



Final framework and approach

**SA Power Networks
Regulatory control period
commencing 1 July 2020**

July 2018

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Shortened forms

Shortened Form	Extended Form
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
Allowance Mechanism	demand management innovation allowance mechanism
capex	capital expenditure
CESS	capital expenditure sharing scheme
COAG	Council of Australian Governments
CPI	consumer price index
DMIS	demand management incentive scheme
distributor, DNSP	distribution network service provider
DUoS	distribution use of system
EBSS	efficiency benefit sharing scheme
expenditure assessment guideline	expenditure forecast assessment guideline for electricity distribution
GSL	guaranteed service level
F&A	Framework and approach
kWh	kilowatt hours
NEM	National Electricity Market
NEO	National Electricity Objective
NER or the rules	National Electricity Rules
next regulatory control period	1 July 2020 to 30 June 2025
opex	operating expenditure
RAB	regulatory asset base
STPIS	service target performance incentive scheme

Overview

The Framework and Approach (F&A) is the first step in a two-year process to determine efficient prices for electricity distribution services in South Australia (SA). The F&A determines, amongst other things, which services we will regulate and the broad nature of the regulatory arrangements. This includes an assessment of services (service classification) and whether we need to directly control the prices and/or revenues set for those services. The F&A also facilitates early consultation with consumers and other stakeholders and assists electricity distribution businesses to prepare regulatory proposals.

In preparing this final F&A, we published a preliminary F&A for SA Power Networks on 22 March 2018, seeking submissions from interested parties. Submissions closed on 27 April 2018, with 9 responses received, including a submission from our Consumer Challenge Panel. Appendix A lists the stakeholders who made submissions to this process.¹ We also held a meeting with interested stakeholders on 17 April 2018 to discuss our preliminary F&A.

This F&A has been prepared during the consultation period for our forthcoming Service Classification Guideline. We published a draft Guideline in June 2018 and have incorporated aspects of the draft Guideline into this F&A. When the final Guideline is published in September 2018, consequential changes to the classification of services may be required when SA Power Networks submits its regulatory proposal. The rules permit such adjustments in certain circumstances.²

Table 1 summarises our SA distribution determination process.

Table 1 South Australia distribution determination process

Step	Date
AER published preliminary F&A for SA Power Networks	March 2018
Stakeholder forum	17 April 2018
Submissions on the preliminary F&A for SA Power Networks closed	27 April 2018
AER to publish final F&A for SA Power Networks	July 2018
SA Power Networks submits its regulatory proposal to AER	January 2019
AER publishes issues paper and holds public forum	March/April 2019*
Submissions on regulatory proposal close	May 2019
AER to publish draft decision	September 2019

¹ All submissions are available on the AER's website at <https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/sa-power-networks-determination-2020-25/aer-position>.

² NER, cl. 6.12.3(b).

Step	Date
AER to hold a predetermination conference	October 2019
SA Power Networks to submit revised regulatory proposal to AER	December 2019
Submissions on revised regulatory proposal and draft decision close	January 2020*
AER to publish distribution determination for regulatory control period	April 2020

* The date provided is based on the AER receiving compliant proposals. The date may be altered if we receive non-compliant proposals.

Source: NER, chapter 6.

Background

The Australian Energy Regulator (AER) is the economic regulator for transmission and distribution electricity and gas network businesses across Australia (excluding Western Australia). Our powers and functions for the electricity sector are set out in the National Electricity Law (NEL) and National Electricity Rules (NER).

SA Power Networks is the licensed, regulated operator of South Australia's monopoly electricity distribution network. The network comprises the poles, wires and transformers used for transporting electricity across urban and rural population centres to homes and businesses. SA Power Networks designs, constructs, operates, and maintains its distribution network for SA electricity consumers.

We make regulatory decisions on the revenues SA Power Networks can recover from its customers. We determine SA Power Networks' revenue by an assessment of its efficient costs and forecasts. Our assessment is based on a regulatory proposal submitted by SA Power Networks in advance of a regulatory control period, in this case beginning 1 July 2020. Regulatory proposals set out the network businesses' views on their expected costs, services, incentive schemes, and required revenues. Our regulatory determinations set out our decisions on these issues.

The regulatory framework we administer is based on an incentive regime. We set a network business's allowed revenue for a period (typically five years) based on the best available information, rigorous assessment and consideration of consumers' views. Network businesses are then provided with incentives to outperform the revenue we determine. A network business retains any savings for a period of time before those savings are passed to customers through lower network bills.

This overview provides a summary of our proposed approach on:

- classification of distribution services (which services we will regulate)
- control mechanisms (how we will determine prices for regulated services)

- incentive schemes for service quality, capital expenditure, operating expenditure and demand management
- expenditure forecasting tools to test SA Power Networks' regulatory proposal
- how we will calculate depreciation of SA Power Networks' regulatory asset base
- how we will price transmission assets (dual function assets).

We summarise below our approach to each of the above matters. More detailed discussion of each matter is set out in the following chapters.

Classification of distribution services

We regulate most distribution services provided by SA Power Networks. Service classification determines which services will be regulated and how. We will regulate services that are provided on a monopoly basis under a price or revenue cap, directly controlling the charges that a distributor can levy customers. Less prescriptive regulation is required where the prospect of competition exists. In some situations we may remove regulation altogether—unregulated distribution services must be provided through either a separate affiliate to the distributor or the distributor must demonstrate functional separation,³ following the introduction of our Ring-fencing Guideline.⁴

In broad terms, this means that while existing regulated distribution services will continue to be provided by the distributor, all unregulated distribution services or new distribution services that come into existence within a regulatory control period must be kept separate from direct control services, unless the distributor applies for, and receives, a waiver under the Ring-fencing Guideline.

Further, the Australian Energy Market Commission (AEMC) made a rule change to the NER in December 2017 which applies to the regulatory process for SA Power Networks for 2020–25.⁵ In short, the rule change made it easier for the AER to change the classification of services regardless of how services have been historically classified. More specifically, the rule change removed the requirement for the AER to not alter service classification unless another classification is clearly more appropriate.⁶ This mandatory requirement had previously constrained our ability to move away from the status quo when considering service classification.⁷ As part of the rule change, we are required to develop and publish a

³ Functional separation may include physical separation of offices, staff separation, accounting separation and separate branding/avoiding cross-promotion. See AER, *Ring-fencing guideline electricity distribution*, October 2017; AER, *Electricity distribution ring-fencing guideline explanatory statement*, Version 2 October 2017, available at <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/electricity-ring-fencing-guideline-october-2017> and <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/ring-fencing-guideline-electricity-distribution-december-2016>.

⁴ AER, *Ring-fencing guideline electricity distribution*, October 2017; AER, *Electricity distribution ring-fencing guideline explanatory statement*, October 2017.

⁵ AEMC, final rule determination - National Electricity Amendment (Contestability of Energy Services) 2017

⁶ Formerly clause 6.2.1(d), now deleted.

⁷ The rule change also requires us to develop and publish service classification guidelines by September 2018, which will

service classification guideline in September 2018, which will provide clarity and transparency around how we classify services.⁸

Table 2 provides an overview of the service classifications available to us for the purposes of economic regulation under the NER.

Table 2 Classifications of distribution services

Classification		Description	Regulatory treatment
Direct control service	Standard control service	Services that are central to electricity supply and therefore relied on by most (if not all) customers such as building and maintaining the shared distribution network. Most distribution services are classified as standard control.	We regulate these services by determining prices or an overall cap on the amount of revenue that a DNSP may earn for all standard control services. The costs associated with these services are shared by all customers via their regular electricity bill.
	Alternative control service	Customer specific or customer requested services. These services may also have potential for provision on a competitive basis rather than only by the local distributor.	We set service specific prices to provide a reasonable opportunity to enable the distributor to recover the efficient cost of each service from customers using that service.
Negotiated service		Services we consider require a less prescriptive regulatory approach because all relevant parties have sufficient countervailing market power to negotiate the provision of those services.	Distributors and customers are able to negotiate service and price according to a framework established by the NER. We are available to arbitrate if necessary.
Unclassified distribution services		Distribution services that are contestable will not be classified.	We have no role in regulating these services.
Non-distribution services		Services that are not distribution services. ⁹	We have no role in regulating these services.

Source: AER

Our proposed approach is to change the classification of a number of SA Power Networks' distribution services for the 2020–25 regulatory control period. This will particularly apply to services which were classified as negotiated distribution services for the 2015-20 regulatory

⁸ provide further clarity and transparency around how we classify services. See clause 6.2.3A. Consultation on our Service Classification Guideline has commenced. See: <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/distribution-service-classification-guidelines-and-asset-exemption-guidelines>.

⁹ The NER defines a distribution service as a service provided by means of, or in connection with, a distribution system. NER, Chapter 10, glossary.

control period. Changes to this classification are necessary, in part due to the implementation of our Ring-fencing Guideline, which requires functional and legal separation between the delivery of direct control services and contestable electricity services, which includes negotiated distribution services and non-distribution services.

In December 2017, we granted SA Power Networks a waiver from certain ring-fencing obligations so that SA Power Networks would not have to separate its negotiated distribution services.¹⁰ Ring-fencing requires regulated services to be separated from services offered into contestable markets. Our Ring-fencing Guideline introduced more stringent ring-fencing obligations and this has caused many distributors, including SA Power Networks, to reconsider how existing services are classified. Reclassifying SA Power Networks' negotiated distribution services as alternative control services would allow SA Power Networks to continue to offer these services without breaching the Ring-fencing Guideline.

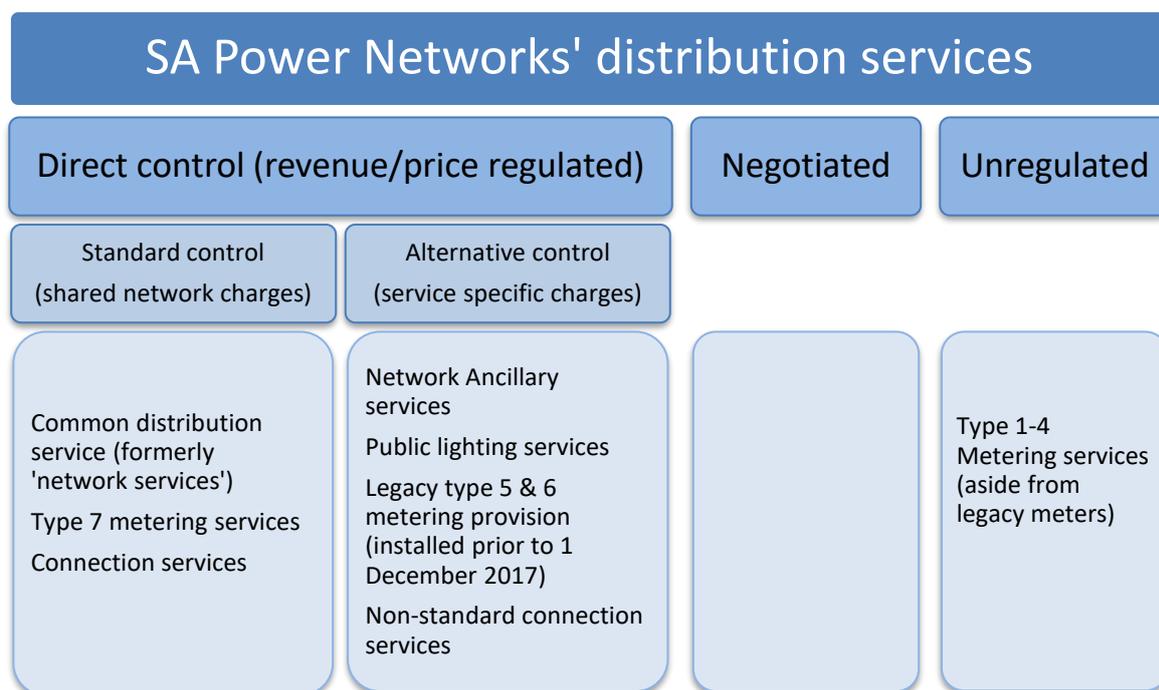
However, classification decisions are made having regard to each service and the nature of the market in which it is offered. Classification decisions are not made with the objective of merely minimising ring-fencing compliance costs. The current negotiated services, such as public lighting, are exclusively provided by SA Power Networks as a monopoly service and should be regulated as an alternative control service. This is a matter that we have considered in previous F&A papers and until now have decided to maintain the position that existed under the previous jurisdictional approach. We have now re-considered this issue in light of how these services have been provided and have decided that they should be regulated more directly as alternative control. A detailed list of these services is set out in appendix C.

Our changes to SA Power Networks' classification of services also seeks to clarify service descriptions to better align with the services being provided and create consistency and predictability across jurisdictions as far as practicable in how distribution services might be classified.

An overview of our proposed service classifications for SA Power Networks is set out in figure 1 below.

¹⁰ See <https://www.aer.gov.au/networks-pipelines/ring-fencing/ring-fencing-waivers/sa-power-networks-ring-fencing-waiver-august-2017>.

Figure 1 AER proposed classification of SA Power Networks' distribution services



Source: AER

Our final F&A decision on service classification is not binding for our determination on SA Power Networks' regulatory proposal. Under the NER we may only change our classification approach if there has been a material change in circumstances, justifying a departure from our final F&A position.¹¹ Our Service Classification Guideline, which is due to be finalised in September 2018, could trigger some refinements to service classification as set out in this F&A paper. Any changes will be considered as part of the determination process.

Form of control

Following on from service classification, our determinations impose controls on direct control service prices and/or their revenues.¹² We may only accept or approve control mechanisms in a distributor's regulatory proposal if they are consistent with our final F&A, unless we consider there has been a material change in circumstances to the classification of that service,¹³ and we consider no form of control mechanism set out in the final F&A should apply to that distribution service.¹⁴ In making a decision on control mechanism forms, we must select one or more from those listed in the NER.¹⁵ These include price schedules, caps

¹¹ NER, cl. 6.12.3(b).

¹² NER, cl. 6.2.5(a).

¹³ NER, cl. 6.12.3(b).

¹⁴ NER, cl. 6.12.3(c)(2).

¹⁵ NER, cl. 6.2.5(b).

on the prices of individual services, weighted average price caps, revenue caps, average revenue caps, and hybrid control mechanisms.

Our decision on the form of control mechanisms for SA Power Networks is:

- standard control services— revenue cap
- alternative control services— caps on the prices of individual services.

For standard control services, the NER mandate that the basis of the control mechanism must be the prospective CPI–X form or some incentive-based variant.¹⁶

Our final F&A decision on the form of control is binding on us and SA Power Networks for the 2020–25 regulatory determination.¹⁷ We may only vary our proposed control mechanism formulas in response to a material change in circumstances and we consider that no form of mechanism as set out in the F&A should apply to that distribution service.¹⁸

Incentive schemes

Incentive schemes encourage network businesses to manage their networks in a safe, reliable manner that serves the long term interests of consumers. They provide network businesses with incentives to only incur efficient costs and to meet or exceed service quality targets. Our proposed position is to apply each of the following incentive schemes to SA Power Networks:

- Service Target Performance Incentive Scheme (STPIS)
- Efficiency Benefit Sharing Scheme (EBSS)
- Capital Expenditure Sharing Scheme (CESS)
- Demand Management Incentive Scheme (DMIS) and Innovation Allowance Mechanism (Allowance Mechanism).

Our final F&A approach on the application of incentive schemes is not binding on us or SA Power Networks.¹⁹

Application of our Expenditure Forecast Assessment Guideline

Our Expenditure Forecast Assessment Guideline²⁰ is based on a reporting framework allowing us to compare the relative efficiencies of distributors. Our proposed position is to

16 NER, cl. 6.2.6(a). The basis of the form of control is the method by which target revenues or prices are calculated e.g. a building block approach.

17 NER, cl. 6.8.1(b)(1)(i).

18 NER, cl. 6.12.3(c)(1),(2).

19 We note SA power Networks' submissions that we should remain open to consideration through the F&A process of possible ideas for a Small-Scale Incentive Scheme, but it does not yet propose any such scheme. See: SA Power Networks, *Request to replace framework and approach*, 31 October 2017, p. 3.

20 AER, *Expenditure Forecast Assessment Guideline for Distribution*, November 2013.

apply the guideline, including its information requirements, to SA Power Networks in the 2020–25 regulatory control period.

Our expenditure assessment guideline outlines a suite of assessment/analytical tools and techniques to assist our review of SA Power Networks' regulatory proposal. We intend to apply the assessment/analytical tools set out in the guideline and any other appropriate tools for assessing expenditure forecasts.²¹

Our final F&A approach on the application of our guideline is not binding.

Depreciation

When we roll forward SA Power Networks' regulatory asset base (RAB) for the upcoming regulatory control period, we must adjust for depreciation. Our proposed approach is to use depreciation based on forecast capex (known as forecast depreciation) to establish the opening RAB as at 1 July 2025. In combination with our proposed application of the CESS, this approach will maintain incentives for SA Power Networks to pursue capex efficiencies. These improved efficiencies will benefit consumers through lower regulated prices.

Our final F&A position on the depreciation approach is not binding.

Dual function assets

Dual function assets are high-voltage transmission assets forming part of a distribution network. We decide whether to price dual function assets according to transmission or distribution pricing rules.

SA Power Networks does not own or operate any dual function assets. As such, we are not required to make a decision on the application of either transmission or distribution pricing rules.

Consumer engagement

Consumer engagement is becoming increasingly important in the development of proposals by network businesses. The increased focus on consumer engagement has led network businesses to commence engagement activities with their consumer groups much earlier in the regulatory process than ever before.

²¹ As part of the continuous improvement of our economic benchmarking techniques that are captured in our expenditure assessment guideline, we are reviewing and refining our analysis of operating environment factors in consultation with industry and other interested parties. In undertaking this review, we have engaged economic and engineering consultants Sapere Research Group and Merz Consulting. This consultation is ongoing. More information is available at <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/review-of-operating-environment-factors-for-distribution-network-service-providers>.

SA Power Networks' engagement program commenced in early 2017 with preliminary customer research to understand customer sentiment and priorities. This informed subsequent engagement in 2017 which explored key themes of network price, reliability and resilience, and network of the future. Engagement included deliberative-style workshops, focus groups, and online engagement.²²

In 2018, SA Power Networks' program narrows to explore complex topics with stakeholders in dedicated 'deep dive' workshops. Outcomes of the engagement will help refine the plans that will form the basis of the Draft Plan/Tariff Structure Statement, due for release at the end of July 2018. SA Power Networks will seek feedback on positions ahead of lodging its regulatory proposal in January 2019. SA Power Networks is also engaging with councils and other interested stakeholders on public lighting for the 2020-25 period.

More information can be found at <https://www.talkingpower.com.au>.

Our Consumer Challenge Panel (CCP sub-panel 14), in its submission to our preliminary F&A, expressed support for SA Power Networks' consumer engagement framework and acknowledged the positive consumer engagement process that SA Power Networks is undertaking as part of the regulatory reset.²³ CCP sub-panel 14 encouraged the AER to give further consideration to more specific incentives around the effectiveness of a network's consumer engagement.²⁴

²² For further information regarding SA Power Networks' engagement program see: <https://www.talkingpower.com.au>.

²³ Consumer Challenge Panel (Sub-Panel 14), *Submission on AER's preliminary framework and approach for SA Power Networks*, 4 May 2018, p. 4.

²⁴ Consumer Challenge Panel (Sub-Panel 14), *Submission on AER's preliminary framework and approach for SA Power Networks*, 4 May 2018, p. 4.

1 Classification of distribution services

This chapter sets out our proposed approach on the classification of distribution services provided by SA Power Networks in the 2020–25 regulatory control period. Our proposed approach to classification for the 2020–25 period largely mirrors that of the current period with one significant exception: the proposed reclassification of all negotiated services as alternative control services, as discussed later in this chapter.

Service classification determines the nature of economic regulation, if any, applicable to distribution services. Applying the classification process prescribed in the NER, we may classify services so that we:

- directly control prices of some distribution services²⁵
- allow parties to negotiate services and prices and only arbitrate disputes if necessary, or
- do not regulate some distribution services at all.

Our classification decisions therefore determine which services we will regulate and how distributors will recover the cost of providing those regulated services.

Our Ring-fencing Guideline for electricity distributors, which came into effect in December 2016, has prompted DNSPs to review the classification of services they provide. Our classification decisions will also settle ring-fencing obligations that will apply to SA Power Networks for the 2020–25 regulatory control period.²⁶

The AEMC recently made changes to the NER, following two rule change proposals from the Council of Australian Governments Energy Council and the Australian Energy Council, on contestability of energy services.²⁷ As part of the rule change, we are required to develop and publish service classification guidelines by 30 September 2018. More specifically, the NER has removed the requirement for us to maintain the current service classification unless another classification is clearly more appropriate. By removing this provision to maintain the status quo, it provides an opportunity to improve clarity, achieve greater consistency across jurisdictions as far as practicable, greater predictability in how distribution services might be classified, and service descriptions that better align with the services being provided.

The Service Classification Guideline will set out our approach to service classification under the Rules. As a guide for distributors, it will also contain a baseline list of distribution services along with our view on how these services would typically be classified. The Service Classification Guideline will not bind the AER. However, we are required to set out our

²⁵ Control mechanisms available for each service depend on their classification. Control mechanisms available for direct control services are listed by clause 6.2.5(b) of the NER. These include caps on revenue, average revenue, prices and weighted average prices. A fixed price schedule or a combination of the listed forms of control are also available.

Negotiated services are regulated under part D of chapter 6 of the NER.

²⁶ AER, *Ring-fencing guideline electricity distribution*, Version 2 October 2017; AER, *Electricity distribution ring-fencing guideline explanatory statement*, October 2017.

²⁷ See <http://www.aemc.gov.au/Rule-Changes/Contestability-of-energy-services>.

reasons for any departure from the Guideline to provide transparency to stakeholders in circumstances where our approach differs from that in the Guideline. We anticipate that DNSPs will need to depart from the approach set out in the Guideline. Departures can be expected because of different licensing obligations on DNSPs and service contestability between the different jurisdictions

Consultation on the development of the Service Classification Guideline is ongoing. We published our draft guideline for comment in late June 2018.²⁸ Work on the new Service Classification Guideline has been occurring in parallel to this final F&A. As such, we anticipate that adjustments to the classification of services for SA Power Networks may be required at the time the regulatory proposal is submitted. It is likely that we will consider that changes to the Guideline between its draft and final versions constitute a material change of circumstances.²⁹ This could justify further refinements of the classification of services set out in this F&A paper.

1.1 AER's proposed approach

Overall, our proposed approach is to change the classification of many of SA Power Networks' distribution services for the 2020–25 regulatory control period.

