Better Regulation

Shared Asset Guideline

November 2013

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1 Overview of the guideline

1.1 Introduction

Service providers may use assets to provide both electricity supply services we regulate and other services we do not regulate. These assets are called 'shared assets'.[1] An example is a power pole, paid for by electricity consumers, which also supports a fibre optic cable for communications services. We regulate electricity supply but not communications services. So the power pole is a shared asset.

Service providers recover the cost of shared assets from consumers of their regulated services. By also charging for unregulated services provided through shared assets, service providers may recover shared assets costs more than once.[2] Because of this, electricity consumers may be paying more than their fair share for shared assets. To address this problem, the Australian Energy Market Commission (AEMC) introduced new rules for shared assets. The National Electricity Rules (NER) now allow us, the Australian Energy Regulator (AER), to reduce the annual revenue requirement for service providers to reflect the costs attributable to services generating unregulated revenues.

The NER only set out a high level framework for us to determine cost reductions. The detailed mechanism for shared asset cost reductions has been the left to us. The NER requires us to publish a shared asset guideline setting out the approach we propose to take. We may vary our approach from this guideline only if we explain our reasons for doing so. Together, the NER shared asset provisions and this guideline establish the shared asset mechanism.

The NER defines shared assets as providing unregulated services and specific types of regulated services. For the electricity distribution sector, shared assets provide standard control services. For the transmission sector, shared assets provide prescribed transmission services. The majority of services provided by service providers are standard control or prescribed transmission, for the distribution and transmission sectors respectively. Because of this, almost all electricity consumers of networks we regulate stand to benefit from the shared asset mechanism.

Our approach to determining cost reductions, as described in this guideline, is constrained in a number of ways. Under the NER, we may make cost reductions:

- of an amount that we consider reasonable to reflect asset costs recovered through charging for unregulated services
- based on the use of the shared assets
- that are no greater than the depreciated regulatory value of the shared assets
- as part of our distribution and transmission regulatory determinations, usually every five years
- that are forward looking and therefore based on forecasts.

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1 The NER permit use of electricity supply assets to provide other services so long as electricity supply is not prejudiced.

2 Unregulated services may be either electricity supply services we determined not to regulate, or non-electricity supply related—unregulated by us by definition.

1.2 Key issues this guideline addresses

Within our proposed approach to making cost reductions, some issues are significant.

- Materiality

  The shared asset principles establish that use of shared assets should be material before cost reductions are applied, but the NER do not define materiality in this context. This guideline sets out our approach to what constitutes a material use of shared assets.

- Cost reduction method

  The NER indicate that our proposed approach to applying the shared asset principles may include a methodology to determine cost reductions. This guideline sets out a methodology.

- Cost reductions may be proposed by service providers

  The NER allow us to determine cost reductions. However, consistent with the propose-response model of the NER generally, we will allow service providers to propose cost reductions to us.[3]

- Information reporting

  The NER do not set out what information service providers should report to allow us to determine cost reductions. This guideline sets out information reporting requirements. We will seek this information through our regulatory information notices or other appropriate mechanisms.

1.3 Shared assets and cost allocation

Cost allocation is the process of apportioning costs incurred by a service provider to the different services it provides.[4] By allocating costs to services, the service provider recovers them from consumers who benefit from those services—cost reflective pricing. Service providers allocate costs usually only when the assets are first established.[5] Importantly, service providers allocate costs based on the assets' expected future use. Where asset use changes unexpectedly, the initial cost allocation may no longer be accurate.

The shared asset mechanism relates to assets whose costs were initially allocated to regulated services but come to be used to provide unregulated services as well. This change from expected use means the assets are earning both regulated and unregulated revenues. The assets have therefore become shared assets.

1.4 Structure of this guideline

Section 2 sets out our proposed approach to making shared asset cost reductions.

Section 3 sets out our proposed method for shared asset cost reductions.

Section 4 sets out information reporting requirements.

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3 Service providers submit to us their proposed regulatory arrangements for upcoming regulatory control periods, usually every five years. Our regulatory determinations respond to submitted regulatory proposals by accepting or not accepting numerous elements which comprise the full proposal.

