

## Preliminary framework and approach Energex and Ergon Energy

# Regulatory control period commencing 1 July 2020

March 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	

Preliminary framework and approach – Energex and Ergon Energy – March 2018

## Overview

The F&A is the first step in a two year process to determine efficient prices for electricity distribution services in Queensland (Qld). 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 prepare regulatory proposals.

This preliminary F&A outlines changes we are proposing to make that will affect the regulated services offered by Energex and Ergon Energy in the future.

Our preliminary view is that the F&A should be revised to reflect rule changes and the development of new incentive schemes and regulatory guidelines that will apply to Energex and Ergon Energy. In particular, late last year, the Australian Energy Market Commission (**AEMC**) changed the NER to amend the framework we use to classify DNSPs' electricity distribution services.<sup>1</sup> Power of Choice reforms that also commenced last year have introduced metering contestability to residential electricity consumers fundamentally changing the role of the Qld distributors in the provision of meters.<sup>2</sup> Further, we developed a new demand management incentive scheme (DMIS) and innovation allowance mechanism (Allowance Mechanism)<sup>3</sup> and have implemented a national Ring-fencing Guideline.<sup>4</sup> These changes to the regulatory environment that the Qld distributors operate in have been reflected in this preliminary F&A.

Following release of this Preliminary F&A we will consult with interested parties before issuing our final F&A by 31 July 2018. Table 1 summarises our Qld distribution determination process.

Step	Date
AER publishes preliminary F&A for Qld distributors	March 2018
Stakeholder forum	23 April 2018
Submissions on preliminary F&A for Qld distributors close	27 April 2018

## Table 1 Queensland distribution determination process

<sup>&</sup>lt;sup>1</sup> AEMC, final rule determination - National Electricity Amendment (Contestability of Energy Services) 2017

<sup>&</sup>lt;sup>2</sup> See: http://www.aemc.gov.au/Major-Pages/Power-of-choice.

<sup>&</sup>lt;sup>3</sup> See: https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/demand-management-incentive-scheme-and-innovation-allowance-mechanism.

<sup>&</sup>lt;sup>4</sup> AER, *Ring-fencing guideline electricity distribution*, Version 2. October 2017. See https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/electricity-ring-fencing-guideline-october-2017.

AER to publish final F&A for Qld distributors	July 2018
Qld distributors submit regulatory proposals 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 decisions	September 2019
AER to hold a predetermination conference	October 2019
Qld distributors to submit revised regulatory proposals to AER	December 2019
Submissions on revised regulatory proposals and draft decisions close	January 2020*
AER to publish distribution determinations 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).

Energex and Ergon Energy are the licensed, regulated operators of Queensland's (Qld) monopoly electricity distribution networks connected to the National Electricity Market. The networks comprises the poles, wires and transformers used for transporting electricity across urban and rural population centres to homes and businesses. The Qld distributors design, construct, operate and maintain their distribution network for Qld electricity consumers.

We make regulatory decisions on the revenues the Qld distributors can recover from their customers. We determine Qld distributors' revenue by an assessment of their efficient costs and forecasts. Our assessment is based on a regulatory proposal submitted by the Qld distributors 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' 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 time before those savings are passed to customers through lower network bills.

This chapter provides an overview of our preliminary positions on:

- classification of distribution services (which services we will regulate)
- control mechanisms (how we will determine prices for regulated services)
- incentives schemes for service quality, capital expenditure and operating expenditure and demand management
- expenditure forecasting tools to test the network businesses' regulatory proposals
- how we will calculate depreciation of the network businesses' regulatory asset bases
- how we will price transmission assets (dual function assets).

A summary our intended approach to each of the above matters is provided below. More detailed discussion of each matter is set out in the following chapters.

## **Classification of distribution services**

We regulate distribution services provided by the Qld distributors. 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 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,<sup>5</sup> following the introduction of our Ring-Fencing Guideline.<sup>6</sup>

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 services that come into existence within a regulatory control period must be provided separately to the regulated network business, unless it applies for, and receives, a waiver under the Ring-fencing Guideline. We are required to develop and publish a service classification guideline by September 2018, which will provide further clarity and transparency around how we classify services.

Further, the Australian Energy Market Commission (**AEMC**) made a rule change to the NER in December 2017 which applies to the regulatory process for Qld electricity distributors for

<sup>&</sup>lt;sup>5</sup> 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*, November 2016, available at <a href="https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/electricity-ring-fencing-guideline-october-2017">https://www.aer.gov.au/networks-pipelines/guideline-schemes-models-reviews/electricity-ring-fencing-guideline-october-2017</a> and

https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/electricity-ring-fencing-guideline-2016.
 AER, *Ring-fencing guideline electricity distribution*, October 2017; AER, *Electricity distribution ring-fencing guideline explanatory statement*, November 2016.

the 2020–25 regulatory period.<sup>7</sup> 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.<sup>8</sup> This mandatory requirement had previously constrained our ability to move away from the status quo when considering service classification.<sup>9</sup>

Table 12 provides an overview of the service classifications available to us for the purposes of economic regulation under the NER.

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.	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.
		Most distribution services are classified as standard control.	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.
Unregulated 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. <sup>10</sup>	We have no role in regulating these services.

## **Table 2 Classifications of distribution services**

<sup>7</sup> See http://www.aemc.gov.au/Rule-Changes/Contestability-of-energy-services.

<sup>&</sup>lt;sup>8</sup> Formerly clause 6.2.1(d), now deleted.

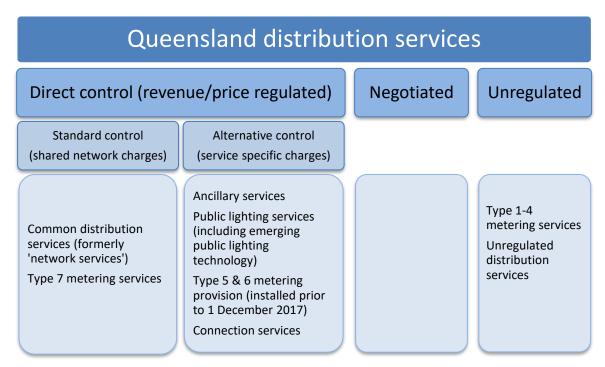
<sup>&</sup>lt;sup>9</sup> The rule change also requires us to develop and publish service classification guidelines by September 2018, which will provide further clarity and transparency around how we classify services. See clause 6.2.3A.

<sup>&</sup>lt;sup>10</sup> The NER defines a distribution service as a service provided by means of, or in connection with, a distribution system. NER, Chapter 10, glossary.

#### Source: AER

Our preliminary position is to change the classification of some Qld distribution services for the 2020–25 regulatory control period. While we propose to retain the existing service classifications for most services, we intend 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 the Qld network businesses is set out in figure 1 below.



## Figure 1 AER proposed classification of Qld distribution services

#### Source: AER

In relation to metering services, we note that the Qld DNSPs were responsible for the provision of type 5 and 6 meters up until 30 November 2017. The Qld DNSPs will continue to be responsible for those meters until they are replaced (end entitled to levy associated charges). We refer to these as 'legacy meters' and will be classified as alternative control. All new meters (including replacements) installed from 1 December 2017 are considered to be 'contestable meters' and will not be provided by the Qld DNSPs. Going forward, customers can expect retailers to make arrangements for metering on their behalf.

There is an exception to the metering arrangements discussed above. Ergon Energy's Mount Isa-Cloncurry supply network is not part of the NEM and is therefore not covered by the new metering rules. Ergon Energy will continue to be solely responsible for these metering services, which will remain as alternative control services.

Our final F&A decision on service classification is not binding for our determination on the Qld network businesses' regulatory proposals. However, under the NER we may only change our classification approach in making the determination if a material change in circumstances justifies a departure from our final F&A position.<sup>11</sup> However, without affecting the content of a determination that has already been made, an F&A paper may be amended or replaced in accordance with the rules and with consultation.<sup>12</sup>

#### Form of control

Following on from service classifications, our determinations impose controls on direct control service prices and/or their revenues.<sup>13</sup> 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 and we consider no form of control mechanism set out in that paper should apply to that distribution service.<sup>14</sup> In deciding control mechanism forms, we must select one or more from those listed in the NER.<sup>15</sup> These include price schedules, caps on the prices of individual services, weighted average price caps, revenue caps, average revenue caps and hybrid control mechanisms.

Our preliminary position on the form of control mechanisms for the Qld network businesses is to retain the long standing approaches of:

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

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

Our final F&A decision on the form of control is binding on us and the Qld distributors for the 2020–25 regulatory determination.<sup>17</sup> We may only vary our proposed control mechanism formulas in making the determination in response to a material change in circumstances.<sup>18</sup> However, without affecting the content of a determination that has already been made, an F&A paper may be amended or replaced in accordance with the rules and with consultation.<sup>19</sup>

<sup>&</sup>lt;sup>11</sup> NER, cl. 6.12.3(b).

<sup>&</sup>lt;sup>12</sup> NER, cl 6.8.1(a)(2), 6.8.1(c)(3).

<sup>&</sup>lt;sup>13</sup> NER, cl. 6.2.5(a).

<sup>&</sup>lt;sup>14</sup> NER, cl. 6.12.3(c).

<sup>&</sup>lt;sup>15</sup> NER, cl. 6.2.5(b).

<sup>16</sup> 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.

<sup>17</sup> NER, cl. 6.8.1(b)(1)(i).

<sup>&</sup>lt;sup>18</sup> NER, cl. 6.12.3(c1).

<sup>&</sup>lt;sup>19</sup> NER, cl 6.8.1(a)(2), 6.8.1(c)(3).

#### **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 available incentive schemes to each of the Qld network businesses:

- 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 the Qld network businesses.

## Application of our Expenditure Forecast Assessment Guideline

Our Expenditure Forecast Assessment Guideline<sup>20</sup> is based on a reporting framework allowing us to compare the relative efficiencies of distributors. Our proposed position is to apply the guideline, including its information requirements, to the Qld network businesses 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 the Qld distributors' regulatory proposals. We intend to apply the assessment/analytical tools set out in the guideline and any other appropriate tools for assessing expenditure forecasts.<sup>21</sup>

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

## Depreciation

When we roll forward the Qld network businesses' regulatory asset bases (RABs) for the upcoming regulatory control period we must adjust for depreciation. Our preliminary position is to use depreciation based on forecast capex (or forecast depreciation) to establish the opening RABs as at 1 July 2025. In combination with our proposed application of the CESS this approach will maintain incentives for the distributors 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.