Our proposed approach is to group distribution services provided by SA Power Networks as:

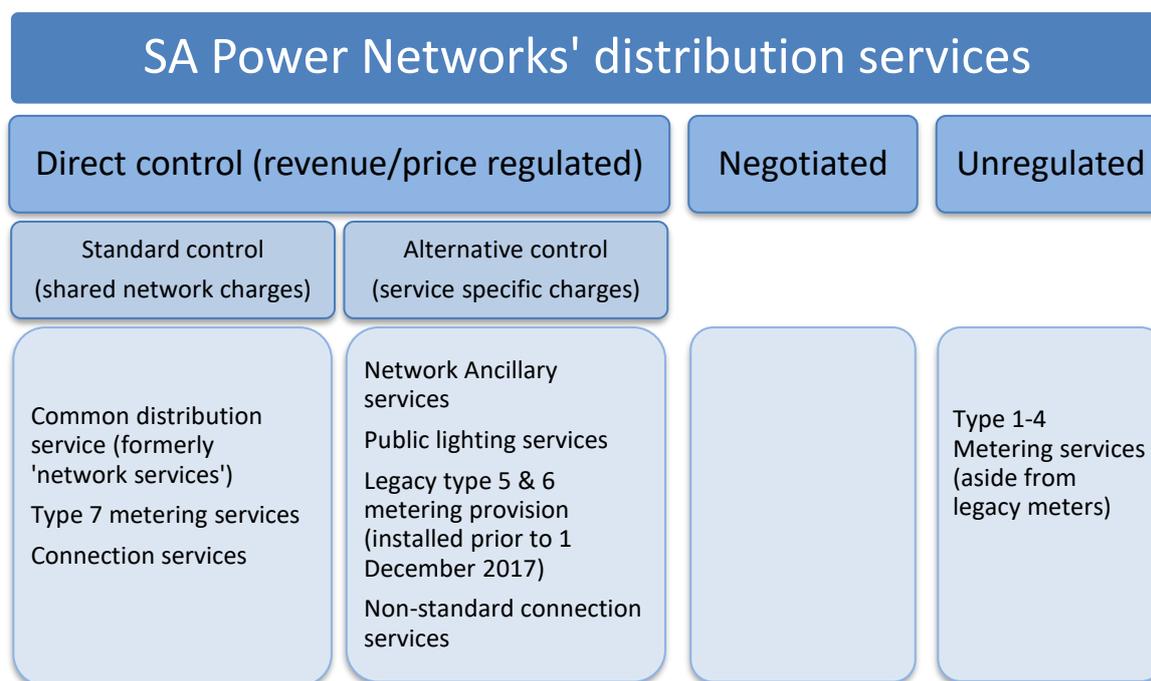
- common distribution services (formerly 'network services')
- connection services
- metering services
- network ancillary services
- public lighting services
- unregulated distribution services.

Figure 1.1 summarises our proposed classification of SA Power Networks' distribution services. Our assessment approach and reasons follow.

²⁸ As part of the consultation process so far for the development of the guideline, we produced an issues paper inviting submissions by interested parties. In response, we received eight submissions from industry stakeholders on a broad range of issues, which can be found at <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/distribution-service-classification-guidelines-and-asset-exemption-guidelines>.

²⁹ NER cl.6.12.3(b).

Figure 1.1 AER's proposed approach to classification of SA Power Networks' distribution services



Source: AER

1.2 AER's assessment approach

In conducting our assessment of distribution service classification, we commence on the basis that we:

- classify the service, rather than the asset³⁰ – we can only decide on service classification if we understand the service being provided. That is, distribution service classification involves the classification of services distributors directly supply to customers. It does not involve the classification of:
 - the assets used to provide such services,
 - the inputs/delivery methods distributors use to provide such services to customers, or
 - services that consumers or other parties provide to distributors.
- classify distribution services in groups³¹ – our general approach to service classification, where practicable, is to classify services in groupings rather than individually. This

³⁰ The AEMC's contestability of energy services rule change, made in December 2017, introduced a requirement for the AER to regulate 'restricted assets'. The AER does not classify assets as restricted assets; rather, the term is defined in the NER. The AER only has a role in assessing applications for exemptions from the restricted assets provisions of the NER.

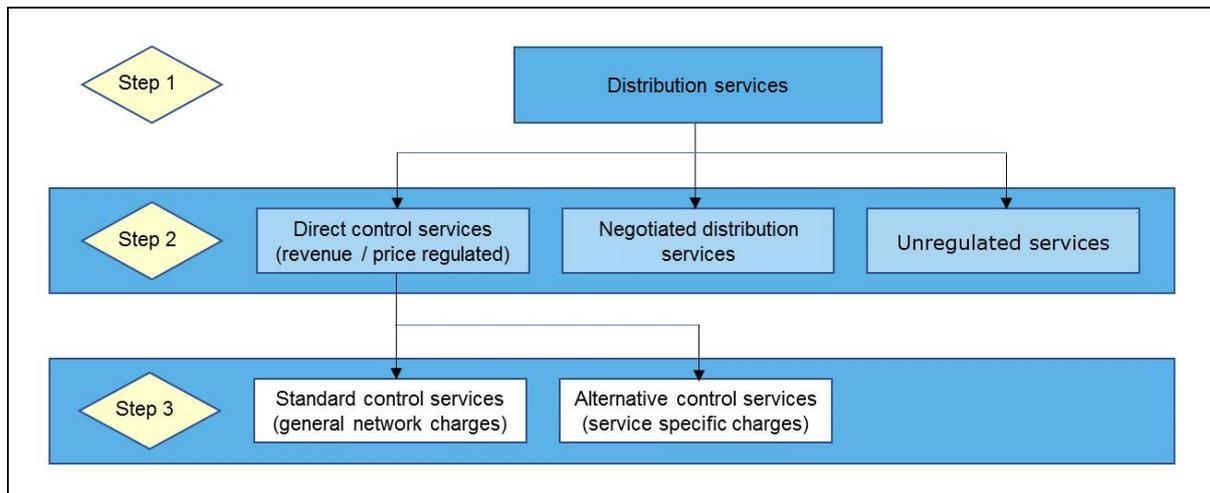
³¹ NER, cl. 6.2.1(b).

obviates the need to classify services one-by-one and instead defines a service cluster, that where a service is similar in nature it would require the same regulatory treatment. As a result, a new service with characteristics that are the same or essentially the same as other services within a group might simply be added to the existing grouping and hence be treated in the same way for ring-fencing purposes. This provides distributors with the flexibility to alter the exact specification (but not the nature) of a service during a regulatory control period. Where we make a single classification for a group of services, it applies to each service in the group.

- We are proposing that the pricing approach for any new service, introduced within the regulatory period, if it clearly falls within one of the established service groupings, should be based on a similar service within that grouping. Rather than introducing new services at any time, DNSPs may notify us at the time of the annual price submission, regarding the new service and the price they plan to charge.
- In some circumstances, we may choose to classify a single service because of its particular nature. In addition, a distribution service that does not belong to any existing service classification may be 'not classified' and therefore be treated as an unregulated distribution service for that regulatory control period. New distribution services (that are created within a regulatory control period) are also to be treated as unregulated distribution services for the remainder of that regulatory control period.

Once we group services, the NER sets out a three-step classification process we must follow. We must consider a number of specified factors at each step. Figure 1.2 outlines the classification process under the NER.

Figure 1.2 Distribution service classification process



Source: NER, chapter 6, part B.

As illustrated by figure 1.2:

- We must first satisfy ourselves that a service is a 'distribution service' (step 1). The NER defines a distribution service as a service provided by means of, or in connection with, a distribution system.³² A distribution system is a 'distribution network, together with the connection assets associated with the distribution network, which is connected to another transmission or distribution system'.³³
- We then consider whether economic regulation of the service is necessary (step 2). When we do not consider economic regulation is warranted, we will not classify the service. If economic regulation is necessary, we consider whether to classify the service as either a direct control or negotiated distribution service.
- When we consider that a service should be classified as direct control, we further classify it as either a standard control or alternative control service (step 3).

When deciding whether economic regulation of the service is necessary (step 2), the NER requires us to have regard to the 'form of regulation factors' set out in the NEL.³⁴ We have reproduced these at appendix B. They include the presence or extent of barriers to entry by alternative providers and whether distributors possess market power in provision of the services. The NER also requires us to consider the desirability of consistency in the form of regulation both within and beyond the jurisdiction.³⁵

For services we intend to classify as direct control services, the NER requires us to have regard to a further range of factors.³⁶ These include the potential to develop competition in the provision of a service and how our classification may influence that potential, whether the costs of providing the service are directly attributable to a specific person, and the possible effect of the classification on administrative costs.

Our classification decisions determine how distributors will recover the cost of providing services.³⁷ Distributors recover standard control service costs by averaging them across all customers using the shared network. This shared network charge forms the core distribution component of an electricity bill. In contrast, distributors will charge a specific user benefiting from an alternative control service. Alternative control classification is akin to a 'user-pays' system. We set service specific prices to enable the distributor to recover the full efficient cost of each service from the customers using that service. At a high level, a service will be classified as an alternative control service if it is either:

- potentially contestable, or

³² NER, chapter 10, glossary.

³³ NER, chapter 10, glossary.

³⁴ NER, cl. 6.2.1(c); NEL, s. 2F.

³⁵ NER, cl. 6.2.1(c).

³⁶ NER, cl. 6.2.2(c).

³⁷ We regulate distributors by determining either the prices they may charge (price cap) or by determining the revenues they may recover from customers (revenue cap).

- it is a monopoly service used by a small number of identifiable customers on a discretionary or infrequent basis and the costs can be directly attributed to those customers.

For services we classify as negotiated, distributors and customers negotiate service provision and price under a framework established by the NER. Our role is to arbitrate disputes where distributors and prospective customers cannot agree. Two instruments support the negotiation process (and form part of our distribution determination even where we do not classify any services as negotiated):

- Negotiating distribution service criteria—sets out the criteria distributors are to apply in negotiating the price, and terms and conditions, under which they supply distribution services. We will also apply the negotiating distribution service criteria in resolving disputes.
- Negotiating framework—sets out the procedures a distributor and any person wishing to use a negotiated distribution service must follow in negotiating for provision of the service.

In the case of some distribution services, we may determine that there is sufficient competition and there is no need for us to classify the service as either a direct control service or a negotiated distribution service. That is, the market is sufficiently competitive allowing customers to shop around for the best price. We refer to these distribution services as 'unregulated distribution services'. Pursuant to our Ring-fencing Guideline, all unregulated distribution services or new distribution services that come into existence within a regulatory control period must be kept separate from direct control services, unless the distributor applies for and receives, a waiver under the Ring-fencing Guideline.³⁸

1.3 Reasons for AER's proposed approach

This section sets out, for each major service group, our proposed service classification and reasons for SA Power Networks' 2020–25 regulatory control period.

Appendix C contains a detailed table of our proposed classification of SA Power Networks' distribution services.

The Energy and Water Ombudsman of South Australia (EWOSA) and CCP sub-panel 14 supported the proposed service classifications and the service grouping approach.³⁹

³⁸ AER, *Ring-fencing guideline electricity distribution*, October 2017; AER, *Electricity distribution ring-fencing guideline explanatory statement*, October 2017.

³⁹ Energy and Water Ombudsman of South Australia, *Submission on AER's preliminary framework and approach for SA Power Networks*, 26 April 2018, p. 1; Consumer Challenge Panel (Sub-Panel 14), *Submission on AER's preliminary framework and approach for SA Power Networks*, 4 May 2018, p. 3.

SA Power Networks agreed with our service classification positions,⁴⁰ but submitted that the terminology and descriptions that we have applied to its services require further amendment to reflect the specific nature of the services SA Power Networks will provide.⁴¹

Common distribution service

This service group was formerly called 'network services'. However, to avoid confusion with the defined terms in chapter 10 of the NER, we propose to rename this service group 'common distribution service'. This was supported by CCP sub-panel 14.⁴²

The common distribution service is a suite of activities concerned with providing a safe and reliable electricity supply to customers.⁴³ Activities within the common distribution service group are intrinsically tied to the network infrastructure and the systems that support the shared use of the distribution network by customers. Customers use or rely on access to common distribution service activities on a regular basis. Providing a common distribution service involves a variety of different activities, such as the construction and maintenance of poles and wires used to transport energy across the shared network. The precise nature of activities provided to plan, design, construct, and maintain the shared network may change over time. Regardless of what activities make up the common distribution service, this service group reflects the provision of access to the shared network to customers.

Our proposed approach is to classify the common distribution service group as a direct control service. SA Power Networks holds a licence to provide the activities within this service, which is the only distribution licence in place for South Australia.⁴⁴ Therefore, as the sole licence holder, SA Power Networks has an obligation to operate, maintain and protect its supply network. Only SA Power Networks can provide services that relate to the safe and reliable conveyance, and controlling the conveyance, of electricity through the distribution network. Further, consumers cannot source a common distribution service from other service providers. These arrangements create a regulatory barrier, preventing third parties from providing activities within the common distribution service group.⁴⁵ Therefore, we consider that there is no opportunity for third parties to enter the market for the provision of activities classified as a common distribution service.

⁴⁰ SA Power Networks, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 3.

⁴¹ SA Power Networks, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 2.

⁴² Consumer Challenge Panel (Sub-Panel 14), *Submission on AER's preliminary framework and approach for SA Power Networks*, 4 May 2018, p. 3.

⁴³ NER, Chapter 10 glossary.

⁴⁴ The licence is issued by the Essential Service Commission of South Australia. A copy of the licence is available on ESCOSA's website at www.escosa.sa.gov.au/electricity-overview/licensing/distribution-licences.aspx.

⁴⁵ NER, cl. 6.2.1(c)(1); NEL, ss. 2F(a), (d) and (f).

We must further classify direct control services as either standard or alternative control services.⁴⁶ Our proposed approach is to retain the current standard control classification for the common distribution service grouping. There is no potential to develop competition in the market for the common distribution service grouping because of the barriers outlined above.⁴⁷ There would be no material effect on administrative costs for us, SA Power Networks, users or potential users by continuing this classification.⁴⁸ We currently classify the common distribution service grouping (or 'network services') in SA and all other National Electricity Market (NEM) jurisdictions as standard control services.⁴⁹ Further, distributors provide activities listed within the common distribution service through a shared network and therefore cannot directly attribute the costs of these services to individual customers.⁵⁰

SA Power Networks supported our proposed classification of the common distribution service grouping as standard control services for the 2020–25 regulatory control period.⁵¹

Support for another distributor during emergency event

We note that SA Power Networks has proposed a new activity under the common distribution service heading, labelled "support for another distributor during an emergency event". The activity is provided in connection with a distribution system as part of the bundle of activities under the Common distribution service. This is consistent with the service description and classification provided in other jurisdictions.⁵² In the case of SA Power Networks supporting another distributor in an emergency event, the works performed are not on SA Power Networks' shared network. Therefore, SA Power Networks is entitled to recover the costs of the assistance provided. While we propose to classify these activities as standard control, in line with the classification for the Common distribution service, the distributor is still expected to seek recovery of the costs of the assistance provided. Going forward, we propose to adopt this approach across all NEM jurisdictions.

CCP sub-panel 14 supported the adoption of the costs to support other distributors in times of emergency as a common distribution service, provided that we are confident that the recovery of fair and reasonable costs by the service provider will occur.⁵³

Load control devices

Demand management can assist DNSPs to reduce or avoid costly network investment in response to growth in peak electricity demand.

⁴⁶ NER, cl. 6.2.2(a).

⁴⁷ NER, cl. 6.2.2(c)(1).

⁴⁸ NER, cl. 6.2.2(c)(2), (3).

⁴⁹ NER, cl. 6.2.2(c)(4).

⁵⁰ NER, cl. 6.2.2(c)(5).

⁵¹ SA Power Networks, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 3.

⁵² NER 6.2.1(c)

⁵³ Consumer Challenge Panel (Sub-Panel 14), *Submission on AER's preliminary framework and approach for SA Power Networks*, 4 May 2018, p. 5.

Demand management undertaken by DNSPs can take many forms. For example, a distributor might directly undertake demand management activities or acquire demand management from third parties (such as load aggregators). Activities undertaken could involve incentive payments to encourage certain behaviours by customers (such as payment for controlling peak smart devices or controlled load tariffs) or involve investment in equipment such as load control devices. It should be noted that the associated expenditures may be recorded as operating or capital expenses. Irrespective, demand management activities are undertaken to reduce the cost of providing services to all consumers, albeit that a particular incentive may be directed to a specific customer. For this reason, we are satisfied that acquisition of demand management is an activity that is provided as an input to the 'common distribution service'.

In the past, distributors have tended to undertake demand management. Moving forward, we expect that third parties will play a greater role in offering demand management to distributors. Ultimately, however, distributors will continue to play a key role in funding demand management activities on behalf of consumers, whether the services are provided by distributors or by third parties. For this reason, we have explicitly identified the acquisition of demand management as an input to the 'common distribution service' in the list of distribution services.

AGL Energy Limited (AGL) submitted that the preliminary F&A failed to clarify the provision of current standard control services that are aimed at the control of customers' load control. Network businesses offer a controlled load tariff to customers prepared to have appliance loads, such as hot water, directly controlled by the DNSP. AGL argued that this is not a uniform service provided to the majority of electricity customers as the customer pays a different, lower tariff for the controlled load and is provided with a unique product that is offered to and selected by the customer. Thus, AGL queried why it is included as a standard control service. AGL argued that classifying this service as standard control effectively precludes competition for delivery of load management services, despite the fact that networks have previously argued for its inclusion as a standard service.⁵⁴

The different means by which demand management can be effected means that there is a degree of competition between these different sources. While controlled load tariffs will remain the purview of DNSPs, other forms of managing demand, such as through direct load control, can be provided by alternative service providers. We note the new rules relating to restricted assets⁵⁵ may also be relevant to the future of load control devices by DNSPs.

AGL also questioned the inclusion of 'network demand management for distribution purposes' within the common distribution services. AGL submitted that it is uncertain whether this refers to legacy load control services, the potential demand management input activities under incentive schemes or the provision of other demand management services to

⁵⁴ AGL Energy Limited, *Submission on AER's preliminary framework and approach for SA Power Networks*, 21 May 2018, p. 2.

⁵⁵ NER, cl. 6.4B.

customers. AGL seek clarification on this issue.⁵⁶ To be clear, demand management in this context refers to the requirement for DNSPs to seek demand management services from the market as an input to the common distribution service. It is a service DNSPs obtain from the market, whether by direct investment in load control devices (where permitted) or the procurement of such services from third party providers. It is not a service a DNSP offers to customers.

Emergency recoverable works

We define emergency recoverable works as the distributor's emergency work to repair damage following a person's act or omission, for which that person is liable (for example, repairs to a power pole following a motor vehicle accident).

Given that these services are provided in connection with a distribution system, we consider this a distribution service. In the current regulatory control period, we did not classify this service in South Australia. Therefore, the service was unregulated.⁵⁷ This was because the cost of these works could be recovered through other avenues (e.g. under common law). However, following the introduction of our Ring-fencing Guideline, we have had cause to consider the classification of this service. As an unregulated distribution service, it would be subject to ring-fencing which could increase the cost of these activities. We are of the view that these services should be classified as direct control.

Therefore, our proposed approach is for emergency recoverable works to be subsumed into the common distribution service group and classified as a direct control and standard control service. SA Power Networks supported this proposed approach.⁵⁸ Distributors are required to perform works to maintain or repair the shared network to ensure a safe and reliable electricity supply.

Although we propose to classify this service as a standard control service, a distributor is still expected to seek recovery of the cost of these emergency repairs from the third party where possible. CCP sub-panel 14 agreed with the proposed classification, however noted that there are risks regarding whether or not network distributors will continue to be incentivised to recover the costs if the expense will be 'budgeted' for in overall operating costs.⁵⁹ Further, CCP sub-panel 14 submitted that it would be concerned if distributors could recover the cost of the repairs twice (from consumers and the third party).⁶⁰ We note this concern, however, where a distributor is successful in recovering the cost of the emergency repairs from a third party, this payment or revenue would be netted off from expenditure on regulated activities and hence forecasts in the future. This would prevent a distributor from recovering the cost

⁵⁶ AGL Energy Limited, *Submission on AER's preliminary framework and approach for SA Power Networks*, 21 May 2018, p. 3.

⁵⁷ AER, *Final framework and approach for SA Power Networks*, April 2014, p. 37.

⁵⁸ SA Power Networks, *Request to replace framework and approach for 2020-25 determination*, 31 October 2017.

⁵⁹ Consumer Challenge Panel (Sub-Panel 14), *Submission on AER's preliminary framework and approach for SA Power Networks*, 4 May 2018, p. 5.

⁶⁰ Consumer Challenge Panel (Sub-Panel 14), *Submission on AER's preliminary framework and approach for SA Power Networks*, 4 May 2018, p. 5.

of emergency repairs twice—as a standard control charge across the broader customer base and from the responsible third party. Going forward, we propose to adopt this approach across all NEM jurisdictions.

Connection services

Put simply, a connection service refers to the services a distributor performs in order to:

- connect a person’s home, business or other premises to the electricity distribution network (premises connection)
- get more electricity from the distribution network than is possible at the moment (augmentation)
- extend the network to reach a person’s premises (extension).

SA Power Networks arranges its connection services into three components: premises connections; extensions and augmentation. Customers use these components depending on their size and the nature of their connection. SA Power Networks also provides other connection services to facilitate the physical connection to the distribution network. These services are comprised of: connection management services and enhanced connection services.

In the 2015–20 regulatory control period, SA Power Networks offers two types of connection services: basic and non-basic connections. A basic connection is a connection or an alteration, which involves minimal or no augmentation (no extension or upgrade) of SA Power Networks’ distribution network. This is different from non-basic connection services which require an augmentation. Basic connection services are currently classified as standard control services, while non-basic connection services are grouped under the non-standard network services group and are classified as negotiated services.⁶¹

SA Power Networks agreed with our approach to service classification, suggesting some minor amendments to ensure the service offered matches the description in the connection services list.⁶²

Basic connection services

Our proposed approach is to maintain the classification for basic connections as direct control and further, as a standard control service for the 2020-25 regulatory period.⁶³

Basic connection services are currently provided to the following groups of customers:

⁶¹ AER, Final decision SA Power Networks distribution determination, Attachment 13, Classification of services - October 2015.

⁶² SA Power Networks, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 3.

⁶³ AER, Final decision SA Power Networks distribution determination, Attachment 13, Classification of services - October 2015.

- residential customers (no extension or upgrade required)⁶⁴
- small business customers up to a capacity of less than 63 amps per phase
- small embedded generators (e.g. customers who wish to install solar PV panels on their premises) with a generating capacity of up to 10kVA for a single phase connection and up to 30kVA for a three phase connection.

Similar to the common distribution service, SA Power Networks provides basic connection services on a routine basis. For example, a new residential property owner having their house connected to the network with minimal or no augmentation. This type of connection request is common to anyone wanting to connect to the network to use electricity and therefore we consider that we should directly regulate the price of these services.

For the following reasons we consider the current standard control classification for basic connection services to be appropriate:

- There is little, if any, prospect for competition in the market for the basic connection service.⁶⁵ That is, we are not aware of any South Australian Government initiatives to introduce contestability for connection services in the next regulatory control period. Therefore, our classification will not influence the potential for competition.
- There would be no material effect on administrative costs to us, SA Power Networks, users or potential users.⁶⁶ This is because a standard control classification for basic connection services is consistent with the current regulatory approach.
- The nature of connection services are such that in most instances, the customer requesting the service will benefit from the provision of that service. As such, the costs are directly attributable to identifiable customers.⁶⁷ To protect the broader customer base from incurring additional costs for services of no benefit to them, connections which require augmentation or significant alteration to the distribution network (as opposed to a basic connection service where no such costs are required) require the requesting customer to make a capital contribution. This is discussed in the enhanced connection services section below.

For the above reasons, we consider retaining the current classification of standard control for basic connection services is justified. We did not receive any submissions on our preliminary position on this issue.

Enhanced connection services

We propose to classify enhanced connection services as direct control and further, as alternative control services for the 2020–25 regulatory period.

⁶⁴ NER, chapter 5A, A1.

⁶⁵ NER, cl. 6.2.2(c)(1).

⁶⁶ NER, cl. 6.2.2(c)(2).

⁶⁷ NER, cl. 6.2.2(c)(5).

Enhanced connections are requested by customers at a higher standard than required (i.e. above the least cost technically acceptable solution). Examples include where a customer wants a permanent stand-by supply (e.g. back-up feeder or duplicate supply) or a higher voltage supply. Also in this category are: connections for large embedded generators which, given their size, require specific solutions and consideration of their impact on the network, and any other specific connection lines / assets that customers might request.