4 Cost allocation must be done by service providers in accordance with a cost allocation method (CAM), or set of cost allocation rules, which we have approved.

5 Assets may be established by service providers constructing or purchasing them.

1.5 Summary of our proposed cost reduction approach

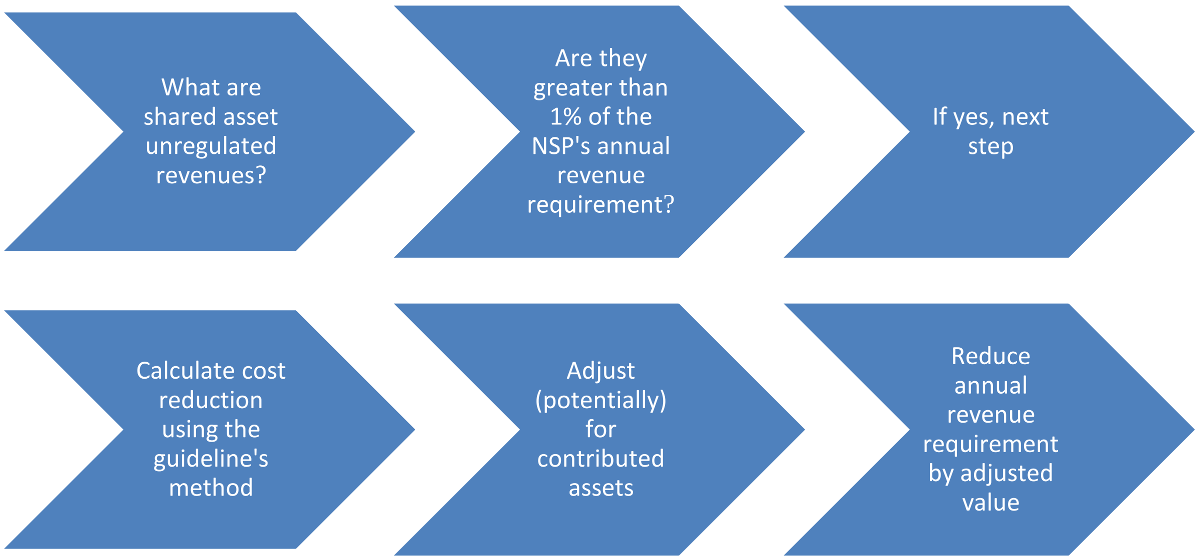
This guideline sets out that, for each service provider we regulate, we may:

- make cost reductions in advance for each year unregulated revenues earned from shared assets are expected to exceed 1 per cent of regulated revenues from standard control (or prescribed transmission) services
- determine cost reductions using the method set out in this guideline
- reduce standard control (or prescribed transmission) service revenues by an amount equal to the cost reductions we determine[6]
- encourage service providers to submit proposed cost reductions calculated in accordance with the method set out in the guideline
- consider proposed cost reductions calculated using alternative methods if the result leaves consumers no worse off than under the method set out in the guideline
- require minimum annual reporting and more comprehensive reporting with regulatory proposals.

In determining cost reductions, we take into account evidence of consumers benefitting from assets upgraded or replaced by third parties. We will accept as the upper limit on potential cost reductions a service provider's reasonable estimate of the regulated returns it earns from its shared assets.

Figure 1 illustrates the steps to making a cost reduction, as set out in this guideline.

Figure 1 Cost reduction process



If a service provider earns, from its shared assets, unregulated revenues equal to or less than one per cent of its annual revenue requirement, no further action is required.[7] In this scenario, there will be no cost reduction for this service provider for the relevant regulatory year.

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[6] Standard control (or prescribed transmission) revenues are referred to in aggregate as a service provider's annual revenue requirement (ARR).

By reducing a service provider's annual revenue requirement, tariffs paid by consumers for standard control (or prescribed transmission) services will be lower than otherwise. Because standard control (or prescribed transmission) services are consumed by most electricity consumers, lower tariffs for these services mean lower electricity prices for most consumers.

[7] A service provider's annual revenue requirement is the revenue it earns from standard control or prescribed transmission services in a given year. This generally equates to around 80 per cent of a service provider's total annual revenue.

