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Australian Energy Market Commission

## CONSULTATION PAPER

National Electricity Amendment (Contestability of energy services) Rule 2016

**Rule Proponent**

Council of Australian Governments Energy Council

National Electricity Amendment (Contestability of energy services - demand response and network support) Rule 2016

**Rule Proponent**

Australian Energy Council

15 December 2016

RULE  
CHANGE

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## **About the AEMC**

The AEMC reports to the Council of Australian Governments (COAG) through the COAG Energy Council. We have two functions. We make and amend the national electricity, gas and energy retail rules and conduct independent reviews for the COAG Energy Council.

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## Summary

Technology, and the increased choices it offers consumers, is changing the energy sector. In particular, technologies such as battery storage – which are able to provide multiple services – make it more difficult to draw the line between what is economically regulated and what is provided by the competitive market.

The Australian Energy Market Commission (AEMC or Commission) has been proactive in identifying these challenges, making changes to the regulatory arrangements to support these changes, and highlighting the need for additional reforms. A year ago, our report on the integration of energy storage highlighted the need to review the National Electricity Rules (NER) and regulatory arrangements so that they do not prevent efficient investment and competition in storage services.<sup>1</sup>

The Council of Australian Governments (COAG) Energy Council has submitted a rule change request to the AEMC partly in response to the AEMC's recommendations in the storage report. The COAG Energy Council's rule change is not restricted to storage issues, and identifies broader issues related to the competitive provision of services. It proposes changes to the classification of distribution services under the NER as a way of promoting the development of competitive markets for new technologies in the energy sector.

The Australian Energy Council (AEC) – an industry body representing generators and retailers – also submitted a rule change request relating to the contestability of a range of services that can be provided by new technologies. The AEC also seeks changes to the framework for classification of distribution services. But it goes a step further and also seeks to restrict distribution network businesses' ability to earn a regulated rate of return on assets that provide network support, demand response or are located on the customer's side of the meter. The AEC also proposes that the threshold for the regulatory investment test be reduced so that it applies more extensively to distribution businesses' decisions.

The questions raised by technological change, which are reflected in both rule change requests, are complex. For example, much of the focus is on the regulation of assets such as battery storage. But it is the services provided by an asset that are classified under the existing economic regulatory framework, not the assets themselves. An asset could provide multiple services, some of which are regulated and others that are competitive. As such, introducing restrictions on the ownership of assets (or the ability of network businesses to earn a regulated return in relation to an asset) into the regulatory framework would need to be considered carefully in order not to create any unintended outcomes and may not be the best approach.

With that in mind, the AEMC's consultation approach is designed to develop a common understanding of issues relating to the two rule change requests. This approach will lead to a focused analysis of issues and will likely reduce the time needed to develop solutions and result in a more efficient rule making process.

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<sup>1</sup> AEMC, Integration of Storage: Regulatory Implications, Final report, 3 December 2015.

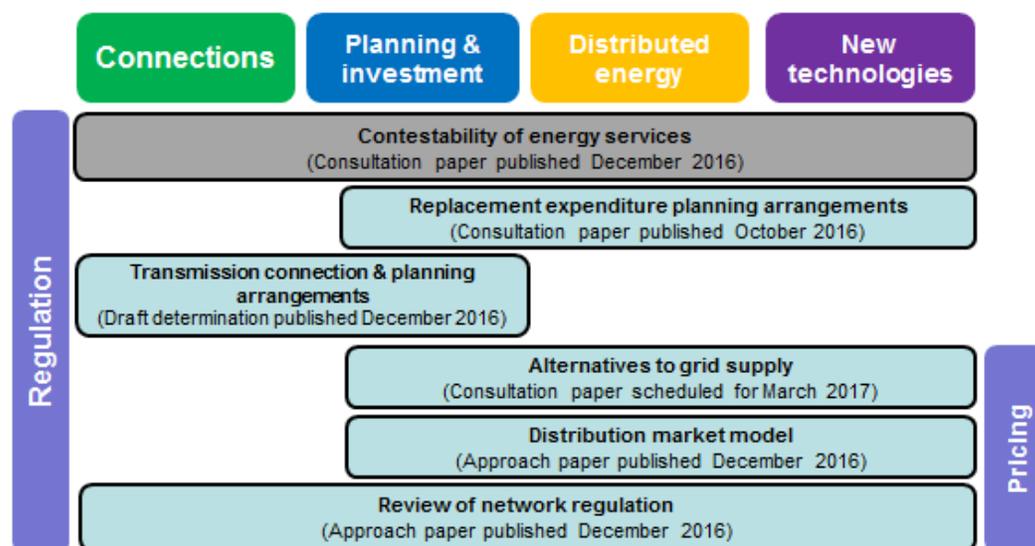
This paper is the starting point of our consultation process, which seeks to provide a clear overview of the existing arrangements. It asks stakeholders to comment on how these arrangements affect their ability to use new technologies to provide services. This will help us identify the key issues in the current regulatory arrangements. The next stage will be extensive stakeholder engagement during 2017 to assess potential solutions and how they can be implemented.

The consultation paper covers both rule change requests since they relate to similar issues and offer somewhat overlapping solutions. As our understanding of the issues and potential solutions develops over the course of these projects, it may be appropriate to consolidate the two rule change requests. However, it is also possible that separate solutions would be needed and, as such, they will continue as two separate rule changes.

We are also conscious that changes to service classification should, ideally, be implemented in time for incorporation into the next set of the Australian Energy Regulator's (AER) regulatory determinations. In contrast, more fundamental changes to the regulatory framework – such as some of the changes proposed by the AEC – are likely to require longer consultation and implementation timeframes. This consideration has influenced our decision to not consolidate the rule change requests at this stage.

These rule changes also interact with a number of other rule changes and reviews that the AEMC is currently undertaking. All of the projects listed in the figure below deal with the ways in which new technologies are changing the way electricity is supplied to consumers, and the changing role of distribution and transmission businesses. To the extent possible, we assess and consult on these various projects in a coordinated manner. We encourage stakeholders to engage with us on this and other projects, to help us develop a framework that will continue to meet the long-term interests of consumers.

**Figure 1 The future of electricity networks - AEMC work program**



# Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Rule change requests.....	1
1.2	Process for assessment of the rule change requests.....	1
<b>2</b>	<b>Background .....</b>	<b>4</b>
2.1	Market developments .....	4
2.2	Recent reviews.....	4
2.3	Related work.....	5
<b>3</b>	<b>Summary of the rule change requests.....</b>	<b>9</b>
3.1	COAG Energy Council rule change request .....	9
3.2	AEC rule change request .....	10
<b>4</b>	<b>Current arrangements and issues for consultation – distribution service classification.....</b>	<b>12</b>
4.1	Why service classification is important.....	13
4.2	Clarifying the purpose and scope of distribution service classification .....	15
4.3	Distribution service classification – process.....	17
4.4	Distribution service classification – step by step.....	20
4.5	Distribution service classification – examples and observations .....	26
4.6	Distribution service classification – as a whole .....	29
<b>5</b>	<b>Incentive framework for economically regulated services .....</b>	<b>31</b>
5.1	Overview .....	31
5.2	Building blocks.....	33
5.3	Planning framework.....	42
5.4	Alternative control services.....	46
<b>6</b>	<b>Separation of direct control services from other services.....</b>	<b>47</b>
6.1	Overview .....	47
6.2	Cost allocation .....	48
6.3	Ring-fencing.....	51
6.4	Shared assets.....	55

<b>7</b>	<b>Approach to assessing the rule change requests.....</b>	<b>59</b>
7.1	Rule making test.....	59
7.2	Proposed approach.....	61
<b>8</b>	<b>Lodging a submission .....</b>	<b>64</b>
8.1	Lodging a submission electronically .....	64
8.2	Lodging a submission by mail.....	64
	<b>Abbreviations.....</b>	<b>66</b>
<b>A</b>	<b>AER treatment of related party transactions.....</b>	<b>67</b>

# 1 Introduction

## 1.1 Rule change requests

This consultation paper has been prepared to facilitate public consultation and seek stakeholder submissions on related rule change requests from the COAG Energy Council and the AEC.

On 2 September 2016 the COAG Energy Council submitted a rule change request to the AEMC. This request seeks to promote the development of competitive markets for new technologies that are capable of providing services in both contestable and regulated markets. To achieve this goal, the COAG Energy Council proposes to change the provisions and processes within Chapter 6 of the National Electricity Rules (NER) that relate to the classification of distribution services.

On 20 October 2016 the AEC - an industry body representing generators and retailers - submitted a rule change request to the AEMC. The request seeks to require distribution network service providers (DNSPs) to procure certain services, such as demand response and network support, from third parties instead of owning assets that provide such services. To achieve this, the AEC proposes to change the provisions in the NER relating to distribution service classification. The AEC also proposes a number of changes to Chapters 5 and 6 of the NER to require DNSPs to procure such services from third parties or ring-fenced affiliates where they are more efficient than investing in network assets.

The rule change requests focus on the regulation of DNSPs. However, both the COAG Energy Council and the AEC requested that the Commission also consider equivalent issues for transmission network service providers (TNSPs).

## 1.2 Process for assessment of the rule change requests

The issues raised in the rule change requests are closely related and the Commission may choose to formally consolidate the two requests at a future date.<sup>2</sup> The Commission has not done so at this time because there may be benefit in progressing the issues related to distribution service classification that are the primary focus of the COAG Energy Council rule change request on an earlier time frame. This is because changes to service classification should, ideally, be implemented in time to be incorporated into the Australian Energy Regulator's (AER) next set of regulatory determinations.<sup>3</sup> More fundamental changes to the regulatory framework – such as

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<sup>2</sup> Under section 93 of the National Electricity Law, the AEMC may consolidate two or more rule changes if it considers it necessary or desirable that they should be dealt with together, for example in order to allow grouping of related issues.

<sup>3</sup> The next set of regulatory determinations for electricity distribution networks is for New South Wales, Tasmania and the Northern Territory. It is scheduled for final framework and approach papers in July 2017 and draft distribution determinations in September 2018.

those proposed by the AEC – are likely to require longer consultation and implementation periods.

Given the complexity and breadth of the issues raised in the requests, the Commission has extended the time for making draft determination(s). This provides time to engage with stakeholders thoroughly on the issues raised. Stakeholder views on the issues discussed in this paper will inform the timetables and processes for further considering the rule change requests. For example, the Commission may choose to publish an options paper regarding one or both of the rule change requests. If this occurs the draft determination(s) will be extended further.

This consultation paper will be followed by a combination of public forums and stakeholder workshops to discuss the relevant current regulatory arrangements and the proposals in more detail, as well as matters raised in submissions. Table 1.1 sets out an indicative timeframe for this project.

**Table 1.1 Indicative project timeline**

Milestone	Date
Rule change request received from COAG Energy Council	2 September 2016
Rule change request received from AEC	20 October 2016
Consultation paper published	15 December 2016
Public forum on the consultation paper	25 January 2017
Deadline for submissions to the consultation paper	9 February 2017
Stakeholder workshops	March – June 2017
Options paper/draft determination published	1 September 2017

The remainder of this paper is structured as follows:

- Chapter 2 sets out the background to the rule change requests;
- Chapter 3 summarises the rule change requests;
- Chapter 4 outlines the current arrangements regarding distribution service classification, and poses a number of questions for consultation;
- Chapter 5 summarises the arrangements that apply to services that are economically regulated, and poses a number of questions for consultation;
- Chapter 6 summarises the arrangements that apply to services that are not economically regulated, and poses a number of questions for consultation;

- Chapter 7 sets out a proposed assessment framework and approach to assessing the rule change requests; and
- Chapter 8 outlines the process for making submissions.

## **2 Background**

This chapter outlines the context for the two rule change requests in terms of:

- changes in the energy sector; and
- changes to the rules and regulations that govern the sector.

### **2.1 Market developments**

The electricity supply chain has changed substantially in recent years and is continuing to change. The previous supply model of one-way flows from large generators through transmission and distribution networks to customers is changing to a model of bi-directional flows. Customers have increasing opportunity to change their electricity demand, and to supply electricity, in response to price signals.

This changing environment is a key reason for the AEC and COAG Energy Council rule change requests. In particular, the requests highlight a lack of clarity of the regulatory treatment of an increasing number of assets located on customers' premises that are capable of providing value in both regulated and unregulated markets.

### **2.2 Recent reviews**

The above changes to the energy sector have been considered in recent reviews by both COAG Energy Council and the AEMC.

#### **2.2.1 Scenario analysis**

In 2015, the COAG Energy Council commissioned Synergies to undertake scenario analysis of how the economic regulatory framework would deal with different potential technology changes in the future. The scenario analysis identified a number of potential barriers to development of competition in unregulated markets, where those services would act as an alternative to investment in the network. In particular, the analysis questioned whether the current arrangements would be able to reclassify services from regulated to contestable fast enough to keep pace with market developments.<sup>4</sup>

#### **2.2.2 Integration of storage**

The AEMC is conducting a work program focused on new technologies. The program explores whether the existing regulatory framework is flexible and resilient enough to respond to changes in the availability and cost of new energy technologies. As part of

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<sup>4</sup> Policy Advice to the COAG Energy Council, Electricity Network Economic Regulation: Scenario Analysis, June 2015.

this work program, the AEMC investigated the regulatory implications of the growing take-up of energy storage in Australia’s energy markets.

On 3 December 2015 the AEMC published its final report on the integration of energy storage, which recommended that:<sup>5</sup>

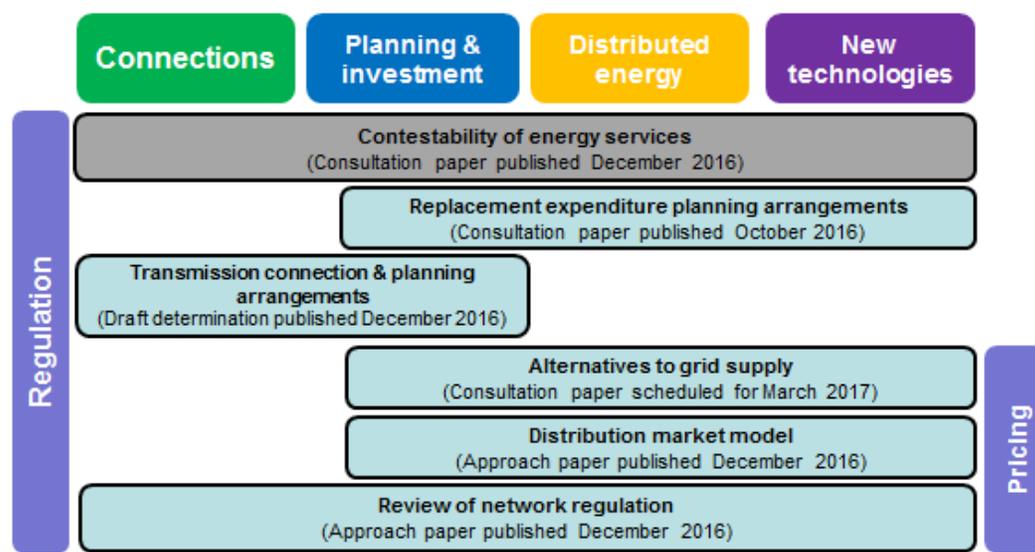
- Storage devices located ‘behind the meter’ that a DNSP seeks to use for network support should generally be sourced from the contestable market (i.e. contracted from a third party or ring-fenced business).
- DNSPs should only be allowed to own storage ‘behind the meter’ through an effectively ring-fenced affiliate that separates contestable market activities from the provision of the regulated service.
- The same prohibition on DNSPs investing in storage technology ‘on their network’ (as part of the regulated service) should not apply because the existing incentives in the framework should lead DNSPs to select the most efficient service delivery option for the provision of network services.