In the 2015-20 regulatory control period, these services are classified as negotiated services.⁶⁸ This classification arose from the assessment that in most instances, non-basic connection services only benefit the customer requesting that service.

As previously indicated, the implementation of our Ring-fencing Guideline has caused DNSPs to reconsider the classification of many of the services they provide. SA Power Networks previously advised that its preferred classification of these services is alternative control.⁶⁹ The rationale for this is that although enhanced connection services reflect monopoly characteristics, as only the distributor can provide them, customers that request them should pay service-specific charges. We agree, as we hold concerns about the ability of consumers to effectively negotiate the charges despite the existence of the negotiating framework. For most consumers, especially if services are demanded relatively rarely, the negotiation would be unlikely to deliver a balanced outcome. For this reason, these services are classified as alternative control in almost all other jurisdictions.

Our proposed approach, therefore, is to classify enhanced connections as direct control and further as alternative control services. SA Power Networks holds the only electricity distribution licence to provide connection services in South Australia.⁷⁰ This licensing arrangement results in a regulatory barrier preventing third parties from providing connection services.⁷¹ Additionally, we consider the scale and scope of resources available to SA Power Networks also prevents the competitive provision of connection services by a third party. We therefore consider that SA Power Networks' possesses significant market power in the provision of connection services.⁷²

Under an alternative standard control classification, SA Power Networks can recover costs from customers who request enhanced connections. However, we anticipate that most customers would only require basic connections. Chapter 5A of the NER and the Connection Charge Guideline provides a framework and charging principles for new connections and connection alternations.⁷³ We are mindful of classifying SA Power Networks' connection services in a way that supports the operation of Chapter 5A and the Guideline. SA Power

⁶⁸ AER, Final framework and approach for SA Power Networks 2015-20 regulatory control period, April 2014, pp. 24-25.

⁶⁹ SA Power Networks, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 3; SA Power Networks, *Request to replace framework and approach for 2020-25 determination*, 31 October 2017, p. 7.

⁷⁰ NER, cl. 6.2.1(a), (c)(1).

⁷¹ NEL, s. 2F(a).

⁷² NEL, s. 2F(d).

⁷³ AER, *Connection charge guidelines for electricity retail customers, under Chapter 5A of the National Electricity Rules*, June 2012, p. 29.

Networks is required to identify the circumstances in its Connection Policy where a customer charge may be applied to customer connections.⁷⁴

On this basis, we consider that classifying enhanced connections as alternative control services is the most appropriate classification for these services. The Energy and Water Ombudsman for South Australia (EWOSA) supported the reclassification of enhanced connection services as alternative control services.⁷⁵

CCP sub-panel 14 supported the approach and submitted that the cost of connections for customers seeking enhanced connections should, as much as possible, be user pays. It should not be an opportunity for large customers seeking specialised connection to have that connection cross-subsidised by all users.⁷⁶

We believe that the issue raised by CCP sub-panel 14 concerns how much the customer is required to pay versus how much is shared network and spread across all customers. CCP sub-panel 14 also raised some queries in relation to the payment arrangements for enhanced connections. CCP sub-panel 14 queried whether SA Power Networks makes any capital contribution to the costs of enhanced connections and whether the prices charged reflect the full costs of providing the services (which is not just the capex but the opex over the life of the specific assets).⁷⁷

Where CCP sub-panel 14 has expressed concern regarding the equitable sharing of the costs of network extensions and augmentations, we note that under a standard control service classification, costs are subject to a cost revenue test. This test takes into account the incremental revenue the connection will generate against the incremental cost, with the customer bearing the cost of any shortfall via a capital contribution. The connection policy published by SA Power Networks outlines how these contributions are calculated.

Connection management services

Connection management services is the grouping which covers a range of services and activities provided by distributors, and sought by customers, which are specific to a connection point. SA Power Networks provides these services under its distribution licence. Given this barrier to competition, our proposed approach is to classify this service group as direct control services.⁷⁸ The benefits and cost of the services can be attributed to the

⁷⁴ SA Power Networks is yet to submit its Connection Policy. Consequently, the classifications may be inconsistent with the Connection Policy. We will consider any such adjustments in our draft determination to avoid any inconsistencies.

⁷⁵ Energy and Water Ombudsman of South Australia, *Submission on AER's preliminary framework and approach for SA Power Networks*, 26 April 2018, p. 1.

⁷⁶ Consumer Challenge Panel (Sub-Panel 14), *Submission on AER's preliminary framework and approach for SA Power Networks*, 4 May 2018, p. 7.

⁷⁷ Consumer Challenge Panel (Sub-Panel 14), *Submission on AER's preliminary framework and approach for SA Power Networks*, 4 May 2018, p. 7.

⁷⁸ NEL, s. 2F(a).

person for whom the service is provided.⁷⁹ As such, we further propose to classify connection management services as alternative control services.

Our proposed approach is consistent with the current classification for such services.⁸⁰ As a result, there would be no material effect on administrative costs to us, SA Power Networks, users or potential users.⁸¹

We did not receive any submissions on our preliminary position on this issue.

Metering services

All electricity customers have a meter that measures the amount of electricity they use.⁸² On 26 November 2015, the AEMC made a final rule that opens up competition in metering services and give consumers more opportunities to access a wider range of metering services.⁸³

The competitive framework is designed to promote innovation and lead to investment in advanced meters that deliver services valued by consumers at a price they are willing to pay. Improved access to the services enabled by advanced meters will provide consumers with opportunities to better understand and take control of their electricity consumption and the costs associated with their usage decisions.⁸⁴

The final rule alters who has overall responsibility for the provision of metering services by providing for the role and responsibilities of the Responsible Person to be performed by a new type of Registered Participant – a Metering Coordinator. Any person can become a Metering Coordinator subject to satisfying certain registration requirements.⁸⁵

Retailers are required to appoint the Metering Coordinator for their retail customers. The final rule also includes a number of other features to support the competitive framework for the provision of metering services, including consumer protections⁸⁶ and an ability for consumers to opt out of having an advanced meter installed if they have an existing, working meter.⁸⁷

The new arrangements commenced on 1 December 2017 and required changes to the NER and the National Electricity Retail Rules (NERR).⁸⁸ Consequently, our proposed

⁷⁹ NER, cl. 6.2.2(c)(5).

⁸⁰ AER, Final framework and approach for Ergon Energy and Energex, April 2014, p. 52.

⁸¹ NER, cl. 6.2.2(c)(2).

⁸² All connections to the network must have a metering installation (NER, cl. 7.8.1(a)).

⁸³ AEMC, *Competition in metering services information sheet*, 26 November 2015.

⁸⁴ AEMC, *Competition in metering services information sheet*, 26 November 2015.

⁸⁵ AEMC, *Competition in metering services information sheet*, 26 November 2015.

⁸⁶ AEMC, *Competition in metering services information sheet*, 26 November 2015.

⁸⁷ AEMC, *Final rule to increase consumers' access to new services information sheet*, 26 November 2015.

⁸⁸ AEMC, *Competition in metering services information sheet*, 26 November 2015.

classification of some metering services will also change for the 2020–25 regulatory control period.

EWOSA submitted that given the contestability of metering services from 1 December 2017, the proposed changes to the classification of metering services are appropriate. However, EWOSA noted that it has received a significant and rising number of complaints associated with the introduction of metering contestability. Further, EWOSA indicated that the experience in SA suggests that when distribution services are opened up to competition without consumer protections being considered as much as they should be, energy consumers can be made worse off.⁸⁹ We note these concerns raised by EWOSA. We expect these issues will be raised again and considered in the context of the regulatory proposal due to be submitted by SA Power Networks in January 2019.

Type 1 to 4 metering services

Type 1 to 4 meters provide a range of additional functions compared to other meters. In particular, these meter types have a remote communication ability. In South Australia, type 1 to 4 metering services are currently classified as negotiated distribution services. Again, this classification arises from our previous requirement to maintain the status quo. Further, stakeholder submissions have never called for us to reconsider the classification. However, type 1 to 4 meters are competitively available and we do not currently regulate them in most other NEM jurisdictions⁹⁰—they are not classified and are therefore unregulated distribution services. This approach also overcomes any potential ring-fencing issues. Therefore, our preliminary position is to not classify SA Power Networks' type 1 to 4 metering services so they become unregulated distribution services for the 2020–25 regulatory control period.

SA Power Networks supported our proposed approach to not classify type 1 to 4 metering services for the 2020–25 regulatory control period.⁹¹

Type 5 and 6 metering services

Up until 1 December 2017, SA Power Networks was the monopoly provider of type 5 (interval) and 6 (accumulation) meters⁹². However, from 1 December 2017 (and therefore before the commencement of the next regulatory control period on 1 July 2020), metering services across the NEM⁹³ became contestable. Therefore, since 1 December 2017, SA Power Networks is no longer permitted to install or replace type 5 or 6 meters (although SA Power Networks will continue to provide a number of other type 5 and 6 metering services to

⁸⁹ Energy and Water Ombudsman of South Australia, *Submission on AER's preliminary framework and approach for SA Power Networks*, 26 April 2018, p. 1.

⁹⁰ AEMC, *Expanding competition in metering and related services, Rule Determination*, 26 November 2015, p. 6.

⁹¹ SA Power Networks, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 3.

⁹² AER, *Final decision SA Power Networks distribution determination, Attachment 13, Classification of services - October 2015* p. 16.

⁹³ Except for the Northern Territory.

support the continued operation of existing type 5 and 6 meters). For this reason, new type 5 and 6 meter provision and new installation services are no longer permitted under the NER from 1 December 2017. Therefore, our proposed position is to not classify these services for the 2020–25 regulatory control period.

However, SA Power Networks may still recover the capital cost of legacy type 5 and 6 metering equipment installed prior to 1 December 2017 as an alternative control service. Type 5 and 6 metering services were unbundled from standard control services in our final determination for the 2015–20 regulatory control period⁹⁴ to promote customer choice and remove any classification barriers limiting contestable provision of these meters. This approach aligned with AEMC's Power of Choice recommendations to unbundle metering costs from shared network charges.⁹⁵

We did not receive any submissions on our preliminary position regarding the classification of type 5 and 6 metering services.

Type 7 metering services

Type 7 metering services are unmetered connections with a predictable energy consumption pattern (for example, public lighting connections). Such connections do not include a meter that measures electricity use. Charges associated with type 7 metering services relate to the process of estimating electricity use. For example, the distributor estimates public light usage using the total time the lights were on, the number of lights in operation and the light bulb wattage. SA Power Networks is the monopoly provider of type 7 metering services in SA.⁹⁶

We therefore consider that there is no potential to develop competition in the provision of type 7 metering services.⁹⁷ We intend to classify type 7 metering services as direct control services and further, as standard control services. This is a continuation of the current classification of type 7 metering services.⁹⁸ We did not receive any submissions on our preliminary position on this issue.

Auxiliary metering services

SA Power Networks will be required to provide auxiliary metering services to support the metering contestability framework along with metering services to support existing type 5 and 6 meters. Distributors hold an electricity distribution authority to provide these metering

⁹⁴ AER, *Final decision SA Power Networks determination 2015-16 to 2019-20, Attachment 13 Classification of services*, October 2015, pp. 13–10

⁹⁵ AEMC, *Consultation paper — National electricity amendment (expanding competition in metering and related services)*, April 2014.

⁹⁶ NER, cl. 7.2.3(a)(2).

⁹⁷ NER, cl. 6.2.2(c)(1).

⁹⁸ AER, *Final decision SA Power Networks distribution determination, Attachment 13, Classification of services* - October 2015 p. 16.

support services, which creates a regulatory barrier to competition. As a result, we propose to classify them as direct control services.⁹⁹ Further, as Auxiliary metering services are provided to an identifiable subset of customers, we propose to classify them as alternative control services.¹⁰⁰

Some examples include:

- Type 5 and 6 meter final read – to conduct a final read on removed type 5 metering equipment as required by the Australian Energy Market Operator Service Level Procedure.¹⁰¹
- Distributor arranged outage for purposes of replacing meter – at the request of a retailer or metering coordinator, provide notification to affected customers and facilitate the disconnection/reconnection of customer metering installations where a retailer planned interruption cannot be conducted.¹⁰²
- Type 5 and 6 meter recovery and disposal – at the request of the customer or their agent to remove a type 5 or 6 meter where a permanent disconnection has been requested.

A detailed list of metering services is contained in appendix C.

Our proposed classification and reasons for network ancillary services (which captures ancillary metering services) are set out below with our broader discussion on all ancillary services.

Metering coordinator, metering provider, metering data provider

Under the competitive framework for metering, the roles of metering coordinator, metering provider and metering data provider may be performed by any registered person.¹⁰³

While we consider a metering coordinator, metering provider or metering data provider are distribution services, our proposed approach – with regard to new installations – is to not classify these services.¹⁰⁴ That is, we propose to treat them as unregulated distribution services. From a ring-fencing perspective, the provision of these services will need to be

⁹⁹ NEL, s. 2F.

¹⁰⁰ NER, cl. 6.2.2(c)(5).

¹⁰¹ This Service Level Procedures applies to Metering Providers who are accredited and registered by AEMO to provide metering services within the National Electricity Market (NEM). The Service Level Procedure details the technical requirements and performances associated with the provision, installation and maintenance of a metering installation. This Service Level Procedures is established under clause 7.14.1A of the NER for the various categories of registration and metering installation types as detailed under clause S7.4 of the NER.

¹⁰² AEMC, *Rule determination, National Electricity Amendment (Expanding competition in metering and related services) Rule 2015; National Energy Retail Amendment (Expanding competition in metering and related services) Rule 2015*, 26 November 2015, p. 206.

¹⁰³ AEMC, *Rule determination, National Electricity Amendment (Expanding competition in metering and related services) Rule 2015; National Energy Retail Amendment (Expanding competition in metering and related services) Rule 2015*, 26 November 2015, pp. 127–131.

¹⁰⁴ NER, chapter 10, glossary; *Ergon Energy Corporation Ltd v Australian Energy Regulator* [2012] FCA 393.

separated from the provision of direct control services if a distributor intends to enter the competitive metering market. We may consider ring-fencing waivers around office and staff sharing obligations where there are no third party competitors (for a time).¹⁰⁵

Importantly, we consider that pre-existing type 5 and 6 metering services, as detailed in appendix C, already encompass these roles and are reflected in the alternative control service charges.

To explain further, each distributor, as the current 'responsible person' under the NER, was appointed as the metering coordinator as at 1 December 2017.¹⁰⁶ The distributors will remain in this role until such time as the initial type 5 or 6 meter is replaced or the distributor receives a notice from a retailer that it is replacing them as metering coordinator. While a distributor acts as the initial metering coordinator performing its current services like type 5 and 6 meter reading, maintenance and testing, we will classify it as an alternative control service. This approach avoids the need for distributors to incur costs ring-fencing the responsibilities of metering coordinator, when the instances of distributors performing this role will diminish as more type 5 and 6 meters are replaced or retailers exercise their ability to replace distributors as the metering coordinator.

We did not receive any submissions on our preliminary position on this issue.

Network metering services

This service was formerly known as bulk supply point metering. It refers to the measurement of the flow of energy through the distribution system to support the operation of the wholesale market. The service is often listed in association with the common distribution service. There are no identifiable customers and the distributors are required to provide the service as it plays an important role in network infrastructure. We have uncoupled network metering services from the common distribution service in order to keep similar services grouped together. In doing so, we recognise the interdependencies and similarities this service has with activities listed under the common distribution service group. Similar to common distribution services, only SA Power Networks may perform these services in its distribution area, there are no substitutes and no prospect for the development of competition. As a result, the classification of direct control and further as standard control is appropriate. This is a continuation from the current regulatory control period.

Network ancillary services

We propose to classify network ancillary services as direct control services for the 2020-25 regulatory control period. Further we intend to classify network ancillary services as alternative control within the direct control classification.

Network ancillary services share the common characteristics of being services provided to individual customers on an 'as needs' basis and the specific charge can be applied to the

¹⁰⁵ AER, *Ring-fencing guideline electricity distribution*, Version 2 October 2017; AER, *Electricity distribution ring-fencing guideline explanatory statement*, October 2017.

¹⁰⁶ NER, cl. 11.86.7.

customer(s) requesting the service (e.g. meter testing and reading at a customer's request, moving mains, temporary supply, alteration and relocation of existing public lighting assets).

Network ancillary services involve work on, or in relation to, parts of SA Power Networks' distribution network. Therefore, similar to common distribution services only SA Power Networks may perform these services in its distribution area. This proposed service group is new for SA Power Networks and captures many services which are currently classified as negotiated distribution services.

While the services included in the network ancillary services group may suit a negotiated distribution services framework by virtue of being specifically requested services that are tailored to customer requirements, these services also reflect monopoly characteristics. This creates a regulatory barrier preventing any party other than SA Power Networks providing ancillary services in its distribution area.¹⁰⁷ Because of this monopoly position, customers may have limited negotiating power in determining the price and other terms and conditions on which SA Power Networks provides these services. These factors contribute to the view that SA Power Networks possesses significant market power in providing network ancillary services.¹⁰⁸

For these reasons, we consider that we should classify network ancillary services as direct control services.

Further, we intend to classify network ancillary services as alternative control services because SA Power Networks provides these services to specific customers.¹⁰⁹ As such, the cost of each network ancillary service is directly attributable to an individual customer.¹¹⁰ This results in costs that are more transparent for customers.

We adopt this view even though some network ancillary services do not exhibit signs of competition or potential for competition. We do not consider that there would be any material effect on the administrative costs to us, the distributor, users or potential users of the network by reclassifying network ancillary services from negotiated distribution services to alternative control services.¹¹¹ This is because we will set price caps on these services, and the administrative and time costs to SA Power Networks and customers in negotiating the price of these services will be removed.

To the extent that the provision of network ancillary services becomes, or may become, contestable through future changes to the regulatory or contestability frameworks, our proposed alternative control classification would allow SA Power Networks to compete, as a discrete price for the service is set for each network ancillary service.

¹⁰⁷ NEL, s. 2F(a).

¹⁰⁸ NEL, s. 2F.

¹⁰⁹ NER, cl. 6.2.2(c)(5).

¹¹⁰ NER, cl. 6.2.2(c)(5) – this includes a small number of identifiable customers.

¹¹¹ NER, cl. 6.2.2(c)(2).

EWOSA supported the classification of network ancillary services as alternative control services.¹¹²

The South Australian Council of Social Service (SACOSS) submitted that it is appropriate to reclassify network ancillary services as alternative control services except for 'network safety services' and 'rectification works to maintain network safety'. 'Network safety services' are broken down into four sub-services, two of which (high load escorts and customer initiated outages) are clearly customer-initiated. However, SACOSS submitted that there is insufficient information to judge whether the other two sub-services (provision of traffic control and fitting of tiger tails and aerial markers) involve the provision of services to specific customers. Further, SACOSS submitted that it is difficult to judge whether the service 'rectification works to manage customer vegetation defects or aerial mains where the customer has failed to do so' is customer-specific, as it depends on where the vegetation is and whether the customer has specific responsibility for it.¹¹³

We have classified network safety services as alternative control because there are circumstances where a customer may request these safety related services from a DNSP. If no request has been made for these services, SA Power Networks is still obligated to maintain the safety and integrity of its assets. In these circumstances, these safety activities would be undertaken as part of its common distribution service (and therefore funded by all customers). The addition of a new safety related service does not obviate the need for SA Power Networks to maintain the safety of its network.

Public lighting

Our proposed approach is to classify public lighting services as alternative control services. This is a change from the current classification where public lighting is classified as a negotiated service.

SA Power Networks operates and maintains the majority of public lighting systems throughout SA. It provides these services on behalf of local councils and government departments responsible for public lighting in SA.

The NER does not define public lighting services. However, we have consistently defined public lighting services in other distribution determinations as:

- the operation, maintenance, repair and replacement of public lighting assets,
- the alteration and relocation of public lighting assets, and
- the provision of new public lighting.¹¹⁴

¹¹² Energy and Water Ombudsman of South Australia, *Submission on AER's preliminary framework and approach for SA Power Networks*, 26 April 2018, p. 1.

¹¹³ South Australian Council of Social Service, *Submission on AER's preliminary framework and approach for SA Power Networks*, 1 May 2018, pp. 2–3.

¹¹⁴ See, for example, AER, *Final framework and approach for Queensland*, April 2014, p. 66; AER, *Final framework and approach for Victoria*, October 2014, p. 62.

While SA Power Networks does not have a legislative monopoly over these services, a monopoly position exists to some extent.¹¹⁵ This is because SA Power Networks' extensive network of poles is integral to the provision of public lighting services.¹¹⁶ That is, other parties would need access to poles and easements for instance to hang their own public lighting assets. Therefore, similar to network services, ownership of network assets restricts the operation, maintenance, alteration or relocation of public lighting services to SA Power Networks.¹¹⁷ Based on the above analysis, our proposed position is to classify public lighting services, including emerging technology, as direct control services.¹¹⁸

As direct control services, we must further classify public lighting services as either standard control or alternative control services.¹¹⁹ Our proposed position is to classify public lighting as an alternative control service for the following reasons:

- classifying public lighting services as alternative control services provides scope for third parties and new entrants to provide public lighting services for new public lighting assets.¹²⁰
- classifying public lighting services as alternative control services may encourage other potential service providers to enter the market in the future. In the meantime, an alternative control classification supports the National Electricity Objective by ensuring the distributor provides safe and reliable public lighting services to the community.¹²¹
- SA Power Networks can directly attribute the costs of providing public lighting services to a specific set of customers. This includes local councils and other government agencies.¹²² An alternative control classification allows us to set price caps on these services. We consider that there would not be any material effect on the administrative costs to us, the distributor, users or potential users of the network by reclassifying non-standard connections from negotiated distribution services to alternative control services.¹²³ This is because the administrative and time costs to SA Power Networks and customers in negotiating the price of these services are removed.
- Classifying public lighting services as alternative control is consistent with the classification of public lighting in other jurisdictions.¹²⁴

¹¹⁵ NEL, s. 2F(d).

¹¹⁶ NEL, s. 2F(a).

¹¹⁷ NEL, s. 2F(a)(d).

¹¹⁸ NER, cl. 6.2.1.

¹¹⁹ NER, cl. 6.2.2(c).

¹²⁰ NER, cl. 6.2.2(c)(1).

¹²¹ NER, cl. 6.2.2(c)(1).

¹²² NER, cl. 6.2.2(c)(5).

¹²³ NER, cl. 6.2.2(c)(2).

¹²⁴ See, for example, AER, *Final framework and approach for Queensland*, April 2014, p. 10; AER, *Final framework and approach for NSW*, July 2017, p. 35.

For all the above reasons, we consider that there is a sufficient basis to reclassify public lighting services in SA as alternative control services.¹²⁵

While SA Power Networks proposed to reclassify public lighting as an alternative control service, it requested that we identify an approach within the classification framework that will provide some flexibility to tailor its service offering to its customers.

Under the negotiated distribution service classification, SA Power Networks negotiates with customers and charges for specific types of services—ranging from fully integrated services where they provide full luminaire and infrastructure maintenance and replacement of lights on their poles, to charges for maintenance of luminaires and systems management for lights on customer owned infrastructure (i.e. council and State Government).

EWOSA agreed with the reclassification of public lighting as alternative control service.¹²⁶

SA Power Networks supported the reclassification of public lighting as it is consistent with other jurisdictions where we have consistently considered that this classification matches the market characteristics of public lighting. Further, SA Power Networks submitted that discussions with its public lighting customers has revealed that some customers might value additional oversight via our determinations.¹²⁷

In its submission, SA Power Networks suggested six service offerings for LED¹²⁸ lights to its customers. We note the service offerings and related tariff streams. We shall evaluate these LED service offerings as part of SA Power Networks' reset proposal.