2 Our approach

This section describes shared assets and sets out our proposed approach, or high level steps, to making cost reductions.

2.1 Cost reductions will be forward looking

Consistent with NER requirements, we will determine and make cost reductions for relevant regulatory periods within our distribution and transmission regulatory determinations, usually every five years. Necessarily, cost reductions will be determined on the basis of forecast revenues from services expected to be provided.

2.2 Cost allocation and shared assets

a. For the avoidance of doubt, the shared asset mechanism relates to assets:

  i. which are already established, so have had their costs allocated using a service provider's approved cost allocation method (CAM)

  ii. used to provide both unregulated services and either standard control or prescribed transmission services, but whose costs are allocated only to standard control or prescribed transmission services[8]

  iii. defined in regulatory terms, rather than physical terms.

b. The shared asset mechanism does not relate to assets:

  i. which are new, so have not yet had their costs allocated using a service provider's approved CAM

  ii. used to provide standard control or prescribed transmission services and unregulated services, consistent with their cost allocation.

c. The shared asset mechanism does not supersede or substitute the operation of a service provider's approved CAM. Rather, because a service provider allocates assets only once, the shared assets mechanism relates to assets for which the initial allocation is no longer accurate.

d. The shared asset mechanism specifically relates to assets for which the initial cost allocation under an approved CAM comes to understate its use to provide unregulated services.

2.3 Materiality

a. We may make a cost reduction for a specific regulatory year if the unregulated use of the shared asset is expected to be material in that regulatory year.

b. Unregulated use of shared assets is material when a service provider's annual unregulated revenues from shared assets are expected to be greater than 1 per cent of its total smoothed annual revenue requirement for that regulatory year.

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[8] Cost allocation in accordance with a service provider's approved CAM.

c. For clarity, unregulated revenues earned from use of assets which are not shared assets, as defined by the NER and above (section 2.2), are not relevant to this guideline.

d. Materiality is determined by averaging expected shared asset unregulated revenues across each regulatory year to which those revenues relate.

2.4 Service providers may propose cost reductions

a. Service providers may include in a regulatory proposal for a regulatory period proposed cost reductions for our approval. That is, where a regulatory period includes some regulatory years where the materiality threshold is not expected to be met, cost reductions are not required for those years.

b. We will substitute a proposed cost reduction with our own if we consider a proposed cost reduction included in a service provider's regulatory proposal is not reasonable.

c. We will determine a cost reduction where we consider a regulatory year is a relevant regulatory year but the service provider has not proposed a shared asset cost reduction for it.

d. Service providers should calculate their proposed cost reductions using the method set out in section 3 of this guideline. If a service provider uses an alternative method to calculate a cost reduction, it should demonstrate that consumers it supplies with electricity would be no worse off than if the section 3 method had been used.

2.5 Shared asset cost reductions apply to regulated revenues

a. Cost reductions apply to a service provider's annual revenue requirement,[9] not to regulatory asset base (RAB) values.

b. In approving or determining cost reductions, we will consider all relevant matters including:

    i. the shared asset principles and this guideline

    ii. the cost allocation principles

    iii. the service provider's approved CAM.

2.6 Apportioning unregulated revenues earned from shared assets

a. Unregulated services may be provided using both shared assets and other assets that are not used to provide standard control services. If the extent to which shared assets are used is minimal (relative to all the assets used by that service), the AER may accept revenue apportionment.

    Revenue apportionment means proportionately reducing the total unregulated revenue earned from a specific unregulated service to reflect the extent of shared asset use by that service.

b. We may approve revenue apportionment if there is minimal shared asset use to provide the service. We will generally not approve apportionment in other circumstances.

9 Annual revenues a service provider earns from its standard control or prescribed transmission services.

c. Apportionment is applicable only to individual unregulated services which use shared assets. Apportionment is not applicable in aggregate across multiple unregulated services, nor across multiple regulatory years.

d. Service providers proposing revenue apportionment should submit to us:

   i. their rationale for proposing apportionment

   ii. their proposed apportionment

   iii. their method used to determine that apportionment.