<sup>&</sup>lt;sup>20</sup> AER, *Expenditure Forecast Assessment Guideline for Distribution*, November 2013.

<sup>&</sup>lt;sup>21</sup> We are continuously improving the economic benchmarking techniques that are captured in our Guideline. This includes reviewing and refining our analysis of operating environment factors. See section 4 for more detail.

## **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.

Energex and Ergon Energy do not operate 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**

With the industry undergoing a period of rapid transformation, 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 consumers much earlier in the regulatory process than ever before.

Energex and Ergon Energy are following a set of engagement principles to ensure openness and transparency within the regulatory development process. The Qld distributors commenced their consumer engagement in December 2017 by hosting a '<u>Customer</u> <u>Xchange Forum</u>' which explored key energy issues with customers and customer advocacy groups. In early March 2018, they also held their first <u>Regulatory Proposal & Tariff Structure</u> <u>Statement Customer Council Working Group</u>. Supporting their engagement activities is a draft communication plan, published on their website (<u>https://www.talkingenergy.com.au/commitment</u>) for which they are also seeking public comment.

## **1** Classification of distribution services

This chapter sets out our preliminary position on the classification of distribution services provided by Qld distributors in the 2020–25 regulatory control period. 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 services<sup>22</sup>
- 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. We introduced our ring-fencing guideline for electricity distributors and our classification decisions will also settle ring-fencing obligations that will apply to each Qld distributor for the 2020–25 regulatory control period.<sup>23</sup> For these reasons, we have closely reviewed the table of distribution services at Appendix B.

The Australian Energy Market Commission (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.<sup>24</sup> The new rule streamlines the classification provisions and requires us 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. Removing this provision provides an opportunity to improve clarity, and achieve greater consistency across jurisdictions as far as practicable. It also provides more predictability in how distribution services might be classified and service descriptions that better align with the services being provided.

The service classification guideline will not be binding on the AER. However, we are required to provide reasons for any departure from the guideline to provide transparency to stakeholders in circumstances where our approach differs from that in the classification guideline.

<sup>&</sup>lt;sup>22</sup> 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.

<sup>&</sup>lt;sup>23</sup> AER, Ring-fencing guideline electricity distribution, November 2016; AER, Electricity distribution ring-fencing guideline explanatory statement, November 2016.

<sup>24</sup> See http://www.aemc.gov.au/Rule-Changes/Contestability-of-energy-services.

As part of the consultation process 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 on the <u>AER website</u>.

As work on the new guidelines will not be complete before our final F&A for the Qld distributors is published, we have developed preliminary classification positions within the current regulatory framework (see appendix B). We aim to provide improved clarity, consistency across jurisdictions as far as practicable, predictability in how new distribution services might be classified and service descriptions that better align with the services being provided.

## 1.1 AER's preliminary position

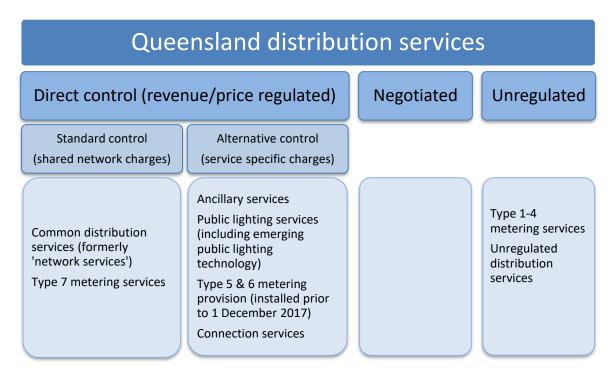
Overall, our preliminary position is to change the classification of some Qld distribution services for the 2020–25 regulatory control period.

Our preliminary position is to group distribution services provided by the Qld distributors as:

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

Figure 1.1 summarises our preliminary classification of Qld distribution services. Our assessment approach and reasons follow.

## Figure 1.1 AER proposed approach to classification of QId 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 asset<sup>25</sup> 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:
  - $\circ$   $\;$  the assets used to provide such services
  - the inputs/delivery methods distributors use to provide such services to customers, or
  - o services that consumers or other parties provide to distributors.
- classify distribution services in groups<sup>26</sup> our general approach to service classification is to classify services in groupings rather than individually. This obviates the need to

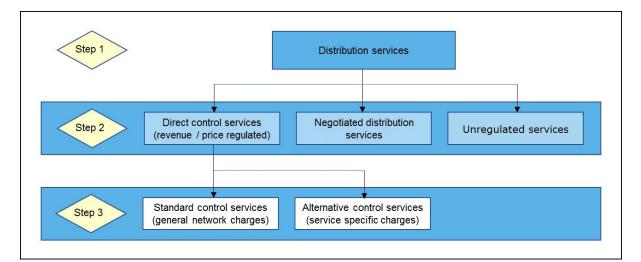
<sup>&</sup>lt;sup>25</sup> The AEMC's Contestability of energy services rule change, made in December 2017, introduced a requirement for the AER to regulate 'restricted assets'. The AER does not classify assets as restricted assets; rather, the term is defined in the NER. The AER has a role only in assessing applications for exemptions from the restricted assets provisions of the NER.

<sup>&</sup>lt;sup>26</sup> NER, cl. 6.2.1(b).

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 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 services, introduced within the regulatory period – which clearly fall 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 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.<sup>27</sup> 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'.<sup>28</sup>
- 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.<sup>29</sup> 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 to classify services as either direct control or negotiated services, or to not classify them, the NER requires us to have regard to the 'form of regulation factors' set out in the NEL.<sup>30</sup> We have reproduced these at appendix A. 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 for similar services both within and beyond the jurisdiction.<sup>31</sup>

For services we intend to classify as direct control services, the NER requires us to have regard to a further range of factors.<sup>32</sup> These include the potential to develop competition in provision of a service and how our classification may influence that potential; whether the costs of providing the service are directly attributable to the person to whom the service is provided; and the possible effect of the classification on administrative costs.

Our classification decisions determine how distributors will recover the cost of providing services.<sup>33</sup> 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:

<sup>&</sup>lt;sup>27</sup> NER, chapter 10, glossary.

<sup>&</sup>lt;sup>28</sup> NER, chapter 10, glossary.

<sup>&</sup>lt;sup>29</sup> NER, cl 6.2.1(a) note.

<sup>&</sup>lt;sup>30</sup> NER, cl. 6.2.1(c)(1); NEL, s. 2F.

<sup>&</sup>lt;sup>31</sup> NER, cl. 6.2.1(c).

<sup>&</sup>lt;sup>32</sup> NER, cl. 6.2.2(c).

<sup>&</sup>lt;sup>33</sup> 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).

- potentially contestable, or
- 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 will 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 there is sufficient competition that there is no need for us to classify the service as either a direct control or 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'. Broadly, pursuant to our Ring-Fencing Guideline, this means that while existing regulated distribution services will continue to be provided by the distributor, all unregulated distribution services or new services that come into existence within a regulatory control period must be provided outside of the regulated network business, unless it applies for, and receives, a waiver under the ring-fencing guideline.<sup>34</sup>

## 1.3 Reasons for AER's preliminary position

This section sets out our preliminary service classification and reasons for the Qld distributors' 2020–25 regulatory control period for:

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

<sup>&</sup>lt;sup>34</sup> AER, Ring-fencing guideline electricity distribution, October 2017; AER, Electricity distribution ring-fencing guideline explanatory statement, November 2016.

Appendix B contains a detailed table of our preliminary classification of Qld distribution services.

## 1.3.1 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'.

The Common distribution service grouping is a suite of activities concerned with providing a safe and reliable electricity supply to customers.<sup>35</sup> 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.

The Qld distributors, in their submission to our preliminary F&A for Qld, proposed a revised description that we consider is clearer and more comprehensive than our preliminary description,<sup>36</sup> which we have ultimately adopted. That description is contained in appendix B and we have adopted it for the Qld distributors, bringing the description of a common distribution service in Qld in line with NSW, ACT, Tasmania and the NT.

Our preliminary position is to classify the grouping; common distribution service as a direct control service. Each of the Qld distributors holds an electricity distribution authority to provide these services which is the only distribution authority in place for their respective geographic areas.<sup>37</sup> Under the *Electricity Act* (Qld) 1994, a person is prevented from distributing and supplying electricity unless they hold a licence authorising them to do so.<sup>38</sup> These arrangements create a regulatory barrier, preventing third parties from providing activities within the common distribution service group.<sup>39</sup> 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.

We must further classify direct control services as either standard or alternative control services.<sup>40</sup> Our preliminary position is to retain the current standard control classification for

<sup>&</sup>lt;sup>35</sup> NER, Chapter 10 glossary.

<sup>&</sup>lt;sup>36</sup> Energex and Ergon Energy letter, Request to amend the framework and approach, 31 October 2017, p.1.

<sup>&</sup>lt;sup>37</sup> Authorities are issued by the Director General of Qld's Department of Energy and Water Supply.

<sup>&</sup>lt;sup>38</sup> Under s. 88A of the Electricity Act 1994 (Qld), the right to supply electricity using a supply network within a distribution area is provided under a 'distribution authority', equivalent to a licence to operate.

<sup>&</sup>lt;sup>39</sup> NER, cl. 6.2.1(c)(1); NEL, ss. 2F(a), (d) and (f).

<sup>&</sup>lt;sup>40</sup> NER, cl. 6.2.2(a).

the common distribution service. There is no potential to develop competition in the market for common distribution service activities because of the barriers outlined above.<sup>41</sup> There would be no material effect on administrative costs for us, the Qld distributors, users or potential users by continuing this classification.<sup>42</sup> We currently classify the common distribution service (or 'network services') in Qld and all other NEM jurisdictions as standard control services.<sup>43</sup> 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.<sup>44</sup>

We note that the Qld distributors have listed a new activity under the common distribution service heading, labelled "support for another distributor during an emergency event". This activity is provided in connection with a distribution system, and we consider it a distribution service. However, in the case of an emergency event, where the distributor is called upon to assist another distributor, the works performed are not on the distributor's shared network and the distributor is entitled to recover the costs of the assistance provided. While we propose to classify these activities as standard control, 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.

#### **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 Queensland. The service was, therefore, unregulated.<sup>45</sup> 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, and could increase the cost of these activities. Instead, we intend these service should be classified as direct control. Therefore, our preliminary position is for emergency recoverable works to be subsumed into the common distribution service group and classified as a direct control and standard control service. Distributors are required to perform works to maintain or repair the shared network to ensure a safe and reliable electricity supply.