The Commission recommended that the COAG Energy Council task the AEMC with reviewing what changes to the NER would be required to give effect to these recommendations.

## 2.3 Related work

There are a number of rule changes and reviews that are ongoing that are closely related to the two rule change requests. Figure 2.1 displays these projects, the topics they cover and their timing.

**Figure 2.1 Ongoing related AEMC rule changes and reviews**



<sup>5</sup> AEMC, Integration of Energy Storage, Regulatory Implications, Final Report, 3 December 2015, p.iv.

The Commission is closely coordinating and considering linked policy and legal issues across these projects. A summary of each of the projects is set out below. Where a project is directly relevant to an issue raised by the requests, this is discussed in this consultation paper.

### **Electricity network economic regulatory framework review<sup>6</sup>**

In August 2016, the COAG Energy Council tasked the Commission with monitoring developments in the energy market, including the increased uptake of decentralised energy services. The Commission is to advise on whether the economic regulatory framework for electricity networks is sufficiently robust and flexible to continue to achieve the national electricity objective (NEO) in light of these developments. The Commission is required to publish its findings annually, with the first report due on 1 July 2017.

The Commission published an approach paper on 1 December 2016, which set out how it intends to conduct the task and its proposed information sources. The paper also sets out the Commission's preliminary views on the areas that will be the focus of the 2017 report, which are:

- continued implementation of network pricing reform;
- the ability of networks to utilise increasingly diverse supply options; and
- different network operating models.

### **Transmission connection and planning arrangements rule change<sup>7</sup>**

In July 2015, the COAG Energy Council submitted a rule change request to amend the NER with regard to the arrangements by which parties connect to the transmission network, and how transmission network businesses plan to invest in and operate their networks.

The Commission published a draft rule determination on the rule change request on 24 November 2016. The draft rule seeks to improve transparency, contestability and clarity in the transmission connections framework, while maintaining clear accountability for outcomes on the shared transmission network. This includes promoting contestability for a new range of services through changes to transmission service classification within the NER. It also seeks to enhance the efficiency of existing transmission planning arrangements and promote a more coordinated approach to transmission planning.

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<sup>6</sup> See the project page on the AEMC website:  
<http://www.aemc.gov.au/Markets-Reviews-Advice/Electricity-Network-Economic-Regulatory-Framework>.

<sup>7</sup> See the project page on the AEMC website:  
<http://www.aemc.gov.au/Rule-Changes/Transmission-Connection-and-Planning-Arrangements>.

## **Distribution market model project<sup>8</sup>**

As part of its new technologies work program, the Commission is undertaking a project to examine how a market for electricity services at the distribution level might develop. The project considers how current arrangements might incentivise or disincentivise the emergence of different business models. On the back of this, it considers whether the regulatory framework and distribution market design more broadly, need to change to accommodate this potential evolution.

The Commission published an approach paper for this project on 1 December 2016. The paper sets out the scope and context for the project, and the proposed framework for assessing regulatory arrangements in light of the opportunities and challenges presented by distributed energy resources.

## **Replacement expenditure planning arrangements rule change<sup>9</sup>**

In July 2016, the AER submitted a rule change request that seeks to increase the transparency of asset replacement decisions by electricity TNSPs and DNSPs. The rule change request also seeks to extend the application of the regulatory investment tests for transmission and distribution businesses to replacement projects. The AEMC published a consultation paper on this rule change request on 27 October 2016.

## **Alternatives to grid-supplied network services rule change<sup>10</sup>**

In September 2016, Western Power submitted a rule change request that seeks to allow DNSPs to provide electricity services that are not physically connected to the network, and to receive regulated revenue for these services. The request relates primarily to 'stand-alone power systems' and proposes amendments to the definition of 'distribution services' which will affect how services are classified. The AEMC has started considering this rule change request and plans to publish a consultation paper in 2017.

The Commission also made a submission to the COAG Energy Council's consultation on the regulatory implications of stand-alone energy systems in the national electricity market (NEM).<sup>11</sup>

## **Projects in implementation phase**

The AER and the Australian Energy Market Operator (AEMO) are also implementing a number of rule changes that were made by the Commission, and which are closely linked to this rule change. These are set out in Figure 2.2 below.

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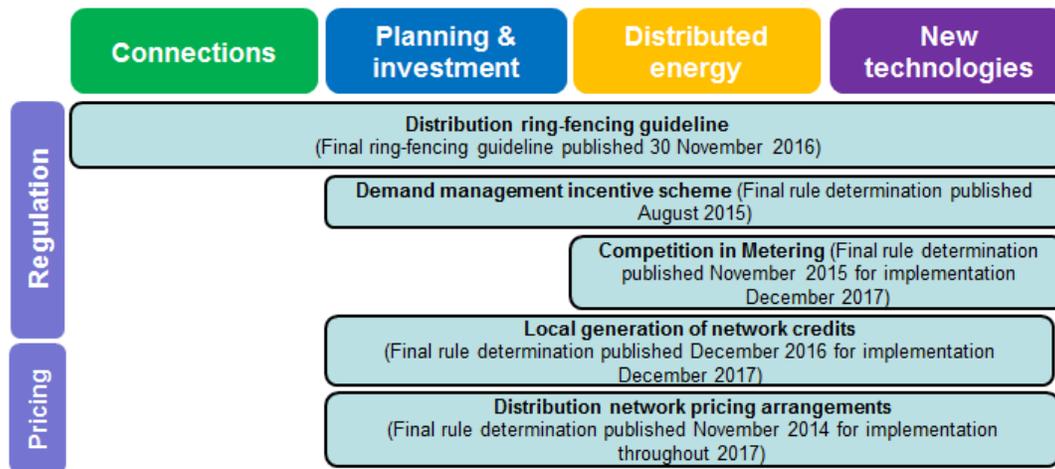
<sup>8</sup> See the project page on the AEMC website:  
<http://www.aemc.gov.au/Major-Pages/Technology-impacts>.

<sup>9</sup> See the project page on the AEMC website:  
<http://www.aemc.gov.au/Rule-Changes/Replacement-Expenditure-Planning-Arrangements#>.

<sup>10</sup> See the project page on the AEMC website:  
<http://www.aemc.gov.au/Rule-Changes/Alternatives-to-grid-supplied-network-services>.

<sup>11</sup> The submission can be accessed on the AEMC website at:  
<http://www.aemc.gov.au/Major-Pages/Market-transformation>.

**Figure 2.2 Related AEMC rule change in implementation phase**



Information on these completed rule changes is available on our website.<sup>12</sup> Of particular relevance to this rule change is the AER's final distribution ring-fencing guideline, which was published on 30 November 2016 and is being implemented throughout 2017. The ring-fencing arrangements and their interactions with this rule change request are discussed in section 6.3.

<sup>12</sup> See the relevant project pages on the AEMC website for:  
<http://www.aemc.gov.au/Rule-Changes/Local-Generation-Network-Credits>,  
<http://www.aemc.gov.au/Rule-Changes/Demand-Management-Embedded-Generation-Connect-on-I>,  
<http://www.aemc.gov.au/Rule-Changes/Distribution-Network-Pricing-Arrangements>,  
<http://www.aemc.gov.au/Rule-Changes/Expanding-competition-in-metering-and-related-serv>.

### 3 Summary of the rule change requests

This chapter provides a summary of the rule change requests. The requests are available on the AEMC's website.<sup>13</sup> The rule change requests are summarised here as written by their respective proponents. This chapter does not attempt to interpret their practical implications.

#### 3.1 COAG Energy Council rule change request

COAG Energy Council's rule change request seeks to reinforce a number of principles within the NER, including:<sup>14</sup>

- technologies that are capable of providing services in regulated and unregulated markets should be contestable under the regulatory framework, unless it can be established that the competitive market is unlikely to efficiently and effectively deliver the service; and
- the processes and NER provisions for distribution service classification should be clear, transparent, result in predictable outcomes and allow for timely reclassification of services.

COAG Energy Council's rule change request does not include a proposed rule or specific changes to the NER. Instead, COAG Energy Council considers that its policy positions may be achieved through changes to distribution service classification. More specifically:<sup>15</sup>

- Making services provided by technologies that provide value streams in contestable and regulated markets unclassified, unless it can be established that the competitive market is unlikely to efficiently and effectively deliver the service.
- Changes to the distribution services classification process:
  - requiring the AER to produce a service classification guideline;
  - allowing for the possibility of reclassifying a service within a regulatory period; and
  - providing an easier path to changes in service classification over time.

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<sup>13</sup> For the COAG Energy Council rule change request see:  
<http://www.aemc.gov.au/Rule-Changes/Contestability-of-energy-services>.

For the AEC rule change request see:  
<http://www.aemc.gov.au/Rule-Changes/Contestability-of-energy-services-demand-response>.

<sup>14</sup> COAG Energy Council, Contestability of energy services, rule change request, August 2016, p. 3.

<sup>15</sup> *ibid.* p. 4.

The COAG Energy Council also requests the AEMC to consider changes to the NER outside of service classification, if it considers these are necessary to reflect its proposed principles.<sup>16</sup>

### 3.2 AEC rule change request

The AEC rule change request starts from the position that competition, where practical, is the best mechanism for providing services to customers at an efficient cost. It does so by offering them a choice of service and encouraging innovation to continuously improve services. Regulation is seen as a second-best approach.<sup>17</sup>

The AEC considers the NER do not reflect this principle because it is not clear that the NER provide for the competitive delivery of an emerging class of energy services. The AEC characterises these services as those that typically operate 'behind the meter'. They benefit the customers on whose premises they are located, but can also offer benefits to the network (e.g. peak demand reduction, voltage support). The AEC identifies embedded generation, storage and demand management tools as such services.<sup>18</sup>

The AEC considers that the NER are unclear as to whether DNSPs and TNSPs can directly supply and/or own the assets that deliver these services. It seeks to clarify the issue by requiring that such assets must be procured from third parties or (properly) ring-fenced affiliates.<sup>19</sup>

In addition to addressing this core principle, the AEC highlights a number of other issues that it considers exist within the current network regulatory framework, including:

- DNSPs are biased towards capital expenditure approaches over operating expenditure approaches;<sup>20</sup>
- DNSPs are biased towards in-house approaches over outsourced approaches;<sup>21</sup> and
- DNSPs are biased towards their own ring-fenced affiliates over third party providers.<sup>22</sup>

The AEC rule change request takes a three-step approach to solving the issues identified.

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<sup>16</sup> *ibid*, p. 17.

<sup>17</sup> AEC, Contestability of energy services - demand response and network support, October 2016, p. 1.

<sup>18</sup> *ibid*, p. 1.

<sup>19</sup> *ibid*.

<sup>20</sup> *ibid*, p. 4.

<sup>21</sup> *ibid*.

<sup>22</sup> *ibid*, p. 10.

**Step 1:** To achieve the primary focus, restrict networks from using capital expenditure to provide certain services:<sup>23</sup>

- these services would include, but not be restricted to 'behind the meter' services, for example network support and demand management;
- implement this restriction through creation of a new service classification type named 'contestable services'; and
- require contestable services to only be procured through operating expenditure.

The AEC has not proposed how the contestable services classification would operate within the distribution service classification framework.

**Step 2:** To address the secondary issues identified, which the AEC considers would likely result in DNSPs using traditional network solutions instead of procuring 'behind the meter' services:<sup>24</sup>

- lower the regulatory investment test for distribution (RIT-D) threshold to \$50,000, with some form of shortened RIT-D process applying to these investments; and
- make the outcome of the RIT-D binding on DNSPs through prohibition of capital expenditure not approved under a RIT-D being rolled into the regulatory asset base.

**Step 3:** Require DNSPs to publish all relevant information, so that third parties can compete for contestable services on an equal basis with DNSPs' ring fenced affiliates.<sup>25</sup>

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<sup>23</sup> *ibid*, p. 1.

<sup>24</sup> *ibid*, p. 6.

<sup>25</sup> *ibid*, p. 9.

## 4 Current arrangements and issues for consultation – distribution service classification

### Summary

- Distribution service classification is important. It:
  - determines which services provided by DNSPs are economically regulated and in what form;
  - has implications for what, if any, separation applies between services which are economically regulated and those that are not;<sup>26</sup> and
  - has an impact on the potential for contestable service provision.
- Distribution service classification involves the classification of services DNSPs supply customers rather than the classification of:
  - the assets used to provide such services;
  - the inputs/delivery methods DNSPs use to provide such services to customers; or
  - services that consumers or other parties provide to DNSPs.
- Both rule change requests have raised issues with respect to a lack of clarity, strategic direction and flexibility in the NER regarding distribution service classification. This is the key focus of this Chapter.
- Both rule change requests seek to require DNSPs to procure certain inputs to economically regulated services from contestable markets, rather than having the discretion to invest in the assets that provide such inputs and recover a regulated return in connection with such investments. The requests propose that this be achieved through changes to the framework for distribution service classification. This chapter explains that this is unlikely to be possible, because these are not services that can be classified within distribution service classification.
- Instead, implementing this policy position may require changing the discretion DNSPs have in providing economically regulated services. This is discussed further in Chapter 5.

This Chapter explains the current arrangements for distribution service classification. It also seeks stakeholders' views regarding these arrangements and the issues raised in the rule change requests.

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<sup>26</sup> The separation of economically regulated services (direct control services) from other services is achieved through the cost allocation, distribution ring-fencing and asset sharing regulations.

Service classification is the foundation of the economic regulatory framework. The AER may only classify distribution services.<sup>27</sup> The AER may:

- classify distribution services as direct control services and, therefore, subject to economic regulation; or
- classify distribution services as a negotiated distribution service; or
- not classify a distribution service at all.

#### **4.1 Why service classification is important**

Service classification has significant implications for how services are regulated, and also for the potential for effective contestable provision of services.

##### **4.1.1 Regulatory implications**

Services that are classified as direct control services are economically regulated under the incentive based framework. This framework, set out in detail in Chapter 5 of this paper, provides DNSPs with the opportunity to recover the efficient costs of providing these services through regulated revenues.

The regulatory framework incentivises DNSPs to provide direct control services efficiently. Generally speaking, it affords DNSPs discretion over the method they choose to deliver these services. For example, generally speaking, the framework provides DNSPs with discretion to provide these services by using any combination of:

- network or non-network options;<sup>28</sup>
- operating or capital expenditure;
- a variety of technologies;
- assets that are positioned behind or in-front of the meter; and/or
- providing the services "in-house" or procuring the services from third parties or appropriately ring-fenced related entities.