   The service provider should submit sufficient information for us to replicate the proposed apportionment using the service provider's method.

e. Apportioned revenue is relevant to both the assessment of materiality (section 2.3) and the cost reduction method (section 3).

f. If we consider a service provider's proposed apportionment and/or method is not reasonable, we may:

   i. not approve these and substitute them with our own method and/or apportionment, or

   ii. not approve the proposed apportionment and not substitute it with our own—in this instance, no apportionment would apply to the unregulated service in the specific regulatory year.

2.7 Making cost reductions

We will reduce a service provider's annual revenue requirement by the value of the cost reduction determined under section 3 of this guideline.

3 Shared asset cost reduction method

This section sets out our proposed method for determining shared asset cost reductions. Our proposed method incorporates a primary calculation and a secondary control step. The control step is to estimate the regulated returns to a service provider from its shared assets. Under the NER, cost reductions may not exceed this value.

In addition, consumers may benefit from asset upgrades, or contributed assets, funded by third party providers of unregulated services.[10] Service providers may provide to us evidence of consumer benefits from contributed assets. We may take such evidence into account by reducing the value of a cost reduction to reflect any consumer benefits.

3.1 Cost reduction method[11]

a. Service providers may propose cost reductions, and we propose to determine them, in accordance with the method set out in this section.

b. Consistent with clause 2.3.d of this guideline (materiality), unregulated revenue relevant to cost reductions is determined by averaging expected shared asset unregulated revenues across each regulatory year to which those revenues relate.

c. Consistent with section 2.6 of this guideline (apportioning unregulated revenues earned from shared assets), unregulated revenue relevant to cost reductions may include apportionment.

d. A cost reduction will reduce a service provider's standard control (or prescribed transmission) revenues by 10 per cent of the value of the service provider's expected total unregulated revenues from shared assets in that year.

e. The cost reduction is now complete, subject to the control step and, potentially, accounting for contributed assets.

3.2 Control

a. Service providers may report to us their estimate of the sum of return on and return of capital for their shared assets.

b. Service providers should provide the method used to calculate an estimate reported to us under section 4.

c. We will consider whether the service provider's estimate and method are reasonable. We may estimate the cap value ourselves if we consider a service provider's proposed estimate or method is not reasonable, or if no estimate or method is provided to us.

3.3 Applying the control

a. Subject to the cap calculated under section 3.2:

    i. where the cost reduction amount is greater than the cap value

    ii. the cost reduction amount may be reduced to equal the cap value.

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[10] For example, a telecommunications company may replace power poles it uses to support fibre optic cable.
[11] Appendix A sets out a worked example of these calculations.

3.4 Contributed assets

a. Service providers may provide evidence to us of electricity consumer benefits accruing from third parties by:

   i. asset replacements

   ii. asset enhancements or upgrades

   iii. other network improvements.

b. Such evidence may be grounds for reducing cost reduction values. We may take this evidence into account when approving or determining cost reductions.

4 Information reporting

This section sets out our information reporting requirements relevant to the shared asset mechanism.

4.1 Annual reporting

a. Through annual regulatory information notices (RINs) or other appropriate mechanisms we may require service providers to report for each regulatory year:

   i. a list of unregulated services provided with shared assets

   ii. total shared assets unregulated revenue.

4.2 Regulatory proposal reporting

a. Through RINs submitted with regulatory proposals or other appropriate mechanisms we may require service providers to report for an upcoming regulatory period a list of unregulated services using shared assets.

b. If an upcoming regulatory period is expected to be a relevant regulatory period, our regulatory proposal RINs may require:

   i. descriptions of each shared asset unregulated service to be provided during the relevant regulatory period

   ii. descriptions of the shared assets used to provide unregulated services.

c. We may also seek an overview of contracts under which the service provider earns shared asset unregulated revenues, including:

   i. revenues related to each contract

   ii. the contract period and renewal arrangements

   iii. a description of termination options and other contract provisions which may alter unregulated revenues accruing to the service provider.