An issue that emerged during a workshop¹²⁹ between SA Power Networks and its customers regarding public lighting is how to treat cases where customers want price certainty beyond the 5-year regulatory period. SA Power Networks proposed 2 options:

- alternative control service prices serve as the base price that is fixed for the regulatory control period which will be offered to all customers,
- if customers seek additional price certainty for longer periods, and enter on this basis into a contract with SA Power Networks in good faith, then prices for the agreements would last for the term of the agreement and services and prices pursuant to the agreement would be treated as alternative control services.¹³⁰

¹²⁵ NER, cl. 6.2.2(c)(3).

¹²⁶ Energy and Water Ombudsman of South Australia, *Submission on AER's preliminary framework and approach for SA Power Networks*, 26 April 2018, p. 1.

¹²⁷ SA Power Networks, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, pp. 3–4.

¹²⁸ Light Emitting Diode.

¹²⁹ Public Lighting workshop held 17 April 2018, run by SA Power Networks.

¹³⁰ SA Power Networks, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 4.

We note SA Power Networks' submission and we are considering how we can introduce increased flexibility into alternative control service pricing to facilitate the approach that SA Power Networks is seeking.

SACOSS also supported the reclassification of public lighting as it aligns with other jurisdictions and recognises that SA Power Networks have an element of monopoly control in the provision of this service, since installation and maintenance of most street lights requires access to SA Power Networks' poles.¹³¹

CCP sub-panel 14 supported the reclassification of public lighting. However, CCP sub-panel 14 opined that ultimately public lighting should be classified as negotiated on the basis that the allocation as a distribution service is largely consequential to the fact that the utilities own the pole to which the light is attached. CCP sub-panel 14 argued that our approach to regulate the price being charged by distributors for public lighting as an alternative control service is a necessary but ultimately insufficient response. CCP sub-panel 14 contended that there are several impediments to a negotiated classification in the short term but submitted that SA Power Networks should be encouraged to address any technical and commercial barriers that preclude the transition of public lighting to potentially becoming unregulated for the 2025–30 regulatory control period. CCP sub-panel 14 also noted that there is some frustration among local councils in relation to public lighting.¹³²

The City of Salisbury submitted that public lighting should be classified as a negotiated service. The City of Salisbury were of the view that public lighting as a function involves the end use and not the distribution of electricity and by its nature is not a distribution service. The City of Salisbury disagreed that a monopoly position exists as the majority of public lights have no access issues and the Local Government Association of SA, in association with the City of Salisbury, are currently progressing Facilities Access Agreement negotiations with SA Power Networks that would allow customers to install their own lights on utility poles. Further, the City of Salisbury argued that public lighting customers in SA currently enjoy a large degree of bargaining power, demonstrated by the establishment of individually negotiated LED tariff agreements. The City of Salisbury contended that the classification of lighting services in other jurisdictions should be taken into account when classifying SA lighting services.¹³³

Trans Tasman Energy Group (TTEG) also did not support the reclassification of public lighting as an alternative control service for the following reasons:¹³⁴

¹³¹ South Australian Council of Social Service, *Submission on AER's preliminary framework and approach for SA Power Networks*, 1 May 2018, p. 3.

¹³² Consumer Challenge Panel (Sub-Panel 14), *Submission on AER's preliminary framework and approach for SA Power Networks*, 4 May 2018, p. 6.

¹³³ City of Salisbury, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, pp. 1–2.

¹³⁴ Trans Tasman Energy Group, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, pp. 1–5.

- There is no monopoly aspect to public lighting (SA Power Networks only have monopoly over the lights they currently own and not any future lights) and therefore economic regulation is not required.
- Public lighting, like metering, has no impact on the distribution network which performs exactly the same with or without meters and/or unmetered lights.
- SA Power Networks do not provide services on behalf of local councils and government departments responsible for public lighting in SA, rather SA Power Networks simply provide the services to local councils and government departments.
- The NER was never designed for establishing public lighting services and prices.
- A result of an alternative control service classification is that public lighting customers are both price and service takers whereas a negotiated classification enables a dynamic interaction between customers and the distributor in establishing both service and price.
- TTEG agreed that other parties would need access to poles and easements but did not agree that this requires SA Power Networks to provide services.
- Markets have not developed under alternative control service classification and in order to enable third party and new entrants, we must adopt a similar approach for public lighting as we did for metering.
- Negotiated classification enables public lighting customers to minimise costs and SA customers have enjoyed far lower price increases compared to that incurred by Victoria and NSW customers under an alternative control service classification.
- There will be a cost incurred by the AER in the alternative control service process which is not incurred under the negotiated classification unless there is a dispute.
- The economic benefits for customers from a negotiated classification have been material and far outweighed any costs.
- The only aspect that may have an element of alternative control is SA Power Networks' existing RAB - however TTEG submitted that this should also be included in a negotiated classification as there are aspects customers can/should engage with/negotiate with SA Power Networks.
- A negotiated classification has multiple benefits for public lighting customers including: delivers lower prices than alternative control services, removes the time constraints on the process, enables changes to both services and prices during the regulatory control period, and enables customers to access SA Power Networks' information.
- An alternative control classification is not appropriate for street lighting as there is no process for establishing/varying the service or charges, services are expected to vary which is not consistent with the regulatory approach to alternative control pricing, and establishing charges under alternative control is problematic.

TTEG proposed that public lighting continue to be classified as a negotiated service as a mechanism on the pathway leading to contestability of unmetered public lighting services.¹³⁵

We disagree with TTEG and the City of Salisbury and maintain the view that public lighting is a monopoly service when provided in connection with SA Power Networks' network infrastructure. Our observation is that there is unequal bargaining power between SA Power Networks and customers, and we are concerned about the likelihood of unsuccessful negotiations leading to disputes. Further, reclassifying public lighting in SA as alternative control is consistent with other jurisdictions, as SA Power Networks noted in its submission. We also note that alternative control simplifies ring-fencing treatment of public lighting; although this is not a driver of the classification, it is noteworthy.

Unregulated distribution services

Unregulated distribution services is the term we use to describe distribution services which we have not classified as either direct control or negotiated services.¹³⁶ These services are provided on an unregulated basis and are potentially provided by other service providers in a competitive market. This group of services is particularly important as the number and types of services offered by distributors is growing and changing.

In October 2017, we published the amended Ring-fencing Guideline for Electricity Distribution.¹³⁷ Our Ring-fencing Guideline interacts with a number of regulatory instruments, including our service classification decisions. Specifically, our service classification decisions set ring-fencing obligations for each distributor for its next regulatory control period.¹³⁸ Under our Ring-fencing Guideline, any unregulated distribution service would be protected by functional and accounting separation. This removes the potential risk of a distributor benefitting from its privileged access to network information to gain a competitive advantage.

Figure 1.3 illustrates the interrelationship between service classification and ring-fencing obligations. Essentially, a distributor may only provide distribution services. Affiliated entities may provide other electricity services. For the purposes of this final F&A we are not addressing interactions with other regulatory frameworks in detail as these are set out in the explanatory statement to the Ring-fencing Guideline.¹³⁹

¹³⁵ Trans Tasman Energy Group, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 1.

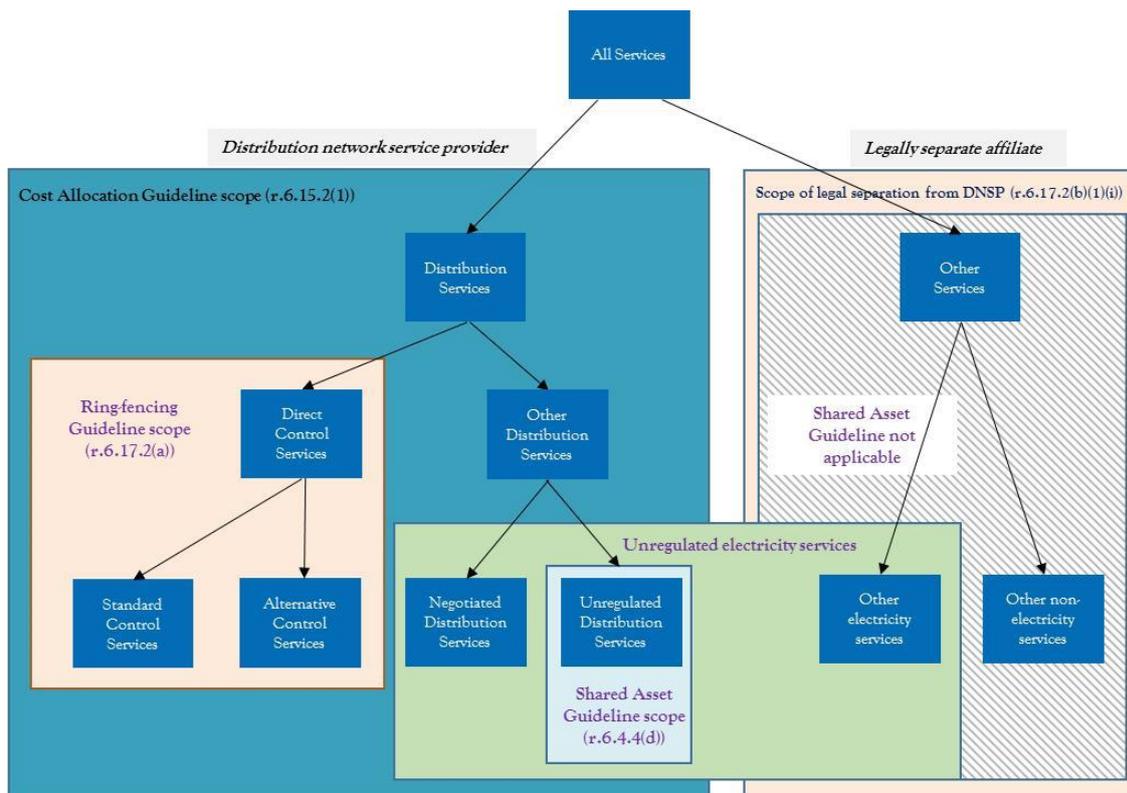
¹³⁶ AER, *Electricity distribution ring-fencing guideline explanatory statement*, November 2016, p. 13.

¹³⁷ AER, *Ring-fencing guideline electricity distribution*, Version 2 October 2017; AER, *Electricity distribution ring-fencing guideline explanatory statement*, October 2017.

¹³⁸ AER, *Electricity distribution ring-fencing guideline explanatory statement*, November 2016, pp. 13–16.

¹³⁹ AER, *Electricity distribution ring-fencing guideline explanatory statement*, November 2016, pp. 13–16.

Figure 1.3 Distribution services linkage to ring-fencing



Source: AER

In approaching classification of unregulated distribution services, distributors (and the AER) are considering if the service would be better offered by an affiliate and therefore not classified (i.e. fall into the 'other electricity services' group on the services diagram above).

Alternatively, some of these distribution services could be classified as alternative control services. As part of our distribution determination, we would set a cost-reflective price for the service based on information provided by the distributor. Customer uptake of the distributor provided service would depend on whether the price of the service is competitive with that of other market participants. It should be noted that if a service is classified as an alternative control service, it would not be subject to ring-fencing obligations, such as the requirements to use a different brand, to use separate offices and to not share staff. Consequently, there are market effects of classifying a potentially contestable service as an alternative control service rather than an unregulated service.

Developing a comprehensive list of unregulated distribution services will be challenging as this service group will capture all distribution services that are contestable services. This includes all contestable metering and contestable connection services.

Compliance with our Ring-fencing Guideline became mandatory on 1 January 2018. Distributors, when considering what unregulated distribution services they offer, should refer

to the examples contained in the explanatory statement to the Ring-fencing Guideline¹⁴⁰ and their unregulated revenue streams. For example, a distributor may earn additional revenue from say NBN Co. by permitting NBN Co. to hang its wires from the same poles. The service is 'providing access to electricity poles'. Similarly, some other access to a network asset that forms part of the RAB may be rented to a third party. The service for classification is 'Distribution asset rental'.

Business SA submitted that under the AER's existing shared asset guideline¹⁴¹, DNSPs can provide third party access to a network asset through a rental agreement whereby consumers receive a 10% share of additional revenues. Business SA supported SA Power Networks being incentivised to maximise the value of their assets, but these assets are subject to economic regulation and consumers ultimately pay SA Power Networks a return to maintain them. If ordinarily SA Power Networks receive a 30% share of cost savings made for consumers, there is no reason why leasing assets paid for by consumers should operate on a different basis. Business SA suggested that we review the shared asset guideline through the F&A process to ensure consumers receive a share of asset rental revenues commensurate with their funding of the actual assets themselves.¹⁴² We agree with Business SA. Given the use of shared assets and how this market has transitioned since the Shared Asset Guideline came in to force, a review of the Guideline is warranted.

¹⁴⁰ AER, *Electricity distribution ring-fencing guideline explanatory statement*, November 2016, Appendices A and B, pp. 77–86.

¹⁴¹ AER, <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/shared-asset-guideline>.

¹⁴² Business SA, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 4.

2 Forms of control

Our distribution determination must impose controls over the prices (and/or revenues) of direct control services.¹⁴³ This section sets out our proposed approach, together with our reasons, on the forms of control to apply to SA Power Networks' direct control services for the 2020–25 regulatory control period. This section also sets out our proposed approach on the formulae to give effect to these control mechanisms.

As discussed in chapter 1, we classify direct control services 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. Appendix C provides our proposed classification of SA Power Networks' distribution services.

The form of control mechanisms in a distributor's regulatory proposal must be the same as the mechanisms set out in the relevant F&A paper.¹⁴⁴ Additionally, the formulae that give effect to the control mechanisms in a distributor's regulatory proposal must be the same as the formulae set out in the relevant F&A paper. The formulae cannot be altered unless we consider that there has been a material change in circumstances justifying a departure from the formulae set out in that paper.¹⁴⁵

2.1 AER's proposed position

Our proposed approach is to apply the following forms of control in the 2020–25 regulatory control period:

- Revenue cap — for services we classify as standard control services.
- Caps on the prices of individual services — for services we classify as alternative control services.

For standard control services, SA Power Networks has proposed the continuation of a revenue cap control mechanism over the 2020–25 regulatory control period.¹⁴⁶ SA Power Networks also suggested that the formula used to calculate the revenue cap in the most recent NSW, ACT, TAS and NT F&A papers appears to remain appropriate, subject to the clarification of customer contributions and the DMIS as outlined in its request to replace its current F&A.¹⁴⁷

¹⁴³ NER, cl. 6.2.5(a).

¹⁴⁴ NER, cl. 6.12.3(c).

¹⁴⁵ NER, cl. 6.12.3(c1).

¹⁴⁶ SA Power Networks - SA Power Networks' *letter: Request to replace framework and approach for 2020-25 determination*, 31 October 2017, p. 9.

¹⁴⁷ SA Power Networks - SA Power Networks' *letter: Request to replace framework and approach for 2020-25 determination*, 31 October 2017, pp. 4, 7, 17.

For alternative control services, SA Power Networks proposed the continuation of the price caps over the 2020–25 regulatory control period.¹⁴⁸

2.2 AER's assessment approach

Our consideration of the control mechanisms for direct control services consists of three parts:

- the form of the control mechanisms¹⁴⁹
- the formulae to give effect to the control mechanisms
- the basis of the control mechanism.¹⁵⁰

The NER sets out the form of control mechanisms that may apply to both standard and alternative control services:¹⁵¹

- a schedule of fixed prices

A schedule of fixed prices specifies a price for every service provided by a distributor. The specified prices are escalated annually by inflation, the X factor and applicable adjustment factors. A distributor complies with the constraint by submitting prices matching the schedule in the first year and then escalated prices in subsequent years.

- caps on the prices of individual services (price caps)

Caps on the prices of individual services are the same as a schedule of fixed prices except that a distributor may set prices below the specified prices on some or all of the services.

- caps on the revenue to be derived from a particular combination of services (revenue cap)

A revenue cap sets the total annual revenue (TAR) for each year of the regulatory control period. A distributor complies with the constraint by forecasting sales for the next regulatory year and setting prices so the expected revenue is equal to or less than the TAR. At the end of each regulatory year, the distributor reports its actual revenues to us. We account for differences between the actual revenue recovered and the TAR in future years. This operation occurs through an unders and overs account, whereby any revenue under recovery (over recovery) is added to (deducted from) the TAR in future years.

- tariff basket price control (weighted average price cap or WAPC)

A WAPC is a cap on the average increase in prices from one year to the next. This allows prices for different services to adjust each year by different amounts. For example, some prices may rise while others fall, subject to the overall WAPC constraint. A weighted average

¹⁴⁸ SA Power Networks - SA Power Networks' *letter: Request to replace framework and approach for 2020-25 determination*, 31 October 2017, p. 9.

¹⁴⁹ NER, cl. 6.2.5(b).

¹⁵⁰ NER, cl. 6.2.6(a).

¹⁵¹ NER, cl. 6.2.5(b).

is used to reflect that services may be sold in different quantities. Therefore, a small increase in the price of a frequently provided service must be offset by a large decrease in the price of an infrequently provided service. A distributor complies with the constraint by setting prices so the change in the weighted average price is equal to or less than the CPI-X cap. Importantly, the WAPC places no ceiling on the revenue recovered by a distributor in any given year. That is, if revenue recovered under the WAPC is greater than (less than) the expected revenue, the distributor keeps (loses) that additional revenue (shortfall).

- revenue yield control (average revenue cap)

An average revenue cap is a cap on the average revenue per unit of electricity sold that a distributor can recover. The cap is calculated by dividing the TAR by a particular unit (or units) of output, usually kilowatt hours (kWh). The distributor complies with the constraint by setting prices so the average revenue is equal to or less than the TAR per unit of output.

- a combination of any of the above (hybrid).

A hybrid control mechanism is any combination of the above mechanisms. Typically, hybrid approaches involve a proportion of revenue that is fixed and a proportion that varies according to pre-determined parameters, such as peak demand.

In considering our proposed approach on the control mechanisms for SA Power Networks' standard control services, we have only considered the continuation of the revenue cap, or adoption of price caps or an average revenue cap. We have not considered the other forms of control mechanisms for standard control services based on our previous considerations that they are not superior to either an average revenue cap or a revenue cap in addressing the factors set out in clause 6.2.5(c) of the NER.

We have not considered a schedule of fixed prices. We consider direct price control mechanisms do not provide the level of flexibility within the regulatory control period to manage distribution use of service charges shared across the broad customer base.

We have not considered a WAPC as our previous considerations on this type of control mechanism noted the incentives for distributors to systematically recover revenue above efficient cost recovery resulting in higher bills for consumers.¹⁵² We consider a control mechanism that results in higher bills for consumers than necessary is not consistent with the national electricity objective.¹⁵³

We have also not considered a hybrid approach as our previous deliberations considered the higher administrative costs outweigh the potential benefits of this form of control.¹⁵⁴

¹⁵² For example, see: AER, *Final framework and approach for the Victorian electricity distributors: Regulatory control period commencing 1 January 2016*, 24 October 2014, p. 82 and AER, *Stage 1 Framework and approach, Ausgrid, Endeavour Energy and Essential Energy, 1 July 2014–30 June 2019*, March 2013, p. 78.

¹⁵³ NEL, s. 7.

¹⁵⁴ For example, see: AER, *Final framework and approach for Victorian electricity distributors: Regulatory control period commencing 1 January 2016*, 24 October 2014, p. 86.

Our decision on the control mechanisms for SA Power Networks' alternative control services is based on whether there is reason to depart from the current price caps in terms of the factors set out in clause 6.2.5(c) of the NER.

Standard control services

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

- need for efficient tariff structures
- possible effects of the control mechanism on administrative costs of us, the distributor, users or potential users
- regulatory arrangements (if any) applicable to the relevant service immediately before the commencement of the distribution determination
- desirability of consistency between regulatory arrangements for similar services (both within and beyond the relevant jurisdiction)
- any other relevant factor.

We also propose to have regard to three other factors which we consider are relevant to assessing the most suitable control mechanism:

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

The basis of the control mechanism for standard control services must be of the prospective CPI-X form or some incentive-based variant.¹⁵⁵

Section 2.3 sets out our consideration of each of the above factors in determining our proposed approach on the form of control mechanisms for standard control services.

Alternative control services

In determining a control mechanism to apply to alternative control services, we must have regard to the factors in clause 6.2.5(d) of the NER:

- the potential for competition to develop in the relevant market and how the control mechanism might influence that potential
- the possible effects of the control mechanism on administrative costs for us, the distributor and users or potential users
- the regulatory arrangements (if any) applicable to the relevant service immediately before the commencement of the distribution determination

¹⁵⁵ NER, cl. 6.2.6(a).

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

We propose that another relevant factor is the provision of cost reflective prices. Efficient prices (cost reflectivity) allow consumers to compare the cost of providing the service to their needs and wants. It also better promotes the national electricity objective by ensuring that customers only pay for services they use. Cost reflective prices also enable distributors to make efficient investment and demand side management decisions.

We must state what the basis of the control mechanism is in our distribution determination.¹⁵⁶ This may utilise elements of Part C of chapter 6 of the NER with or without modification. For example, the control mechanism may use a building block approach or incorporate a pass through mechanism.¹⁵⁷

Section 2.4 sets out our consideration of each of the above factors in determining our proposed approach on the form of control mechanism for alternative control services.

2.3 AER's reasons — control mechanism and formulae for standard control services

Our decision is to maintain a revenue cap for SA Power Networks' standard control services for the 2020–25 regulatory control period. We consider the application of a revenue cap control mechanism best meets the factors set out under clause 6.2.5(c) of the NER.

A revenue cap will result in no additional administrative costs and allow for consistency of regulatory arrangements for standard control services both across regulatory periods and across jurisdictions.

A revenue cap will also result in benefits to consumers through a higher likelihood of revenue recovery at efficient costs and will provide better incentives for demand side management. Furthermore, our recent approach to the operation of the revenue cap has reduced the magnitude of overall price variability during a regulatory control period, which has been a concern in the past. We provide our consideration of these issues below.

EWOSA, SA Power Networks and CCP sub-panel 14 supported this approach.¹⁵⁸

SACOSS submitted that we should take steps to more fully investigate the choice between price caps and revenue caps through the F&A process and through a broader process

¹⁵⁶ NER, cl. 6.2.6(b).

¹⁵⁷ NER, cl. 6.2.6(c).

¹⁵⁸ Energy and Water Ombudsman of South Australia, *Submission on AER's preliminary framework and approach for SA Power Networks*, 26 April 2018, p. 2; SA Power Networks, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 5; Consumer Challenge Panel (Sub-Panel 14), *Submission on AER's preliminary framework and approach for SA Power Networks*, 4 May 2018, p. 3.

across the NEM.¹⁵⁹ Similarly, CCP sub-panel 14 encouraged the AER at a broader level to consider undertaking a review of whether a revenue cap form of control is the best form of control in the changing demand environment in the NEM for the next cycle of resets.¹⁶⁰ We note the concerns raised and agree that it will be useful to review the various forms of control and their related incentives in the future.

Efficient tariff structures

In deciding on a control mechanism, the NER requires us to have regard to the need for efficient tariff structures.¹⁶¹ We consider tariff structures are efficient if they reflect the underlying cost of supplying distribution services.

It is likely that efficient tariff structures can be developed and implemented under all types of control mechanisms. Our recent assessment of distributors' tariff structures has demonstrated that efficient tariff structures have been developed and will be implemented under both average revenue cap and revenue cap control mechanisms. AGL agreed with this point but submitted that DNSPs' pricing preferences appear to be trending towards revenue recovery, because of the form of control, rather than alignment to drivers of network cost.¹⁶²

Our previous considerations on the interaction between a control mechanism and its ability to deliver efficient tariff structures during a regulatory control period relied solely on the incentive properties of the different types of control mechanisms.¹⁶³ However, recent changes to the NER now require us to undertake a supplementary assessment of the efficiency of a distributor's tariff structures which are set out in a tariff structure statement. Therefore, consideration of the interaction between control mechanisms and efficient tariff structures should also be informed by our assessment of a distributor's tariff structure statement.