In comparison, DNSPs cannot recover the costs of services that are not classified as direct control services through regulated revenues, regardless of the service delivery

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<sup>27</sup> Under Chapter 10 of the NER a distribution service is defined as "a service provided by means of, or in connection with, a distribution system". A distribution system is defined as "a distribution network, together with the connection assets associated with the distribution network, which is connected to another transmission or distribution system".

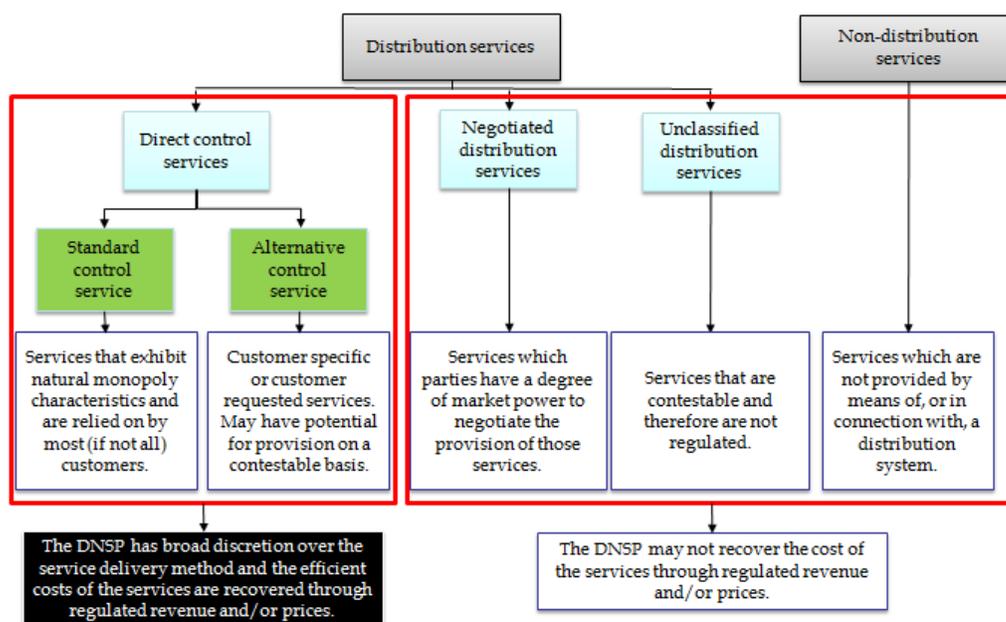
<sup>28</sup> DNSPs discretion in using non-network options is limited to those non-network options which fall within the definition of distribution service - see section 4.4, level one.

method. This means that, if a service is not classified as a direct control service, DNSPs cannot use regulated revenues to:<sup>29</sup>

- recover the costs of investing in assets that provide such a service; nor
- recover the costs of procuring such a service from the contestable market.

This importance of whether services are classified as direct control services or not is displayed in figure 4.1.

**Figure 4.1 Importance of classification of distribution services as direct control services**



There are also regulatory implications for whether:

- a direct control service is classified as a standard or alternative control service;
- a distribution service is classified as a negotiated distribution service or remains unclassified; and
- a service is a distribution service.

For example, requirements in the AER’s distribution ring-fencing guidelines, the shared asset guideline and cost allocation may apply differently depending on whether the service is classified, how it is classified or whether it is a distribution service. These implications are set out in Chapters 5 and 6.

<sup>29</sup> Direct control services are further classified by the AER into two subclasses: standard control services and alternative control services. A distribution determination imposes controls over the prices of direct control, the revenues to be derived from direct control services or both. See Rule 6.2 of the NER.

#### **4.1.2 Contestable service provision**

Service classification also has a significant impact on the ability for other parties to compete with DNSPs in providing services. Broadly:

- A service is typically only classified as a standard control service if it exhibits natural monopoly characteristics and, therefore, could not be efficiently provided by another supplier. DNSPs recover the costs of providing standard control services from all customers who use the shared network. This restricts the ability of other parties to compete with the DNSP to provide these services. As such, the lack of competition for such services is not usually detrimental to customers.
- A service is typically classified as alternative control where there is, or is a potential for, a contestable market for provision of the service. Classification as alternative control services allows for contestable service provision because such services are generally only paid for by the users of the service. This allows customers to see the price of the service offered by the DNSP and compare it to offers from other providers. However, contestable service provision may be limited to some extent for alternative control services, because DNSPs may have advantages in providing the services. For example, distribution ring-fencing arrangements do not require ring-fencing between alternative and standard control services, so a DNSP may be able to use information it has gained in the provision of standard control services to gain an advantage in providing alternative control services. The classification of alternative control services is often viewed as a first step in allowing services that were previously provided on a monopoly basis to be, over time, fully opened up to contestable provision.
- Non-direct control services – which include negotiated services, unclassified distribution services and non-distribution services – are all open to contestable service provision. Provisions regarding cost allocation, shared assets and ring-fencing under chapter 6 of the NER are designed to provide an even playing field for other parties to compete with DNSPs in supplying these services.

#### **4.2 Clarifying the purpose and scope of distribution service classification**

Assessment of the rule change requests, and discussions with some stakeholders, have highlighted common misunderstandings regarding a number of important elements of the service classification framework under the NER. The Commission also considers that there may be a lack of clarity in respect of certain aspects of the service classification framework. This section seeks to clarify these misunderstandings in order to assist stakeholders in making submissions to the rule change requests.

- It is the services provided by DNSPs that may be classified under Chapter 6 of the NER, not the specific assets that DNSPs use to provide those services. This has a number of relevant implications:

- Assets can, and often are, used to provide multiple services with different service classifications. For example, a truck that a DNSP purchases is an asset that may be used to provide:
  1. standard control services, for example, network services;
  2. alternative control services, for example, public lighting services; and
  3. a number of negotiated or unclassified distribution services.
- As long as DNSPs do so in accordance with their cost allocation methodology, shared asset guideline and distribution ring-fencing guidelines, such multiple use of an asset is permissible under the NER.
- It is the services provided by DNSPs **to customers** that are classified within distribution service classification. The inputs that a DNSP uses in providing distribution services to customers are not classified. Equivalently, services that are provided **to the DNSP** as inputs to providing services to customers are not classified. For example:
  - To provide network services, a DNSP will usually need to trim trees surrounding its network. The DNSP may procure a third party or related entity to trim the trees, or use its own staff and assets to trim the trees. Regardless of which approach is taken, tree trimming for the purpose of maintaining the network is not a separate service that can be classified. This is because it is not a service being provided to a customer, it is an input to providing network services to customers.
  - If a customer owns a storage device and uses it to provide a DNSP with network support, this cannot be classified because the customer is providing the DNSP with a service, not the other way around. Similarly, if a DNSP invests in storage assets and uses them to provide network support, this is not a service that can be classified, because it is an input to network services and not a separate service provided to a customer.
- Whilst inputs to services are not classified under the service classification framework, the distinction between an input to a distribution service and the distribution service itself can be unclear at times. Several examples of certain elements of network services that may be considered inputs have been split off from the core network service and classified separately include;
  - Connection services – connecting customers to the network could be viewed as an input to providing network services, because customers cannot receive electricity through a distribution network without first being connected to it. However, connection services are separately classified.
  - Metering services – metering is another element of network services that could be viewed as an input to network services. Similar to connections, metering services are separately classified.

- Notably, inputs that are able to be classified separately tend to exhibit two key features. First, they are provided by the DNSP to the customer, not the other way around. Second they are provided to an individual customer. These features mean that the customer is able to be charged individually for provision of the service.

**Box 4.1                      Application of clarifications to the rule change requests**

Both of the rule change requests seek to require DNSPs to procure certain inputs to standard control services from third parties or related entities, rather than investing in assets that provide such inputs. To achieve this aim, the requests focus on changes to the service classification framework to introduce new categories of classified services (e.g. a new "contestable service" classification) or otherwise clarifying what types of services can be classified as direct control services.

However, the above sections demonstrate that certain services identified by the proponents as being services that should be classified in a particular way may not actually be able to be classified because they are not distribution services provided by DNSPs to customers. Rather, they may be one of many inputs DNSPs use in providing services to customers (e.g. network support from a battery is one input into providing network services).

Furthermore, section 4.1.1 demonstrates that even if these services were distribution services and were not classified as direct control services, this would achieve the opposite of what the rule change requests are seeking to achieve. That is, it would inhibit DNSPs from procuring these services from other parties, not promote such procurement. This is because DNSPs are not able to receive forecast operating expenditure allowances for services which are not classified as direct control services.

That is not to say that a procurement-only approach of such services could not be achieved within the economic regulatory framework. Instead, the mechanism to achieve a procurement only approach would be different to those proposed by the proponents. For example, by potentially limiting the discretion DNSPs have over how they provide direct control services. This is discussed in Chapter 5.

**4.3                      Distribution service classification – process**

Service classification is the first step in network regulation because it determines which services will be economically regulated and in what form. That is a key input into DNSPs' regulatory proposals and the AER's distribution determinations.

Distribution services may be assigned a specific service classification in the NER or may otherwise be classified by the AER.<sup>30</sup> Typically the NER have not classified

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<sup>30</sup> NER, clause 6.2.1(e).

distribution services and, therefore, the AER has had to consider which distribution services provided by DNSPs should be classified.

The AER undertakes distribution service classification during the framework and approach stage of each DNSP's regulatory determination.<sup>31</sup> The AER typically publishes a draft framework and approach paper for consultation and then issues a final framework and approach paper. The AER has also undertaken additional consultation on the classification of specific services it considers are contentious or require further stakeholder engagement, for example, the classification of public lighting in New South Wales in the framework and approach for the 2014-19 distribution determination.<sup>32</sup>

Distribution determinations and framework and approach processes occur on different timelines in different jurisdictions in the NEM. This means that service classification occurs at different times across jurisdictions.<sup>33</sup>

The AER may also alter its service classification from the framework and approach in the distribution determination, if it considers unforeseen circumstances arise after the framework and approach process.<sup>34</sup> For example, the Commission's recent competition in metering rule change altered the way that metering services are provided in the NEM. In response, the AER reviewed and reclassified metering services for the NSW DNSPs in the 2014-19 distribution determinations.<sup>35</sup>

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<sup>31</sup> NER, clause 6.8.1(b)(2)(i).

<sup>32</sup> AER, Discussion paper, Matters relevant to the framework and approach New South Wales (NSW) DNSPs 2014-19, Public lighting services, April 2012.

<sup>33</sup> The current regulatory determination calendar is available on the AER's website at: <https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements>.

<sup>34</sup> NER, clause 6.12.3.

<sup>35</sup> AER, Draft decision, Ausgrid distribution determination 2014-15 - 2018-19, Attachment 13 Classification of distribution services, p. 12.

**Box 4.2 COAG Energy Council consideration of service classification process<sup>36</sup>**

COAG Energy Council considers that the current process for distribution service classification does not provide for clear, engaging or predictable distribution service classification decisions. COAG Energy Council highlights that:

- Since the framework and approach process is conducted far in advance of the distribution determination, it often attracts little engagement from stakeholders. This is because stakeholders have little time to prepare and lack an understanding of the significance of service classification decisions.
- Locking in service classifications for regulatory control periods creates a lag in the ability of the AER to reclassify services. With the pace of technological change there may now be a need to allow for quicker service re-classification.

COAG Energy Council proposes the Commission consider changing the NER to:

- require the AER to publish a distribution service classification guideline; and
- allow the AER to re-classify services within regulatory control periods.

The NER do not currently allow for a change in service classifications within a regulatory control period. If service classifications were able to be changed within a regulatory control period it would likely require significant adjustments to the framework. For example, if a service was reclassified from standard control to alternative control within a period, it may require:

- recalculation of the regulatory asset base for standard control services;
- adjustments to the total revenue requirement for standard control services;
- changes to targets within the capital expenditure sharing scheme and efficiency benefit sharing scheme; and
- establishment of a new control mechanism and revenue or price limits for the new alternative control service.

There may also be significant implications for DNSPs planning, business decisions and the risks that they face, which would need to be considered carefully. For example, DNSPs are currently able to make investments with confidence on the basis of being the monopoly supplier of standard control services over the entire regulatory control period.

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<sup>36</sup> COAG Energy Council, Contestability of energy services, rule change request, August 2016, p. 11.

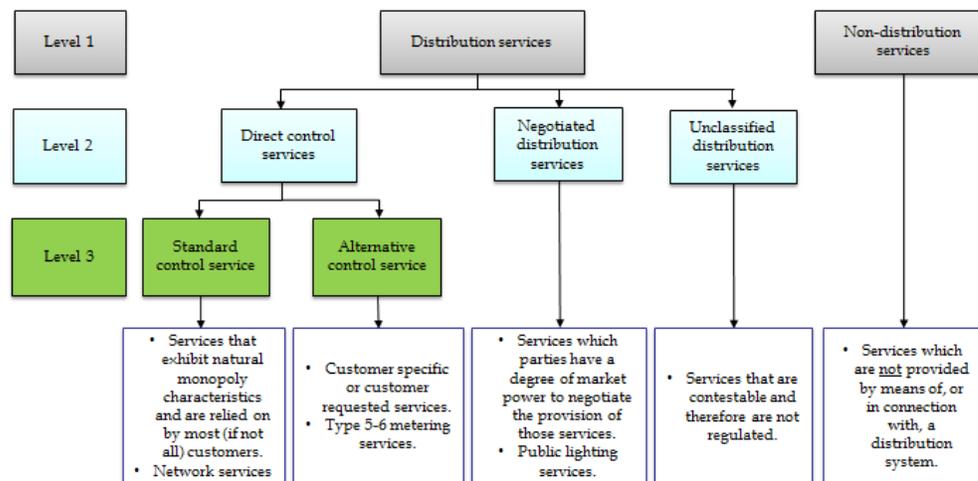
### Question 1

- a) Is there a problem with the current process for distribution service classification? For example:
  - i. does the current determination by determination approach reduce clarity over likely service classification decisions?
  - ii. does the timing of the framework and approach process (in advance of each distribution determination) inhibit stakeholder engagement on service classification decisions?
- b) Would a distribution service classification guideline increase clarity regarding distribution service classification?
- c) To what extent does service classification being locked in over the regulatory control period create a lag in appropriate reclassification of services?
- d) What other changes to the economic regulatory framework may be required to allow clear and properly informed decisions on reclassification of services within a regulatory control period?
- e) What would be the costs and benefits of allowing reclassification of services within a regulatory control period?

## 4.4 Distribution service classification – step by step

Figure 4.2 sets out the three levels of service classification, the service classifications within each level, core characteristics of services within each classification and examples of which services the AER has typically classified within each classification.

**Figure 4.2** Distribution service classification – step by step



## Level one

The AER may only classify services which are distribution services. The NER define a distribution service as "a service provided by means of, or in connection with, a distribution system".<sup>37</sup> A distribution system is defined as "a distribution network, together with the connection assets associated with the distribution network, which is connected to another transmission or distribution system".<sup>38</sup>

### **Box 4.3 COAG Energy Council and AEC rule change requests**

Both rule change requests argue that the definition of distribution service (and its associated definitions) is not clear. COAG Energy Council's rule change request highlights that the words "in connection with" appear to imply the service does not itself need to utilise assets that fall within the scope of the distribution system and that it potentially allows for services provided 'behind the meter' to be defined as a distribution services.<sup>39</sup>

The AEC highlights that, because the AER's distribution ring-fencing guideline apply different ring-fencing conditions on DNSPs depending on whether a service is an unclassified distribution service or a non-distribution services, it is important that there is a clear distinction between these two types of services.