Glossary

This guideline uses the following definitions:

Term	Definition
annual revenue requirement	an amount representing revenue for a distributor, for each regulatory year of a regulatory control period, calculated in accordance with Part C of Chapter 6 of the NER for a transmission network service provider, the equivalent is the maximum allowed revenue calculated for a regulatory year of a regulatory control period in accordance with rule 6A.3
consumer	For this guideline we use the term 'consumer'. This term is consistent with the National Electricity and National Gas Objectives. It is also reflected in the National Electricity Rules, which refer to 'electricity consumers'. We acknowledge 'consumer' and 'customer' have distinct meanings and it is valid to make the distinction in some cases. We also acknowledge these terms are used interchangeably.
cost reduction	shared asset cost reduction a reduction in the regulated annual revenue, see clauses 6.4.4 and 6A.5.5 of the NER
cost reduction method	as set out in this guideline
guideline	This shared asset guideline
material	for the purposes of the application of this guideline, 'material' is as set out in this guideline
NER	National Electricity Rules as defined in the National Electricity Law
RAB	regulatory asset base
relevant regulatory period	an upcoming regulatory control period comprising one or more relevant regulatory years
relevant regulatory year	a regulatory year of an upcoming regulatory control period in which total shared asset unregulated revenues are material
return of capital	depreciation calculated in accordance with the relevant distribution or transmission determination
return on capital	the return on capital calculated in accordance with the relevant distribution or transmission determination
RIN	regulatory information notice
service provider	distribution network service provider and/or transmission network service provider as defined by the NER
shared asset standard control revenues	return on and return of capital, as determined under chapter 6 of the NER
shared asset unregulated revenues	revenues paid to a distributor for unregulated services provided using the distributor's shared assets

Appendix A: Cost reduction method — worked example

Table A1 sets out a worked example of a cost reduction for a service provider. We have taken the annual revenue requirement value from our draft decision on Energy Australia's (now Ausgrid) 2009–10 regulatory year. The value for shared asset unregulated revenues is an example only. The discussion of unregulated revenue apportionment is also an example only.

Table A1 Cost reduction method – worked example ($million)

Inputs	
Annual revenue requirement (ARR)[12]	$1,284.8
Shared asset unregulated revenues (for example)	$30.0
Assess materiality	
Shared asset unregulated revenues are 1% of ARR?	Yes
Cost reduction method	
Calculate 10% of shared asset unregulated revenues	$3.0
	Subtract $3.0 from ARR
Reduced ARR	$1,281.8

Estimating the upper limit of a cost reduction

The total return on/of capital[13] of a service provider's shared assets forms a cap for cost reductions calculated under any method. Service providers should estimate this value and submit it to us with a proposed cost reduction. If a service provider does not submit an estimate of the cap value, or if we consider a submitted estimate is not reasonable, we may make our own estimate.

Unregulated revenue apportionment

Assume the service provider earns unregulated revenues from several unregulated services provided using shared assets. Further assume one such unregulated service makes only minimal use of shared assets. That is, that particular service is provided predominantly with assets that are not standard control assets. When submitting their proposed cost reduction to us, the service provider may propose a revenue apportionment in relation to this particular service.

The service provider should identify a method on which to base its revenue apportionment. Let's say it chooses the amount of time that shared assets are used to provide the service compared to the time

12 Example input value from our draft decision for EnergyAustralia (Ausgrid) for 2009–10 regulatory year.
13 Return on and of capital are defined in the glossary.

that unregulated assets are used. For example, the service provider may estimate that of total asset use to provide the unregulated service, shared assets are used 5 per cent of the time. That is, 95 per cent of the time the unregulated service is provided using unregulated assets.

Next, assume the service provider earns from our example service unregulated revenue of $10 million per annum. Using its proposed method, the service provider may apportion 5 per cent of the $10 million revenue stream to shared assets. Because 5 per cent of $10 million is equal to $500,000, the service provider may remove $9.5 million from its calculations in respect of the shared asset materiality threshold and cost reduction method.

In reporting or proposing a cost reduction to us, our example service provider should provide details of its method, its rationale for making a revenue apportionment and evidence in support of its method. We will assess whether these elements are reasonable. If we consider a proposed revenue apportionment is not reasonable, we may not accept it or substitute our own apportionment.

A method used to calculate a proposed revenue apportionment may be better suited to some services than others. For instance, our example method, time of asset use, is suited to vehicles used for maintenance, though there may be other suitable methods too.