The requirement for distributors to prepare tariff structure statements is new. It arises from a significant process of reform to the NER governing distribution network pricing. The purpose of the reforms is to empower customers to make informed choices by:

- Providing better price signals—tariffs that reflect what it costs to use electricity at different times so that customers can make informed decisions to better manage their bills.

¹⁵⁹ South Australian Council of Social Service, *Submission on AER's preliminary framework and approach for SA Power Networks*, 1 May 2018, p. 4.

¹⁶⁰ Consumer Challenge Panel (Sub-Panel 14), *Submission on AER's preliminary framework and approach for SA Power Networks*, 4 May 2018, p. 7.

¹⁶¹ NER, cl. 6.2.5(c)(1).

¹⁶² AGL Energy Limited, *Submission on AER's preliminary framework and approach for SA Power Networks*, 21 May 2018, p. 3.

¹⁶³ For example, see: AER, *Final framework and approach for the Victorian electricity distributors: Regulatory control period commencing 1 January 2016*, 24 October 2014, pp. 79–81; AER, *Stage 1 Framework and approach*, Ausgrid, Endeavour Energy and Essential Energy, 1 July 2014–30 June 2019, March 2013, pp. 76–77.

- Transitioning to greater cost reflectivity—requiring distributors to explicitly consider the impacts of tariff changes on customers, and engaging with customers, customer representatives and retailers in developing network tariff proposals over time.
- Managing future expectations—providing guidance for retailers, customers and suppliers of services such as local generation, batteries and demand management by setting out the distributor's tariff approaches for a set period of time.

A distributor's tariff structure statement sets out the tariff structures it can apply over a regulatory control period.¹⁶⁴ The tariff structure statement should show how a distributor applied the distribution pricing principles¹⁶⁵ to develop its tariff structures and the indicative price levels of tariffs for the coming five year regulatory control period. The network pricing objective of the distribution pricing principles is the focus for a distributor when developing its network tariffs. The objective is that:¹⁶⁶

the tariffs that a distributor charges for provision of direct control services to a retail customer should reflect the distributor's efficient costs of providing those services to the retail customer.

We must approve a tariff structure statement unless we are reasonably satisfied it will not comply with the distribution pricing principles or other relevant requirements of the NER.¹⁶⁷

In February 2017, we made final decisions on the initial tariff structure statements for SA Power Networks, Evoenergy (formerly ActewAGL) and the distributors in Queensland and New South Wales. On 28 April 2017, we made our final decision on TasNetworks' initial tariff structure statement.

Through the initial tariff structure statements many distributors will be introducing more cost reflective tariff structures, such as demand based tariffs. In our assessment we found no evidence to suggest that Evoenergy's average revenue cap or other distributors' revenue caps inhibited the ability to develop or implement efficient tariff structures. Therefore, we consider that efficient tariff structures can occur under both average revenue cap and revenue cap control mechanisms. On this basis, we also consider efficient tariff structures are likely to occur under all forms of control mechanisms, including price caps.

While our consideration of efficient tariff structures does not necessarily indicate a revenue cap should be favoured over an average revenue cap or price caps, our decision needs to be weighed against the other factors under clause 6.2.5(c) of the NER.

We note that tariff reform brought about by the tariff structure statements is still in its infancy. We may revisit the interaction between a control mechanism and efficient tariff structures for future F&A's.

¹⁶⁴ NER, cl. 6.18.1A(a)(3).

¹⁶⁵ This is a reference to the NER *pricing principles for direct control services*, alternatively described in this paper as the "distribution pricing principles"; NER, cl. 6.18.5(e)–(j).

¹⁶⁶ NER, cl. 6.18.5(a).

¹⁶⁷ NER, cl. 6.12.3(k).

Business SA noted that whatever price signals SA Power Networks sends through its tariff structures, particularly for small market customers, there is nothing to oblige retailers to pass on those tariffs to the market, which is more likely to occur in a market such as SA which is highly concentrated.¹⁶⁸ Business SA did not propose a solution to this problem but simply noted that the anomaly exists and should be recognised.

Administrative costs

In deciding on a control mechanism, the NER requires us to have regard to the possible effects of the control mechanism on administrative costs.¹⁶⁹ We consider that, where possible, a control mechanism should minimise the complexity and administrative burden for us, the distributor and users.

Generally, we consider there is little difference in administrative costs between control mechanisms under the building block framework in the long run. However, we consider the continuation of a revenue cap control mechanism to SA Power Networks' standard control services would have the least complexity and administrative burden. The continuation of a revenue cap would impose no additional administrative costs for us, SA Power Networks or users.

In contrast, additional administrative costs will be incurred by at least SA Power Networks and us in transitioning from a revenue cap to a price cap or alternative form of control mechanism. For example, new tariff models would need to be developed for annual pricing proposals to demonstrate compliance with the new control mechanism. Therefore, we consider the continuation of a revenue cap is superior in meeting clause 6.2.5(c)(2) of the NER.

Existing regulatory arrangements

In deciding on a control mechanism, the NER requires us to have regard to the regulatory arrangements applicable to the relevant service immediately before the commencement of the distribution determination.¹⁷⁰ We note maintaining a revenue cap control mechanism for SA Power Networks' standard control services provides for consistent regulatory arrangements for these services across regulatory control periods. Therefore, we consider the continuation of a revenue cap control mechanism is superior in meeting clause 6.2.5(c)(3) of the NER compared to an alternative control mechanism.

AGL submitted that the AER's position that under a revenue cap there is no additional administrative costs and that a revenue cap allows for consistency between regulatory periods is valid but is not an overriding argument given that the AER has overseen many networks transitioning from price to revenue caps in recent determinations.¹⁷¹ We consider

¹⁶⁸ Business SA, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 4.

¹⁶⁹ NER, cl. 6.2.5(c)(2).

¹⁷⁰ NER, cl. 6.2.5(c)(3).

¹⁷¹ AGL Energy Limited, *Submission on AER's preliminary framework and approach for SA Power Networks*, 21 May 2018, p. 3.

that the ability to transition between control mechanisms demonstrates that consistency between periods is not the sole criteria for assessing the appropriate control mechanism, but neither does it remove it as a consideration. In response to AGL's submission we refer to our earlier discussion of revenue caps compared to price caps under section 2.3.

Desirability of consistency between regulatory arrangements

In deciding on a control mechanism, the NER requires us to have regard to the desirability of consistency between regulatory arrangements for similar services both within and beyond the relevant jurisdiction.¹⁷² We consider the continuation of a revenue cap control mechanism for SA Power Networks' standard control services delivers consistent regulatory arrangements for these services across jurisdictions.

Apart from Evoenergy, all other electricity distributors who are currently subject to economic regulation under the NER have a revenue cap control mechanism applied to their standard control services. However, we have decided to apply a revenue cap to Evoenergy's standard control services for the 2019–24 regulatory control period.¹⁷³ This means that from 1 July 2019 all distributors' standard control services will be subject to a revenue cap control mechanism. Therefore maintaining SA Power Networks' revenue cap control mechanism will ensure consistent regulatory arrangements for these services across jurisdictions. For these reasons, we consider the continuation of a revenue cap control mechanism is superior in meeting clause 6.2.5(c)(4) of the NER than an alternative mechanism.

Revenue recovery

We consider that a control mechanism should give a distributor an opportunity to recover efficient costs. Also, a control mechanism should limit revenue recovery above such costs. Revenue recovery above efficient costs results in higher prices for end users. Further, allocative efficiency is reduced when a distributor recovers additional revenue from price sensitive services through prices above marginal cost.¹⁷⁴

Generally, we consider that a revenue cap provides a high likelihood of efficient cost recovery. Under a revenue cap, revenue recovery is fixed and unrelated to energy sales. Similarly, costs for distributors are largely fixed and unrelated to energy sales. Therefore, our view is that a revenue cap is likely to lead to efficient cost recovery.

We also consider that a revenue cap incentivises distributors to reduce their expenditures because their revenues are assured during the regulatory control period. These lower costs can be shared with customers in future regulatory control periods.

In contrast, control mechanisms where revenue depends on energy sales (such as average revenue caps or price caps) provides distributors with incentives to understate sales

¹⁷² NER, cl. 6.2.5(c)(4).

¹⁷³ ActewAGL Distribution, *Response to AER preliminary framework and approach*, April 2017, p. 11.

¹⁷⁴ AER, *Framework and approach: ActewAGL - Regulatory control period commencing 1 July 2019*, July 2017, p. 33.

forecasts and adjust tariffs to gain revenues above efficient cost levels.¹⁷⁵ A systematic recovery of revenue above efficient cost recovery results in higher bills for consumers.¹⁷⁶ We consider a control mechanism that results in higher bills for consumers than necessary is not consistent with the national electricity objective.¹⁷⁷

In terms of efficient revenue recovery, we consider a revenue cap control mechanism better reflects the national electricity objective than those that rely on energy sales.¹⁷⁸

AGL submitted that our review of the form of control focuses on the revenue determination process rather than DNSP behaviour during the period. The determination process only estimates efficient cost and will be in error. AGL prefers a control that limits the price to customers rather than focussing on limiting revenue with the potential for significant price increases.¹⁷⁹ As discussed in section 2.3, we consider that revenue caps and price caps both incentivise DNSPs to different behaviours. On balance, we consider a revenue cap to be the more appropriate option.

Pricing flexibility and stability

Price flexibility enables a distributor to restructure its tariffs to meet changes in the environment of operating an electricity distribution network during a regulatory control period. Price stability is important because it affects retailers' ability to manage risks incurred from changes to network tariffs, which they then package into retail plans for customers. It also affects customers' ability to manage their bills.

We consider price flexibility is primarily influenced by the distribution pricing principles and the side constraint.¹⁸⁰ Therefore, price flexibility is similar for all control mechanisms as they are subject to the same distribution pricing principles and the same side constraint.

In terms of price stability, some control mechanisms are more likely to deliver stable prices than others. However, price instability can occur under all control mechanisms because the NER require various annual price adjustments regardless of the control mechanism.¹⁸¹

Within a regulatory control period, an average revenue cap or price caps will deliver more overall price stability than a revenue cap. The increased variability under a revenue cap

¹⁷⁵ For example, see: AER, *Preliminary positions: Framework and approach paper ActewAGL—Regulatory control period commencing 1 July 2014*, pp. 64–67; AER.

¹⁷⁶ For example, see: AER, *Final framework and approach for the Victorian electricity distributors: Regulatory control period commencing 1 January 2016*, 24 October 2014, p. 82 and AER, *Stage 1 Framework and approach, Ausgrid, Endeavour Energy and Essential Energy, 1 July 2014–30 June 2019*, March 2013, p. 78.

¹⁷⁷ NEL, s. 7.

¹⁷⁸ NEL, s. 7.

¹⁷⁹ AGL Energy Limited, *Submission on AER's preliminary framework and approach for SA Power Networks*, 21 May 2018, p. 3.

¹⁸⁰ Clause 6.18.6(b) of the NER requires the expected weighted average revenue to be raised from a Standard Control Services tariff class to not exceed the corresponding expected weighted average revenue from the preceding year by more than a permissible percentage (the tariff side constraint).

¹⁸¹ These include cost pass throughs, jurisdictional scheme obligations, tribunal decisions and transmission prices passed on to the distributors from transmission network service providers.

occurs because future revenues and tariffs are adjusted to account for the difference between the actual revenue recovered and the TAR. These differences are due to the variations between forecast and actual sales volumes. The true up of this under or over recovery of revenue is calculated in the unders and overs account.

Typically there is a two year lag from when the under or over recovery of revenue occurs (year $t-2$) and the year in which audited accounts can be relied upon to make an accurate revenue true up adjustment (year t). This lagged effect may cause price instability when an under (over) recovery of revenue in one year is followed by an over (under) recovery in the following year. In this scenario, price movements go in one direction for first year and then go in the opposite direction the following year.

We have somewhat addressed this issue in our recent determinations by applying a rolling unders and overs account which includes an additional true up for the estimated under and over recovery of revenues for the year in between (year $t-1$).¹⁸² The inclusion of this estimated year helps smooth year-on-year revenue and tariff adjustments because the effects of the estimated year $t-1$ under or over recovery will have been largely accounted for when year $t-1$ becomes year $t-2$. That is, when year $t-1$ becomes year $t-2$ the adjustment to the TAR will only need to account for the difference between the estimated and actual under or over recovery and not the overall total under or over recovery.

In terms of stability across regulatory control periods, we consider an average revenue cap can result in greater price volatility compared to a revenue cap.¹⁸³ This issue is particularly pronounced if a trend of falling demand and consumption has set in throughout the regulatory control period. This scenario would prompt a large upward adjustment in the X-factors (and hence prices) for the next regulatory control period under an 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. AGL submitted that this argument assumes that efficient network prices would need to increase significantly in the next period in line with the fall in demand and consumption. AGL are hopeful that if network utilisation fell markedly then other cost components would also be re-examined by the AER. AGL argued that revenue cap control simply ensures DNSPs recover a forecast of network revenue.¹⁸⁴

On balance, when weighing price flexibility and stability along with the other factors we have considered, our decision is to maintain SA Power Networks' revenue cap control mechanism for standard control services. While we acknowledge a revenue cap has a higher likelihood

¹⁸² For example, see: AER, *Final Decision, CitiPower distribution determination 2016 to 2020: Attachment 14—Control mechanisms*, May 2016, Appendix A, pp. 18–19.

¹⁸³ AER, *Preliminary positions: Framework and approach paper ActewAGL—Regulatory control period commencing 1 July 2014*, pp. 67–69.

¹⁸⁴ AGL Energy Limited, *Submission on AER's preliminary framework and approach for SA Power Networks*, 21 May 2018, p. 3.

of overall price instability during a regulatory control period, we consider our application of the rolling unders and overs account reduces the magnitude of this effect.

Incentives for demand side management

Demand side management refers to the implementation of non-network solutions to avoid the need to build network infrastructure to meet increases in annual or peak demand.¹⁸⁵ Where prices are cost reflective, consumers and providers of demand side management face efficient incentives because they can take into account the cost of providing the service in decision making.

Under a revenue cap, a distributor's revenue is fixed over the regulatory control period. A distributor can therefore improve its financial position by reducing costs. This creates an incentive for a distributor to undertake demand side management projects that reduce total costs, even if that means the distributor does not build new assets or replace existing ones.¹⁸⁶ We consider this provides a stronger incentive for a distributor to undertake demand side management within a regulatory control period compared to a control mechanism that has expected revenues varying with overall sales, such as in a price cap.

Under an average revenue cap or price cap control mechanism, a distributor's revenues are linked more closely to actual volumes of electricity distributed. As a result, distributors' profits increase with sales if the marginal revenue is greater than the marginal cost of providing services. Demand side management may not be attractive for distributors if such projects result in less revenue as a result of the decline in demand or consumption that they induce.

AGL agreed that there is more incentive for DNSPs to undertake demand side management projects that reduce costs because revenue is unaffected. However, AGL submitted that this position has not been supported by DNSP behaviour to date, as conceded by the AER though introduction of schemes to incentivise DNSPs' use of demand management response.¹⁸⁷

Notwithstanding AGL's comments made throughout section 2.3, AGL conceded that moving to cost-reflective network pricing will both diminish the advantages of price cap regulation whilst reducing the problems with revenue cap control. AGL submitted that if we maintain revenue cap control in the next regulatory control period, then it needs to be accompanied by the requisite network pricing reform.¹⁸⁸

Formulae for control mechanism

¹⁸⁵ Generally peak demand is referred to as the maximum load on a section of the network over a very short time period.

¹⁸⁶ That is, demand side management projects that result in a reduction in future network expenditure greater than the cost of implementing the demand side management projects.

¹⁸⁷ AGL Energy Limited, *Submission on AER's preliminary framework and approach for SA Power Networks*, 21 May 2018, p. 3.

¹⁸⁸ AGL Energy Limited, *Submission on AER's preliminary framework and approach for SA Power Networks*, 21 May 2018, p. 4.

We are required to set out our proposed approach to the formulae that gives effect to the control mechanisms for standard control services in the F&A paper.¹⁸⁹ In making a distribution determination, the formulae must be as set out in our final F&A, unless we consider that unforeseen circumstances justify departing from the formulae as set out in the F&A paper.¹⁹⁰ Below is the formula we propose to apply to SA Power Networks' standard control services revenues. We consider that the formula gives effect to the revenue cap. SA Power Networks supported the revenue cap formulae.¹⁹¹

Figure 2.1 Revenue cap to be applied to SA Power Networks' standard control services

1. $TAR_t \geq \sum_{i=1}^n \sum_{j=1}^m p_t^{ij} q_t^{ij}$ $i = 1, \dots, n$ and $j = 1, \dots, m$ and $t = 1, 2, \dots, 5$
2. $TAR_t = AAR_t + I_t + B_t + C_t$ $t = 1, 2, \dots, 5$
3. $AAR_t = AR_t \times (1 + S_t)$ $t = 1$
4. $AAR_t = AAR_{t-1} \times (1 + \Delta CPI_t) \times (1 - X_t) \times (1 + S_t)$ $t = 2, \dots, 5$

where:

TAR_t is the total allowable revenue in year t.

p_t^{ij} is the price of component 'j' of tariff 'i' in year t.

q_t^{ij} is the forecast quantity of component 'j' of tariff 'i' in year t.

t is the regulatory year.

AR_t is the annual smoothed revenue requirement in the Post Tax Revenue Model (PTRM) for year t.

AAR_t is the adjusted annual smoothed revenue requirement for year t.

I_t is the sum of incentive scheme adjustments in year t. To be decided in the distribution determination.

¹⁸⁹ NER, cl. 6.8.1(b)(2)(ii).

¹⁹⁰ NER, cl. 6.12.3(c1).

¹⁹¹ SA Power Networks, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 5.

B_t is the sum of annual adjustment factors in year t. Likely to incorporate but not limited to adjustments for the unders and overs account. To be decided in the distribution determination.

C_t is the sum of approved cost pass through amounts (positive or negative) with respect to regulatory year t, as determined by the AER. It will also include any end-of-period adjustments in year t. To be decided in the distribution determination.

S_t is the s-factor for regulatory year t.¹⁹² As it currently stands, the s-factor will incorporate any adjustments required due to the application of the AER's STPIS.¹⁹³

However, we are currently undertaking a review of the STPIS. How the s-factor will apply within the revenue cap formula may depart from the current arrangements. Depending on the outcome of our review, provision to adjust revenues for performance against the STPIS may be made through either the S or I factors as set out in this F&A paper. If the review is completed in time, the distributors may need to apply the revised STPIS for the 2020–25 regulatory control period. We will consider the application of the revised STPIS during the revenue determination process.

ΔCPI_t is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities¹⁹⁴ from the December quarter in year t–2 to the December quarter in year t–1, calculated using the following method:

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in regulatory year t–1

divided by

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in regulatory year t–2

minus one.

For example, for 2020–21, year t–2 is the December quarter 2018 and year t–1 is the December quarter 2019.

X_t is the X-factor in year t, incorporating annual adjustments to the PTRM for the trailing cost of debt where necessary. To be decided in the distribution determination.

¹⁹² The meaning for year “t” under the price control formula is different to that in Appendix C of STPIS. Year “t+1” in Appendix C of STPIS is equivalent to year “t” in the price control formula of this decision.

¹⁹³ AER, *Electricity distribution network service providers - service target performance incentive scheme*, 1 November 2009.

¹⁹⁴ If the ABS does not or ceases to publish the index, then CPI will mean an index which the AER considers is the best available alternative index.

2.4 AER's reasons — control mechanism for alternative control services

Our decision is to apply caps on the prices of individual services (price caps) in the 2020–25 regulatory control period to all of SA Power Networks' alternative control services. We propose to classify the following services as alternative control services:

- type 5 and 6 metering services (legacy metering services)
- public lighting services
- non-standard connection services
- ancillary services.

We note SA Power Networks' alternative control services are currently subject to price cap regulation. The continuation of these price caps over the 2020–25 regulatory control period best meets the factors set out under clause 6.2.5(d) of the NER.

Unlike standard control services, the NER is not prescriptive on the basis of the control mechanism for alternative control services.¹⁹⁵ For example, the price caps could be based on a building block approach, or a modified building block cost build up. We have set out our proposed formulae that will give effect to the price cap control mechanisms in figure 2.2 and figure 2.3 below. However, it is at the distributor's discretion as to the approach it undertakes to develop its initial prices.

Prices for certain ancillary services will be determined on a quoted basis. Prices for quoted services are based on quantities of labour and materials with the quantities dependent on a particular task. For example, where a customer seeks a non-standard connection which may involve an extension to the network, the distributor may only be able to quote on the service once it knows the scope of the work. Because of this uncertainty, our proposed approach on price cap formula for quoted services differs to that proposed to apply to metering and fee based services. Our quoted services price cap is consistent with the approach we have adopted in the past.

A further consideration relates to the treatment of new services that might be offered by SA Power Networks within the regulatory control period. Where such services were not identified at the time of our Determination but for which the service clearly falls within one of the established service groupings, we propose that a quoted price approach be adopted based on a similar service within that same service grouping. For example, the price for a new type of security lighting would be set based on the same approach as a similar security lighting service. This approach would give SA Power Networks additional flexibility to introduce new services while offering consumers the protections associated with price regulation. If there was no other similar service, the new service would be unregulated and may therefore be subject to ring-fencing restrictions that affect the use of SA Power

¹⁹⁵ NER, cl. 6.2.6(c).

Networks' brand and sharing of staff and offices in offering the new services. SA Power Networks supported this approach.¹⁹⁶

Application for the introduction of a new alternative control service, within the regulatory control period, is to be made at the time of the annual price submission. The application should provide a detailed description of the service to be introduced along with a plan for how the new service will be charged.

Our consideration of the relevant factors is set out below.

Influence on the potential to develop competition

We consider a departure from the current price cap controls for SA Power Networks' alternative control services would not have a significant impact on the potential development of competition. We consider the primary influence on competition development will be the classification of services as alternative control services. Chapter 1 discusses service classification.

Administrative costs

Where possible, a control mechanism should minimise the complexity and administrative burden for us, the distributor and users. The continuation of price caps will impose no additional administrative costs for us, SA Power Networks or users. Additional administrative costs will be incurred at least to SA Power Networks and us if an alternative control mechanism was applied to these services.

Existing regulatory arrangements

We consider consistency across regulatory control periods is generally desirable. Our proposed approach maintains this regulatory consistency as it continues the application of price cap control mechanisms for SA Power Networks' alternative control services.

Desirability of consistency between regulatory arrangements

We consider consistency across jurisdictions is also generally desirable. Our proposed approach maintains this consistency across jurisdictions.

We note that apart from the Victorian distributor's metering services which are subject to a revenue cap, price cap control mechanisms are currently applied to the alternative control services for all other electricity distributors subject to economic regulation under the NER.

Cost reflective prices

We consider that price caps are more suitable than other control mechanisms for delivering cost reflective prices. To apply price caps to the prices, we estimate the cost of providing each service and set the price at that cost. This will enhance cost reflectivity on both competitive and non-competitive services.

¹⁹⁶ SA Power Networks, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 5.