The lack of clarity regarding the definition of distribution service has also been raised by Western Power in the 'alternatives to grid supply' rule change request. Western Power considers that it is currently unclear whether a DNSP supplying customers through systems that are not physically connected to a distribution network would constitute a distribution service.<sup>40</sup> Western Power considers that, where supplying a customer with such an arrangement is a substitute to the existing network, this should be classified as a distribution service. Western Power has proposed to change the definition of distribution services to explicitly include such non-network options.<sup>41</sup>

The Commission's power to make changes to the definition of 'distribution service' in the NER may be limited in certain respects because of the close nature and scope of the AER's economic regulatory functions under the National Electricity Law (NEL), the nature of related definitions under the NEL (such as 'electricity network service') and the purpose of the economic regulatory framework. The Commission will be considering these matters in the context of these rule change requests and the Western Power rule change request.

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<sup>37</sup> NER, chapter 10, glossary

<sup>38</sup> NER, chapter 10, glossary.

<sup>39</sup> COAG Energy Council, Contestability of energy services, rule change request, August 2016, p.4.

<sup>40</sup> For example, a customer supplied by a solar photovoltaic system, a battery and a diesel generator with no connection to the grid.

<sup>41</sup> Western Power, Alternatives to Grid-supplied Network Services, September 2016, p.10.

## Question 2

- a) Does the definition of distribution services provide clear guidance regarding which services are distribution services and which are not?
- b) What types of changes could be made to clarify the term?
- c) What would be the pros and cons of changing the definition of distribution services?

### Level two

Distribution services can be classified as direct control services, negotiated distribution services, or be left unclassified. The NER do not set out the specific characteristics of services that should fall within each classification category. Instead, the NER defines classifications in terms of the regulation that will apply to the services in each classification:

- a direct control service is regulated under a distribution determination, which sets out the control mechanism that applies to the relevant service (i.e. the price to be paid or revenue to be earned from the services);
- a negotiated service is a service that is subject to the DNSP's negotiating framework, which is approved by the AER in its distribution determination; and
- a distribution service falling outside the classifications of a direct control service or a negotiated distribution service is left unclassified and not subject to economic regulation.<sup>42</sup>

Although not defined by the NER, the AER typically refers to the third category as unclassified or unregulated services. The AER typically does not set out a comprehensive list of unclassified distribution services.<sup>43</sup>

The NER sets out the factors the AER needs to have regard to in classifying distribution services. These include:

- the form of regulation factors;
- 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 previous regulatory system;

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<sup>42</sup> In certain circumstances an unclassified distribution service may be subject to regulation under Chapter 5A of the NER or otherwise affected by the operation of AER's distribution ring-fencing guidelines, the cost allocation method and/or shared asset guidelines in accordance with Chapter 6 of the NER.

<sup>43</sup> For example, see AER, Final Framework and approach for Energex and Ergon Energy, April 2014, p21.

- the desirability of consistency in the form of regulation for similar services; and
- any other relevant factors.<sup>44</sup>

The form of regulation factors are:<sup>45</sup>

- the presence and extent of any barriers to entry in a market for electricity network services;
- the presence and extent of any network externalities (that is, interdependencies) between an electricity network service provided by a network service provider and any other electricity network service provided by the network service provider;
- the presence and extent of any network externalities (that is, interdependencies) between an electricity network service provided by a network service provider and any other service provided by the network service provider in any other market;
- the extent to which any market power possessed by a network service provider is, or is likely to be, mitigated by any countervailing market power possessed by a network service user or prospective network service user;
- the presence and extent of any substitute, and the elasticity of demand, in a market for an electricity network service in which a network service provider provides that service;
- the presence and extent of any substitute for, and the elasticity of demand in a market for, electricity or gas (as the case may be); and
- the extent to which there is information available to a prospective network service user or network service user, and whether that information is adequate, to enable the prospective network service user or network service user to negotiate on an informed basis with a network service provider for the provision of an electricity network service to them by the network service provider.

Generally speaking, the AER's approach to applying the form of regulation factors to service classification has been to classify services with a greater degree of competition or potential for development of competition as negotiated or unclassified distribution services. Those with limited competition are classified as direct control services and, therefore, subject to economic regulation.<sup>46</sup>

Further, in classifying distribution services that have previously been subject to regulation under the present or earlier legislation, the NER require the AER to act on the basis that, unless a different classification is clearly more appropriate:

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<sup>44</sup> NER, clause 6.2.1.

<sup>45</sup> Section 2F of the NEL.

<sup>46</sup> For example, see AER, Stage 1 Framework and approach - NSW distributors, March 2013, p.15.

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

**Box 4.4 COAG Energy Council's rule change request<sup>47</sup>**

COAG Energy Council considers that the form of regulation factors are an important part of the service classification process, noting that they guide the AER in deciding whether a service should be regulated. This includes whether there are barriers to entry in providing the service, the relative market power of DNSPs and customers, the availability of substitute services, and the information available to networks and customers in coming agreements.<sup>48</sup>

COAG Energy Council proposes that the AEMC analyse whether the form of regulation factors remain appropriate in the context of changes in the electricity market.

COAG Energy Council also considers that the requirement to not change service classification unless a new classification is clearly more appropriate should be removed. COAG Energy Council notes that this clause was included in the NER as part of the process of transferring economic regulation from jurisdictional regulators to the AER. With that period past and a period of technological change occurring in the market, COAG Energy Council considers the AER now needs more discretion to reclassify services.

**Question 3**

- Do the form of regulation factors provide clear guidance to the AER in determining whether distribution services should be classified as direct control services, negotiated services or be left unclassified?
- Should the requirement to not change service classification unless a new classification is clearly more appropriate be removed?

**Level three**

Services classified as direct control services are then split into two sub-classes: standard control services and alternative control services. The NER defines these services by reference to how they are regulated once classified:

<sup>47</sup> COAG Energy Council, Contestability of energy services, rule change request, August 2016, p.14.

<sup>48</sup> COAG Energy Council also notes in its rule change request that the AEMC cannot change the form of regulation factors because they are set out in the NEL.

- standard control services are services subject to a control mechanism based on a DNSP's total revenue requirement; while
- all other direct control services are alternative control services.

Again, the NER set out the factors the AER must have regard to when classifying a direct control services as standard or alternative control. These are:

- the potential for development of competition in the relevant market and how the classification might influence that potential;
- the possible effects of the classification on administrative costs for the AER, the DNSP and users or potential users;
- the current regulatory approach applicable to the relevant service;
- the desirability of a consistent regulatory approach to similar services (both within and beyond the relevant jurisdiction);
- the extent the costs of providing the relevant service are directly attributable to the person to whom the service is provided;<sup>49</sup> and
- any other relevant factors.

Further, in classifying direct control services that have previously been subject to regulation under the present or earlier legislation, the AER must act on the basis that, unless a different classification is clearly more appropriate:

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

**Box 4.6 COAG Energy Council rule change request<sup>50</sup>**

COAG Energy Council proposed two key changes regarding splitting direct control services into standard and alternative control services:

- the requirement to only reclassify services when a different classification is clearly more appropriate should be removed; and
- the definition (and/or associated rules) should clearly reflect the intent that services only be classified as standard control services if they have natural monopoly characteristics.

<sup>49</sup> The NER contain an example for this factor as a note to clause 6.2.2(5): a service may be more appropriately classified as alternative control if it is provided to a small number of identifiable customers on a discretionary or infrequent basis, and costs can be directly attributed to those customers.

<sup>50</sup> COAG Energy Council, Contestability of energy services, rule change request, August 2016, p.14.

#### Question 4

- a) Are the NER clear regarding classifying direct control services as standard or alternative control services?
- b) Do the NER provide effective guidance to the AER in classifying direct control services into standard and alternative control services?
- c) Should the requirement to not change service classification unless a new classification is clearly more appropriate be removed?

#### 4.5 Distribution service classification – examples and observations

This section provides an example of service classification under the NER. It also provides some initial observations of service classification to date that are relevant to the rule change requests.

##### **Box 4.8 AER classification of Queensland large customer connections for the 2015-20 regulatory control period<sup>51</sup>**

###### **Context**

The AER reclassified large customer connections from standard to alternative control services in the 2010-15 regulatory control period. At the same time, the Queensland government made large customer connection services contestable. The services had, therefore, been open to contestable service provision for three years at the time of the framework and approach for the 2015-20 regulatory control period.

###### **Proposed approach and submissions**

In its initial framework and approach paper, the AER noted that competition in the provision of large customer connections had only recently been introduced in Queensland. It preferred to retain the alternative control classification because the service is provided to specific customers and competition appears to be developing.

Energex submitted that it preferred large customer connections to be unclassified. Energex further submitted that its second preference was for an alternative control classification, not a negotiated classification.

Ergon Energy submitted that it preferred retention of the existing alternative control classification. Should the AER decide to change the classification approach, Ergon Energy preferred the services be unclassified rather than a negotiated service.

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<sup>51</sup> AER, Final Framework and approach for Energex and Ergon Energy, Regulatory control period commencing 2 July 2015, April 2014, pp. 34-36.

The AER did not receive any submissions from alternative service providers or current or prospective users of large customer connection services.

#### **AER assessment**

The AER noted that a key consideration in deciding how to classify a distribution service is the extent and effectiveness of competition in the market for the service. Further, in regard to the potential for competition, the existence and extent of any barriers to entry by alternative service providers is important. The AER's competition analysis found that:

- alternative service providers performed around one third of large customer connections in Energex's distribution area in 2012-13;
- a higher proportion of large customer connections are being performed by alternative providers in 2013-14 in Energex's area;
- around one third of large customer connections under way are being performed by alternative providers in Ergon Energy's area; and
- the existing process for accrediting alternative service providers for large customer connections created a barrier to entry for new providers. Energex and Ergon Energy accredit other parties to perform large customer connections in their respective distribution areas. That is, the DNSPs accredit their prospective competitors.

On this basis, the AER observed that:

- The reclassification to an alternative control classification and the Queensland government's decision to make connections contestable seemed to have been successful, though given the short period of time, how successful remained unclear.
- In most markets, a provider with a market share of two thirds would be considered to hold a dominant market position. After only three years of large customer connections being contestable, the market was still developing.
- There may have been types of large customer connections for which the distributors retain market power. There may also have been particular geographic regions where the DNSPs retain market power.

The AER also recognised that classifying large customer connections as negotiated services would incur costs. In particular, because there were no other negotiated services at the time, the DNSPs would have needed to create a negotiating framework, which would have required stakeholder consultation and dedication of DNSP and stakeholder resources.

#### **Comparison to other jurisdictions**

The AER contrasted the market for connection services in Queensland with other jurisdictions. In particular, the AER set out that New South Wales had a well

developed independent process for accrediting alternative service providers and a competitive environment for the provision of connection services. Moreover, the New South Wales DNSPs had low market shares in connection services.

The AER noted that in Queensland, the development of an independent accreditation system for alternative providers of large customer connections would give significant weight to the case for not classifying the service. At that date, the Queensland government had not indicated it would establish an independent accreditation system.

### **Decision**

On balance, the AER decided to retain the existing alternative control classification for large customer connections for both Energex and Ergon Energy. It noted a lack of support from stakeholders for reclassifying to negotiated services, as well as the likely additional administrative costs. It also noted that a contestable market for large customer connections was in the early stage of development, and that there were barriers to new providers entering the market.

#### **4.5.1 Initial classifications**

When the AER assumed responsibility for the economic regulation of DNSPs in the national electricity market (NEM), many of the services that are now open to contestable service provision were provided on a monopoly basis by DNSPs as part of standard control services. Large customer connection services in Queensland are only one of many services that the AER has reclassified away from standard control services to support the provision of such services by contestable markets. Others include metering services, connection services, public lighting and ancillary services.<sup>52</sup>

#### **4.5.2 Practical issues are as relevant as underlying economic characteristics**

In undertaking competition assessments, the AER focuses on both the underlying economic characteristics of the services and the practical circumstances of the supply of the services. For example, if jurisdictional legislation provides an exclusive licence to the DNSP to undertake the service, the AER will consider that there is no potential for competition and classify the service accordingly. This is the case even if the AER assesses a service's underlying economic characteristics as having potential for competition.

Some notable practical factors the AER has taken into account in its classification decisions include:

- ownership of existing public lighting infrastructure by DNSPs;
- sole provision of accreditation rights of alternative service providers for connection services; and

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<sup>52</sup> See, for example, AER, Stage 1 Framework and approach - NSW distributors, March 2013, pp.116-126.

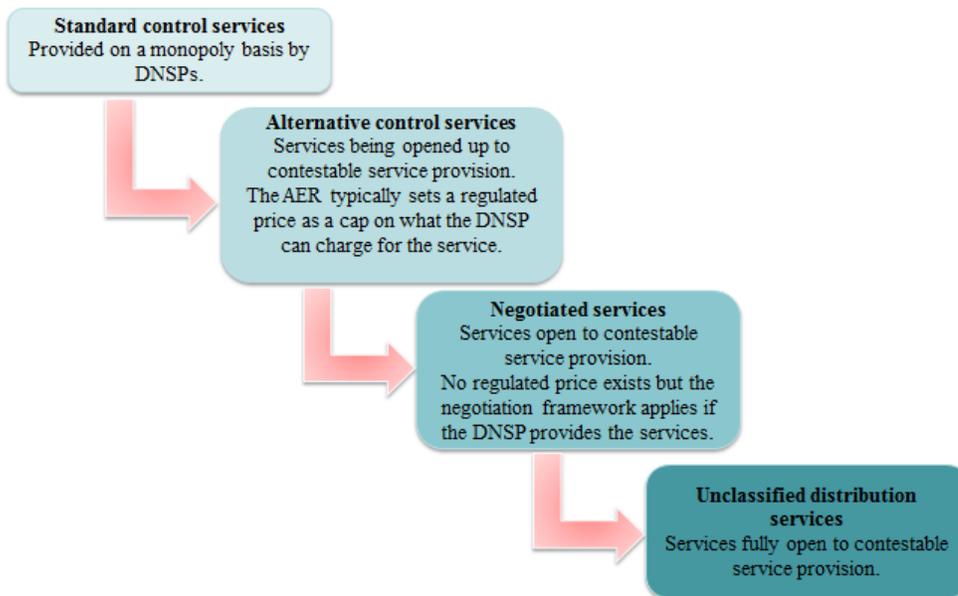
- the new competition in metering rules assigning responsibility for providing specific services to specific accredited providers.

### 4.5.3 Holistic service classifications

The AER often considers steps two and three of service classification as one decision rather than two separate decisions to be undertaken sequentially. For example, the Queensland large customer connections decision highlights that the AER assesses whether to classify the service as an alternative control, negotiated or unclassified distribution service in one decision.