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<sup>&</sup>lt;sup>41</sup> NER, cl. 6.2.2(c)(1).

<sup>&</sup>lt;sup>42</sup> NER, cll. 6.2.2(c)(2), (3).

<sup>&</sup>lt;sup>43</sup> NER, cl. 6.2.2(c)(4).

<sup>44</sup> NER, cl. 6.2.2(c)(5).

<sup>&</sup>lt;sup>45</sup> AER, Final framework and approach for QLD electricity distribution businesses, April 2014, p.37.

Although we propose classifying 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. If a distributor is successful in recovering the cost of the emergency repairs from a third party, this payment or revenue, would be netted off. This would prevent a distributor from recovering the cost 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.

## 1.3.2 Metering services

All electricity customers have a meter that measures the amount of electricity they use.<sup>46</sup> On 26 November 2015, the AEMC made a final rule to open up competition in metering services and give consumers more opportunities to access a wider range of metering services.<sup>47</sup>

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.<sup>48</sup>

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.<sup>49</sup>

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 protections<sup>50</sup> and an ability for consumers to opt out of having an advanced meter installed if they have an existing, working meter.<sup>51</sup>

The new arrangements commenced on 1 December 2017 and required changes to the NER and the National Electricity Retail Rules (NERR).<sup>52</sup> Consequently, our proposed classification of some metering services will also change for the 2020–25 regulatory control period.

<sup>&</sup>lt;sup>46</sup> All connections to the network must have a metering installation (NER, cl. 7.3.1A(a)).

<sup>47</sup> AEMC, Competition in metering services information sheet, 26 November 2015.

 <sup>&</sup>lt;sup>48</sup> AEMC, Competition in metering services information sheet, 26 November 2015.
 <sup>49</sup> AEMC, Competition in metering convices information sheet, 26 November 2015.

 <sup>&</sup>lt;sup>49</sup> AEMC, Competition in metering services information sheet, 26 November 2015.
 <sup>50</sup> AEMC, Competition in metering services information sheet, 26 November 2015.

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

<sup>&</sup>lt;sup>51</sup> AEMC, Final rule to increase consumers' access to new services information sheet, 26 November 2015.

<sup>&</sup>lt;sup>52</sup> AEMC, Competition in metering services information sheet, 26 November 2015.

## 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. Type 1 to 4 meters are competitively available<sup>53</sup> and we do not currently regulate them in Qld or in most other jurisdictions—they are not classified and therefore are unregulated distribution services and our preliminary position is for them to remain so.

## Type 5 and 6 metering services

Up until 1 December 2017, the Qld distributors were the monopoly providers of type 5 (interval) and 6 (accumulation) meters. However, from 1 December 2017 (and therefore before the commencement of the next regulatory control period on 1 July 2020), metering services across the National Energy Market (NEM) became contestable. Therefore, since 1 December 2017, households and other small customers who traditionally use these meter types may elect to change their metering provider and the type of meter they have. Further, the Qld distributors (or any metering provider)<sup>54</sup> are no longer permitted to install or replace existing meters with type 5 or 6 meters (although the Qld distributors will continue to provide a number of other type 5 and 6 metering services to 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, the Qld distributors may still recover the capital cost of 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 2015–20 regulatory control period<sup>55</sup> 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.<sup>56</sup>

## 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

<sup>&</sup>lt;sup>53</sup> NER, cll. 7.2.3(a)(2) and 7.3.1.A(a)).

<sup>54</sup> Except Power and Water Corporation in the NT, pursuant to chapter 7A NER (NT).

<sup>&</sup>lt;sup>55</sup> AER, Final decision Energex / Ergon Energy 2015–20 regulatory control period, Attachment 13 Classification of services, April 2015, pp. 13–10.

<sup>&</sup>lt;sup>56</sup> AEMC, Consultation paper — National electricity amendment (expanding competition in metering and related services), April 2014.

bulb wattage. Qld distributors are the monopoly providers of type 7 metering services in Qld.57

We therefore consider that there is no potential to develop competition in the provision of type 7 metering services.<sup>58</sup> 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.<sup>59</sup>

## Ancillary services – Metering

The Qld distributors will be required to provide ancillary metering services to support the metering contestability framework along with metering services to support existing type 5 and 6 meters.

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.<sup>60</sup>
- 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.<sup>61</sup>
- 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 B.

Our proposed classification and reasons for ancillary services (which captures ancillary metering services) are set out in section 1.3.4 below with our broader discussion on all ancillary services.

<sup>57</sup> NER, cl. 7.2.3(a)(2).

<sup>&</sup>lt;sup>58</sup> NER, cl. 6.2.2(c)(1).

<sup>&</sup>lt;sup>59</sup> AER, Final decision Energex / Ergon Energy 2015–20 regulatory control period, Attachment 13 Classification of services, April 2015, p. 13-23.

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.

<sup>61</sup> 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.

## 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.<sup>62</sup>

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.<sup>63</sup> 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 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).<sup>64</sup>

Importantly, we consider that pre-existing type 5 and 6 metering services, as detailed in appendix B, already encompasses these roles and is 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.<sup>65</sup> The distributors will remain in this role until such time as their type 5 or 6 meter is replaced or they receive 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.

## 1.3.3 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);

<sup>&</sup>lt;sup>62</sup> 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.

<sup>63</sup> NER, chapter 10, glossary; Ergon Energy Corporation Ltd v Australian Energy Regulator [2012] FCA 393

<sup>&</sup>lt;sup>64</sup> AER, *Ring-fencing guideline electricity distribution*, November 2016; AER, *Electricity distribution ring-fencing guideline explanatory statement*, November 2016. CCP sub-panel 10 submitted that the AER should only grant short term waivers in relation to ring-fencing obligations, see: Consumer Challenge Panel (Sub-Panel 10), *Submission on AER's preliminary framework and approach for NSW DNSPs*, 21 April 2017, p. 9.

<sup>&</sup>lt;sup>65</sup> NER, cl. 11.86.7.

• extend the network to reach a person's premises (extension).

In Qld, connection services are grouped into two broad categories: Major customer connections and small customer connections.<sup>66</sup> Most small customer connections are currently classified as standard control. Within these two broad groups, Ergon and Energex have sub-categories of connection services; pre-connection and post-connection services. Each service within these groupings is classified according to whether the services can be attributed to specific customers. In the majority of cases, post-connection services are currently classified as alternative control.<sup>67</sup> Similarly, pre-connection services are provided as part of the distributor's role as a monopoly service provider and are currently classified as alternative control services.

## Small customer connections

Our proposed approach is to maintain the classification for small customer connections as direct control and further, as a standard control service for the 2020-25 regulatory period.<sup>69</sup>

In the final framework and approach for the 2015-20 regulatory period, there was some discussion regarding the opening of contestability for small customer connections. The introduction of competition would have required a more suitable classification such as alternative control. However, it was our view then that, without a change of Qld Government policy, changing the classification would lead to customers facing new service fees without the benefits of competition.<sup>70</sup> Should the Qld Government indicate before our determination that it intends to establish contestability in the provision of small customer connections before or during the 2020–25 regulatory control period, we would reconsider our classification approach. In effect, a Qld Government policy statement on contestability may constitute a material change in circumstance, justifying a change in classification.<sup>71</sup>

For the following reasons we consider the current standard control classification for standard connection services is appropriate:

 While there may be some prospect for competition, we are not aware of any Queensland Government initiatives to introduce contestability for connection services in the next regulatory control period. Therefore, our classification will not influence the potential for competition.

<sup>&</sup>lt;sup>66</sup> Energex and Ergon consider embedded generators larger than 30 kVA but small than 1 MW should be treated as major customer connections. Ergon also uses the term 'major customer' in place of 'large customer'.

<sup>&</sup>lt;sup>67</sup> AER Final Framework and approach QLD Electricity distributors, regulatory control period commencing July 2015, April 2014, p. 37 (a noteworthy exception is "Operate and maintain connection assets" which is classified as standard control, Appendix B, p. 112.)

AER Final Framework and approach QLD Electricity distributors, regulatory control period commencing July 2015, April 2014, p. 36

 <sup>&</sup>lt;sup>69</sup> AER Final decision QLD electricity distribution determination, Attachment 13, Classification of services - October 2015, p.7.
 <sup>70</sup> AER, Final framework and approach for Ergon Energy and Energex, April 2014

<sup>&</sup>lt;sup>71</sup> Under Clause 6.12.3(b) of the NER, the distribution service classifications must be as set out in our final F&A unless we consider that a material change in circumstance justifies us changing it.

- There would be no material effect on administrative costs to us, Qld electricity distributors, users or potential users. This is because a standard control classification for standard connection services is consistent with the current regulatory approach.
- We are aiming to harmonise the classification of standard connection services in Queensland, South Australia, and the ACT in the forthcoming regulatory control period, where standard connections services are likely to be classified as standard control services.<sup>72</sup>
- The nature of connection services is 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. 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 standard connection service where no such costs are required) require the requesting customer to make a capital contribution. This is discussed in the non-standard connection services section below.

For the above reasons, we consider retaining the current classification of standard control for standard connection services is justified.

### **Pre-connection services**

Pre-connection services include both the provision of general information about connections to the broad customer base and services provided to specific customers on request.

Provision of general information about connections is a service provided to the broad customer base. Only the Qld distributors are able to provide these services to customers.<sup>73</sup> Therefore, our proposed approach is to classify this as a direct control service. It would be difficult, if not impractical, for distributors to separately identify and charge specific customers benefitting from this service.<sup>74</sup> As such, we further propose to classify pre-connection services as standard control services. This is consistent with the current classification.

Other pre-connection services are required by specific customers. These include consultation about a potential new connection and may include the distributor undertaking site inspections. In the context of a major customer connection, the distributor may be required to assess and approve connection designs made by alternative service providers. As these services are part of a distributor's role as a monopoly service provider, our proposed approach is to classify them as direct control services.<sup>75</sup> Because these services

<sup>&</sup>lt;sup>72</sup> AER, Final decision, Queensland distribution determination 2015–16 to 2019–20, Attachment 13,October 2015, p. 7; AER, Final Framework and Approach for ActewAGL July 2017, p.27.

<sup>&</sup>lt;sup>73</sup> NEL, s. 2F(a).

<sup>74</sup> NEL, clause 6.2.2(c)(5).

