AER to compare costs proposed by ActewAGL with ActewAGL's 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 tools. The AER will issue regulatory proposal RINs on ActewAGL prior to the receipt of its regulatory proposal.²⁶⁸

Information requirements have changed significantly since the 2009–14 regulatory proposal RIN was served on ActewAGL. For the next regulatory control period, the ActewAGL regulatory proposal RIN will contain data requirements for application of the AER's assessment tools including the repex tool, augmentation tool, and benchmarking.

²⁶⁵ NER, cl. 6.5.7(c).

NER, cll. 6.5.7(a)(3) and 6.5.7(a)(4). This combination of analysis tools provides the AER with an indication of the level of replacement capex required by ActewAGL to maintain the quality, reliability and security of supply of standard control services, and maintain the reliability, safety and security of the distribution system.
 NER, cll. 6.5.7(a)(3) and 6.5.7(a)(4). This combination of analysis tools provides the AER with an indication of the level of replacement capex required by ActewAGL to maintain the quality, reliability and security of supply of standard control services, and maintain the reliability, safety and security of the distribution system.

²⁶⁷ NER, cl. 6.5.7(c).

²⁶⁸ NEL, s. 28.

Appendix A—ActewAGL proposed distribution service classifications

AER service group	Activities included in services group	ActewAGL services	AER proposed classification	Current classification
Network services	Constructing the network Maintaining the network Operating the network for DNSP purposes Planning the network Designing the network Emergency response Administrative support	Constructing the network Maintaining the network Operating the network for DNSP purposes Planning the network Designing the network Emergency response Administrative support	Standard control	Standard control
Metering services (types 5 – 7)	Commissioning of metering and load control equipment Provision of types 5–7 meters Provision of minimum requirement historical types 5–7 metering data Scheduled meter read Unscheduled meter reading—non- chargeable Metering investigation Maintaining and repairing meters and load control equipment	Commissioning of metering and load control equipment Provision of types 5–7 meter Provision of minimum requirement historical type 5–7 metering data Scheduled meter read Unscheduled meter reading—non- chargeable Metering investigation Maintaining and repairing meters and load control equipment	Alternative control	Alternative control
Connection services				Standard control
Premises connection assets	Includes any connection assets located on the retail customer's premises.	Includes any connection assets located on the retail customer's premises.	Alternative control	-
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	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	Alternative control	
Augmentations	Augmentations (insofar as it involves more than an extension)—any augmentation or	Augmentations (insofar as it involves more than an extension)—any augmentation or	Standard control	

AER service group	Activities included in services group	ActewAGL services	AER proposed classification	Current classification
	network augmentation dedicated to a customer which is not an extension undertaken by a DNSP	network augmentation dedicated to a customer which is not an extension undertaken by a DNSP		
Incidental services	Includes the provision of administration, design, certification and inspection services.	Includes the provision of administration, design, certification and inspection services.	Alternative control	
Fee based services	Specification and design entry fees De-energisation and re-energisation Re-test Supply abolishment Temporary supply service Fault response – not DNSP fault Wasted attendance	Specification and design enquiry 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 assetsCovering low voltage mainsNon-standard data services (types 5–7metering)Ancillary metering services (types 5–7metering)Supply enhancementMetering enhancementAfter hour provision of any serviceLarge customer connectionsAuditing of design and constructionMiscellaneous (including high load escorts,rectification of illegal connections,conversion to aerial bundled cables,provision of service crew/additional crew)	Rearrangement of networks Covering low voltage mains Non-standard data services (types 5–7 metering) Ancillary metering services (types 5–7 metering) Supply enhancement Metering enhancement After hour 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	Standard control

Appendix B—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. ²⁶⁹ Opex benchmarking Opex benchmarking utilised ratio and trend analysis and multiple regression analysis.	 Non-system capex/customer Non-system capex/size IT capex/customer IT capex/size 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. Opex benchmarking The AER also utilised ratio and trend analysis for opex benchmarking.	 Capex/RAB Non-system capex/customers Non-system capex/line length Non-system capex/maximum demand Non-system capex/energy consumption Opex / line length Opex/ customers

²⁶⁹ Wilson Cook, *Main Report*, October 2008, p. v.

Determination	Technique	Ratio
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 NEM. The analysis considered three states with customer numbers greater than one million (Victoria, NSW and Queensland). ²⁷⁰ The AER then undertook a two stage process to derive results: ²⁷¹	 Natio 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 Opex per kilometre/maximum demand per kilometre Capex/RAB Capex/Line length Capex/Energy distributed Capex/Peak demand
	 comparisons of capex ratios for Victoria against NSW and Queensland regression analysis including all NEM DNSPs 	 Customers/Line length (km) Load profile (MW/GWh)²⁷²
	 each ratio was compared across Victoria, NSW and Queensland. <u>Opex benchmarking</u> 	Opex/RAB

AER, *Final decision, Victorian distribution determinations 2011–2015,* October 2010, p. 100, attachment H.

AER, Final decision, Victorian distribution determinations 2011–2015, October 2010, p. 100–104, attachment H.

AER, Final decision, Victorian distribution determinations 2011–2015, October 2010, p. 100–104, attachment H.

Determination	Technique	Ratio	
	The AER compared historical opex levels across three states (Victoria, NSW and Queensland) and individual DNSPs.	 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)²⁷³ 	
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. ²⁷⁴ 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	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). ²⁷⁵ • Reinforcement capex (\$ million)/MW growth • Customers/line length (km)	
	other DNSPs based on customer density, load density, peak demand and	 MW/km Opex (\$)/line length (km)Opex/customer 	

²⁷³ 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).

AER, Aurora 2012–17 draft distribution determination, p. 127–8, attachment 5.

²⁷⁵ AER, Aurora 2012–17 draft distribution determination, p. 127–8, attachment 5.

Determination	Technique	Ratio
	The AER chose to use customer density, as load density would not have altered the outcome. ²⁷⁶	 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, November 2009; 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, Victorian distribution determinations 2011–2015, October 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.

²⁷⁶ 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.