The example also demonstrates how the AER views the service classifications as a sliding scale from left to right as a means of moving services that were previously supplied on a monopoly basis to contestable service provision. This is shown in figure 4.3.

**Figure 4.3 Sliding scale of distribution service classification**



### 4.6 Distribution service classification – as a whole

The proponent of each rule change request has identified a need for additional clarity and guidance regarding distribution service classification. In this context, it is important to not only consider the individual levels of service classification in the NER, but to also consider the overarching purpose of service classification. A number of questions regarding this overall framework are set out below.

### Question 5

- a) Is an objective for service classification in the NER necessary? For example, COAG Energy Council considers the NER should be more explicit in providing that only services which exhibit natural monopoly characteristics should be economically regulated.
- b) Should the steps of service classification be informed by the same considerations? For example, should all service classification steps be based on market characteristics, rather than on the form of regulation that applies to the service?
- c) Within this framework, should new classification(s) be added?
- d) The proponents of the rule change requests consider that service classification is no longer only determining which services are economically regulated and which are not. It is increasingly having significant effects on the application of the distribution ring-fencing, cost allocation and shared asset guidelines. Should the AER expressly be required to have regard to the interaction of service classification with these other forms of regulation?
- e) Are the NER clear as to what can and cannot be classified? If not, what changes would be required?

## 5 Incentive framework for economically regulated services

### Summary

- The key feature of economic regulation in the NEM is that it is based on incentivising DNSPs to provide standard control services as efficiently as possible. It does so by locking in DNSPs' total revenue requirement prior to each regulatory control period.<sup>53</sup> With revenue locked in, DNSPs' returns are determined by their actual costs of providing services.
- This high level incentive regulatory framework is then enhanced through specific incentive schemes for capital expenditure, operating expenditure, service standards and demand management.
- Since DNSPs are incentivised to provide services efficiently, they are provided with discretion to choose how they provide economically regulated services.
- The AEC's rule change request considers that DNSPs should be required to procure network support, demand management and inputs provided by assets located 'behind the meter' from contestable markets.

This chapter sets out the current regulatory framework for economically regulated services. It also seeks stakeholders' views regarding the issues raised in the rule change requests related to this framework.

At this stage, the Commission is focusing on the issues with the regulatory framework. Once a clearer picture is established of the issues, and their materiality, the Commission will focus on the solutions proposed and other potential solutions to address the issues.

### 5.1 Overview

This section provides:

- an overview of the purpose of the economic regulation of DNSPs in the NEM; and
- the core principles behind the economic regulatory framework.

#### 5.1.1 Principles underlying regulation of electricity network service providers

Electricity networks are capital intensive and incur declining average costs as output increases. Network services in a particular geographic area are, therefore, most

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<sup>53</sup> Where the AER selects a control mechanism that is not a revenue cap, a DNSPs' actual revenue may vary from its total revenue requirement. The requirement may also be adjusted for cost-pass through events within the period.

efficiently provided by one supplier. For example, the cost of transporting electricity from generators to households would be much higher if two or more businesses built competing poles and wires in one area. This results in a natural monopoly market structure. Without competition, providers of network services (i.e. DNSPs and TNSPs) are regulated to encourage efficient investment and maintenance of the electricity network, and to prevent consumers from being overcharged.

The key feature of economic regulation of DNSPs in the NEM is that it is based on incentives rather than prescription. The total revenue requirement is locked in at the start of each regulatory period. It is based on the AER's estimate of the efficient costs that a DNSP would incur to meet its reliability standards and other regulatory obligations.

If a DNSP spends less than the estimated efficient cost, it will retain the difference for the remainder of the regulatory control period. This incentivises it to operate more efficiently and reduce costs. Conversely, if the DNSP spends more than the estimated efficient costs, it will not be allowed to recover the additional spending during the remainder of the regulatory control period.

Overlaying this framework are specific incentive schemes for capital and operating expenditure. They also affect how an underspend or overspend is shared with consumers. For example, if a DNSP reduces its costs it will retain the benefits of that efficiency during the regulatory control period and then share the benefits with consumers through lower charges in the next regulatory control period. These incentives are designed to make the DNSP indifferent between spending:

- capital and operating expenditure; and
- in one year of the regulatory period or another in net present value terms.

Importantly, under this approach, funding is not approved for DNSPs' specific projects or programs. Rather, a total revenue requirement is set, which is based on forecasts of total efficient expenditure. Once a total revenue is set, it is for the DNSP to decide which suite of projects and programs are required to deliver services to consumers while meeting its regulatory obligations. For example, the framework provides DNSPs with discretion to provide services by using any combination of:

- network or non-network options;
- operating or capital expenditure;
- a wide variety of technologies;
- assets that are positioned in many locations, including behind or in-front of the meter; and
- in-house or procuring the services from third parties or related entities.

### **Box 5.2 AEC rule change request<sup>54</sup>**

The AEC considers that DNSPs should be required to procure network support, demand management and inputs provided by assets located 'behind the meter' from contestable markets. Equivalently, DNSPs would be prevented from investing in assets that provide such inputs.

The AEC considers that demand response, network support and other inputs provided from assets located 'behind the meter' have a number of unique characteristics that distinguish them from other inputs, which justify preventing DNSPs from owning them. Specifically:

- the technologies used to provide them are fairly immature, so market dominance by the DNSPs could delay or inhibit potentially sizable cost reductions, technology improvements and business model innovations;
- the market for services from assets 'behind the meter' is potentially sizable, and may be able to offset investment in the network; and
- services from assets 'behind the meter' are a potential competitor to the distribution network as a means of supplying customers with electricity in the long-term.

### **Question 6**

- a) Is there a problem with DNSPs having service delivery discretion in relation to demand response, network support and other inputs derived from assets located 'behind the meter'? If so:
  - i. What is the problem?
  - ii. How material is it?
  - iii. Provide examples of the problem?
- b) Is the problem unique to demand response, network support and other inputs provided by means of assets 'behind the meter'?

## **5.2 Building blocks**

The incentive-based regulatory framework for DNSPs is based on the building block methodology in Part C of Chapter 6 of the NER. This section describes the key components of the building block methodology that are relevant to the two rule change requests:

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<sup>54</sup> AEC, Contestability of energy services - demand response and network support, October 2016, p. 6.

- the treatment of capital costs – capital expenditure, regulatory asset base, return on capital and depreciation;
- the treatment of operating costs; and
- other components – the demand management incentive scheme (DMIS) and demand management incentive allowance (DMIA), and the treatment of related party margins.

**Box 5.4            AEC rule change request**

The AEC considers that the current framework incentivises DNSPs to favour capital expenditure in order to grow their regulatory asset bases, and that this should be addressed.<sup>55</sup>

In addition, the AEC raises a number of issues with some specific outcomes of, and incentives within, the building block framework. For example, the AEC considers that:

- The efficiency benefit sharing scheme (EBSS) and DMIS should be reviewed to ensure that they cannot be "gamed" by DNSPs to share benefits with an affiliate and, thus, gain an advantage over other providers.<sup>56</sup>
- The framework needs to maximise the scope for independent competitive providers to supply network support services to networks. To do this they need to be exposed to the information and price signals that indicate where and when network support services are most valuable.<sup>57</sup>

**5.2.1    The treatment of capital expenditure**

Capital expenditure is spent on buying and installing assets like poles, wires and other equipment that transports energy. It typically varies from year to year because capital assets are generally costly to build but are used for a number of years.

The regulatory framework accounts for this difference between when a DNSP incurs capital expenditure and when it recovers these costs from consumers. Importantly, DNSPs earn revenue from capital expenditure over the life of the assets through the return on capital (rate of return multiplied by the regulatory asset base) and the return of capital (depreciation).

**Capital expenditure**

The AER approves an estimate of total capital expenditure for each DNSP at the start of the regulatory control period. By locking in the allowance of efficient capital

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55    *ibid.* p. 4.

56    *ibid.* p. 3.

57    *ibid.*

expenditure at the start of the regulatory control period, DNSPs face an incentive to undertake capital expenditure efficiently. This is because they keep savings on the financing costs of capital until the end of the regulatory control period if they spend less than their allowance. At the end of each regulatory period only the value of capital expenditure that was actually incurred by the DNSP is added to the regulatory asset base for the next regulatory control period. So any savings are passed on to consumers through lower allowed network revenues (and, therefore, lower network charges) in future regulatory control periods.

The AER determines the total capital expenditure allowance for the regulatory period based on the capital expenditure objectives and criteria set out in the NER. These objectives and criteria require the AER to determine the efficient costs a prudent network business would need to meet or manage estimated demand for standard control services, comply with regulatory requirements (including jurisdictional reliability standards) associated with providing standard control services and maintain safety of the distribution system through the supply of standard control services.

The AER is also required to, and has developed, an incentive scheme for capital expenditure under the NER, known as the capital expenditure sharing scheme (CESS). The CESS is not designed to replace the core feature of the economic regulatory framework of locking in total efficient capital expenditure upfront.<sup>58</sup> Rather, the CESS is complementary to this framework.

The AER highlights three purposes of the CESS:

- balance incentives to spend on capital and operating expenditure;
- equalise the incentive for efficient capital expenditure in each year of a regulatory period; and
- share efficiency gains and losses between DNSPs and consumers.

More detail on the CESS is set out in box 5.3 below.

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<sup>58</sup> NER, clause 6.5.8A. The CESS must be consistent with the capital expenditure incentive objective as set out in rule 6.4A of the NER.

## Box 5.5 The CESS

### NER provisions<sup>59</sup>

The CESS was introduced into the NER under the Commission's 2012 *Economic regulation of network service providers* final rule. The NER require that in developing a CESS, the AER take into account:

- that DNSPs should be rewarded or penalised for improvements or declines in efficiency of capital expenditure;
- that the rewards and penalties should be commensurate with the efficiencies or inefficiencies in capital expenditure;<sup>60</sup>
- the interaction of the scheme with other incentives that DNSPs may have in relation to undertaking efficient operating or capital expenditure; and
- the capital expenditure objectives and, if relevant, the operating expenditure objectives.

### CESS<sup>61</sup>

The AER published its capital expenditure incentive guideline in November 2013. The guideline highlights that without a CESS a DNSP will face incentives that decline over a regulatory control period. For example, if a DNSP makes an efficiency gain in the first year of a five year regulatory control period any benefits will last for four more years before the regulatory asset base is updated for actual capital expenditure. In the final year, however, the benefit will be approximately zero. This may lead to inefficient capital expenditure and inefficient substitution of operating expenditure for capital expenditure towards the end of a regulatory control period.

The CESS encourages efficient capital expenditure investment decisions by providing DNSPs with the same reward for a capital expenditure efficiency saving and same penalty for a capital expenditure efficiency loss regardless of which year they make the saving or loss in. The CESS rewards a DNSP if it made a capital expenditure efficiency saving, and penalises it if it made a capital expenditure efficiency loss.

The CESS is symmetric in that:

- a DNSP will retain 30 per cent of any underspend while consumers will receive 70 per cent of the benefit of an underspend; and
- a DNSP will also bear 30 per cent of the cost of any overspend, while consumers will bear 70 per cent.

<sup>59</sup> NER, clauses 6.5.8A(c) and (d).

<sup>60</sup> A reward for efficient capital expenditure need not correspond in amount to a penalty for the same amount of inefficient capital expenditure.

<sup>61</sup> AER, *Better regulation, Capital expenditure incentive guideline for electricity network service providers*, November 2013, pp. 7-9.

## Regulatory asset base

The regulatory asset base for a DNSP is the value of those assets that are used by the DNSP to provide standard control services, but only to the extent that they are used to provide such services. The AER determines the opening value of the regulatory asset base for DNSPs for each year of a regulatory control period.<sup>62</sup>

In general terms, the regulatory asset base in a given year of the regulatory control period is based on:

- the value of the regulatory asset base at the end of the previous regulatory control period;
- depreciation over intervening years; and
- forecast capital expenditure in the intervening years.

## Return on capital

The value of the DNSPs' regulatory asset base is multiplied by the allowed rate of return to determine the return on capital.

The allowed rate of return, or the weighted average cost of capital, is the estimate of the cost of funds a DNSP requires to attract investment in the network. A good estimate of the rate of return is essential to promote efficient investment by DNSPs. If the rate of return is set too low, DNSPs may not be able to attract sufficient funds to be able to make required investments to maintain reliability and safety. Alternatively, if the rate of return is set too high, DNSPs may face an incentive to spend more than necessary and consumers will pay inefficiently high prices.

The rate of return also influences the incentives DNSPs face to spend on operating expenditure relative to capital expenditure. Capital expenditure earns a rate of return over time, whereas operating expenditure is recovered within the period of the expenditure. If DNSPs expect that the rate of return will be higher than their actual cost of capital (the cost of borrowing and shareholders' required return), they will be incentivised to undertake capital expenditure rather than operating expenditure.

Similar to the overall economic regulatory framework, the rate of return operates on an incentive basis. That is, the AER sets the rate of return at the start of the regulatory control period based on its estimate of the efficient financing costs of a similar benchmark entity. This provides DNSPs with an incentive to obtain financing at the lowest available cost because their returns are based on the estimated rate regardless of their actual financing costs during the period.

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<sup>62</sup> NER, Clauses 6.5.1 and S6.2.

## Depreciation

Depreciation is the allowance provided so that capital investors recover their investment over the economic life of the asset (return of capital). The regulatory depreciation allowance is the net total of depreciation less the indexation of the regulatory asset base.

### 5.2.2 Operating expenditure

Operating expenditure is the non-capital cost of running the electricity network and maintaining the assets. Operating expenditure is generally recurrent and predictable from year to year.

Similar to capital expenditure, the regulatory arrangements for operating expenditure operate on an incentive basis. That is, the AER locks in an overall estimate of operating expenditure for each DNSP at the start of the regulatory period. This creates an incentive for DNSPs to undertake operating expenditure efficiently. This is because DNSPs retain savings for the remainder of the regulatory period if they spend less than the operating expenditure allowance. Consumers benefit where such savings have been made because the AER uses the information about costs incurred by the DNSP to set lower operating cost allowances for the next regulatory period.<sup>63</sup>

The AER determines the estimated operating costs for the regulatory control period based on the efficient costs a prudent network business would incur. The NER provide the AER with discretion to use a range of methods and information to determine the efficient operating expenditure.

The NER require the AER to create an incentive scheme, known as the efficiency benefit sharing scheme (EBSS), for operating expenditure. Similar to the CESS, the objective of this is not to alter the incentive for efficient operating expenditure, as this is already embodied in the regulatory framework. Rather, the EBSS is complementary to this framework.

The AER highlights three purposes for the EBSS:

- provide a balanced incentive to reduce operating and capital expenditure;
- incentivise continuous efficiency improvements in operating expenditure throughout the regulatory period; and
- allow DNSPs and consumers to share in efficiency gains.

More detail on the EBSS is set out in box 5.3 below.

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<sup>63</sup> NER, clause 6.5.6.