<sup>&</sup>lt;sup>75</sup> NEL, s. 2F(a).

may be attributable to specific customers, or prospective customers, we further propose to classify them as alternative control services.<sup>76</sup>

### **Post-connection services**

In the final framework and approach leading into the current regulatory period, postconnection services were grouped together and called 'connection management services'.<sup>77</sup> This group includes services such as moving the point of attachment to the network, auditing connections after energisation or upgrading a connection from an overhead to an underground connection.<sup>78</sup>

Energex and Ergon Energy provide these services under their distribution authorities. Given this barrier to competition, our proposed approach is to classify this service group as direct control services.<sup>79</sup> Because the distributors provide these services to specific customers, we further propose to classify them as alternative control services.<sup>80</sup> Our proposed approach is consistent with the current classification for such services.<sup>81</sup>

#### Major customer connections

We propose to retain the current classification of most major customer connections as direct control and alternative control services in line with their current classification.<sup>82</sup> Exceptions to this are extensions and augmentations to certain major customers who fall into a particular set of circumstances. We propose that network extensions for major customers can be separated into two categories:

- "where the network extension will be dedicated to the exclusive use of the major customer at the time of installation and energisation and there is no reasonable likelihood that the network extension will be used to supply another customer or customers within the time period set out in the distributor's Connection Policy." These would be continue to be classified Alternative Control as indicated above.
- "where the distributor considers there is a reasonable likelihood that the network extension will be used to supply another customer or customers within the time period set out in the distributor's Connection Policy (i.e. will form part of the shared network)." These services would be classified as standard control.

Likewise, our preliminary position is to classify augmentations for major customers, which are a part of the shared network, as standard control. We seek stakeholder input on these views.

<sup>76</sup> NER, clause 6.2.2(c)(5).

AER, Final framework and approach for Ergon Energy and Energex, April 2014, p.51

<sup>&</sup>lt;sup>78</sup> See Appendix B for services grouped as 'connection management services'.

<sup>&</sup>lt;sup>79</sup> NEL, s. 2F(a).

<sup>&</sup>lt;sup>80</sup> NER, clause 6.2.2(c)(5).

<sup>&</sup>lt;sup>81</sup> AER, Final framework and approach for Ergon Energy and Energex, April 2014, p.52

<sup>&</sup>lt;sup>82</sup> AER, Final framework and approach for Ergon Energy and Energex, April 2014, p.44

A key consideration for us in deciding whether to classify a distribution service is the extent and effectiveness of competition in the market for the service.<sup>83</sup> We also take into account the existence and extent of any barriers to entry by alternative service providers. In preliminary discussions with the distributors, Energex indicated that around 70 per cent of the design and construction of contestable major customer connection assets are being provided by alternative providers. While in Ergon's distribution area, around half of new major customer connections are provided through competitors. As a result, we consider that the Qld distributors are still able to exercise considerable monopoly power in this market.

## 1.3.4 Ancillary services

Ancillary services share the common characteristics of being services provided to individual customers on an 'as needs' basis (e.g. meter testing and reading at a customer's request, moving mains, temporary supply, alteration and relocation of existing public lighting assets). Ancillary services involve work on, or in relation to, parts of the Qld distributors' respective distribution networks. Therefore, similar to common distribution services only the relevant distributor may perform these services in its distribution area.

The above factors create a regulatory barrier preventing any party other than the Qld distributors providing ancillary services in their respective distribution area.<sup>84</sup> Because of this monopoly position, customers have limited negotiating power in determining the price and other terms and conditions on which the distributors provide these services. These factors contribute to the view that the Qld distributors possess significant market power in providing ancillary services.<sup>85</sup>

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

Further, we intend to classify ancillary services as alternative control services because the Qld distributors provide these services to specific customers.<sup>86</sup> As such, the cost of each ancillary service is directly attributable to an individual customer.<sup>87</sup> This results in costs that are more transparent for customers.

We adopt this view even though ancillary services do not exhibit signs of competition or potential for competition. We also note that there would be no material effect on the administrative costs to us, the distributors, users or potential users of the network.<sup>88</sup> This is because classifying ancillary services as alternative control services is consistent with the current approach.

<sup>83</sup> NEL, s. 2F.

<sup>&</sup>lt;sup>84</sup> NEL, s. 2F(a).

<sup>&</sup>lt;sup>85</sup> NEL, s. 2F.

<sup>&</sup>lt;sup>86</sup> NER, cl. 6.2.2(c)(5).

<sup>&</sup>lt;sup>87</sup> NER, cl. 6.2.2(c)(5) – this includes a small number of identifiable customers. NER, cl. 6.2.2(c)(2).

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

## 1.3.5 Public lighting

The Qld distributors operate and maintain the majority of public lighting systems throughout Qld. The distributors provide these services on behalf of local councils and government departments responsible for public lighting in Qld.

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.<sup>89</sup>

We also propose to include emerging public lighting technology as part of the public lighting services group. Emerging public lighting technology relates to luminaires that the Qld distributors do not provide at the time of our distribution determination. However, emerging public lighting technology may become available during the 2020–25 regulatory control period. We intend to classify public lighting (including emerging public lighting technology) as a direct control service and further, as an alternative control services. Our reasons follow.

While the Qld distributors do not have a legislative monopoly over these services, a monopoly position exists to some extent.<sup>90</sup> This is because the Qld distributors own the majority of public lighting assets.<sup>91</sup> That is, other parties would need access to poles and easements for instance to hang their own public lighting assets. However, Energex and Ergon Energy own and control such supporting infrastructure. Therefore, similar to network services, ownership of network assets restricts the operation, maintenance, alteration or relocation of public lighting services to Energex and Ergon Energy.<sup>92</sup>

Based on the above analysis, our preliminary position is to classify public lighting services, including emerging technology, as direct control services.<sup>93</sup> This is consistent with public lighting's current classification.

<sup>&</sup>lt;sup>89</sup> AER, *Final framework and approach for Queensland*, April 2014, p. 66; AER, *Final framework and approach for Victoria*, October 2014, p. 62; AER, *Final framework and approach for TasNetworks*, July 2017, p. 28.

<sup>&</sup>lt;sup>90</sup> NEL, s. 2F(d).

<sup>&</sup>lt;sup>91</sup> NEL, s. 2F(a).

<sup>&</sup>lt;sup>92</sup> NEL, s. 2F(a)(d).

<sup>&</sup>lt;sup>93</sup> NER, cl. 6.2.1.

As direct control services, we must further classify public lighting services as either standard control or alternative control services.<sup>94</sup> Our preliminary 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.<sup>95</sup>
- classifying public lighting services as alternative control services may encourage other
  potential service providers to enter the market in the future— if the Qld Government
  implements a contestability regime. In the meantime, an alternative control classification
  supports the National Electricity Objective by ensuring distributors provide safe and
  reliable public lighting services to the community.<sup>96</sup>
- there would be no material effect on administrative costs to us, the Qld distributors, users or potential users. This is because we are retaining the current classification.<sup>97</sup>
- the Qld distributors can directly attribute the costs of providing public lighting services to a specific set of customers. This includes local councils and other government agencies.<sup>98</sup>

For these reasons, we consider that there is insufficient basis to move away from the presumption that public lighting services in Qld should be alternative control services.<sup>99</sup>

## **1.3.6 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.<sup>100</sup> 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 Electricity Distribution Ring-Fencing Guideline.<sup>101</sup> Our Ring-fencing Guideline interacts with a number of regulatory instruments, including our service classification decisions. Specifically, our service classification decisions have an impact on how the ring-fencing obligations apply to each distributor for its next regulatory control period.<sup>102</sup> Under our ring-fencing guideline, unregulated distribution

<sup>94</sup> NER, cl. 6.2.2(c).

<sup>95</sup> NER, cl. 6.2.2(c)(1).

<sup>96</sup> NER, cl. 6.2.2(c)(1).

<sup>97</sup> NER, cl. 6.2.2(c)(2).

<sup>&</sup>lt;sup>98</sup> NER, cl. 6.2.2(c)(5).

<sup>&</sup>lt;sup>99</sup> NER, cl. 6.2.2(c)(3).

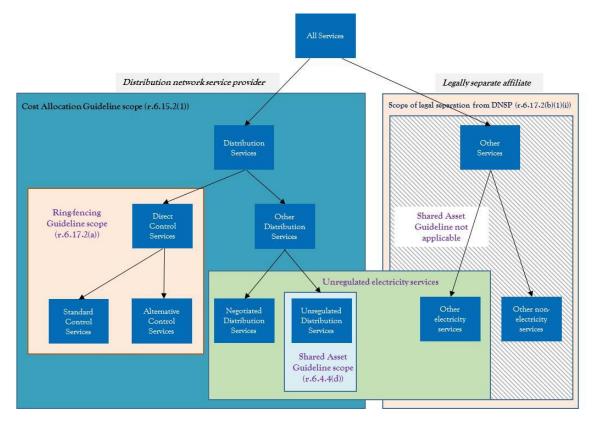
<sup>&</sup>lt;sup>100</sup> AER, *Electricity distribution ring-fencing guideline explanatory statement*, November 2016, p. 13.

<sup>&</sup>lt;sup>101</sup> AER, *Ring-fencing guideline electricity distribution*, October 2017.

<sup>&</sup>lt;sup>102</sup> AER, *Electricity distribution ring-fencing guideline explanatory statement*, November 2016, pp. 13–16.

services are subject to functional and accounting separation from direct control services. 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 preliminary 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.<sup>103</sup>



## 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 treated as a service that is "not classified", and therefore not subject to regulation.

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

<sup>&</sup>lt;sup>103</sup> AER, *Electricity distribution ring-fencing guideline explanatory statement*, November 2016, pp. 13–16.

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 guideline<sup>104</sup> 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 regulatory asset base (RAB) may be rented to a third party. The service for classification is 'access to a RAB asset'.

<sup>&</sup>lt;sup>104</sup> AER, *Electricity distribution ring-fencing guideline explanatory statement*, November 2016, Appendices A and B, pp. 77–86.

## 2 Forms of control

Our distribution determination must impose controls over the prices (and/or revenues) of direct control services.<sup>105</sup> This section sets out our preliminary positions, together with our reasons, on the forms of control to apply to Qld distributors' direct control services for the 2020–25 regulatory control period. This section also sets out our preliminary positions 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 B provides our preliminary classification of the Qld distributors' distribution services.

The form of control mechanisms in a distributor's regulatory proposal must be as set out in the relevant F&A paper.<sup>106</sup> 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 between F&A paper and the making of the determination unless we consider that there has been a material change in circumstances that justifies departing from the formulae set out in that paper.<sup>107</sup> However, without affecting the content of a Determination that has already been made, an F&A paper may be amended or replaced in accordance with the rules and with consultation.<sup>108</sup>

## 2.1 AER's preliminary position

Our preliminary position 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.