Formulae for alternative control services

We are required to set out our proposed approach to the formulae that gives effect to the control mechanisms for alternative control services.¹⁹⁷ In making a distribution determination, the formulae must be as set out in our final F&A, unless we consider that unforeseen circumstances justify departing from the formulae as set out in the F&A paper.¹⁹⁸

Below are our proposed price cap formulae which will apply to SA Power Networks' alternative control services. SA Power Networks supported the price cap formulae.¹⁹⁹

Figure 2.2 Price cap formula to be applied to SA Power Networks' legacy metering, public lighting and ancillary services (fee based)

$$\bar{p}_t^i \geq p_t^i \quad i=1,\dots,n \text{ and } t=1, 2,\dots,5$$

$$\bar{p}_t^i = \bar{p}_{t-1}^i \times (1 + \Delta CPI_t) \times (1 - X_t^i) + A_t^i$$

Where:

\bar{p}_t^i is the cap on the price of service i in year t.

p_t^i is the price of service i in year t. The initial value is to be decided in the distribution determination.

\bar{p}_{t-1}^i is the cap on the price of service i in year t-1.

t is the regulatory year.

ΔCPI_t is the annual percentage change in the ABS consumer price index (CPI) All Groups, Weighted Average of Eight Capital Cities²⁰⁰ from the December quarter in year t-2 to the December quarter in year t-1, calculated using the following method:

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in regulatory year t-1

divided by

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in regulatory year t-2

minus one.

¹⁹⁷ NER, cl. 6.8.1(b)(2)(ii).

¹⁹⁸ NER, cl. 6.12.3(c1).

¹⁹⁹ SA Power Networks, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 5.

²⁰⁰ If the ABS does not, or ceases to, publish the index, then CPI will mean an index which the AER considers is the best available alternative index.

For example, for 2020–21, year t–2 is the December quarter 2018 and year t–1 is the December quarter 2019.

X_t^i is the X factor for service i in year t. The X factors are to be decided in the distribution determination and will be based on the approach the distributor undertakes to develop its initial prices.

A_t^i is the sum of any adjustments for service i in year t. Likely to include, but not limited to adjustments for any approved cost pass through amounts (positive or negative) with respect to regulatory year t, as determined by the AER.

Figure 2.3 Price cap formula to be applied to SA Power Networks' quoted services

$$\text{Price} = \text{Labour} + \text{Contractor Services} + \text{Materials}$$

Where:

Labour consists of all labour costs directly incurred in the provision of the service which may include labour on-costs, fleet on-costs and overheads. Labour is escalated annually by $(1 + \Delta CPI_t)(1 - X_t^i)$ where:

ΔCPI_t is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities²⁰¹ from the December quarter in year t–2 to the December quarter in year t–1, calculated using the following method:

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in regulatory year t–1

divided by

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in regulatory year t–2

minus one.

For example, for 2020–21, year t–2 is the December quarter 2018 and year t–1 is the December quarter 2019.

X_t^i is the X factor for service i in year t. The X factor is to be decided in the distribution determination and will be based on the approach the distributor undertakes to develop its initial prices.

²⁰¹ If the ABS does not, or ceases to, publish the index, then CPI will mean an index which the AER considers is the best available alternative index.

Contractor Services reflect all costs associated with the use of external labour including overheads and any direct costs incurred. The contracted services charge applies the rates under existing contractual arrangements. Direct costs incurred are passed on to the customer.

Materials reflect the cost of materials directly incurred in the provision of the service, material storage and logistics on-costs and overheads.

3 Incentive schemes

This chapter sets out our proposed approach on the application of a range of incentive schemes to SA Power Networks for the 2020–25 regulatory control period. At a high level, our proposed approach is to apply the:

- service target performance incentive scheme
- efficiency benefit sharing scheme
- capital expenditure sharing scheme
- demand management incentive scheme and innovation allowance mechanism.

SA Power Networks and EWOSA supported the proposed approach to apply all incentive schemes, including the likely revised STPIS.²⁰²

SA Renewable Energy Policy Group had concerns with the incentive schemes we propose to apply and does not believe that any of the schemes will result in efficiency but would rather simply hand cash to networks without mechanisms for assuring that those funds are earned or spent appropriately.²⁰³ SA Renewable Energy Policy Group supported incentives that bring about real value and investment in non-network alternatives, however did not believe that SA Power Networks is incentivised to be efficient.²⁰⁴ We consider that this claim is not supported by the available evidence.

CCP sub-panel 14 supported in principle the application of all the incentive schemes provided that the network shows it is efficient.²⁰⁵

3.1 Service target performance incentive scheme

This section sets out our proposed approach and reasons for applying the service target performance incentive scheme (STPIS) to SA Power Networks in the next regulatory control period.

Our distribution STPIS²⁰⁶ provides a financial incentive to distributors to maintain and improve service performance. The scheme aims to ensure that cost efficiencies incentivised under our expenditure schemes do not arise through the deterioration of service quality for customers. Penalties and rewards under the STPIS are calibrated with how willing customers are to pay for improved service. This aligns the distributor's incentives towards

²⁰² SA Power Networks, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 8; Energy and Water Ombudsman of South Australia, *Submission on AER's preliminary framework and approach for SA Power Networks*, 26 April 2018, p. 2.

²⁰³ SA Renewable Energy Policy Group, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 1.

²⁰⁴ SA Renewable Energy Policy Group, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 3.

²⁰⁵ Consumer Challenge Panel (Sub-Panel 14), *Submission on AER's preliminary framework and approach for SA Power Networks*, 4 May 2018, p. 8.

²⁰⁶ AER, *Electricity distribution network service providers - service target performance incentive scheme*, 1 November 2009.

efficient price and non-price outcomes with the long-term interests of consumers, consistent with the National Electricity Objective (NEO).

The STPIS operates as part of the building block determination and contains two mechanisms:

- The service standards factor (s-factor) adjustment to the annual revenue allowance for standard control services rewards (or penalises) distributors for improved (or diminished) service compared to predetermined targets. Targets relate to service parameters pertaining to reliability and quality of supply, and customer service.
- A guaranteed service level (GSL) component composed of direct payments to customers²⁰⁷ experiencing service below a predetermined level. This component only applies if there is not another GSL scheme already in place.²⁰⁸

While the mechanics of how the STPIS will operate are outlined in our scheme, we must set out key aspects specific to SA Power Networks in the next regulatory control period at the determination stage, including:

- the maximum revenue at risk under the STPIS
- how the distributors' networks will be segmented or the purpose of setting performance targets
- the applicable parameters for the s-factor adjustment of annual revenue
- performance targets for the applicable parameters in each network segment
- the criteria for certain events to be excluded from the calculation of annual performance and performance targets
- incentive rates that determine the penalties and rewards under the scheme.

SA Power Networks may propose to vary the application of the STPIS in its regulatory proposal.²⁰⁹ We can accept or reject the proposed variation in our determination. Each year we will calculate SA Power Networks s-factor based on service performance in the previous year against targets, subject to the revenue at risk limit. Our national STPIS includes a banking mechanism, allowing distributors to propose delaying a portion of the revenue increment or decrement for one year to limit price volatility for customers.²¹⁰ A distributor proposing a delay must provide in writing its reasons and justification as to why a delay will result in reduced price variations to customers.

²⁰⁷ Except where a jurisdictional electricity GSL requirement applies.

²⁰⁸ Service level is assessed (unless we determine otherwise) with respect to parameters pertaining to the frequency and duration of interruptions; and time taken for streetlight repair, new connections and publication of notices for planned interruptions.

²⁰⁹ AER, *Electricity distribution network service providers – service target performance incentive scheme*, 1 November 2009, cl. 2.2.

²¹⁰ AER, *Electricity distribution network service providers – service target performance incentive scheme*, 1 November 2009, cl. 2.5(d) and (e).

Our STPIS currently applies to SA Power Networks. The 2015–20 regulatory control period was the first time that SA Power Networks was subject to the national scheme. The level of financial risk to SA Power Networks in terms of penalty or reward was set at ± 5 per cent of the allowable revenue.²¹¹ GSLs are provided for through the Essential Services Commission of South Australia's GSL scheme, so the GSL component of our scheme does not apply.

AER's proposed approach

Our proposed approach is to continue to apply the current version of the national STPIS to SA Power Networks in the 2020–25 regulatory control period. We propose to:

- set revenue at risk within the range of ± 5 per cent
- segment the network according to the four STPIS feeder categories (CBD, urban, short rural and long rural) as per the scheme's definitions
- apply the system average interruption duration index (SAIDI), system average interruption frequency index (SAIFI) and customer service (telephone answering) parameters
- set performance targets based on the distributor's average performance over the past five regulatory years
- apply the method in the STPIS for excluding specific events from the calculation of annual performance and performance targets
- apply the method and value of customer reliability (VCR) values as indicated in AEMO's 2014 Value of Customer Reliability Review final report.

We will not apply the GSL component if SA Power Networks remains subject to a jurisdictional GSL scheme.

We are currently undertaking a review of the STPIS. If the review is completed in time, SA Power Networks may need to apply the revised STPIS for the 2020–25 regulatory control period. SA Power Networks has indicated in its request to replace the current F&A that we should apply the revised STPIS.²¹² We will consider the application of the revised STPIS during the revenue determination process.

AER's assessment approach

In deciding how to apply the current STPIS we have considered the requirements of the NER. The NER sets out certain requirements in relation to developing and implementing a STPIS.²¹³ These include:

²¹¹ AER, *Final decision, South Australia distribution determination, Attachment 11, STPIS*, October 2015, p. 6.

²¹² SA Power Networks, *Request to replace the framework and approach*, 31 October 2017, p. 3.

²¹³ NER, cl. 6.6.2(b).

Jurisdictional obligations

- consulting with the authorities responsible for the administration of relevant jurisdictional electricity legislation
- ensuring that service standards and service targets (including GSL) set by the scheme do not put at risk the distributor's ability to comply with relevant service standards and service targets (including GSL) specified in jurisdictional electricity legislation any regulatory obligations or requirements to which the distributor is subject.

Benefits to consumers

We must take into account the benefits to consumers of applying the STPIS. This includes:

- the need to ensure that benefits to consumers likely to result from the scheme are sufficient to warrant any penalty or reward under the scheme
- the willingness of the customer or end user to pay for improved performance in the delivery of services
- balanced incentives
- the past performance of the distribution network
- any other incentives available to the distributor under the NER or the relevant distribution determination
- the need to ensure that the incentives are sufficient to offset any financial incentives the distributor may have to reduce costs at the expense of service levels
- the possible effects of the schemes on incentives for the implementation of non-network alternatives.

We considered the benefits to consumers of applying the STPIS when we developed the scheme. These considerations are set out in our final decision for the distribution STPIS.²¹⁴

Reasons for AER's proposed approach

Our reasons for applying the STPIS to SA Power Networks in the next regulatory control period are set out below.

SACOSS supported the application of the STPIS, however, did not support maintaining the revenue at risk at ± 5 per cent. SACOSS argued that this is relatively high-powered and can result in higher prices for customers where the network is able to raise reliability standards above the threshold. SACOSS were of the view that ± 2 per cent is preferable, or alternatively, the AER could set penalties for not achieving the threshold service quality levels without providing rewards for exceeding the threshold. SACOSS submitted that the AER should allow SA Power Networks to test with its customers whether they are prepared

²¹⁴ AER, *Final decision: Electricity distribution network service providers Service target performance incentive scheme*, 1 November 2009.

to pay up to 5 per cent more for improvements in service quality above current levels.²¹⁵ We raised the prospect of ± 5 per cent in the preliminary F&A as it is sensible to do so at this point and to seek stakeholders' views. We propose to maintain the revenue at risk of ± 5 per cent.

CCP sub-panel 14 strongly supported the application of the maximum factor of ± 5 per cent.²¹⁶ AGL supported the application of the scheme.²¹⁷

Jurisdictional obligations

In South Australia, the ESCOSA administers and monitors compliance with the distribution licence conditions.

Our proposed approach to applying the STPIS for SA Power Networks is to not create duplication or compromise SA Power Networks ability to comply with jurisdictional requirements. Our proposed approach is therefore to not apply the GSL component of our national STPIS while the GSL arrangements in SA remain in place. We will amend this position if the SA Government advises that these arrangements will cease to apply.

Benefits to consumers

We are mindful of the potential impact of the STPIS on consumers. Under the NER, we must consider customers' willingness to pay for improved service performance so benefits to consumers are sufficient to warrant any penalty or reward under the STPIS.²¹⁸

Under the STPIS, a distributor's financial penalty or reward in each year of the regulatory control period is the change in its annual revenue allowance after the s-factor adjustment. Economic analysis of the value consumers place on improved service performance is an important input to the administration of the scheme. Value of customer reliability (VCR) studies estimate how willing customers are to pay for improved service reliability as a monetary amount per unit of unserved energy during a supply interruption.

The VCR estimates currently in our national STPIS are taken from studies conducted for the Essential Services Commission Victoria and Essential Services Commission of South Australia.²¹⁹

²¹⁵ South Australian Council of Social Service, *Submission on AER's preliminary framework and approach for SA Power Networks*, 1 May 2018, pp. 4–5.

²¹⁶ Consumer Challenge Panel (Sub-Panel 14), *Submission on AER's preliminary framework and approach for SA Power Networks*, 4 May 2018, p. 11.

²¹⁷ AGL Energy Limited, *Submission on AER's preliminary framework and approach for SA Power Networks*, 21 May 2018, p. 4.

²¹⁸ NER, cl. 6.6.2(b)(3)(vi).

²¹⁹ Charles River Associates, *Assessment of the Value of Consumer Reliability (VCR) - Report prepared for VENCorp*, Melbourne 2002; KPMG, *Consumer Preferences for Electricity Service Standards*, 2003.

In September 2014 AEMO completed its analysis of the VCR across the NEM.²²⁰ We stated in our final decision for NSW distributors' 2015–19 regulatory period and our final F&A for NSW distributors' 2019–24 regulatory period,²²¹ that we will apply the latest value for VCR through the distribution determination in calculating the incentive rates. This is because we consider the 2014 AEMO NSW and ACT VCR better reflects the willingness of customers to pay for the reliable supply of electricity in SA. We consider that this approach is still appropriate.

Business SA submitted that consumer understanding of the value of reliability has significantly improved since that point with several load shedding events on top of a state-wide blackout and numerous other events which caused major issues in the distribution network. Therefore, Business SA submitted that the continued validity of the VCR rates from 2014 and whether or not they remain relevant for future determinations should be considered.²²² We have accepted and applied the VCR values published by AEMO in 2014 for a number of revenue determinations. Should distributors consider that its customers have a different value to supply reliability, it should seek customers' feedback on this matter for our consideration in setting the incentive rates. We will continue to apply the VCR values published by AEMO in 2014 to SA Power Networks for the 2020-25 regulatory control period until our impending VCR review in 2019 is completed.

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.

Our proposed approach is to apply the scheme standard level of revenue at risk for SA Power Networks at ± 5 per cent as we do not consider that a lower level would better meet the objectives of the STPIS.

Balanced incentives

We administer our incentive schemes within a regulatory control period to align distributor incentives with the NEO. In implementing the STPIS we need to be aware of both the operational integrity of the scheme and how it interacts with our other incentive schemes. This is discussed below.

Defining performance targets

How we measure actual service performance and set performance targets can significantly impact how well the STPIS meets its stated objectives.

The NER require us to consider past performance of the distributor's network in developing and implementing the STPIS.²²³ Our preferred approach is to base performance targets on

²²⁰ AEMO, *Value of customer reliability review - Final report*, September 2014.

²²¹ AER, *Final framework and approach for NSW distributors 2019-24*, July 2017, p. 63.

²²² Business SA, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 4.

²²³ NER, cl. 6.6.2(b)(3)(iii).

SA Power Networks' average performance over the past five regulatory years.²²⁴ AGL supported this approach.²²⁵ Using an average calculated over multiple years instead of applying performance targets based solely on the most recent regulatory year limits a distributor's incentive to underperform in a specific year to make future targets less onerous.

Under this approach, distributors will only receive a financial reward for achieving reliability improvements. More importantly, a distributor can only retain the reward if it can maintain the reliability improvements. This is because once an improvement is made, the benchmark performance targets will be adjusted to reflect the improved level of performance. If it allows reliability to decline in the future, the distributor will be penalised. Our STPIS limits variability in penalties and rewards caused by circumstances outside the distributor's control. We exclude interruptions to supply deemed to be outside the major event day boundary from both the calculation of performance targets and measured service performance.

Interactions with our other incentive schemes

In applying the STPIS, we must consider any other incentives available to the distributor under the NER or relevant distribution determination.²²⁶ In SA the STPIS will interact with our expenditure and demand management incentive schemes.

The efficiency benefit sharing scheme (EBSS) provides a distributor with an incentive to reduce operating costs. The STPIS counterbalances this incentive by discouraging cost reductions that lead to a decline in performance. The s-factor adjustment of annual revenue depends on the distributor's actual service performance compared to predetermined targets.

In setting STPIS performance targets, we will consider both completed and planned reliability improvements expected to materially affect network reliability performance.²²⁷

The capital expenditure sharing scheme (CESS) rewards a distributor if actual capex is lower than the approved forecast amount for the regulatory year. Since our performance targets will reflect planned reliability improvements, any incentive a distributor may have to reduce capex by not achieving the planned performance outcome will be curtailed by the STPIS penalty.

3.2 Efficiency benefit sharing scheme

The EBSS is intended to provide a continuous incentive for distributors to pursue efficiency improvements in opex, and provide for a fair sharing of these between distributors and consumers. Consumers benefit from improved efficiencies through lower network prices in future regulatory control periods.

²²⁴ Subject to any modifications required under cl. 3.2.1(a) and (b) of the national STPIS.

²²⁵ AGL Energy Limited, *Submission on AER's preliminary framework and approach for SA Power Networks*, 21 May 2018, p. 4.

²²⁶ NER, cl. 6.6.2(b)(3)(iv).

²²⁷ Included in the distributor's approved forecast capex for the next period.

We address our position on the application of the EBSS in relationship to our proposed opex forecasting approach and benchmarking below. We also explain the rationale underpinning the scheme.

This section sets out our proposed approach and reasons on why we intend to apply the EBSS to SA Power Networks in the 2020–25 regulatory control period.

AER's proposed approach

We intend to apply the EBSS to SA Power Networks in the 2020–25 regulatory control period if we are satisfied the scheme will fairly share efficiency gains and losses between SA Power Networks and consumers.²²⁸ This will occur only if the opex forecast for the following period is based on SA Power Networks' revealed costs. Our distribution determination for SA Power Networks for the 2020–25 regulatory control period will specify if and how we will apply the EBSS.²²⁹

SA Power Networks supported the application of the EBSS.²³⁰

CCP sub-panel 14 supported the application of the EBSS when the revealed costs in the proposed base year are shown to be efficient. CCP sub-panel 14 submitted that the EBSS should reward the network for improving its efficiency above what is an efficient level at the start of the regulatory period as opposed to rewarding a network for getting from an inefficient level to an efficient level.²³¹ CCP sub-panel 14 is correct that if a DNSP's revealed opex is not efficient when we start to apply the EBSS, the scheme will share the DNSP's opex overspend as it transitions to an efficient level. The application of the EBSS would result in the distributor incurring only approximately 30 per cent of its opex overspend during the transition to efficient opex. We will take this into consideration when we decide if and how we will apply the EBSS to SA Power Networks.

AGL supported our approach to only utilise an EBSS if we are satisfied that the scheme will provide benefits to consumers and uses the distributors' revealed costs. However, AGL submitted that the EBSS cannot demonstrate any long-term benefits to consumers.²³² We disagree with AGL's view. We consider that the EBSS is an important means of supporting the incentive-based approach to regulation embodied in the NER. We consider the EBSS provides a continuous incentive for businesses to seek efficiencies across the regulatory control period and supports the use of revealed costs to forecast opex. Electricity distributors appear to have improved their opex productivity performance in recent years and we will

²²⁸ NER, cl. 6.5.8(a).

²²⁹ AER, *Efficiency benefit sharing scheme*, 29 November 2013.

²³⁰ SA Power Networks, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 8.

²³¹ Consumer Challenge Panel (Sub-Panel 14), *Submission on AER's preliminary framework and approach for SA Power Networks*, 4 May 2018, p. 8.

²³² AGL Energy Limited, *Submission on AER's preliminary framework and approach for SA Power Networks*, 21 May 2018, p. 5.

pass these productivity gains on to consumers through our revealed cost opex forecasting approach, supported by the EBSS.

SA Renewable Energy Policy Group questioned the benefit of the EBSS, which it considered threatens to create a 'step change' in opex in 2019, and again in 2024. It argued that the EBSS gives networks a 'worse than doing nothing' option, which does not promote the NEO.²³³ The purpose and objective of the EBSS is to provide an incentive for distributors to reveal their efficient costs and we consider it to be an important part of the regulatory framework. Under this framework, electricity distributors have improved their opex partial productivity performance in recent years.

AER's assessment approach

The EBSS must provide for a fair sharing of opex efficiency gains and efficiency losses between a network service provider and network users.²³⁴ We must also have regard to the following factors in developing and implementing the EBSS:²³⁵

- the need to ensure that benefits to electricity consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme
- the need to provide service providers with a continuous incentive to reduce opex
- the desirability of both rewarding service providers for efficiency gains and penalising service providers for efficiency losses
- any incentives that service providers may have to capitalise expenditure
- the possible effects of the scheme on incentives for the implementation of non-network alternatives.

Reasons for AER's proposed approach

The EBSS applies to SA Power Networks in the 2015–20 regulatory control period.²³⁶

We will decide if and how we will apply the EBSS to SA Power Networks in the 2020–25 regulatory control period in our determination. The decision to apply the EBSS will depend on whether we expect to use the distributor's revealed costs in the 2020–25 regulatory control period to forecast opex in the following period.

Why we would apply the EBSS

We will only apply the EBSS in the 2020–25 regulatory control period if we expect we will use a revealed cost forecasting approach to forecast opex for the 2025–30 regulatory control period.

²³³ SA Renewable Energy Policy Group, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 3.

²³⁴ NER, cl. 6.5.8(a).

²³⁵ NER, cl. 6.5.8(c).

²³⁶ AER, *Electricity distribution network service providers, efficiency benefit sharing scheme*, 26 June 2008.

The EBSS is intrinsically linked to our revealed cost forecasting approach. This approach relies on identifying an efficient opex amount in the base year (the 'revealed costs' of the distributor), which we use to develop a total opex forecast. When a business makes an incremental efficiency gain, it receives a reward through the EBSS, and consumers benefit through a lower revealed cost forecast for the subsequent period. This is how efficiency improvements are shared between consumers and the business.

Under a revealed cost approach without an EBSS, a distributor has an incentive to spend more opex in the expected base year. Also, a distributor has less incentive to reduce opex towards the end of the regulatory control period, where the benefit of any efficiency gain is retained for less time.

If we use a revealed cost forecasting approach we apply the EBSS because:

- it reduces the incentive for a distributor to inflate opex in the expected base year in order to gain a higher opex forecast for the next regulatory control period
- it provides a continuous incentive for a distributor to pursue efficiency improvements across the regulatory control period. This is because the EBSS allows a distributor to retain efficiency gains for a total of six years, regardless of the year in which it was made.

In implementing the EBSS we also consider any incentives distributors may have to capitalise expenditure.²³⁷ Where opex incentives are balanced with capex incentives, a distributor does not have an incentive to favour opex over capex, or vice-versa. If the CESS and EBSS are both applied, these incentives will be relatively balanced. We discuss the CESS further in section 3.3.

We also consider the effects of implementing the EBSS on incentives for non-network alternatives²³⁸ (which are generally opex rather than capex). When the CESS and EBSS both apply, a distributor has an incentive to implement a non-network alternative if the increase in opex is less than the corresponding decrease in capex. In this way the distributor will receive a net reward for implementing the non-network alternative.²³⁹ Non-network alternatives and the demand management incentives, including the new DMIS, are discussed further in section 3.4.