## **Box 5.6      The EBSS**

### **NER provisions<sup>64</sup>**

In developing and implementing an EBSS the NER require that the AER have regard to:

- 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 for DNSPs;
- the need to provide DNSPs with a continuous incentive, so far as is consistent with economic efficiency, to reduce operating expenditure;
- the desirability of both rewarding DNSPs for efficiency gains and penalising DNSPs for efficiency losses;
- any incentives DNSPs may have to capitalise expenditure; and
- the possible effects of the scheme on incentives for the implementation of non-network alternatives.

### **EBSS<sup>65</sup>**

The AER updated its EBSS in November 2013 at the same time as introducing the CESS. The AER considered the core aim of the EBSS is to provide a continuous incentive for DNSPs to pursue efficiency improvements in operating expenditure and to share efficiency gains between DNSPs and consumers.

The AER set out that the EBSS is intrinsically linked to its forecasting approach for operating expenditure. Where it is confident that a DNSPs' past operating expenditure is efficient, its preference is to use this as a base for forecasting future costs. In practice, under this approach it examines the actual operating expenditure a DNSP spent in one year of the regulatory period (the base year), and uses this to forecast operating expenditure needs for the next period. However, if this was applied without refinement, a DNSP would have an incentive to spend more operating expenditure in the year it expects the AER will use as a base for its next forecast. This is because spending more in the expected base year would make its future operating expenditure allowance larger.

The EBSS reduces the incentive a DNSP has to inflate its operating expenditure in the base year. It provides a continuous incentive for DNSPs to achieve efficiency gains. The combined effect of the revealed cost forecasting approach and the EBSS is that operating expenditure efficiency savings or losses are shared by 30 per cent to DNSPs and 70 per cent to consumers. For example, for a one dollar saving in operating expenditure the DNSP receives 30 cents of the benefit while consumers receive 70 cents of the benefit.

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<sup>64</sup> NER clause 6.5.8(c).

<sup>65</sup> AER, Better regulation, Efficiency benefit sharing scheme for electricity network service providers, November 2013, pp. 5-7.

In contrast to capital expenditure, the allowance for forecast operating expenditure is recovered by DNSPs within the regulatory period. This also means that if a DNSP develops projects that require operating expenditure in multiple regulatory control periods, this expenditure must be proposed to the AER for each regulatory control period that the expenditure will occur in.

### **5.2.3 Interaction between operating and capital expenditure incentives**

It is important that the incentive schemes create balanced incentives across capital and operating expenditure. If this is not the case, DNSPs may face an incentive to reallocate expenditure to gain rewards or avoid penalties under the incentive schemes, rather than attempting to provide the services at the lowest possible cost.

The AER sets out that the EBSS and the CESS provide balanced incentives at all points in time so DNSPs can make efficient decisions when choosing whether to incur operating or capital expenditure. For example, if a DNSP decides to spend money on operating expenditure which it would otherwise have spent on capital expenditure:

- the DNSP pays 30 per cent of the overspend on operating expenditure as a result of the application of the EBSS; but
- this is offset by the DNSP retaining 30 per cent of the underspend on capital expenditure as a result of the application of the CESS.<sup>66</sup>

### **5.2.4 Other**

The other elements of the building block framework that are relevant to the rule change requests are:

- the demand management incentive scheme and demand management innovation allowance; and
- related party transactions.

#### **Demand management incentive scheme and demand management innovation allowance**

The Commission published the Demand management incentive scheme final rule determination in November 2015. The final rule put in place a framework to allow the AER to develop incentive schemes to encourage more efficient demand management expenditure decisions by DNSPs. There are two mechanisms under the new framework:

- Demand management incentive scheme - the objective of the incentive scheme is to provide DNSPs with an incentive to undertake efficient expenditure on relevant non-network options relating to demand management. The scheme will

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<sup>66</sup> AER, Overview of the better regulation reform package, April 2014, p. 8.

reward DNSPs for implementing relevant non-network options that deliver net cost savings to retail customers.

- Demand management innovation allowance – the objective of the innovation allowance is to provide DNSPs with funding for research and development in demand management projects that have the potential to reduce long term network costs. The allowance will be used to fund innovative projects that have the potential to deliver ongoing reductions in demand or peak demand.

The AER is currently consulting on the development of the demand management incentive scheme and innovation allowance. The AER anticipates finalising the scheme in July 2017.<sup>67</sup>

### **Related party transactions**

The AEC rule change request notes a concern that the EBSS and DMIS may incentivise DNSPs to enter into less efficient contracts with a related party than with a third-party provider. This is because the DNSP would only incur 30 per cent of the overspend, while its related party would retain all profit from the inefficient contract.

It is worth noting that this issue – known as the related party margin problem – is not unique to services provided from assets ‘behind the meter’. The AER’s expenditure forecast assessment guideline sets out how it treats forecast operating and capital expenditures regarding DNSPs’ transactions with related parties (set out in more detail in appendix A).<sup>68</sup>

#### **Question 7**

- a) Does the regulatory framework provide balanced incentives for DNSPs to use the most efficient mix of:
  - i. network or non-network options?
  - ii. capital and operating expenditure?
  - iii. a range of technologies?
  - iv. assets that are positioned behind or in front of the meter?
  - v. providing the services "in-house" or procuring the services from other parties?
  - vi. procuring the services from third parties or related entities?

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<sup>67</sup> See: <http://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/demand-management-incentive-scheme-and-innovation-allowance-mechanism>.

<sup>68</sup> AER, Expenditure forecast assessment guideline - distribution, November 2013, p. 13.

## 5.3 Planning framework

Two key components of the Chapter 5 planning arrangements in the NER are the requirements for DNSPs to undertake:

- a regulatory investment test (RIT-D) for projects to extend the network where the possible expenditure exceeds a specified threshold; and
- an annual planning review and publish an annual planning report setting out the outcomes of the annual planning review (annual planning requirements).

These requirements and relevant issues to the rule change requests are set out below.

### 5.3.1 Regulatory investment test - distribution

The NER contain specific requirements for DNSPs to undertake a RIT-D for major distribution projects. This is additional to the AER's assessment of efficient capital expenditure for the regulatory control period. Currently this is for projects where expenditure exceeds \$5 million.<sup>69</sup> This process is designed to test whether the DNSPs' proposed investment is the most efficient solution (e.g. whether it is the most efficient way to meet the applicable reliability standards) and give providers of non-network solutions an opportunity to propose alternative approaches.

Under current arrangements DNSPs are not required to undertake a RIT-D for (amongst other reasons):

- unforeseen and urgent network investments to address network issues that would have an effect on reliability; and
- the maintenance, refurbishment and replacement of assets.

Interested parties may dispute the conclusions of a RIT-D.<sup>70</sup> However, the DNSP is not required to implement the most efficient solution identified in the RIT-D. Additionally, a breach of the process by a DNSP is not subject to civil penalty provisions.

The AER's Replacement expenditure planning arrangements rule change request seeks to extend the application of the RIT-D (and RIT-T) to replacement projects. The AEMC published a consultation paper on this rule change request on 27 October 2016.

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<sup>69</sup> An equivalent test exists for TNSPs – the RIT-T – but the current threshold is \$6 million.

<sup>70</sup> NER clause 5.17.5.

## **Box 5.8 AEC rule change request<sup>71</sup>**

### **Problems with the RIT-D**

The AEC sets out its consideration of problems with the RIT-D as pertaining to:

- an inability of demand response and network support services to monetise the value they produce with regard to both network peak and energy peak [demand]; and
- the \$5 million threshold of the RIT-D limits the number of opportunities for providers of demand response and network support services to identify where they can provide such value.

### **Truncated RIT-D**

The AEC proposes that a truncated RIT-D that applies at a much lower threshold would be appropriate. Under such an approach the AEC proposes that:

- the threshold for conducting a RIT-D would be reduced from \$5 million to \$50,000; and
- the truncated RIT-D would consist of the DNSP listing the asset, its location and its annualised cost on a website in reasonable advance of it having to be replaced or augmented.

### **Stricter enforcement**

The AEC proposes that, to support the truncated RIT-D approach, a number of new enforcement provisions would be necessary. These include changes to the NER:

- requiring that expenditure on network support and demand response may only be added to DNSPs' capital and operating expenditure allowances after those proposed expenditures have been subject to the truncated RIT-D;
- to allow the AER to remove capital expenditure from the regulatory asset base which has not been subject to the RIT-D; and
- capping the level of capital expenditure that is added to the regulatory asset base at the value revealed through the RIT-D.

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<sup>71</sup> AEC, Contestability of energy services - demand response and network support, October 2016, pp. 8-9.

### 5.3.2 Annual planning requirements

DNSPs must also annually review and report on the expected future operation of their networks over a forward planning period of at least five years. The review must involve:<sup>72</sup>

- preparing maximum demand forecasts on different parts of the network;
- identifying limitations on the DNSP's network including those caused by the requirement for asset refurbishment or replacement;
- whether any corrective action is required to address these identified limitations; and
- take into account any jurisdictional electricity legislation.

DNSPs must set out the results of the annual planning review in a distribution annual planning report (DAPR).<sup>73</sup> The DAPR is required to include information on:

- forecast loads on different parts of the network;
- forecast connection points, sub-transmission lines and zone substations;
- factors that may have an impact on its network including ageing and potentially unreliable assets;
- system limitations for sub transmission lines, zone substations and certain primary distribution feeders including options that may address these limitations;
- all committed investments (and alternative options that were considered) with an estimated capital cost of \$2 million or more to be carried out within the forward planning period to address a refurbishment or replacement need, or an urgent and unforeseen network issue;
- the DNSP's asset management approach; and
- other matters.<sup>74</sup>

The final rule for the local generation network credits rule change requires DNSPs to publish information that is complementary to the DAPR a using a template prepared by the AER.<sup>75</sup> This will include information on:

- the name or identifier and location of network assets where a system limitation or projected system limitation has been identified during the forward planning period;

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<sup>72</sup> NER clause 5.13.1(d).

<sup>73</sup> NER clauses 5.13.2(a) and (b).

<sup>74</sup> NER, Schedule 5.8.

<sup>75</sup> NER, Schedule 5.8.

- the estimated timing of the system limitation or projected system limitation;
- the proposed solution to remedy the system limitation;
- the estimated capital or operating costs of the proposed solution; and
- the amount by which peak demand at the location of the system limitation or projected system limitation would need to be reduced in order to defer the proposed solution, and the dollar value to the DNSP of each year of deferral.

**Box 5.9 AEC rule change request<sup>76</sup>**

**Problems with annual planning requirements**

The AEC states that the current annual planning requirements are not adequate for a third party to make decisions about investing in generation, transmission or distribution capacity.

**Proposed solutions**

To provide clarity and predictability in the market for new investment, the AEC proposes that DNSPs be subject to additional “standard access obligations” in relation to solutions at or near supply points. The AEC proposes that these include providing:

- all necessary information (network performance data, load data) to competitors that will enable decisions to invest in generation or storage as an alternative to distribution capacity; and
- technically equivalent access to the network to the competitors of any regulated or related business.

**Question 8**

- a) Is there a problem with the current planning framework in relation to network support and demand management? If so:
- i. What is the problem (e.g. the detail or timeliness of relevant information; DNSPs being both the decision-maker of investment decisions and the asset owner)?
  - ii. How material is it?
  - iii. Provide examples?

<sup>76</sup> AEC, Contestability of energy services - demand response and network support, October 2016, pp. 9-10.

## 5.4 Alternative control services

The NER give the AER broad discretion over the approach it takes to the economic regulation of alternative control services. Importantly, the AER:

- may set a different control mechanism to that for standard control services;<sup>77</sup> and
- is not required to use the building block methodology as the basis of the control mechanism.<sup>78</sup>

Box 5.1 provides an example of how the AER has used this discretion in regulating alternative control services.

### **Box 5.11 Regulation of Ausgrid's alternative control services in the 2014-19 distribution determination<sup>79</sup>**

The AER classified ancillary network services, metering and public lighting services as alternative control services in the 2014-19 distribution determination. The AER noted that these are services for which a specific customer can be identified and, therefore, the full cost of the service is attributed to that particular customer. This is in contrast to standard control services, where costs are spread across the all network customers.

The AER applied caps on the prices of individual services to all alternative control services for Ausgrid in the period. It considered that capping individual service prices promotes cost-reflective pricing, which was likely to facilitate contestability for the services. This contrasts with the revenue cap applied to standard control services.

Under this approach, the AER estimates the cost of providing each alternative control service and sets the price cap at that cost. The AER noted that, if competition develops within the period on some or all services, DNSPs will be able to compete by charging below the cap. However, unlike under a revenue or weighted average price cap approach, DNSPs will not be compensated for such reductions by being able to increase the price on non-competitive services.

The AER did not use the building block methodology as set out in Part C of Chapter 6 of the NER for any of the services. Instead, for:

- ancillary network services the AER undertook a bottom up cost assessment; and
- metering and public lighting AER used a limited building block analysis.

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<sup>77</sup> NER clause 6.2.5.

<sup>78</sup> NER clause 6.2.6(c).

<sup>79</sup> AER, Draft decision, Ausgrid distribution determination 2015–16 to 2018–19, November 2014, pp. 16.11-14.

## 6 Separation of direct control services from other services

### Summary

- Cost allocation, shared assets and ring-fencing operate as an integrated package of requirements that separate DNSPs' provision of direct control services from other services which DNSPs provide. Distribution service classification underpins all of these requirements.
- This package of requirements has substantially changed recently. The AER published its final distribution ring-fencing guideline on 30 November 2016.
- These arrangements are not the core focus of the AEC and COAG Energy Council rule change requests. However, the AEC does consider there are problems with the cost allocation provisions in the NER and the incentives provided through the shared asset mechanism.

This chapter sets out the regulatory arrangements for the separation of direct control services from other services provided by DNSPs. It focuses on the arrangements relevant to the issues raised by COAG Energy Council and the AEC. This chapter also asks stakeholders to comment on the arrangements, in order to help the Commission identify whether there are any issues, and what their materiality is. The Commission will then analyse solutions to address any issues, including those proposed by the COAG Energy Council and the AEC.

### 6.1 Overview

The arrangements for the separation of DNSPs' supply of direct control services from its supply of other services operate as an integrated package. In particular:

- Service classification is the basis for the application of ring-fencing, cost allocation and asset sharing arrangements.
- The AER's cost allocation guideline and a DNSP's cost allocation methodology (CAM) form the basis for the allocation and attribution of its costs between its distribution services. The obligations in the AER's ring-fencing guideline complement the obligations in the cost allocation guideline by requiring DNSPs to also allocate costs between distribution services and other services which DNSPs provide.
- The shared asset guideline adjusts the level of revenue a DNSP can recover from its standard control services. It modifies a DNSP's cost allocation where its cost allocation methodology no longer accurately reflects how its assets are used.
- The AER's ring-fencing guideline:

- Addresses the risk of a DNSP cross-subsidising other services with revenue earned from distribution services. The guideline does this by, amongst other requirements, requiring legal separation between a DNSP and an affiliated entity seeking to provide non-distribution services.
- Addresses the risk of a DNSP using its provision of direct control services to favour its provision of negotiated services or unclassified distribution services, or an affiliated entity's service provision over potential competitors' services. The guideline does this by imposing "behavioural" obligations on DNSPs, including restrictions on sharing and co-locating staff and information, and on co-branding.