## 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 mechanisms<sup>109</sup>
- the formulae to give effect to the control mechanisms

<sup>&</sup>lt;sup>105</sup> NER, cl. 6.2.5(a).

<sup>106</sup> NER, cl. 6.12.3(c).

<sup>&</sup>lt;sup>107</sup> NER, cl. 6.12.3(c1).

<sup>&</sup>lt;sup>108</sup> NER, cl 6.8.1(a)(2), 6.8.1(c)(3). <sup>109</sup> NER. cl. 6.2.5(b).

• the basis of the control mechanism.<sup>110</sup>

The NER sets out the form of control mechanisms that may apply to both standard and alternative control services:<sup>111</sup>

• 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)<sup>112</sup>

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.

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

A revenue cap sets 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 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 (shortfall) revenue.

• revenue yield control (average revenue cap)

<sup>&</sup>lt;sup>110</sup> NER, cl. 6.2.6(a).

<sup>&</sup>lt;sup>111</sup> NER, cl. 6.2.5(b).

<sup>&</sup>lt;sup>112</sup> A price cap and a schedule of fixed prices are largely the same mechanism, with the only difference being that a price cap allows the distributors to charge below the capped price on some or all of the services.

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 preliminary positions on the control mechanisms for the Qld distributors' 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.<sup>113</sup> We consider a control mechanism that results in higher bills for consumers than necessary is not consistent with the national electricity objective.<sup>114</sup>

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.<sup>115</sup>

However, we are open to consideration on these other control mechanisms for making our final F&A where stakeholders consider an alternative control mechanism for the Qld distributors' standard control services would best address the factors set out in clause 6.2.5(c) of the NER.

In considering our preliminary positions on the control mechanisms for the Qld distributors' alternative control services, our consideration 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.

<sup>&</sup>lt;sup>113</sup> 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.

<sup>&</sup>lt;sup>114</sup> NEL, s. 7.

<sup>&</sup>lt;sup>115</sup> For example, see: AER, Final framework and approach for Victorian electricity distributors: Regulatory control period commencing 1 January 2016, 24 October 2014, p. 86.

## 2.2.1 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.<sup>116</sup>

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

## 2.2.2 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

<sup>&</sup>lt;sup>116</sup> 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.<sup>117</sup> 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.<sup>118</sup>

Section 2.4 sets out our consideration of each of the above factors in determining our preliminary positions 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 the Qld distributors' 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.

## 2.3.1 Efficient tariff structures

In deciding on a control mechanism, the NER requires us to have regard to the need for efficient tariff structures.<sup>119</sup> We consider tariff structures are efficient if they reflect the underlying cost of supplying distribution services.

<sup>&</sup>lt;sup>117</sup> NER, cl. 6.2.6(b).

<sup>&</sup>lt;sup>118</sup> NER, cl. 6.2.6(c).

<sup>&</sup>lt;sup>119</sup> NER, cl. 6.2.5(c)(1).

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.

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.<sup>120</sup> 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 structure statement. a supplementary assessment of a distributor's tariff structure between control mechanisms and efficient 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.
- 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.<sup>121</sup> The tariff structure statement should show how a distributor applied the distribution pricing principles<sup>122</sup> 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:<sup>123</sup>

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.

<sup>&</sup>lt;sup>120</sup> 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 and AER, Stage 1 Framework and approach, Ausgrid, Endeavour Energy and Essential Energy, 1 July 2014–30 June 2019, March 2013, pp. 76–77.

<sup>&</sup>lt;sup>121</sup> NER, cl. 6.18.1A(a)(3).

<sup>&</sup>lt;sup>122</sup> This is a reference to the NER' *pricing principles for direct control services*, alternatively described in this paper as the "distribution principles"; NER, cl. 6.18.5(e)–(j).

<sup>&</sup>lt;sup>123</sup> NER, cl. 6.18.5(a).

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.<sup>124</sup>

In February 2017, we made final decisions on the initial tariff structure statements for SA Power Networks, 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 ActewAGL'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.

## 2.3.2 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.<sup>125</sup> We consider, 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 the Qld distributors' 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, the Qld distributors or users.

In contrast, additional administrative costs will be incurred by at least the Qld distributors 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.

<sup>&</sup>lt;sup>124</sup> NER, cl. 6.12.3(k).

<sup>&</sup>lt;sup>125</sup> NER, cl. 6.2.5(c)(2).

## 2.3.3 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.<sup>126</sup> We note maintaining a revenue cap control mechanism for the Qld distributors' 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 than an alternative control mechanism.

# 2.3.4 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.<sup>127</sup> We consider the continuation of a revenue cap control mechanism for the Qld distributors' standard control services delivers consistent regulatory arrangements for these services across jurisdictions.

Apart from ActewAGL, 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 ActewAGL's standard control services for the 2019–24 regulatory control period,<sup>128</sup> This means that from 1 July 2019 all distributors' standard control services will be subject to a revenue cap control mechanism. Therefore maintaining the Qld distributors' 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.

## 2.3.5 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.<sup>129</sup>

<sup>&</sup>lt;sup>126</sup> NER, cl. 6.2.5(c)(3).

<sup>127</sup> NER, cl. 6.2.5(c)(4).

<sup>&</sup>lt;sup>128</sup> ActewAGL Distribution, Response to AER preliminary framework and approach, April 2017, p. 11.

<sup>&</sup>lt;sup>129</sup> Allocative efficiency is achieved when the value consumers place on a good or service (reflected in the price they are willing to pay) equals the cost of the resources used up in production. The condition required is that price equals marginal cost. When this condition is satisfied, total economic welfare is maximised.

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 forecasts and adjust tariffs to gain revenues above efficient cost levels.<sup>130</sup> A systematic recovery of revenue above efficient cost recovery results in higher bills for consumers.<sup>131</sup> We consider a control mechanism that results in higher bills for consumers than necessary is not consistent with the national electricity objective.<sup>132</sup>

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.<sup>133</sup>

## 2.3.6 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. 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.<sup>134</sup>

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

<sup>&</sup>lt;sup>130</sup> For example, see: *AER, Preliminary positions: Framework and approach paper ActewAGL*—*Regulatory control period commencing 1 July 2014*, pp. 64–67; AER,

<sup>&</sup>lt;sup>131</sup> 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.

<sup>&</sup>lt;sup>132</sup> NEL, s. 7.

<sup>&</sup>lt;sup>133</sup> NEL, s. 7.

<sup>&</sup>lt;sup>134</sup> 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).<sup>135</sup> 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.<sup>136</sup> 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.

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

#### 2.3.7 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.<sup>137</sup>

<sup>&</sup>lt;sup>135</sup> For example, see: AER, *Final Decision, CitiPower distribution determination 2016 to 2020: Attachment 14–Control mechanisms*, May 2016, Appendix A, pp. 18–19.

<sup>&</sup>lt;sup>136</sup> AER, Preliminary positions: Framework and approach paper ActewAGL—Regulatory control period commencing 1 July 2014, pp. 67–69.

<sup>&</sup>lt;sup>137</sup> Generally peak demand is referred to as the maximum load on a section of the network over a very short time period.

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.<sup>138</sup> We consider this provides a stronger incentive for a distributor to undertake demand side management 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 on the decline in demand or consumption that they induce.

#### 2.3.8 Formulae for control mechanism

We are required to set out our proposed approach to the formulae that give effect to the control mechanisms for standard control services in the F&A paper.<sup>139</sup> 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.<sup>140</sup> Below is proposed formula to apply to the Qld distributors' standard control services revenues. We consider that the formula gives effect to the revenue cap.

## Figure 2.1 Preliminary positions revenue cap to be applied to the Qld distributors' standard control services

1.	$TAR_t \ge \sum_{i=1}^n \sum_{j=1}^m p_j$	$q_t^{ij}$ i = 1,,n and j = 1,,m and t = 1, 2,5

- 2.  $TAR_t = AAR_t + I_t + B_t + C_t$  t = 1, 2...,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,...,5

where:

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<sup>&</sup>lt;sup>138</sup> 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.

<sup>&</sup>lt;sup>139</sup> NER, cl. 6.8.1(b)(2)(ii).

<sup>&</sup>lt;sup>140</sup> NER, cl. 6.12.3(c1).

 $TAR_{t}$  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.

 $B_t$  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.<sup>141</sup> As it currently stands, the s-factor will incorporate any adjustments required due to the application of the AER's STPIS.<sup>142</sup>

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 preliminary 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.

 $\Delta CPI_t$  is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities<sup>143</sup> from the December quarter in year t–2 to the December quarter in year t–1, calculated using the following method:

<sup>&</sup>lt;sup>141</sup> 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.

<sup>&</sup>lt;sup>142</sup> AER, *Electricity distribution network service providers - service target performance incentive scheme*, 1 November 2009.

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.

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

Our preliminary position is to apply caps on the prices of individual services (price caps) in the 2020–25 regulatory control period to all of the Qld distributors' alternative control services. We propose classifying the following services as alternative control services:

- type 5 and 6 metering services (legacy meters)
- public lighting services
- ancillary services.

We note the Qld distributors' 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.<sup>144</sup> 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

<sup>&</sup>lt;sup>143</sup> 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.

<sup>&</sup>lt;sup>144</sup> NER, cl. 6.2.6(c).

once it knows the scope of the work. Because of this uncertainty, our preliminary positions 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 Energex and Ergon Energy within the regulatory control period. Where such services were not identified at the time of the AER 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 the distributors 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 use of the Qld distributor's brands as well as sharing of staff and offices in offering the new services.

Application for the introduction of a new ACS 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 preliminary consideration of the relevant factors is set out below.

## 2.4.1 Influence on the potential to develop competition

We consider a departure from the current price cap controls for the Qld distributors' 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.

## 2.4.2 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, the Qld distributors or users. Additional administrative costs will be incurred at least to the Qld distributors and us if an alternative control mechanism was applied to these services.

## 2.4.3 Existing regulatory arrangements

We consider consistency across regulatory control periods is generally desirable. Our preliminary position maintains this regulatory consistency as it continues the application of price cap control mechanisms for the Qld distributors' alternative control services.

# 2.4.4 Desirability of consistency between regulatory arrangements

We consider consistency across jurisdictions is also generally desirable. Our preliminary position 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.