We are currently reviewing the interaction of operating expenditure forecasts, the EBSS and the new DMIS. SA Power Networks supported the DMIS but noted consideration was required about the how the DMIS would interact with the application of the EBSS and opex benchmarking.²⁴⁰ We will seek to confirm our position as part of the regulatory determination process, but note that in implementing the EBSS and DMIS we will seek to provide balanced

²³⁷ NER, cl. 6.5.8(c)(4).

²³⁸ NER, cl. 6.5.8(c)(5).

²³⁹ When the distributor spends more on opex it incurs approximately 30 per cent of that increase as a result of the EBSS. At the same time it retains 30 per cent of the capex decrease through the CESS. So where the decrease in capex is larger than the increase in opex the distributor receives a larger reward than penalty, a net reward.

²⁴⁰ SA Power Networks, *Request to replace the framework and approach*, 31 October 2017, p. 3.

opex and capex incentives that encourage a distributor to identify and undertake efficient demand management options.

Why we would not apply the EBSS

We will not apply the EBSS if it is likely we will not use a revealed cost forecasting approach to forecast opex for the 2025–30 regulatory control period.

If we apply the EBSS but do not forecast opex using revealed costs, a distributor could in theory receive an EBSS reward for efficiency gains (at a cost to consumers), but consumers would not benefit through a lower revealed cost forecast. If the distributor expects this, it has an incentive to increase its EBSS carryover by underspending in its base year, knowing the underspend will not reduce its opex forecast.²⁴¹ Consumers would pay the EBSS reward but not receive a share of the underspend and would be worse off. This outcome is contrary to the NER which requires that the EBSS must provide for a fair sharing of efficiency gains and losses between a distributor and consumers.²⁴²

If a distributor's revealed costs in the 2015–20 regulatory control period are materially higher than the opex incurred by a benchmark efficient distributor, we will be unlikely to use revealed costs to forecast opex for the 2020–25 regulatory control period. In which case, we will be unlikely to apply the EBSS.

3.3 Capital expenditure sharing scheme

The CESS provides incentives for distributors to undertake efficient capex throughout the regulatory control period by rewarding efficiency gains and penalising efficiency losses. Consumers benefit from improved efficiency through lower network prices in the future. This section sets out our proposed approach and reasons for our intention to apply version 1 (dated 29 November 2013) of the CESS to SA Power Networks.

The CESS approximates efficiency gains and efficiency losses by calculating the difference between forecast and actual capex. It shares these gains or losses between a distributor and network users.

The CESS works as follows:

- We calculate the cumulative underspend or overspend amount for the current regulatory control period in net present value terms.

²⁴¹ In our explanatory statement to the EBSS, we discuss why we should exclude the expenditure categories not forecast using a single year revealed cost forecasting method from the EBSS to prevent network users being worse off. AER, *Explanatory statement - efficiency benefit sharing scheme*, November 2013, pp. 18-19.

²⁴² NER, cl 6.5.8(a).

- We apply the sharing ratio of 30 per cent to the cumulative underspend or overspend amount to work out what the distributor's share of any underspend or overspend should be.
- We calculate the CESS payments taking into account the financing benefit or cost to the distributor of any underspend or overspend amounts.²⁴³ We can also make further adjustments to account for deferral of capex and ex post exclusions of capex from the RAB.
- The CESS payments will be added to or subtracted from the distributor's regulated revenue as a separate building block in the next regulatory control period.

Under the CESS, a distributor retains 30 per cent of the financing benefit or cost of any underspend or overspend amount, while consumers retain 70 per cent of the financing benefit or cost of any underspend or overspend amount.

AER's proposed approach

Our proposed approach is to apply the CESS, as set out in our capex incentives guideline,²⁴⁴ to SA Power Networks in each regulatory year of the 2020–25 regulatory control period.

SA Power Networks supported our position to apply the CESS.²⁴⁵

AER's assessment approach

In deciding whether to apply a CESS to a distributor, and the nature and details of any CESS to apply to a distributor, we must:²⁴⁶

- make that decision in a manner that contributes to the capex incentive objective set out in the NER²⁴⁷
- consider the CESS principles,²⁴⁸ capex objectives,²⁴⁹ other incentive schemes, and where relevant the opex objectives, as they apply to the particular distributor, and the circumstances of the distributor.

Broadly speaking, the capex incentive objective is to ensure that only capex that meets the capex criteria enters the RAB used to set prices. Therefore, consumers only fund capex that is efficient and prudent.

²⁴³ We calculate benefits as the benefits to the distributor of financing the underspend since the amount of the underspend can be put to some other income generating use during the period. Losses are similarly calculated as the financing cost to the distributor of the overspend.

²⁴⁴ AER, *Capital expenditure incentive guideline for electricity network service providers*, pp. 5–9.

²⁴⁵ SA Power Networks, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 8.

²⁴⁶ NER, cl. 6.5.8A(e).

²⁴⁷ NER, cl. 6.4A(a); the capex criteria are set out in cl. 6.5.7(c) of the NER.

²⁴⁸ NER, cl.6.5.8A(c).

²⁴⁹ NER, cl. 6.5.7(a).

Reasons for AER's proposed approach

We propose to apply the CESS to SA Power Networks in the next regulatory control period as we consider this will contribute to the capex incentive objective.

SA Power Networks are currently subject to a CESS. As part of our Better Regulation program we consulted on and published version 1 of the capex incentives guideline which sets out the CESS.²⁵⁰ The guideline specifies that in most circumstances we will apply a CESS, in conjunction with forecast depreciation to roll-forward the RAB.²⁵¹ We are also proposing to apply forecast depreciation, which we discuss further in chapter 5. In developing the CESS we took into account the capex incentive objective, capex criteria, capex objectives, and the CESS principles. We also developed the CESS to work alongside other incentive schemes that apply to distributors including the STPIS and DMIS.

For capex, the sharing of underspends and overspend amounts happens at the end of each regulatory control period when we update a distributor's RAB to include new capex. If a distributor spends less than its approved forecast during a period, it will benefit within that period. Consumers benefit at the end of that period when the RAB is updated to include less capex compared to if the business had spent the full amount of the capex forecast. This leads to lower prices in the future.

Without a CESS, the incentive for a distributor to spend less than its forecast capex declines throughout the period.²⁵² Because of this a distributor may choose to spend capex earlier, or spend on capex when it may otherwise have spent on opex, or less on capex at the expense of service quality—even if it may not be efficient to do so.

With the CESS a distributor faces the same reward and penalty in each year of a regulatory control period for capex underspends or overspends. The CESS will provide a distributor with an ex ante incentive to spend only efficient capex in each year of the regulatory control period. A distributor that makes an efficiency gain will be rewarded through the CESS. Conversely, a distributor that makes an efficiency loss will be penalised through the CESS. In this way, a distributor will be more likely to incur only efficient capex when subject to a CESS, so any capex included in the RAB is more likely to reflect the capex criteria. In particular, if a distributor is subject to the CESS, its capex is more likely to be efficient and to reflect the costs of a prudent distributor.

In addition, when the CESS, EBSS and STPIS apply to a distributor then incentives for opex, capex and service performance are balanced. This encourages a distributor to make efficient decisions on when and what type of expenditure to incur, and to balance expenditure efficiencies with service quality.

²⁵⁰ AER, *Capital expenditure incentive guideline for electricity network service providers*, pp. 5–9.

²⁵¹ AER, *Capital expenditure incentive guideline for electricity network service providers*, pp. 10–12.

²⁵² As the end of the regulatory period approaches, the time available for the distributor to retain any savings gets shorter. So the earlier a distributor incurs an underspend in the regulatory period, the greater its reward will be.

Relevantly, as emphasised as part of the development of our guideline, while our forecast of capex for a regulatory control period is partly informed by our forecast of the prudent and efficient capex the network service provider will need to complete discrete projects or programs, this is only to inform our total forecast of capex for the regulatory control period. Importantly, while we may consider certain projects and programs in forming a view on the total capex forecast, we do not determine which projects and programs the network service provider should or should not undertake. This is consistent with the incentive based regulatory framework.

Once we approve total revenue, the network service provider is able to prioritise its capex program given its circumstances over the course of the regulatory control period. This means, a network service provider may choose to defer some discrete projects that we initially considered when forming our view of the total capex forecast for the regulatory control period. Conversely, it may also choose to bring forward other discrete projects that we had not previously assessed when setting the network service provider's forecast of capex for the regulatory control period. This means that it is not appropriate to consider our determinations as approving specific projects and programs.

CCP sub-panel 14 did not support an automatic application of the CESS rather they encouraged the AER to carefully examine the reasons for the capital underspend to assess whether there should be an adjustment for deferral of capex as provided for in the CESS guideline.²⁵³ CCP sub-panel 14 mentioned that recent analysis by the Centre for Efficiency and Productivity Analysis shows consistent underspend of allowed capex by SA Power Networks.²⁵⁴ CCP sub-panel 14 argued that there are no legitimate reasons for the network to share in the CESS benefits. Customers should not pay for networks not properly resourcing their capex evaluation and implementation activities they sought as necessary to meet their obligations at the time of submitting their proposal.²⁵⁵

We anticipate that we would identify any significant deferrals through our ex post assessment of actual capex in the current regulatory control period. We will only apply an adjustment to the CESS payments where a DNSP has deferred capex in the current regulatory control period and:

- (a) the amount of the deferred capex in the current regulatory control period is material; and
- (b) the amount of the estimated underspend in capex in the current regulatory control period is material; and
- (c) total approved forecast capex in the next regulatory control period is materially higher than it is likely to have been if a material amount of capex was not deferred in the current regulatory control period.

²⁵³ Consumer Challenge Panel (Sub-Panel 14), *Submission on AER's preliminary framework and approach for SA Power Networks*, 4 May 2018, p. 11.

²⁵⁴ CEPA, *Incentives Faced by Network Service Providers* Report to AEMC, 16 April 2018, draft report pp 34–5, <https://www.aemc.gov.au/sites/default/files/2018-04/CEPA%20AEMC%20CapexBias%20Report%20DRAFT.pdf>.

²⁵⁵ Consumer Challenge Panel (Sub-Panel 14), *Submission on AER's preliminary framework and approach for SA Power Networks*, 4 May 2018, p. 10.

AGL did not support the application of the CESS submitting that it cannot demonstrate any long-term benefits to consumers and the effectiveness of the scheme is highly doubtful. AGL argued that the requirement for a CESS indicates that the AER believes that existing incentives are not enough to avoid DNSPs investing in inefficient or imprudent capital. In AGL's experience, many privately owned DNSPs have acted commercially and chosen to not spend expected capital allowance because of the incentives already inherent in the regulatory framework, without the need for a capital based incentive scheme. AGL submitted that customers paying for inefficient or imprudent capital investment is not acceptable but requiring customers to pay additional revenue simply to avoid even greater and longer term payments is a second best option.²⁵⁶ We consider that each of the incentive schemes are designed to work together to provide a constant and balanced incentive to improve performance and reduce expenditure. We are only now starting to see outcomes from the CESS, which we continue to monitor. If we find that the CESS is leading to unintended outcomes, we will consider refining or redesigning the scheme to ensure it produces long-term benefits to consumers.

3.4 Demand management incentive scheme and demand management innovation allowance mechanism

We established a new demand management incentive scheme (DMIS) and demand management innovation allowance mechanism (DMIA) in December 2017.²⁵⁷ It is intended that the new DMIS and DMIA are to apply to SA Power Networks in the 2020–25 regulatory control period.

DMIS is intended to encourage distribution businesses to find lower cost solutions to investing in network solutions. The incentive scheme achieves this by encouraging distribution businesses to undertake efficient expenditure on non-network options relating to demand management.

We have also improved our existing DMIA to provide a research and development (R&D) fund to help distribution businesses discover new ways of using demand management to keep the costs down for electricity consumers in the future. Its objective is to provide distribution businesses with funding for R&D in demand management projects that have the potential to reduce long term network costs. This will fund innovative projects that have the potential to deliver ongoing reductions in demand or peak demand.

Reasons for AER's proposed approach

Distribution businesses can manage demand on their networks to reduce, delay or even avoid the need to install, replace or upgrade expensive network assets. Network assets include equipment like poles, wires, transformers, and substations. When used effectively,

²⁵⁶ AGL Energy Limited, *Submission on AER's preliminary framework and approach for SA Power Networks*, 21 May 2018, pp. 4–5.

²⁵⁷ <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/demand-management-incentive-scheme-and-innovation-allowance-mechanism>.

managing demand to avoid incurring these costs can reduce upward pressure on network charges, which make up about half the cost of electricity bills.

Managing demand on electricity networks can increase the reliability of supply and reduce the cost of supplying electricity. Often electricity consumers are empowered to manage demand via price signals and enabling technology.

Price signals or financial incentives can reward consumers for using electricity in a way that allows network businesses to keep their costs down. These signals or incentives may come in the form of things like cost-reflective tariffs, congestion pricing, and rebates. Enabling technology often complements price signals by empowering consumers to use electricity in a way that allows network businesses to keep their costs down. This technology may include things like advanced metering technology, demand response enabling devices, and energy monitoring apps.

The revised DMIS only allows the implementation of demand management projects that are efficient and contribute, partially or wholly, to resolving a network constraint. In deciding whether a project is efficient, we require distribution businesses to test the demand management services market. This will increase transparency, promote competition and put downward pressure on electricity prices. This is because distribution business can only benefit from incentives if they address the network constraint in the most efficient way available.

This incentive structure should encourage best-practice network planning that will deliver value to consumers via lower electricity prices. We believe our incentive scheme will achieve this because distribution businesses will be:

- Selecting efficient projects that deliver the most value to consumers when solving network constraints, regardless of whether these projects constitute a demand-side or supply-side solution.
- Asking third parties to propose demand management solutions, and forming contracts with parties that propose solutions that deliver the most value to consumers.

We will continue providing a demand management innovation allowance, which is an R&D fund, because the innovation allowance will complement the new DMIS. It will increase the capacity of distribution businesses to invest in ideas that may eventually form parts of projects under the incentive scheme.

We believe that DMIS, supported by DMIA, will provide long-term benefits to customers.

AER's proposed approach

We intend to apply our new demand management incentive scheme (DMIS) and demand management innovation allowance mechanism (DMIA), as published by us in December 2017, to SA Power Networks in the 2020–25 regulatory control period.

CCP sub-panel 14 supported the application of the DMIS and encouraged the AER to emphasise the importance of the recently updated DMIA and DMIS to the SA Power Networks proposal, in particular the opportunity for operating cost trade-offs to capital investment in long-lived assets.²⁵⁸

SA Renewable Energy Policy Group argued that the DMIS is exploitable as the AER is unable to validate estimates made by SA Power Networks under the DMIS. The DMIS ultimately relies on a declaration from the delegate of the CEO that the theoretical savings justifies actual project spending, which SA Renewable Energy Group argued is not good enough.²⁵⁹ SA Renewable Energy Policy Group were of the view that the new DMIS and Demand Management Allowance do not give the AER enough power to reject proposals which are observably inefficient or otherwise violate the NEO at any stage after preliminary project approval.²⁶⁰

AGL are hopeful that the DMIS and DMIA are successful in encouraging the DNSPs to utilise non-network solutions that are lower cost to investing in network assets.²⁶¹ When establishing the DMIS and DMIA, AGL suggested that the AER should communicate clearly its expectations on how the DNSPs select relevant projects and that it enables third parties to propose and implement demand management solutions.²⁶²

We consider the new DMIS is designed to provide higher incentives for the distributors and consumers to adopt more demand management measures, which should put greater downward pressure on prices, benefitting the whole community. Along with the new DMIS, the AER has improved its current research and development fund—the DMIA. The improved allowance provides more funding to networks to undertake further research on demand management initiatives and to share these learnings across industry and consumers.

We will undertake annual compliance assessment on distributors' demand management compliance report in accordance with the criteria set out in the DMIS and DMIA, to ensure the benefits realised from the demand management is delivered to the consumers. We will reject claims that do not meet the criteria under the DMIS or DMIA.

AER's assessment approach to the DMIS

We will assess the proposed projects under the DMIS and DMIA under the assessment criteria prescribed by the scheme documents.

²⁵⁸ Consumer Challenge Panel (Sub-Panel 14), *Submission on AER's preliminary framework and approach for SA Power Networks*, 4 May 2018, p. 11.

²⁵⁹ SA Renewable Energy Policy Group, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 1.

²⁶⁰ SA Renewable Energy Policy Group, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 3.

²⁶¹ AGL Energy Limited, *Submission on AER's preliminary framework and approach for SA Power Networks*, 21 May 2018, p. 4.

²⁶² AGL Energy Limited, *Submission on AER's preliminary framework and approach for SA Power Networks*, 21 May 2018, p. 5.

4 Expenditure forecast assessment guideline

This chapter sets out our intention to apply our expenditure forecast assessment guideline (the EFA guideline)²⁶³ including the information requirements applicable to SA Power Networks for the 2020–25 regulatory control period. The EFA guideline sets out our expenditure forecast assessment approach developed and consulted upon during the Better Regulation program. It outlines the assessment techniques we will use to assess a distributor's proposed expenditure forecasts, and the information we require from the distributor.

The EFA guideline uses a nationally consistent reporting framework that allows us to compare the relative efficiencies of distributors and decide on efficient expenditure forecasts. SA Power Networks advised us on 29 June 2018 of the methodology they propose to use to prepare their forecasts, as required by the NER.²⁶⁴ In the final F&A, we must advise whether we will deviate from the EFA guideline.²⁶⁵ This will provide clarity on how we will apply the EFA guideline and the information SA Power Networks should include in their regulatory proposal. This contributes to an open and transparent process and makes our assessment of expenditure forecasts more predictable. The EFA guideline contains a suite of assessment/analytical tools and techniques to assist our review of the expenditure forecasts that distributors include in their regulatory proposals. We intend to have regard to the assessment tools set out in the guideline. The tool kit includes:

- models for assessing proposed replacement and augmentation capex
- benchmarking (including broad economic techniques and more specific analysis of expenditure categories)
- methodology, governance and policy reviews
- predictive modelling and trend analysis
- cost benefit analysis and detailed project reviews.²⁶⁶

We exercise judgement to determine the extent to which we use a particular technique to assess a regulatory proposal. We use the techniques we consider appropriate depending on the specific circumstances of the determination. The guideline is flexible and recognises that we may employ a range of different estimating techniques to assess an expenditure forecast.

For opex, in most cases we take a base-step-trend approach to assessing forecast expenditure and in this context use top down economic benchmarking tools to determine the reasonableness of the forecast rather than a bottom-up assessment approach. However, in

²⁶³ We were required to develop the EFA guideline under clauses 6.4.5 and 11.53.4 of the NER. We published the guideline on 29 November 2013. It can be located at www.aer.gov.au/node/18864.

²⁶⁴ NER, cl. 6.8.1A(b)(1).

²⁶⁵ NER, cl. 6.8.1(b)(2)(viii).

²⁶⁶ AER, *Explanatory statement: Expenditure assessment guideline for electricity transmission and distribution*, 29 November 2013.

exercising our judgement, we may use any analytical tool at our disposal, including assessing individual elements of the forecast using a bottom-up approach.

We will continue to develop and use economic benchmarking to inform our expenditure decisions consistent with the EFA guideline. Economic benchmarking remains a tool in assessing the relative efficiency of network services providers. We are likely to use a range of benchmarking approaches in assessing expenditure forecasts. Benchmarking also provides a source of information to assist both service providers and other interested parties about the relative productivity of individual businesses and the trends in productivity for the industry.

In the context of continuously improving economic benchmarking, we are currently reviewing and refining our analysis of operating environment factors in consultation with industry and other interested parties. The consultation with industry is ongoing and we are looking to finalise the review in mid-2018.²⁶⁷ We will then seek to implement any recommended improvements from that process in our annual benchmarking and regulatory determination processes.

EWOSA and CCP sub-panel 14 supported the proposed application of the guideline.²⁶⁸

CCP sub-panel 14 questioned the AER's assumption of a zero productivity change over the reset period in the context of the base-step-trend approach to assessing opex.²⁶⁹ It noted that a zero assumption is an improvement on the fall in productivity over the last 10 years, but that in the current environment network business customers are under continual pressure to improve their productivity to stay in business. CCP sub-panel 14 cautioned the AER in accepting revealed costs in any year of the current period as an acceptable base year for 2020-24.

In past decisions, under the base-step-trend approach, we have forecast zero productivity growth when we have determined forecast opex. However we have noted that distributors should achieve positive productivity growth in the medium to long term.²⁷⁰ More recent information suggests that electricity distributors have improved their opex partial productivity performance in recent years. We will take into account all available information, and the views of all stakeholders, when we forecast opex productivity growth for the 2020–25 period.

SA Power Networks submitted that an additional matter requiring the AER's confirmation is that NEM wide benefits can be accommodated within the AER's expenditure assessments.

²⁶⁷ More information is available at <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/review-of-operating-environment-factors-for-distribution-network-service-providers>.

²⁶⁸ Energy and Water Ombudsman of South Australia, *Submission on AER's preliminary framework and approach for SA Power Networks*, 26 April 2018, p. 2; Consumer Challenge Panel (Sub-Panel 14), *Submission on AER's preliminary framework and approach for SA Power Networks*, 4 May 2018, p. 4.

²⁶⁹ Consumer Challenge Panel (Sub-Panel 14), *Submission on AER's preliminary framework and approach for SA Power Networks*, 4 May 2018, p. 9.

²⁷⁰ AER, *Jemena distribution determination, 2016 to 2020, Preliminary decision*, Attachment 7, October 2015, p. 60.

SA Power Networks noted that the capex and opex objectives and factors in chapter 6 of the NER do not explicitly refer to consideration of the costs incurred and benefits derived via other parts of the NEM supply chain (market benefits). However, SA Power Networks are of the view that market benefits are included in the scope of the capex and opex objectives and factors via the NEO in the NEL, which refers to the national electricity system. Further, SA Power Networks submitted that there may be cases where a DNSP's initiative/investment made by means of, or in connection with, its distribution system, might derive greater benefits to the broader market than to the distribution network via avoided capex.²⁷¹ SA Power Networks raised this issue in a separate submission to our current review of the RIT-D application guidelines,²⁷² but consider that it warrants discussion in the F&A as it pertains to our expenditure assessments within distribution determinations.

We acknowledge this issue, but we consider that the NER is clear about how new capex and opex must be justified, including that the AER must make its decision in a manner that contributes to the achievement of the NEO to the greatest degree.²⁷³ If SA Power Networks considers that further clarity is required, it could potentially seek a rule change to broaden or clarify the capex and opex criteria and factors.

Business SA submitted that it is not clear in the F&A how we will be monitoring the long-term performance of SA Power Networks. Business SA suggested that we could track RAB values each year against growth in peak demand, at least over the last decade. Business SA submitted that it is not enough to just rely on benchmarking between the states, particularly given the significant overspend in public owned networks in NSW and Qld.²⁷⁴ We are considering how our monitoring of businesses' performance can be improved but note that the information collected under regulatory information notices assists in this regard.

²⁷¹ SA Power Networks, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 2.

²⁷² SAPN, *Review of the application guidelines - Regulatory Investment Tests*, 6 April 2018.

²⁷³ NEL, section 16.

²⁷⁴ Business SA, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 3.

5 Depreciation

As part of the process of rolling forward a distributor's RAB to the start of the next regulatory control period, we update the RAB for actual capex incurred during the current regulatory control period and also adjust for depreciation. This chapter sets out our proposed approach on the form of depreciation to be used when SA Power Networks' RAB is rolled forward to the commencement of the 2025–30 regulatory control period.