This package of regulations has changed recently. The AER published its final ring-fencing guideline on 30 November 2016 which will come into effect during 2017 in accordance with the guideline's transitional arrangements.<sup>80</sup> Furthermore, the shared asset provisions were introduced into the NER under the final rule for the 2012 *Economic regulation of network service providers* rule change and have only been applied to one round of regulatory determinations.

## 6.2 Cost allocation

In the regulatory framework, cost allocation refers to the attribution of direct costs and the allocation of shared costs by DNSPs between different categories of distribution services. Typical costs that are allocated include those associated with the DNSP's workforce and corporate assets, as well as its physical network infrastructure.

In addition, under the AER's final distribution ring-fencing guideline, DNSPs are required to allocate costs between distribution services and non-distribution services.

### 6.2.1 Why is cost allocation important?

Under the NER, cost allocation is important to many elements of the regulation of DNSPs. For example:

- in order for allowed revenue to reflect the efficient costs of investing in and operating the network, costs must be properly allocated to standard control services;<sup>81</sup>
- any shared asset cost reduction under the shared asset guideline should be compatible with the cost allocation principles and CAM (the shared asset provisions are explained in detail in section 6.4);<sup>82</sup> and

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<sup>80</sup> Previously the DNSPs were subject to jurisdictional ring-fencing guidelines which focused on the separation of retail and wholesale markets from network service provision.

<sup>81</sup> NER clauses 6.5.6(b)(2) and 6.5.7(b)(2).

<sup>82</sup> NER clause 6.4.4(c)(5).

- the negotiated distribution services principles specify that the price for a negotiated distribution service should be based on the costs incurred in providing that service, determined in accordance with the principles and policies set out in the CAM for the relevant DNSP.<sup>83</sup>

### 6.2.2 How does cost allocation occur?

Cost allocation for DNSPs in the NEM occurs through a three step process:

1. the AER develops the cost allocation guideline;
2. the DNSP submits, and the AER approves a proposed CAM and any amendments to the CAM; and
3. the DNSP and the AER apply the CAM.

#### AER Cost allocation guideline

The role of the cost allocation guideline is to set out the basis for:

- a DNSP preparing and submitting its proposed CAM to the AER for approval;
- the AER approving or rejecting a DNSP's proposed CAM;
- the AER reviewing a DNSP's proposed amendments to an approved CAM from time to time; and
- DNSP applying its CAM.

The NER require the cost allocation guidelines published by the AER to give effect to and be consistent with the cost allocation principles. The principles include:<sup>84</sup>

- The detailed principles and policies used by a DNSP to allocate costs between different categories of distribution services must be described in sufficient detail to enable the AER to replicate the reported outcomes by applying those principles and policies.
- Cost allocations must be determined according to the substance of a transaction or event, rather than its legal form.
- The only costs that can be allocated to a particular category of distribution services are:
  - costs directly attributable to the provision of those services; and
  - costs not directly attributable but that are incurred in providing those services.

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<sup>83</sup> NER clause 6.7.1(1).

<sup>84</sup> NER clause 6.15.2.

The allocation of costs not directly attributable but that are incurred in providing those services should be based on an appropriate allocator and clearly described.<sup>85</sup>

- Costs must not be allocated more than once.
- A DNSP's costs that have been allocated to a particular service cannot be reallocated to another service during the course of a regulatory control period.

Under the NER the cost allocation guideline may specify:

- the format of a DNSP's CAM;
- the information to be included in the CAM
- the separate categories of distribution services to be addressed in the CAM; and
- the acceptable allocation methodologies and supporting information to be included in the CAM.<sup>86</sup>

The AER published cost allocation guidelines for distribution in June 2008.<sup>87</sup>

### **DNSP cost allocation methodologies**

DNSPs are required under the NER to propose their own CAM, which must be consistent with the cost allocation guideline. All DNSPs in the NEM have submitted and had a CAM approved by the AER.

### **Application of the cost allocation methodology**

A DNSP must comply with the CAM once it has been approved by the AER. Some of the key instances in which a DNSP must apply its CAM include in preparing:<sup>88</sup>

- forecast operating and capital expenditure in regulatory proposals;
- a certified annual statement in accordance with a future regulatory information instrument; and
- actual or estimated capital expenditure for the purposes of updating the value of its regulatory asset base.

To demonstrate the application of the CAM the AER may request that DNSPs submit a supporting working paper whenever they provide financial information that has been prepared by applying the CAM. If requested to do so the working paper must.<sup>89</sup>

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<sup>85</sup> NER, clause 6.15.2(3)(ii).

<sup>86</sup> NER, clause 6.15.3.

<sup>87</sup> AER, Electricity DNSPs cost allocation guideline, June 2008.

<sup>88</sup> AER, Proposed electricity DNSPs cost allocation guidelines, April 2008, Section 5.1.

<sup>89</sup> AER, Proposed electricity DNSPs cost allocation guidelines, April 2008, Section 5.2.

- demonstrate how the DNSP has applied the detailed principles and policies in its approved CAM;
- provide details of the numeric quantity or percentage of the allocator, or allocators, applied to each cost item; and
- provide an explanation of how the numeric quantity or percentage of each allocator has been calculated for each cost item, including where the data for determining the numeric quantity or percentage have been sourced.

The AER can also undertake an audit of financial information that has been prepared by applying a DNSP's approved CAM.<sup>90</sup>

**Box 6.2 AEC rule change request<sup>91</sup>**

The AEC considers that:

- the cost allocation principles outlined in the NER offer little guidance beyond high level generic principles; and
- cost allocation relating to assets that can provide network support and demand response might be deemed efficient under the current principles when, in fact, they are not.

The AEC, therefore, considers that changes are necessary to the cost allocation provisions in the NER. The AEC does not propose specific changes to the NER, but notes that they should include new principles, developed in consultation, for the allocation of costs for assets that can provide both direct control services and network support or demand response.

**Question 9**

- a) Does the combination of the cost allocation principles in the NER, the AER's cost allocation guideline and the DNSPs' CAM provide for efficient cost allocation in relation to assets that can provide both direct control services and network support or demand response?

**6.3 Ring-fencing**

Neither the AEC nor COAG Energy Council have raised issues with or proposed changes to the NER regarding ring-fencing. This section, therefore, provides a

<sup>90</sup> AER, Proposed electricity DNSPs cost allocation guidelines, April 2008, Section 5.3.

<sup>91</sup> AEC, Contestability of energy services - demand response and network support, October 2016, pp. 4-6.

summary of the ring-fencing arrangements that were introduced with the AER's guideline to provide background and facilitate discussion in other areas of the paper.

### **6.3.1 What is ring-fencing and what is it designed to achieve?**

The distribution ring-fencing guidelines provide for the accounting and functional separation of the provision of direct control services by DNSPs from the provision of other services by DNSPs.<sup>92</sup>

In its distribution ring-fencing guideline explanatory statement, the AER sets out that the objective of ring-fencing is to provide a level playing field for competition in the provision of electricity services. This includes providing an even playing field for third party providers in new and existing markets such as metering and energy storage services. Without effective ring-fencing, DNSPs would hold significant advantages in such markets.<sup>93</sup>

### **6.3.2 Context**

Since 2008, as a transitional measure, the AER has administered distribution ring-fencing arrangements that were established by jurisdictional regulators for each state and territory. This ring-fencing was largely focused on separating direct control network services from contestable electricity retail and generation services. These jurisdictional guidelines did not adequately account for new and emerging technologies like solar PV and energy storage. Nor did they account for market reforms around metering and other new services, which can be provided in contestable markets.

### **6.3.3 The AER's ring-fencing guideline**

The NER require that the AER develop distribution ring-fencing guidelines which may include, but are not limited to:<sup>94</sup>

- legal separation of the entity through which a DNSP provides network services from any other entity through which it conducts business;
- the establishment and maintenance of consolidated and separate accounts for standard control services, alternative control services and other services provided by the DNSP;
- allocation of costs between standard control services, alternative control services and other services provided by the DNSP;

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92 Clause 6.17.2 of the NER.

93 AER, Electricity distribution ring-fencing guideline - explanatory statement, November 2016, p. 2.

94 The Commission introduced the requirement for the AER to develop distribution ring-fencing guidelines by 1 December 2016 in the final rule of the Expanding competition in metering and related services rule change under Clause 6.17.2(b) of the NER.

- limitations on the flow of information between the DNSP and any other person; and
- limitations on the flow of information where there is the potential for a competitive disadvantage between those parts of the DNSP's business which provide direct control services and parts of the provider's business which provide any other services.

The AER published its final distribution ring-fencing guideline on 30 November 2016. The AER sets out that in order to meet its objective, two key harms need to be addressed:<sup>95</sup>

- First, the guideline addresses the risk of a DNSP cross-subsidising other services with revenue earned from distribution services. It does this through legal separation of the DNSP, which may only provide distribution services, from affiliated entities that may provide other services.<sup>96</sup> The legal separation obligation is supported by other obligations for the DNSP to maintain separate accounts, follow defined CAMs, and be able to report on transactions between itself and its affiliates.
- Second, the guideline addresses the risk of a DNSP favouring its own negotiated services or unclassified distribution services, or an affiliated entity's services, in contestable markets. The guideline does this by imposing "behavioural" obligations on DNSPs, including restrictions on sharing and co-locating staff, and information, and on co-branding of advertising materials.

The obligations in the AER's ring-fencing guideline are summarised in table 6.1.

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<sup>95</sup> AER, Electricity distribution ring-fencing guideline explanatory statement, November 2016, p. 1.

<sup>96</sup> This obligation does not apply to the provision of transmission services where DNSPs provide such services.

**Table 6.1 AER ring-fencing guideline - summary of obligations<sup>97</sup>**

Harm affecting customers and markets	Ring-fencing obligation	
Cross subsidies	Legal separation of DNSP from other entities	A DNSP cannot provide services that are not distribution services or transmission services.
	Account separation / Cost allocation	<p>Accounts – DNSP must establish and maintain accounting procedures that enable it to demonstrate the nature and extent of transactions between the DNSP and its affiliates.</p> <p>Costs – DNSP must not allocate / attribute to distribution services costs that relate to other services.</p>
Non-discrimination	Not discriminate	A general obligation on the DNSP that it will not discriminate (either directly or indirectly) in favour of a related electricity service provider or its customers.
	No cross-promotion	A DNSP will not advertise or promote the services provided by its related electricity service providers.
	Functional separation	<p>Physical separation – DNSP must operate independent and separate offices to its related electricity service providers.</p> <p>Staff sharing – DNSP must ensure that staff directly involved in the provision or marketing of a direct control service or a regulated transmission service are not also involved in the provision or marketing of contestable services.</p>
	Information access and disclosure	<p>Protection – DNSP must protect confidential information provided by a customer or prospective customer for direct control services and ensure its use is only for the purpose for which that information was provided.</p> <p>Sharing – Where a DNSP acquires information in providing direct control services and shares this information with an affiliated entity, it must provide equal access to others. A DNSP must establish an information sharing protocol and a register of information requests.</p> <p>Disclosure – DNSP must not disclose confidential information acquired in providing direct control services to any party without the informed approval of the relevant customer or prospective customer to whom the information relates (unless exempt).</p>

<sup>97</sup> *ibid.*, p. 5.

## 6.4 Shared assets

DNSPs may use assets to provide both direct control services and other services. An example is a power pole that also supports a fibre optic cable, which provides communications services. The AER economically regulates the network service provision as a direct control service but not communications services. So the power pole is a shared asset.

DNSPs recover the cost of direct control services from consumers of direct control services. By also charging for other services provided through shared assets, DNSPs may recover the costs of shared assets more than once. If both services being provided by the asset are known at the time of cost allocation, this is not a problem because only the relevant proportion of cost would be allocated to direct control services and recovered from electricity consumers. However, for assets whose costs were initially allocated to direct control services but come to be used for other services as well, consumers are effectively paying twice and the NER provide a specific mechanism to deal with this situation.

### 6.4.1 How are shared assets regulated?

The arrangements for shared assets were introduced as part of the AEMC's 2012 *Economic regulation of network service providers* final rule. In the final rule, the Commission introduced a requirement for the AER to develop a shared asset guideline. The shared asset guideline must set out the approach the AER proposes to take in applying the shared asset principles when determining to reduce a DNSP's annual revenue requirement under the shared asset provisions in the NER.

The shared asset principles are:<sup>98</sup>

- a network business should be encouraged to use assets that provide standard control services for the provision of other kinds of services to the extent that provision is efficient and does not materially prejudice the provision of those services;
- shared asset cost reduction should not depend on the network business deriving a positive commercial outcome from the use of the asset other than for standard control services;
- shared asset cost reduction should be applied when the use the asset other than for standard control services is material;
- regard should be had to the manner in which costs were recovered or revenues reduced in respect of the relevant asset in the past, and to the reasons for adopting that manner of recovery or reduction;

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<sup>98</sup> Clause 6.4.4(c) of the NER.

- shared asset cost reduction should be compatible with the cost allocation principles, the CAM, and other incentives provided under the NER.

The purpose of the guideline is to establish what reduction in the annual revenue requirement would be appropriate as a result of shared assets being used to provide services other than direct control services. The guideline contains a specific methodology for the AER will apply in such circumstances. Specifically, the AER is to reduce a DNSP's revenue by 10 per cent of the value of its expected unregulated revenue earned from shared assets in that year.<sup>99</sup> This reduction is subject to a materiality threshold of unregulated revenue earned with the shared assets exceeding one per cent of its expected annual revenue from standard control services in that year.<sup>100</sup>

Table 6.2 provides a practical example of how the revenue reduction is calculated under the shared asset mechanism. The example is South Australian Power Network's proposed shared asset cost reductions in its 2015-20 revised regulatory proposal.<sup>101</sup> It involves four steps:

1. set out the annual revenue requirement for each year of the regulatory proposal;
2. forecast the revenue to be earned from shared assets providing services which are not direct control services;
3. establish whether the revenue is above the one per cent materiality threshold; and
4. for each year, if yes, calculate the shared asset cost reduction. This is then subtracted from the DNSP's annual revenue requirement.

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<sup>99</sup> AER, Shared Asset Guideline, November 2013, section 3.1.

<sup>100</sup> AER, Shared Asset Guideline, November 2013, section 2.3.

<sup>101</sup> South Australian Power Networks, Regulatory proposal 2015-20, November 2013, p. 296.

**Table 6.2 South Australian Power Network's calculation of shared asset cost reduction 2015-20<sup>102</sup>**

	Calculation	2015/16	2016/17	2017/18	2018/19	2019/20
Step 1	Annual revenue requirement (\$m)	901.8	924.8	948.4	972.6	997.4
Step 2	Average shared asset unregulated revenue (\$m)	9.6	9.6	9.6	9.6	9.6
Step 3	Average shared asset unregulated revenue as a proportion of the annual revenue requirement (%)	1.07	1.04	1.02	0.99	0.97
	Meets the materiality threshold (Y/N)	Y	Y	Y	N	N
Step 4	Shared asset cost reduction	0.963	0.963	0.963	-	-

The AER also notes that the shared asset mechanism complements a DNSP's approved CAM. That is, DNSPs allocate costs when assets are first established, based on the assets' expected future use, in accordance with their CAM. Where asset use changes, the initial cost allocation may no longer be accurate. The shared asset mechanism relates to assets whose costs were initially allocated to standard control services but come to be used to provide services that are not direct control services as well. This change from expected use means the assets are earning both economically regulated and non-economically regulated revenues and have, therefore, become shared assets.<sup>103</sup>

**Box 6.4 AEC rule change request<sup>104</sup>**

The AEC considers that the shared asset guideline skews the up-front incentive for DNSPs to invest in assets that can provide both direct control services and other services.