## 2.4.5 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.

## 2.4.6 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.<sup>145</sup> In making a distribution determination, the formulae must be as set out in our final F&A, unless we consider that material change in circumstances justifies departing from the formulae as set out in the F&A paper.<sup>146</sup>

Below are our preliminary price cap formulae which will apply to the Qld distributors' alternative control services.

## Figure 2.2 Preliminary price cap formula to be applied to the Qld distributors' legacy metering, public lighting and ancillary services (fee based)

$$\overline{p}_t^i \ge p_t^i$$

i=1,...,n and t=1, 2,...,5

$$\overline{p}_{t}^{i} = \overline{p}_{t-1}^{i} \times (1 + \Delta CPI_{t}) \times (1 - X_{t}^{i}) + A_{t}^{i}$$

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.

<sup>&</sup>lt;sup>145</sup> NER, cl. 6.8.1(b)(2)(ii).

<sup>&</sup>lt;sup>146</sup> NER, cl. 6.12.3(c1).

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

*t* is the regulatory year.

 $\Delta CPI_t$  is the annual percentage change in the ABS consumer price index (CPI) All Groups, Weighted Average of Eight Capital Cities<sup>147</sup> 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 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 Preliminary price cap formula to be applied to the QId distributors' quoted services

*Price* = *Labour* + *Contractor Services* + *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:

 $\Delta CPI_{t}$  is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities<sup>148</sup> from the December quarter in year t–2 to the December quarter in year t–1, calculated using the following method:

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<sup>&</sup>lt;sup>147</sup> 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.

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 guarter 2018 and year t-1 is the December quarter 2019.

X<sup>*i*</sup> 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.

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.

<sup>148</sup> 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.

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## 3 Incentive schemes

This chapter sets out our preliminary position on the application of a range of incentive schemes to the Qld distributors for the 2020–25 regulatory control period. At a high level, our preliminary position 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.

## 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 the Qld distributors in the next regulatory control period.

Our distribution STPIS<sup>149</sup> 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 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 customers<sup>150</sup> experiencing service below a predetermined level. This component only applies if there is not another GSL scheme already in place.<sup>151</sup>

<sup>&</sup>lt;sup>149</sup> AER, *Electricity distribution network service providers - service target performance incentive scheme*, 1 November 2009. Currently under review, however the amendment process is not yet complete.

<sup>&</sup>lt;sup>150</sup> Except where a jurisdictional electricity GSL requirement applies.

<sup>&</sup>lt;sup>151</sup> 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.

While the mechanics of how the STPIS will operate are outlined in our scheme, we must set out key aspects specific to the Qld distributors 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.

The Qld distributors may propose to vary the application of the STPIS in their respective regulatory proposals.<sup>152</sup> We can accept or reject the proposed variation in our determination. Each year we will calculate the Qld distributors' 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.<sup>153</sup> 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.

Our STPIS currently applies to the Qld distributors. Based on stakeholders' recommendations, we applied a lower level of financial risk to the distributors in terms of penalty or reward of  $\pm 2$  per cent through an s-factor adjustment to the allowable revenue was applied. GSLs are provided for through the Queensland Competition Authority GSL scheme, so the GSL component of our scheme does not apply.

## 3.1.1 AER's preliminary position

Our preliminary position is to continue to apply the national STPIS to the Qld distributors in the 2020–25 regulatory control period. We propose to:

- set revenue at risk for each distributor within a 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

<sup>&</sup>lt;sup>152</sup> AER, *Electricity distribution network service providers – service target performance incentive scheme*, 1 November 2009, cl. 2.2.

<sup>&</sup>lt;sup>153</sup> AER, *Electricity distribution network service providers – service target performance incentive scheme*, 1 November 2009, cll. 2.5(d) and (e).

- apply the system average interruption duration index or SAIDI, system average interruption frequency index or 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 the Qld distributors remain subject to a jurisdictional GSL scheme.

We are currently undertaking a review of the STPIS. If the review is completed in time, Qld 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.

## 3.1.2 AER's assessment approach

In deciding how to apply the current STPIS scheme we have considered the requirements of the NER. The NER sets out certain requirements in relation to developing and implementing a STPIS.<sup>154</sup> These include:

#### **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

<sup>&</sup>lt;sup>154</sup> NER, cl. 6.6.2(b).

- 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.<sup>155</sup>

## 3.1.3 Reasons for AER's preliminary position

Our reasons for applying the STPIS to Qld distributors in the next regulatory control period are set out below.

#### **Jurisdictional obligations**

In Qld, the Queensland Competition Authority (QCA) administers and monitors compliance with the distribution licence conditions set by Electricity Industry Code. Our proposed approach to applying the STPIS in Qld is to not create duplication or compromise Qld distributors' ability to comply with the jurisdictional requirements. Our proposed approach is therefore to not apply the GSL component of our national STPIS while the GSL arrangements in the Qld remain in place. We will amend this position if the Qld 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.<sup>156</sup>

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.

<sup>&</sup>lt;sup>155</sup> AER, *Final decision: Electricity distribution network service providers Service target performance incentive scheme*, 1 November 2009.

<sup>&</sup>lt;sup>156</sup> NER, cl. 6.6.2(b)(3)(vi).

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.<sup>157</sup>

In September 2014 AEMO completed analysis of the VCR across the NEM.<sup>158</sup> We stated in our final decision for NSW distributors' 2015–19 regulatory period and our preliminary F&A for NSW distributors' 2019–24 regulatory period,<sup>159</sup> 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 the Qld. We consider that this approach is still appropriate.

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 Qld distributors at  $\pm$  5 per cent as we do not consider that a lower than scheme standard level would fully achieve the intended outcomes 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.<sup>160</sup> Our preferred approach is to base performance targets on Qld distributors' average performance over the past five regulatory years.<sup>161</sup> 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

<sup>&</sup>lt;sup>157</sup> 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.

<sup>&</sup>lt;sup>158</sup> AEMO, Value of customer reliability review - Final report, September 2014.

<sup>&</sup>lt;sup>159</sup> AER, *Preliminary framework and approach for NSW distributors 2019-24*, March 2017, p. 57.

<sup>160</sup> NER, cl. 6.6.2(b)(3)(iii).

<sup>&</sup>lt;sup>161</sup> Subject to any modifications required under cll. 3.2.1(a) and (b) of the national STPIS.

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.<sup>162</sup> In Qld 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.<sup>163</sup>

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.

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 preliminary position and reasons on how we intend to apply the EBSS to the Qld distributors in the 2020–25 regulatory control period.

<sup>162</sup> NER, cl. 6.6.2(b)(3)(iv).

<sup>163</sup> Included in the distributor's approved forecast capex for the next period.

## 3.2.1 AER's preliminary position

We intend to apply the EBSS to the Qld distributors in the 2020–25 regulatory control period if we are satisfied the scheme will fairly share efficiency gains and losses between the distributors and consumers.<sup>164</sup> This will occur only if the opex forecast for the following period is based on the distributors' revealed costs. Our distribution determinations for the Qld distributors for the 2020–25 regulatory control period will specify if and how we will apply the EBSS.<sup>165</sup>

## 3.2.2 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.<sup>166</sup> We must also have regard to the following factors in developing and implementing the EBSS:<sup>167</sup>

- 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.

## 3.2.3 Reasons for AER's preliminary position

The EBSS applies to the Qld distributors in the 2015–20 regulatory control period.

We will decide if and how we will apply the EBSS to the Qld distributors in the 2020–25 regulatory control period in our determinations. The decision to apply the EBSS will depend on whether we expect to use the distributors' revealed costs in the 2020–25 regulatory control period to forecast opex in the following period.

#### Why we would apply the EBBS

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.

<sup>&</sup>lt;sup>164</sup> NER, cl. 6.5.8(a).

<sup>165</sup> AER, *Efficiency benefit sharing scheme*, 29 November 2013.166 NER, cl. 6.5.8(a).167 NER, cl. 6.5.8(c).

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.<sup>168</sup> 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 alternatives<sup>169</sup> (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.<sup>170</sup> 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. 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 opex and capex incentives that encourage a distributor to identify and undertake efficient demand management options.

<sup>168</sup> NER, cl. 6.5.8(c)(4).

<sup>169</sup> NER, cl. 6.5.8(c)(5).

<sup>170</sup> 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.

#### Why we would not apply the EBBS

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.<sup>171</sup> 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.<sup>172</sup>

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 the distributors.

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.
- 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.<sup>173</sup> We can also make further

<sup>171</sup> 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.

<sup>172</sup> NER, cl<sup>.</sup>6.5.8(a).

<sup>&</sup>lt;sup>173</sup> We calculate benefits as the benefits to the distributor of financing the underspend since the amount of the underspend

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.

#### 3.3.1 AER's preliminary position

Our preliminary position is to apply the CESS, as set out in our capex incentives guideline,<sup>174</sup> to the Qld distributors in each regulatory year of the 2020–25 regulatory control period.

#### 3.3.2 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:<sup>175</sup>

- make that decision in a manner that contributes to the capex incentive objective set out in the NER<sup>176</sup>
- consider the CESS principles,<sup>177</sup> capex objectives,<sup>178</sup> 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.

## 3.3.3 Reasons for AER's preliminary position

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

The Qld distributors 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.<sup>179</sup> The guideline specifies that in most circumstances we will apply a

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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.

<sup>174</sup> AER, Capital expenditure incentive guideline for electricity network service providers, pp. 5–9.

<sup>&</sup>lt;sup>175</sup> NER, cl. 6.5.8A(e).

 $<sup>^{176}</sup>$  NER, cl. 6.4A(a); the capex criteria are set out in cl. 6.5.7(c) of the NER.

<sup>&</sup>lt;sup>177</sup> NER, cl.6.5.8A(c).

<sup>&</sup>lt;sup>178</sup> NER, cl. 6.5.7(a).

<sup>&</sup>lt;sup>179</sup> AER, Capital expenditure incentive guideline for electricity network service providers, pp. 5–9.

CESS, in conjunction with forecast depreciation to roll-forward the RAB.<sup>180</sup> 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.<sup>181</sup> 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.

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.

<sup>&</sup>lt;sup>180</sup> AER, Capital expenditure incentive guideline for electricity network service providers, pp. 10–12.

<sup>&</sup>lt;sup>181</sup> 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.

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.

# 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.<sup>182</sup> It is intended that the new DMIS and DMIA are to apply to the Qld distributors 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 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.

## 3.4.1 Reasons for AER's preliminary position

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, 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.

<sup>182 &</sup>lt;u>https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/demand-management-incentive-scheme-and-innovation-allowance-mechanism</u>

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 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 aps.