The depreciation we use to roll forward the RAB can be based on either:

- Actual capex incurred during the regulatory control period (actual depreciation). We roll forward the RAB based on actual capex less the depreciation on the actual capex incurred by the distributor; or
- The capex allowance forecast at the start of the regulatory control period (forecast depreciation). We roll forward the RAB based on actual capex less the depreciation on the forecast capex approved for the regulatory control period.

The choice of depreciation approach is one part of the overall capex incentive framework.

Consumers benefit from improved efficiencies through lower regulated prices. Where a CESS is applied, using forecast depreciation maintains the incentives for distributors to pursue capex efficiencies, whereas using actual depreciation would increase these incentives. There is more information on depreciation as part of the overall capex incentive framework in our capex incentives guideline.²⁷⁵ In summary:

- If there is a capex overspend, actual depreciation will be higher than forecast depreciation. This means that the RAB will increase by a lesser amount than if forecast depreciation was used. As a result, the distributor will earn less revenue into the future (i.e. it will bear more of the cost of the overspend into the future) than if forecast depreciation had been used to roll forward the RAB.
- If there is a capex underspend, actual depreciation will be lower than forecast depreciation. This means that the RAB will increase by a greater amount than if forecast depreciation was used. Hence, the distributor will earn greater revenue into the future (i.e. it will retain more of the benefit of an underspend into the future) than if forecast depreciation had been used to roll forward the RAB.

The incentive from using actual depreciation to roll forward the RAB also varies with the life of the asset. Using actual depreciation will provide a stronger incentive for the distributor to underspend capex on shorter lived assets compared to longer lived assets as this will lead to a relatively larger increase in the RAB. Use of forecast depreciation, on the other hand, leads to the same incentive for capex regardless of asset lives. This is because using forecast depreciation does not affect the distributor's incentive on capex as the distributor does not lose the full cost of any overspend and is not able to keep all the benefits of any

²⁷⁵ AER, *Capital expenditure incentive guideline for electricity network service providers*, November 2013, pp. 10–12.

underspend. To this end, using forecast depreciation means the capex incentive is focussed on the return on capital.

5.1 AER's proposed approach

Our proposed approach is to use the forecast depreciation approach to establish the RAB at the commencement of the 2025–30 regulatory control period for SA Power Networks. We consider this approach will provide sufficient incentives for SA Power Networks to achieve capex efficiency gains over the 2020–25 regulatory control period.

EWOSA and SA Power Networks supported the proposed approach to depreciation.²⁷⁶ CCP sub-panel 14 also supported the approach noting that in combination with the proposed application of the CESS, this approach will maintain incentives for the distributors to pursue capex efficiencies.²⁷⁷

5.2 AER's assessment approach

We have to decide for our distribution determination whether we will use actual or forecast depreciation to establish a distributor's RAB at the commencement of the following regulatory control period.²⁷⁸

We set out in our capex incentives guideline our process for determining which form of depreciation we propose to use in the RAB roll forward process.²⁷⁹ Our decision on whether to use actual or forecast depreciation must be consistent with the capex incentive objective. We must have regard to:²⁸⁰

- any other incentives the service provider has to undertake efficient capex
- substitution possibilities between assets with different lives
- the extent of overspending and inefficient overspending relative to the allowed forecast
- the capex incentive guideline
- the capital expenditure factors.

²⁷⁶ Energy and Water Ombudsman of South Australia, *Submission on AER's preliminary framework and approach for SA Power Networks*, 26 April 2018, p. 2; SA Power Networks, *Submission on AER's preliminary framework and approach for SA Power Networks*, 27 April 2018, p. 8.

²⁷⁷ Consumer Challenge Panel (Sub-Panel 14), *Submission on AER's preliminary framework and approach for SA Power Networks*, 4 May 2018, pp. 4, 12.

²⁷⁸ NER, cl. S6.2.2B.

²⁷⁹ NER, cl. 6.4A(b)(3).

²⁸⁰ NER, cl. S6.2.2B.

5.3 Reasons for AER's proposed approach

Consistent with our capex incentives guideline, we propose to use the forecast depreciation approach to establish the RAB for SA Power Networks at the commencement of the 2025–30 regulatory control period.

We had regard to the relevant factors in the NER in developing the approach for deciding on the form of depreciation set out in our capex incentives guideline.²⁸¹

Our approach is to apply forecast depreciation except where:

- there is no CESS in place and therefore the power of the capex incentive may need to be strengthened, or
- a distributor's past capex performance demonstrates evidence of persistent overspending or inefficiency, thus requiring a higher powered incentive.

In making our decision on whether to use actual depreciation in either of these circumstances we will consider:

- the substitutability between capex and opex and the balance of incentives between these
- the balance of incentives with service outcomes
- the substitutability of assets with different asset lives.

We have chosen forecast depreciation as our default approach because, in combination with the CESS, it will provide a 30 per cent reward for capex underspends and 30 per cent penalty for capex overspends, which is consistent for all types of asset categories. In developing our capex incentives guideline, we considered this to be a sufficient incentive for a distributor to achieve efficiency gains over the regulatory control period in most circumstances.

The opening RAB at the commencement of the 2020–25 regulatory control period will be established using forecast depreciation, as stated in our previous determination that applies to SA Power Networks for the 2015–20 regulatory control period. The use of forecast depreciation to establish the opening RAB for the commencement of the 2025–30 regulatory control period therefore maintains the current approach. SA Power Networks is currently subject to a CESS and we propose to continue to apply the CESS in the 2020–25 regulatory control period. We discuss this in section 3.3.

For SA Power Networks, we consider the incentive provided by the application of the CESS in combination with the use of forecast depreciation and our other ex post capex measures should be sufficient to achieve the capex incentive objective.²⁸² Our ex post capex measures

²⁸¹ AER, *Capital expenditure incentive guideline for electricity network service providers*, November 2013, pp. 10–12.

²⁸² AER, *Capital expenditure incentive guideline for electricity network service providers*, November 2013, pp. 13–19 , 20–21.

are set out in the capex incentives guideline. The guideline also sets out how all our capex incentive measures are consistent with the capex incentive objective.

The AER's approach to estimating corporate income tax is being reviewed and may result in changes to the roll-forward model and post-tax revenue model.²⁸³

²⁸³ See <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/review-of-rate-of-return-guideline> and <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/review-of-regulatory-tax-approach-2018>.

Appendix A: List of submissions

AGL Energy Limited

Business SA

City of Salisbury

Consumer Challenge Panel (Sub-Panel 14)

Energy and Water Ombudsman of South Australia (EWOSA)

SA Power Networks

SA Renewable Energy Policy Group

South Australian Council of Social Service (SACOSS)

Trans Tasman Energy Group (TTEG)

Appendix B: Rule requirements for classification

We must have regard to four factors when classifying distribution services.²⁸⁴

- 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, electricity or gas (as the case may be)
 - the extent to which there is information available to a prospective network service user or network service user, and whether that information is adequate, to enable the prospective network service user or network service user to negotiate on an informed basis with a network service provider for the provision of an electricity network service to them by the network service provider.²⁸⁵
- 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)²⁸⁶
- the desirability of consistency in the form of regulation for similar services (both within and beyond the relevant jurisdiction)²⁸⁷
- any other relevant factor.²⁸⁸

²⁸⁴ NER, cl. 6.2.1(c).

²⁸⁵ NEL, s. 2F.

²⁸⁶ NER, cl. 6.2.1(c)(2).

²⁸⁷ NER, cl. 6.2.1(c)(3).

²⁸⁸ NER, cl. 6.2.1(c).

The AEMC contestability of energy services rule change²⁸⁹ removes the previous requirements under the previous rules under clauses 6.2.1(d) and 6.2.2(d) that we must, when classifying a distribution service, not depart from a previous classification or the previously applicable regulatory approach (as the case may be) when classifying a distribution service, unless that different classification is “clearly more appropriate”.

The rule change also amends the existing threshold that must be satisfied before we can change a service classification or control mechanism formulae between a framework and approach paper and the distribution determination – the existing threshold of “unforeseen circumstances” has been changed to “a material change in circumstances.”²⁹⁰

We must have regard to six factors when classifying direct control services as either standard control or alternative control services.²⁹¹

- the potential for development of competition in the relevant market and how the classification might influence that potential
- the possible effects of the classification on administrative costs of us, the distributor and users or potential users
- the regulatory approach (if any) applicable to the relevant service immediately before the commencement of the distribution determination for which the classification is made
- the desirability of a consistent regulatory approach to similar services (both within and beyond the relevant jurisdiction)
- the extent that costs of providing the relevant service are directly attributable to the customer to whom the service is provided, and
- any other relevant factor.²⁹²

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

²⁸⁹ AEMC, final rule determination - National Electricity Amendment (Contestability of Energy Services) 2017

²⁹⁰ NER 6.12.3(b) and (c1) under the final rule.

²⁹¹ NER, cl. 6.2.2(c).

²⁹² NER, cl. 6.2.2(c).

Appendix C: Proposed service classification of SA Power Networks' distribution services 2020–25²⁹³

Service group	Further description	Current classification 2015-20	AER proposed classification 2020-25
Common distribution service – use of the distribution network for the conveyance/flow of electricity (including the services relating to network integrity)			
Common distribution service (formerly 'network services')	<p>The suite of activities that includes, but is not limited to, the following:</p> <ul style="list-style-type: none"> the planning, design, repair, maintenance, construction, and operation of the distribution network the relocation of assets that form part of the distribution network but not relocations requested by a third party (including a customer) ongoing inspection of private electrical works (not part of the shared network) required under legislation for safety reasons works to fix damage to the network (including emergency recoverable works) support for another network during an emergency event procurement and provision of network demand management activities for distribution or system reliability, efficiency or security purposes 	Standard Control	Standard Control

²⁹³ The examples and activities listed in the 'Further description' column are not intended to be an exhaustive list and some distributors may not offer all activities listed. Rather the examples provide a sufficient indication of the types of activities captured by the service.

Service group	Further description	Current classification 2015-20	AER proposed classification 2020-25
	<ul style="list-style-type: none"> • training internal staff and contractors delivering direct control services • activities related to ‘shared asset facilitation’ of distributor assets • emergency disconnect for safety reasons and work conducted to restore a failed component of the distribution system to an operational state upon investigating a customer outage • rectification of simple customer fault (e.g. fuse) relating to a life support customer or other critical health and safety issues • establishment and maintenance of national metering identifiers (NMIs) in market and/or network billing systems, and other market and regulatory obligations • investigation of customer-reported network faults. <p>Such services do not include a service that has been separately classified including any activity relating to that service.</p>		

Connection Services—services relating to the electrical or physical connection of a customer to the network

Basic connection services	<p>Connection Services include:</p> <ul style="list-style-type: none"> • Premises connection services – includes any additions or upgrades to the connection assets located on the customer’s premises (note: excludes all metering services). • Extensions – includes an enhancement required to connect a powerline or facility outside the present boundaries of the transmission or distribution network owned or operated by a DNSP. 	Standard Control	Standard Control
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Service group	Further description	Current classification 2015-20	AER proposed classification 2020-25
	<ul style="list-style-type: none"> Network augmentations – includes any shared network enlargement / enhancement undertaken by a distributor which is not an extension. <p>These services are subject to customer contributions determined according to SA Power Networks' Connection Policy.</p> <p>These services exclude connection services for large embedded generators (30 kW 3 phase or above or 5 kW 1 phase and above. See below).</p>		
Enhanced connection services	<p>Other or enhanced connection services provided at the request of a customer or third party that include those that are:</p> <ul style="list-style-type: none"> Provision of connection services above minimum requirements – customer requests increase in reliability or quality of supply beyond the standard, and/or above minimum regulatory requirements (e.g. reserve feeder); Provided with higher quality of reliability standards, or lower quality of reliability standards (where permissible) than required by the NER or any other applicable regulatory instruments; In excess of levels of service or plant ratings required to be provided by SA Power Networks; For large embedded generators (30 kW 3 phase or above 5 kW 1 phase and above); or <p>Other additional customer dedicated connection lines / assets.</p>	Negotiated distribution service	Alternative Control

Service group	Further description	Current classification 2015-20	AER proposed classification 2020-25
Connection management services	<p>Works initiated by a customer or retailer which are specific to the connection point. Includes, but is not limited to:</p> <ul style="list-style-type: none"> • connection application services • de-energisation • re-energisation • temporary connections • remove or reposition connection • overhead service line replacement – customer requests the existing overhead service to be replaced (e.g. as a result of a point of attachment relocation). No material change to load • protection and power quality assessment • supply enhancement (e.g. upgrade from single phase to three phase) • customer requested change requiring secondary and primary plant studies for safe operation of the network (e.g. change protection settings) • upgrade from overhead to underground service • rectification of illegal connections or damage to overhead or underground service cables • calculation of a site specific distribution loss factor on request in respect of a generating unit up to 10 MW or a connection point for an end-user with actual or forecast load up to 40 GWh per annum capacity, as per clause 3.6.3(b1) of the NER 	Negotiated distribution service	Alternative Control

Service group	Further description	Current classification 2015-20	AER proposed classification 2020-25
	<ul style="list-style-type: none"> power factor correction. 		
Metering Services²⁹⁴ —activities relating to the measurement of electricity supplied to and from customers through the distribution system (excluding network meters)			
Type 1 to 4 metering services	Type 1 to 4 metering installations and supporting services are competitively available.	Negotiated distribution service & Alternative Control	Unregulated
Type 5 and 6 meter installation and provision (prior to 1 December 2017)	Recovery of the capital cost of type 5 and 6 metering equipment installed (including metering with internally integrated load control devices).	Alternative Control	Alternative Control
Type 5 and 6 meter maintenance, reading and data services (legacy meters)	<ul style="list-style-type: none"> Meter maintenance covers works to inspect, test, and maintain metering installations. Meter reading refers to quarterly or other regular reading of a metering installation including field visits and remotely read meters. <p>Metering data services includes for example: services that involve the collection, processing, storage and delivery of metering data, the provision of metering data in accordance with regulatory obligations, remote or self-reading at difficult to access sites, and the management of relevant NMI Standing Data in accordance with the NER.</p>	Alternative Control	Alternative Control

²⁹⁴ SA Power Networks will continue to be responsible for type 5 and 6 meters until they are replaced (and entitled to levy associated charges). We refer to these meters as 'legacy meters'. New meters (that will be type 1 to 4 meters) installed from 1 December 2017 are referred to as 'contestable meters'.

Service group	Further description	Current classification 2015-20	AER proposed classification 2020-25
Type 7 metering services	Administration and management of type 7 metering installations in accordance with the NER and jurisdictional requirements. Includes the processing and delivery of calculated metering data for unmetered loads, and the population and maintenance of load tables, inventory tables and on/off tables.	Standard Control	Standard Control
Auxiliary metering services (Type 5 to 7 metering installations)	<p>Activities include:</p> <ul style="list-style-type: none"> Off-cycle meter reads for type 5 and 6 meters. Requests to test, inspect and investigate, or alter an existing type 5 or 6 metering installation. Testing and maintenance of instrument transformers for type 5 and 6 metering purposes. Type 5 to 7 non-standard metering services. Works to re-seal a type 5 or 6 meter due to customer or third party action (e.g. by having electrical work done on site). <p>Change distributor load control relay channel on request that is not a part of the initial load control installation, nor part of standard asset maintenance or replacement.</p>	Negotiated distribution service	Alternative control
Emergency maintenance of failed metering equipment not owned by DNSP (contestable metering)	The DNSP is called out by a customer or their agent (e.g. retailer, Metering Coordinator or Metering Provider) due to a power outage where an external Metering Provider's metering equipment has failed or an outage has been caused by the Metering Provider and the distributor has had to restore power to the customer's premises. This may result in an unmetered supply arrangement at this site. This fee will also be levied where a metering	Not previously classified in SA	Alternative Control

Service group	Further description	Current classification 2015-20	AER proposed classification 2020-25
	provider has requested the distributor to check a potentially faulty network connection and when tested by the distributor, no fault is found.		
Meter recovery and disposal – type 5 and 6 (legacy meters)	Activities include the removal and disposal of a type 5 or 6 metering installation: <ul style="list-style-type: none"> At the request of the customer or their agent, where an existing type 5 or 6 metering installation remains installed at the premises and a replacement meter is not required. At the request of the customer or their agent, where a permanent disconnection has been requested where it has not been removed and disposed of by the incoming metering provider. 	Not previously classified in SA	Alternative Control
Network metering services	Bulk supply point metering	Standard Control	Standard Control
Third party requested outage for purposes of replacing meter	At the request of a retailer or metering coordinator provide notification to affected customers and facilitate the disconnection/reconnection of customer metering installations where a retailer planned interruption cannot be conducted.	Not previously classified in SA	Alternative control
Network ancillary services - Services closely related to common distribution services but for which a separate charge applies.			
Access permits, oversight and facilitation services	Activities include: <ul style="list-style-type: none"> A distributor issuing access permits or clearances to work to a person authorised to work on or near distribution systems including high and low voltage. A distributor issuing confined space entry permits and associated safe entry equipment to a person authorised to enter a confined space. A distributor providing access to switch rooms, substations and other network plant to a non-LNSP party who is accompanied and supervised by a distributor's staff member. 	Negotiated distribution service	Alternative Control

Service group	Further description	Current classification 2015-20	AER proposed classification 2020-25
	<p>May also include a distributor providing safe entry equipment (fall-arrest) to enter difficult access areas.</p> <ul style="list-style-type: none"> Specialist services (which may involve design related activities and oversight/inspections of works) where the design or construction is non-standard, technically complex or environmentally sensitive and any enquiries related to distributor assets. Facilitation of generator connection and operation on the network. Facilitation of activities within clearances of distributor's assets, including physical and electrical isolation of assets. 		
Third party funded network upgrades or other improvements.	<p>Upgrades or alterations to the shared distribution network to enable third party infrastructure (e.g. NBN Co telecommunications assets) to be installed on the shared distribution network.</p> <p>This does not relate to upstream distribution network augmentation.</p>	Negotiated distribution service	Alternative Control
Network safety services	<p>Examples include:</p> <ul style="list-style-type: none"> fitting of tiger tails as requested by a customer or directed by the OTR high load escorts de-energising wires for safe approach inspection and rectification of customer fault where there may be a safety and or reliability impact on the network or related component 	Negotiated distribution service	Alternative control

Service group	Further description	Current classification 2015-20	AER proposed classification 2020-25
Sale of approved materials or equipment	Includes the sale of approved materials/equipment to third parties for connection assets that are gifted back to become part of the shared distribution network.	Negotiated distribution service	Alternative control
Notices of arrangement and completion notices	<p>Examples include:</p> <ul style="list-style-type: none"> • Work of an administrative nature where a local council requires evidence in writing from the distributor that all necessary arrangements have been made to supply electricity to a development. This includes: receiving and checking subdivision plans, copying subdivision plans, checking and recording easement details, assessing supply availability, liaising with developers if errors or changes are required, and preparing notifications of arrangement. • Provision of a completion notice (other than a notice of arrangement). This applies where the real estate developer requests the distributor to provide documentation confirming progress of work. Usually associated with discharging contractual arrangements (e.g. progress payments) to meet contractual undertakings. 		
Rectification works to maintain network safety	Activities include issues identified by the DNSP and work involved in managing and resolving pre-summer bushfire inspection customer vegetation defects or aerial mains where the customer has failed to do so.	Not previously classified	Alternative control
Planned interruption – customer requested	<p>Examples include:</p> <ul style="list-style-type: none"> • Where the customer requests to move a planned interruption, and agrees to fund the additional cost of performing this distribution service outside of normal business hours. 	Negotiated distribution service	Alternative Control

Service group	Further description	Current classification 2015-20	AER proposed classification 2020-25
Attendance at customers' premises to perform a statutory right where access is prevented	<ul style="list-style-type: none"> customer initiated network outage (e.g. to allow customer and/or contractor to perform maintenance on the customer's assets, work close to or for safe approach, which impacts other networks users). <p>A follow up attendance at a customer's premises to perform a statutory right where access was prevented or declined by the customer on the initial visit. This may include the costs of arranging, and the provision of, a security escort or police escort (where the cost is passed through to the distributor).</p>	Negotiated distribution service	Alternative Control
Inspection and auditing services	<p>Activities include:</p> <ul style="list-style-type: none"> inspection and reinspection by a distributor of assets, installed or relocated by a third party investigation, review and implementation of remedial actions that may lead to corrective and disciplinary action of a third party service provider due to unsafe practices or substandard workmanship auditing of a third party service provider's work practices in the field after hours examination and/or testing of the consumer mains and main switchboard prior to initial energisation (upon request) after hours visual examination of an electrical installation to reconnect it to a source of electricity (upon request) re-test at a customer's installation, where the installation fails the initial test and cannot be connected. 	Negotiated distribution service	Alternative Control

Service group	Further description	Current classification 2015-20	AER proposed classification 2020-25
Provision of training to third parties for network related access	Training services provided to third parties that result in a set of learning outcomes that are required to obtain a distribution network access authorisation specific to a distributor's network. Such learning outcomes may include those necessary to demonstrate competency in the distributor's electrical safety rules, to hold an access authority on the distributor's network and to carry out switching on the distributor's network. Examples of training might include high voltage training, protection training or working near powerlines training.	Not classified in SA	Alternative Control
Authorisation and approval of third party service providers design, work and materials	<p>Activities include:</p> <ul style="list-style-type: none"> • Authorisation or re-authorisation of individual employees and subcontractors of third party service providers and additional authorisations at the request of the third party service providers (excludes training services). • Acceptance of third party designs and works. • Assessing an application from a third party to consider approval of alternative material and equipment items that are not specified in the distributor's approved materials list. 	Not previously classified	Alternative control
Security lights	<p>Provision, installation, operation and maintenance of equipment mounted on the distribution network used for security services, e.g. nightwatchman lights</p> <p>Note: excludes connection services.</p>	Negotiated distribution service	Alternative Control
Customer initiated asset relocations	<ul style="list-style-type: none"> • Preparation of offer and performance of work for relocation of assets that form part of the distribution network in circumstances where the relocation was: initiated by a third party (including a customer), or triggered by a customer's non-compliance with network safety or security standards. 	Negotiated Distribution Service	Alternative control

Service group	Further description	Current classification 2015-20	AER proposed classification 2020-25
Customer requested provision of electricity network or consumption data	Data requests by customers or third parties including requests for the provision of electricity network data or consumption data outside of legislative obligations.	Alternative control	Alternative control
Fault response	Attendance at a customer's premises to restore supply or investigate power quality issues where it is determined that the fault was not related to the distributor's equipment or infrastructure (this excludes circumstances where the fault relates to the network).	Not previously classified in SA	Alternative control
Third party funded network alterations or other improvements	Alterations or other improvements to the shared distribution network to enable third party infrastructure (e.g. NBN Co telecommunications assets) to be installed on the shared distribution network. This does not relate to upstream distribution network augmentation.	Not previously classified in SA	Alternative control
Public Lighting Services			
Public Lighting	Includes provision, construction and maintenance of public lighting and emerging public lighting technology.	Negotiated distribution service	Alternative Control
Unregulated Distribution Services - (non-exhaustive list)			
Distribution asset rental	Rental of distribution assets to third parties (e.g. office space rental, pole and duct rental for hanging telecommunication wires etc.).	Unregulated	Unregulated
Contestable metering support roles	Includes metering coordinator, metering data provider and metering provider for Type 1 to 4 metering installations.	Unregulated	Unregulated

Service group	Further description	Current classification 2015-20	AER proposed classification 2020-25
Type 5 and 6 meter data management to other electricity distributors	The provision of type 5 and 6 meter data management to other electricity distribution network service providers.	Unregulated	Unregulated
Provision of training to third parties for work not associated with common distribution services nor network services	Training programs provided to third parties for work that is not associated with the provision of common distribution services nor network access.	Unregulated	Unregulated