The AEC does not propose any changes to the shared asset provisions within the NER to address this issue. However, the AEC considers this a further justification for its proposed changes that would require DNSPs to only procure network support, demand response or inputs from assets located 'behind the meter' from the competitive market.

<sup>102</sup> South Australian Power Networks, Regulatory proposal 2015-20, November 2013, p. 296.

<sup>103</sup> AER, Shared Asset Guideline, November 2013, section 1.3.

<sup>104</sup> AEC, Contestability of energy services demand response and network support, October 2016, p. 6.

**Question 10**

- a) Does the shared asset guideline provide efficient incentives for DNSPs to invest in assets that can provide both direct control services and other services? If not:
  - i. What is the source of the issue?
  - ii. What is the extent of the issue?
  - iii. Provide examples?

## 7 Approach to assessing the rule change requests

This chapter sets out the rule making test that the Commission will apply in considering the two rule change requests. It also sets out the Commission's analytical approach to considering the issues and solutions proposed in the rule change requests.

### 7.1 Rule making test

The Commission's assessment of the rule change requests must consider whether the proposed changes to the NER promote the NEO.

#### 7.1.1 National Electricity Objective assessment

Under the NEL the Commission may only make a rule if it is satisfied that the rule will, or is likely to, contribute to the achievement of the NEO.<sup>105</sup> This is the decision making framework that the Commission must apply.

The NEO is:<sup>106</sup>

“To promote efficient investment in, and efficient operation and use of, electricity services for the longer term interests of consumers of electricity with respect to -

- (a) price, quality, safety, reliability and security of supply of electricity;  
and
- (b) the reliability, safety and security of the national electricity system.”

The rule change requests present a large range of issues and solutions. The Commission has not yet developed a specific assessment framework to determine whether the proposed changes are likely to promote the NEO. The Commission will first seek to better understand the nature and scope of the issues raised and their materiality before finalising an assessment framework. That said, initial analysis of the rule change requests indicates that the key areas of focus are likely to be regulatory arrangements that promote productive and dynamic efficiency in both economically regulated service markets and service markets which are not economically regulated.

Under the Northern Territory (NT) legislation adopting the NEL<sup>107</sup>, the Commission must regard the reference in the NEO to the “national electricity system” as a reference to whichever of the following the Commission considers appropriate in the circumstances having regard to the nature, scope or operation of the proposed rule:

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<sup>105</sup> Section 88 of the NEL.

<sup>106</sup> Section 7 of the NEL.

<sup>107</sup> Section 32A of the National Electricity (Northern Territory) (National Uniform Legislation) Act 2015.

- the national electricity system;
- one or more, or all, of the local electricity systems;
- all the electricity systems referred to above.

### 7.1.2 Making a more preferable rule

Under s. 91A of the NEL, the Commission may make a rule that is different (including materially different) to a proposed rule (a more preferable rule) if it is satisfied that, having regard to the issue or issues raised in the rule change request, the more preferable rule will or is likely to, better contribute to the achievement of the NEO.

### 7.1.3 Making a differential rule

From 1 July 2016, the NER, as amended from time to time, apply in the NT, subject to derogations set out in Regulations made under the NT legislation adopting the NEL.<sup>108</sup> Under those Regulations, only certain parts of the NER have been adopted in the NT.<sup>109</sup> As elements of the rule change requests relate to parts of the NER that apply in the NT (notably, Chapter 6 of the NER), the Commission will assess the rule change requests against additional elements required by the NT legislation.<sup>110</sup>

Under the NT legislation adopting the NEL, the Commission may make a differential rule if, having regard to any relevant ministerial council of energy statement of policy principles, a differential rule will, or is likely to, better contribute to the achievement of the NEO than a uniform rule.<sup>111</sup> A differential rule is a rule that:

- (a) varies in its term as between:
  - (i) the national electricity system; and
  - (ii) one or more, or all, of the local electricity systems; or
- (b) does not have effect with respect to one or more of those systems,

but is not a jurisdictional derogation, participant derogation or rule that has effect with respect to an adoptive jurisdiction for the purpose of s. 91(8) of the NEL.

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<sup>108</sup> National Electricity (Northern Territory) (National Uniform Legislation) (Modifications) Regulations.

<sup>109</sup> or the version of the NER that applies in the Northern Territory, refer to: [http://www.aemc.gov.au/Energy-Rules/National-electricity-rules/National-Electricity-Rules-\(Northern-Territory\)](http://www.aemc.gov.au/Energy-Rules/National-electricity-rules/National-Electricity-Rules-(Northern-Territory)).

<sup>110</sup> National Electricity (Northern Territory) (National Uniform Legislation) Act 2015.

<sup>111</sup> The National Electricity Law as modified by the National Electricity (Northern Territory) (National Uniform Legislation) Act 2015.

## 7.2 Proposed approach

The Commission's approach is likely to include a number of steps:

1. **Develop a common understanding of the current regulatory arrangements with stakeholders.**

It is important that there is common understanding of how the existing arrangements operate before trying to identify and analyse issues with them. For example, as set out in Chapter 4, there is currently a diverse range of views regarding the operation of distribution service classification within the NER.

Substantial elements of this consultation paper are devoted to setting out the existing regulatory arrangements and their operation. This will also be the focus of the public forum on 25 January 2017, and of early engagement with stakeholders. Based on the outcome of these engagements and submissions to the consultation paper, the Commission will develop its approach to the next steps in the project.

2. **Identifying and specifying the issues and their causes.**

The rule change requests raise issues across a diverse range of aspects of the regulatory framework. For example, the AEC raises issues relating to:

- (a) distribution service classification;
- (b) service delivery discretion for DNSPs in providing economically regulated services; and
- (c) separation of direct control services from other services.

In this context it will be particularly important to identify each of the key issues raised in the requests.

The Commission may determine to consolidate the rule change requests or progress them separately at a later date. The Commission may also set out separate work streams to analyse and engage with stakeholders on individual issues raised in the requests. This approach is explained further in section 7.2.2.

3. **Assessing the materiality and impact of the issues.**

Determining the materiality of the problem may comprise both qualitative and quantitative assessments of the issues. The Commission may seek advice and analysis from economic, technical and legal consultants to inform its decision making.

4. **Identifying potential solutions proportionate to the materiality of the issues.**

The Commission's assessment will include consideration of all of the AEC and COAG Energy Council's proposed solutions, individually and together, as well

as a range of alternative potential solutions. The Commission will seek stakeholders' input on the range of alternative solutions. It may also consider how other regulatory frameworks deal with similar issues, for example, in overseas jurisdictions or in other regulated industries in Australia.

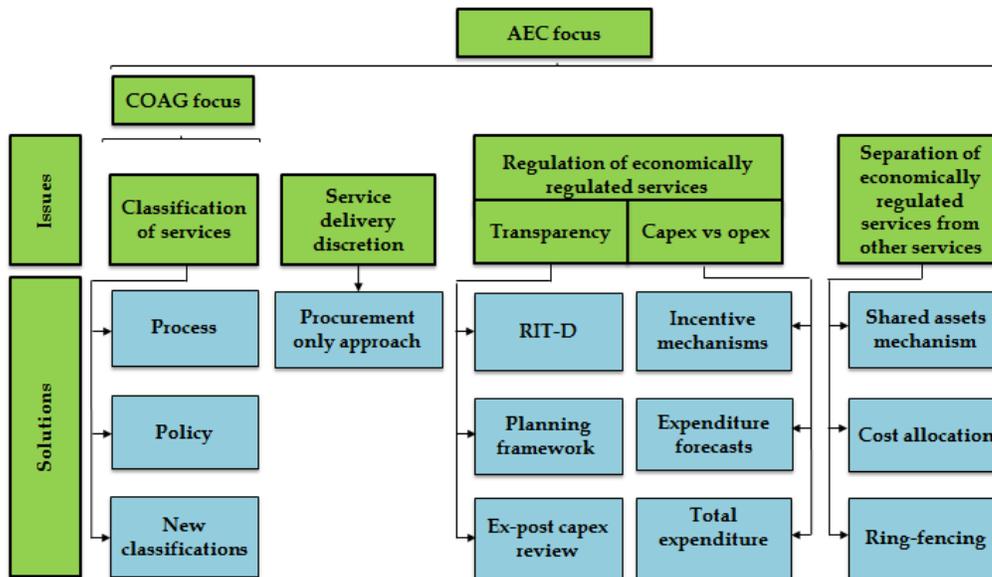
The Commission's preferred approach is that any solution should directly address any material issue identified with the regulatory framework. For example, if a problem is identified relating to DNSPs' bias between operating and capital expenditure under the existing arrangements, the Commission is likely to seek to address that bias.

5. **Determining whether any potential solutions would promote the NEO.**

Any potential solutions will need to promote the NEO. The Commission will assess the likely benefits and detriments of the range of solutions. If the Commission determines that changes are required to the NER, it will also consider whether any transitional arrangements are required in order to not unduly disrupt businesses' operations or the regulatory determination cycle.

Figure 7.1 provides an initial illustration of the way in which the issues raised in the rule change requests, and potential solutions, could be mapped. The Commission's thinking in this regard will evolve over the course of the project.

**Figure 7.1 Illustration of mapping of issues and potential solutions**



**7.2.1 Considering the relevance to transmission**

The AEC and COAG Energy Council rule change requests both focus on distribution services, but request the Commission to also consider the equivalent issues for transmission services.

Similar to the approach for distribution described above, it will be important to establish a common understanding of the current regulatory arrangements for transmission services before analysing the relevance and materiality of the issues to transmission. For example, in considering the relevance of the issues to transmission, the Commission is likely to need to take into account that:

- There are significant differences in the service classification frameworks for distribution and transmission services. Notably, in contrast to the AER undertaking distribution service classification, transmission service classification is predominantly set out within the NER.
- At a high level, TNSPs and DNSPs have similar levels of discretion over service delivery, and the economic regulatory frameworks are relatively similar under Chapters 6 and 6A of the NER. However, the lesser extent to which TNSPs use inputs from assets located 'behind the meter' may mean that the issues raised by the AEC are less material for transmission.
- The ring-fencing requirements on TNSPs are significantly different to those for DNSPs under the AER's recently published ring-fencing guidelines. Ring-fencing for TNSPs is currently governed by the ring-fencing guideline developed by the Australian Competition and Consumer Commission (ACCC) in 2002.<sup>112</sup>

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<sup>112</sup> ACCC, Transmission Ring-Fencing Guidelines, August 2002.

## **8 Lodging a submission**

The Commission has published notices under s. 95 of the NEL for these rule change proposals inviting submissions. Submissions are to be lodged online or by mail by 9 February 2017 in accordance with the following requirements.

Where practicable, submissions should be prepared in accordance with the Commission's Guidelines for making written submissions on rule change requests<sup>113</sup>. The Commission publishes all submissions on its website subject to a claim of confidentiality.

All enquiries on this project should be addressed to Ben Davis on (02) 8296 7851 or at [ben.davis@aemc.gov.au](mailto:ben.davis@aemc.gov.au).

### **8.1 Lodging a submission electronically**

Electronic submissions must be lodged online via the Commission's website, [www.aemc.gov.au](http://www.aemc.gov.au), using the "lodge a submission" function and selecting the relevant project reference code as follows:

- ERC0206 – Contestability of energy services.
- ERC0218 – Contestability of energy services - demand response and network support.

Separate submissions do not have to be made in respect of each of the rule change requests. Comments made in submissions that refer to both project codes and that do not indicate that the comments are made in respect of only one of the rule change requests, will be treated as comments that apply to both requests.

The submission must be on letterhead (if submitted on behalf of an organisation), signed and dated.

### **8.2 Lodging a submission by mail**

The submission must be on letterhead (if submitted on behalf of an organisation), signed and dated. The submission should be sent by mail to:

Australian Energy Market Commission  
PO Box A2449  
Sydney South NSW 1235

The envelope must be clearly marked with the project reference code as follows:

- ERC0206 – Contestability of energy services; and

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<sup>113</sup> This guideline is available on the Commission's website [www.aemc.gov.au](http://www.aemc.gov.au)

- ERC0218 – Contestability of energy services - demand response and network support.

Separate submissions do not have to be made in respect of each of the rule change requests. Comments made in submissions that refer to both project codes and that do not indicate that the comments are made in respect of only one of the rule change requests, will be treated as comments that apply to both requests.

## Abbreviations

AEC	Australian Energy Council
AEMC or Commission	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
CAM	cost allocation methodology
CESS	capital expenditure sharing scheme
COAG	Council of Australian Governments
DAPR	distribution annual planning report
DMIA	management incentive allowance
DMIS	demand management incentive scheme
DNSP	distribution network service provider
EBSS	efficiency benefit sharing scheme
NEL	national electricity law
NEM	national electricity market
NEO	national electricity objective
NER	National Electricity Rules
NSW	New South Wales
NT	Northern Territory
RIT-D	regulatory investment test for distribution
TNSP	transmission network service provider

## A AER treatment of related party transactions

In relation to both operating and capital expenditure the AER uses a two stage approach to assess related party contracts and margins. The first stage is an initial filter to determine if it is reasonable to presume a contract reflects prudent and efficient costs. In assessing whether a contract passes this 'presumption threshold', the AER considers two questions:

- did the DNSP have an incentive to agree to non-arm's length terms at the time the contract was negotiated (or at its most recent renegotiation)?
- if yes, was a competitive open tender process conducted in a competitive market?

If a DNSP has no incentive to agree to non-arm's length terms or obtains a contract through a competitive tender process, the AER considers it reasonable to presume that the contract price reasonably reflects prudent and efficient costs and is consistent with the NEL and NER. However, if there is cause to consider that there were deficiencies in the tender process or that the supplier market is not workably competitive, the AER moves away from the presumption and conduct further detailed examination, and benchmarking.

The second stage is when the incentive for non-arm's length terms exists and the contract was not competitively tendered. In these circumstances, it cannot be presumed that costs within such agreements are efficient. The AER therefore investigates the contractual arrangements in more detail. Key considerations likely include:

- Is the margin efficient? The forecast costs incurred via the outsourcing arrangement are efficient if the margin above the external provider's direct costs is efficient. The AER considers a margin is efficient if it is comparable to margins earned by similar providers in competitive markets.
- Are the DNSP's historical costs efficient? The AER benchmarks the DNSP's historical costs against those of other DNSPs to form a view on whether the DNSP's historical costs are efficient and prudent.

DNSPs already engaged in related party contracts must provide expenditures including and excluding margins. DNSPs need to demonstrate the efficiency of costs under such contracts.