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 downwards 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 consumer 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 business 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 benefit to customers.

## 3.4.2 AER's preliminary position

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 apply to Energex and Ergon Energy in the 2020–25 regulatory control period.

#### 3.4.3 AER's assessment approach to the DMIS

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

## 4 Expenditure forecast assessment guideline

This chapter sets out our intention to apply our expenditure forecast assessment guideline (the EFA guideline)<sup>183</sup> including the information requirements applicable to Qld electricity distribution network service providers 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. The NER require Qld electricity distributors to advise us by 30 June 2018 of the methodology they propose to use to prepare their forecasts.<sup>184</sup> In the final F&A we must advise whether we will deviate from the EFA guideline.<sup>185</sup> This will provide clarity on how we will apply the EFA guideline and the information the Qld electricity distributors should include in their regulatory proposals. 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.<sup>186</sup>

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.

<sup>&</sup>lt;sup>183</sup> 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.

<sup>&</sup>lt;sup>184</sup> NER, cl. 6.8.1A(b)(1).

<sup>&</sup>lt;sup>185</sup> NER, cl. 6.8.1(b)(2)(viii).

<sup>&</sup>lt;sup>186</sup> AER, *Explanatory statement: Expenditure assessment guideline for electricity transmission and distribution*, 29 November 2013.

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 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 mid-2018.<sup>187</sup> We will then seek to implement any recommended improvements from that process in our annual benchmarking and regulatory determination processes.

<sup>&</sup>lt;sup>187</sup> More information is available at <u>https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/review-of-operating-environment-factors-for-distribution-network-service-providers.</u>

## 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 preliminary approach on the form of depreciation to be used when the Qld distributors' RABs are 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.<sup>188</sup> 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

<sup>&</sup>lt;sup>188</sup> AER, *Capital expenditure incentive guideline for electricity network service providers*, November 2013, pp. 10–12.

does not lose the full cost of any overspend and is not able to keep all the benefits of any underspend. To this end, using forecast depreciation means the capex incentive is focussed on the return on capital.

## 5.1 AER's preliminary position

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

## 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.<sup>189</sup>

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.<sup>190</sup> Our decision on whether to use actual or forecast depreciation must be consistent with the capex incentive objective. We must have regard to:<sup>191</sup>

- 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.

## 5.3 Reasons for AER's preliminary position

Consistent with our capex incentives guideline, we propose to use the forecast depreciation approach to establish the RAB for the Qld distributors 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.<sup>192</sup>

Our approach is to apply forecast depreciation except where:

<sup>&</sup>lt;sup>189</sup> NER, cl. S6.2.2B.

<sup>&</sup>lt;sup>190</sup> NER, cl. 6.4A(b)(3).

<sup>&</sup>lt;sup>191</sup> NER, cl. S6.2.2B.

<sup>&</sup>lt;sup>192</sup> AER, *Capital expenditure incentive guideline for electricity network service providers*, November 2013, pp. 10–12.

- 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 the Qld distributors 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. The Qld distributors are 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 the Qld distributors, 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.<sup>193</sup> Our ex post capex measures 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.

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

## **Appendix A: Rule requirements for classification**

We must have regard to four factors when classifying distribution services.<sup>194</sup>

- 1. the form of regulation factors in section 2F of the NEL:
  - the presence and extent of any barriers to entry in a market for electricity network services
  - the presence and extent of any network externalities (that is, interdependencies) between an electricity network service provided by a network service provider and any other electricity network service provided by the network service provider
  - the presence and extent of any network externalities (that is, interdependencies) between an electricity network service provided by a network service provider and any other service provided by the network service provider in any other market
  - the extent to which any market power possessed by a network service provider is, or is likely to be, mitigated by any countervailing market power possessed by a network service user or prospective network service user
  - the presence and extent of any substitute, and the elasticity of demand, in a market for an electricity network service in which a network service provider provides that service
  - the presence and extent of any substitute for, and the elasticity of demand in a market for, elasticity or gas (as the case may be)
  - the extent to which there is information available to a prospective network service user or network service user, and whether that information is adequate, to enable the prospective network service user or network service user to negotiate on an informed basis with a network service provider for the provision of an electricity network service to them by the network service provider.<sup>195</sup>
- 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)<sup>196</sup>
- the desirability of consistency in the form of regulation for similar services (both within and beyond the relevant jurisdiction)<sup>197</sup>
- 4. any other relevant factor.<sup>198</sup>

<sup>&</sup>lt;sup>194</sup> NER, cl. 6.2.1(c).

<sup>&</sup>lt;sup>195</sup> NEL, s. 2F.

<sup>&</sup>lt;sup>196</sup> NER, cl. 6.2.1(c)(2).

<sup>&</sup>lt;sup>197</sup> NER, cl. 6.2.1(c)(3).

<sup>&</sup>lt;sup>198</sup> NER, cl. 6.2.1(c)(4).

We must have regard to six factors when classifying direct control services as either standard control or alternative control services.<sup>199</sup>

- 1. the potential for development of competition in the relevant market and how the classification might influence that potential
- 2. the possible effects of the classification on administrative costs of us, the distributor and users or potential users
- 3. the regulatory approach (if any) applicable to the relevant service immediately before the commencement of the distribution determination for which the classification is made
- 4. the desirability of a consistent regulatory approach to similar services (both within and beyond the relevant jurisdiction)
- 5. the extent that costs of providing the relevant service are directly attributable to the customer to whom the service is provided, and
- 6. any other relevant factor.<sup>200</sup>

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.

<sup>&</sup>lt;sup>199</sup> NER, cl. 6.2.2(c). <sup>200</sup> NER, cl. 6.2.2(c).

# Appendix B: Proposed service classification of Qld distribution services 2020–25<sup>201</sup>

Service group	Further description	Current classification 2015-20	AER proposed – classification 2020–25
Common distribution serv	ice		
Common distribution service (formerly 'network services')	The suite of activities involved in the provision of the distribution network for the conveyance of electricity (including the service that ensures the integrity of the related distribution system) and includes, but is not limited to, the following:	Standard control	Standard control
	<ul> <li>the planning, design, repair, maintenance, construction and operation of the distribution network</li> </ul>		
	<ul> <li>the relocation of assets that form part of the distribution network but not relocations requested by a third party (including a customer)</li> </ul>		
	<ul> <li>works to fix damage to the network (including emergency recoverable works)</li> </ul>		
	support for another distributor during an emergency event		
	network demand management for distribution purposes		

<sup>&</sup>lt;sup>201</sup> 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.

•	training internal staff and contractors undertaking 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 bulk supply point metering
	rectification of simple customer fault (e.g. fuse) relating to a life support customer establishment and maintenance of national metering identifiers (NMIs) in market and/or network billing systems. uch services do not include a service that has been separately classified, cluding any activity relating to that service.

Ancillary services – Services closely related to common distribution services but for which a separate charge applies

Connection application related services	Activities include:	Alternative control	Alternative control	
	services	assessing connection applications or a request to undertake relocation of network assets as contestable works and preparing offers		
		<ul> <li>processing preliminary enquiries requiring site specific or written responses</li> </ul>		
		<ul> <li>undertaking planning studies and associated technical analysis (e.g. power quality investigations) to determine suitable/feasible connection options for further consideration by applicants</li> </ul>		
		<ul> <li>site inspection in order to determine the nature of the connection service sought by the connection applicant and ongoing co-ordination for large projects</li> </ul>		
		registered participant support services associated with connection		

	arrangements and agreements made under Chapters 5 of the NER.		
Access permits, oversight and	Activities include:	Alternative control	Alternative control
facilitation	<ul> <li>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.</li> </ul>		
	<ul> <li>a distributor issuing confined space entry permits and associated safe entry equipment to a person authorised to enter a confined space.</li> </ul>		
	• a distributor providing access to switch rooms, substations and the like to a non-Local Network Service Provider party who is accompanied and supervised by a distributor's staff member. May also include a distributor providing safe entry equipment (fall-arrest) to enter difficult access areas.		
	<ul> <li>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.</li> </ul>		
	facilitation of generator connection and operation of the network.		
	<ul> <li>facilitation of activities within clearances of distributor's assets, including physical and electrical isolation of assets</li> </ul>		
	<ul> <li>sales of approved materials/equipment to third parties for connection assets that are gifted back to become part of the shared distribution network.</li> </ul>		
Notices of arrangement and completion notices	A distributor may be required to perform 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 may include 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.	Alternative control	Alternative control

	A distributor may also be required to provide 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.		
Network related property services	Property tenure services related to providing advice on, or obtaining: deeds of agreement, deeds of indemnity, leases, easements or other property tenure in relation to property rights associated with a connection or relocation.	Unregulated	Alternative control
	Conveyancing inquiry services relating to the provision of property conveyancing information at the request of a customer.		
Network safety services	Examples include:	Alternative control	Alternative control
	<ul> <li>provision of traffic control and safety observer services by the distributor where required</li> </ul>		
	fitting of tiger tails and aerial markers		
	high load escorts		
	<ul> <li>customer initiated outage (e.g. to allow customer and/or contractor to perform maintenance on the customer's assets, work close or for safe approach)</li> </ul>		
Planned Interruption – Customer requested	Where the customer requests to move a distributor planned interruption and agrees to fund the additional cost of performing this distribution service outside of normal business hours.	Alternative control	Alternative control
Attendance at customers' premises to perform a statutory right where access is prevented.	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 includes the costs of arranging, and the provision of, a security escort or police escort (where the cost is passed through to the distributor).	Alternative control	Alternative control
Inspection and auditing services	Activities include:	Alternative control	Alternative control

	<ul> <li>inspection and reinspection by a distributor, of gifted assets or assets that have been installed or relocated by a third party</li> </ul>		
	<ul> <li>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</li> </ul>		
	auditing of a third party service provider's work practices in the field		
	<ul> <li>after hours<sup>202</sup> examination and/or testing of the consumer mains and main switchboard prior to initial energisation (upon request)</li> </ul>		
	<ul> <li>after hours visual examination of an electrical installation to reconnect it to a source of electricity (upon request)</li> </ul>		
	<ul> <li>re-test at a customer's installation, where the installation fails the initial test and cannot be connected.</li> </ul>		
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 power lines training.	Unregulated	Alternative control
Authorisation and approval of third party service providers design, work and materials	<ul> <li>Activities include:</li> <li>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).</li> </ul>	Alternative control	Alternative control

<sup>&</sup>lt;sup>202</sup> We note that this "after hours" reference is included because it specifically relates to sections 219 and 220 of the *Electrical Safety Regulation 2013 (Qld)*.

	<ul> <li>acceptance of third party designs and works.</li> <li>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.</li> </ul>		
Security lights	Provision, installation, operation and maintenance of equipment mounted on a distribution pole used for security services, e.g. nightwatchman lights Note: excludes connection services.	Unregulated	Alternative control
Customer initiated network asset relocations/re- arrangements	Relocation of assets that form part of the distribution network in circumstances where the relocation was initiated by a third party (including a customer).	Alternative control	Alternative control
Customer requested provision of electricity network data	Requests for the provision of electricity network data requiring customised investigation, analysis or technical input (e.g. requests for zone substation data), where there is no demonstrable net benefit to the distribution network.	Alternative control	Alternative control
Fault response (Not DNSP fault)	<ul> <li>Attendance at a customer's premises to:</li> <li>restore supply or investigate power quality issues where it is determined that the fault was not related to the distributor's equipment or infrastructure.</li> </ul>	Alternative control	Alternative control
Metering services <sup>203</sup>			
Type 1 to 4 metering services	Type 1 to 4 metering installations <sup>204</sup> and supporting services are competitively available.	Unregulated	Unregulated

<sup>&</sup>lt;sup>203</sup> The Qld distributors will continue to be responsible for existing 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'. The Qld distributors will continue to be solely responsible for the Mount Isa-Cloncurry supply network, which is not connected to the NEM.

<sup>&</sup>lt;sup>204</sup> Includes the instrument transformer, as per the definition of a 'metering installation' in Chapter 10 of the NER.

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 (including meters with internally integrated load control devices).	Alternative control	Alternative control
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
Types 5 and 6 meter maintenance, reading and data services (legacy meters)	<ul> <li>Meter maintenance covers works to inspect, test, maintain and repair metering installations.</li> <li>Meter reading refers to quarterly or other regular reading of a metering installation.</li> <li>Metering data services are those that involve the collection, processing, storage and delivery of metering data, the provision of metering data from the previous two years, remote or self-reading at difficult to access sites, and the management of relevant NMI Standing Data in accordance with the NER.</li> </ul>	Alternative control	Alternative control
Ancillary metering services (Type 5 to 7 metering installations)	<ul> <li>Activities include:</li> <li>Off-cycle meter reads for type 5 and 6 meters.</li> <li>Requests to test, inspect and investigate, or alter an existing type 5 or 6 metering installation.</li> <li>Testing and maintenance of instrument transformers for type 5 and 6 metering purposes.</li> <li>Type 5 to 7 non-standard metering services.</li> <li>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).</li> <li>Change distributor load control relay channel on request that is not a part of the initial load control installation, nor part of standard asset</li> </ul>	Alternative control	Alternative control

## maintenance or replacement.

Type 5 and 6 meter installation and provision (Mount Isa-Cloncurry supply network only)	<ul> <li>On site installation or upgrade (at a customer's request) by Ergon Energy of a type 5 or 6 metering installation at a customer's premises in the Mount Isa-Cloncurry supply network.</li> <li>Load control services provided by a type 5 or 6 metering installation are grouped with metering services and classified alternative control.</li> <li>Ergon Energy may recover the capital cost of types 5 and 6 metering equipment (including meters with internally integrated load control devices) replaced on or after 1 December 2017, where the replacement was initiated by Ergon Energy.</li> </ul>	Alternative control	Alternative control
Types 5 and 6 meter maintenance, reading and data services (Mount Isa- Cloncurry Network)	<ul> <li>Meter maintenance covers works to inspect, test, maintain and repair metering installations. It also includes the removal and disposal of a metering installation at customers' premises</li> <li>Meter reading refers to quarterly or other regular reading of a metering installation.</li> <li>Metering data services are those that involve the collection, processing, storage and delivery of metering data, the provision of metering data from the previous two years, remote or self-reading at difficult to access sites, and the management of relevant NMI Standing Data in accordance with the NER.</li> </ul>	Alternative control	Alternative control
Additional ancillary metering services (Mount Isa-Cloncurry supply network only)	<ul> <li>Metering services offered by Ergon Energy in the Mount Isa-Cloncurry supply network for type 5 and 6 metering installations:</li> <li>Provision and installation of instrument transformers for type 5 and 6 metering purposes.</li> <li>Exchange meter – customer requests exchange of their current meter (e.g. for alternative metering configuration/ consolidation of multiple meters for one meter), or customer requests exchange of their current meter meter for a solar photovoltaic meter.</li> </ul>	Alternative control	Alternative control

Emergency maintenance of failed metering equipment not owned by the distributor (contestable meters)	The distributor is called out by the 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 provider has requested the distributor to check a potentially faulty network connection and when tested by the distributor, no fault is found.	Alternative control	Alternative control
Meter recovery and disposal – type 5 and 6 (legacy meters)	<ul> <li>Activities include the removal and disposal of a type 5 or 6 metering installation:</li> <li>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.</li> <li>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.</li> </ul>	Alternative control	Alternative control
Third party requested outage for purposes of replacing meter	At the request of a retailer or metering coordinator, provides notification to affected customers, and isolates power at a customer's premises to facilitate the replacement of the existing metering installation by an external metering provider.	Alternative control	Alternative control
Connection services			
Premises connection assets	Includes any additions or upgrades to connection assets located on the customer's premises for: A. major customer connections <sup>205</sup>	A. Alternative control B. Standard control	A. Alternative control B. Standard

<sup>&</sup>lt;sup>205</sup> Generally, major customers are those customers who connect under the Individually Calculated Customer and Connection Asset Customer tariff classes as per the distributor's pricing proposal, including real estate developments as set out in the distributor's connection policy.

	B. small customer connections. <sup>206</sup>		control
	Note: This service includes design, construction, commissioning and energisation of connection assets (including administration services (e.g. reconciling project financials) and generation required to supply existing customers while equipment is de-energised to allow testing and commissioning to occur). It excludes all metering services and services separately identified under 'Post connection services'.		
Extensions	<ul> <li>An enhancement required to connect a power line or facility outside the present boundaries of the transmission or distribution network owned or operated by a network service provider to facilitate:</li> <li>A. a new or altered major customer connection<sup>207</sup>, where the network extension will be dedicated to the exclusive use of the major customer at the time of installation and energisation and there is no reasonable likelihood that the network extension will be used to supply another customer or customers within the time period set out in the distributor's Connection Policy</li> </ul>	A. Alternative control B. Alternative control C. Standard control	<ul><li>A. Alternative control</li><li>B. Standard control</li><li>C. Standard control</li></ul>
	<ul> <li>B. a new or altered major customer connection<sup>208</sup>, where the distributor considers there is a reasonable likelihood that the network extension will be used to supply another customer or customers within the time period set out in the distributor's Connection Policy (i.e. will form part of the shared network)</li> <li>C. a new or altered small customer connection.<sup>209</sup></li> </ul>		

<sup>&</sup>lt;sup>206</sup> Generally, small customers are those customers who connect under the Standard Asset Customer tariff classes as per the distributor's pricing proposal, excluding real estate developments as set out in the distributor's connection policy.

<sup>&</sup>lt;sup>207</sup> Generally, major customers are those customers who connect under the Individually Calculated Customer and Connection Asset Customer tariff classes as per the distributor's pricing proposal, including real estate developments as set out in the distributor's connection policy.

<sup>&</sup>lt;sup>208</sup> Generally, major customers are those customers who connect under the Individually Calculated Customer and Connection Asset Customer tariff classes as per the distributor's pricing proposal, including real estate developments as set out in the distributor's connection policy.

<sup>&</sup>lt;sup>209</sup> Generally, small customers are those customers who connect under the Standard Asset Customer tariff classes as per the distributor's pricing proposal, excluding real estate developments as

Augmentations	<ul> <li>Any shared network enlargement/enhancement undertaken by a distributor, which is not an extension, to facilitate:</li> <li>A. a new or altered major customer connection<sup>210</sup></li> <li>B. a new or altered small customer connection<sup>211</sup></li> <li>C. the removal of a network constraint faced by an embedded generator.</li> </ul>	<ul><li>A. Alternative control</li><li>B. Standard control</li><li>C. Alternative control</li></ul>	<ul><li>A. Standard control</li><li>B. Standard control</li><li>C. Alternative control</li></ul>
Connection management services	<ul> <li>Works initiated by a customer or retailer which are specific to the connection point. Includes, but is not limited to:</li> <li>de-energisation<sup>212</sup></li> <li>re-energisation</li> <li>temporary connections</li> <li>remove or reposition connection</li> <li>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</li> <li>protection and power quality assessment</li> <li>supply enhancement (e.g. upgrade from single phase to three phase)</li> <li>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)</li> </ul>	Alternative control	Alternative control

set out in the distributor's connection policy.

<sup>210</sup> Generally, major customers are those customers who connect under the Individually Calculated Customer and Connection Asset Customer tariff classes as per the distributor's pricing proposal, including real estate developments as set out in the distributor's connection policy.

<sup>211</sup> Generally, small customers are those customers who connect under the Standard Asset Customer tariff classes as per the distributor's pricing proposal, excluding real estate developments as set out in the distributor's connection policy.

<sup>212</sup> De-energisation services related to business as usual activities and de-energisation services that may relate to changing over meter types

	feeder)		
	<ul> <li>customer requested change requiring secondary and primary plant studies for safe operation of the network (e.g. change protection settings)</li> </ul>		
	upgrade from overhead to underground service		
	<ul> <li>rectification of illegal connections or damage to overhead or underground service cables</li> </ul>		
	• 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.		
Public lighting			
Public lighting	<ul> <li>Provision, construction and maintenance of public lighting and emerging public lighting technology.</li> </ul>	Alternative control	Alternative contro
Unregulated distribution se	rvices – (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
Provision of training to third parties for non-network related access	Training programs provided to third parties which are not ASPs or contractors.	Unregulated	Unregulated
Type 5 and 6 meter data management to other electricity distributors	The provision of type 5 and 6 meter data management to other electricity distributors.	Alternative control	Unregulated

Distribution services provided in unregulated isolated networks	Ownership and operation of isolated supply networks, other than the Mount Isa-Cloncurry supply network (Ergon Energy).	Unregulated	Unregulated
Hayman Island undersea cable		Unregulated	Unregulated
Inspection of private network infrastructure	Private inspection of privately owned low voltage or high voltage network infrastructure (i.e. privately owned distribution infrastructure before the meter).	Unregulated	Unregulated