Better Regulation

Draft Shared Asset Guidelines

July 2013

AUSTRALIAN ENERGY REGULATOR

Inquiries about this document should be addressed to:

Australian Energy Regulator
GPO Box 520
Melbourne Vic 3001
Tel: (03) 9290 1444
Fax: (03) 9290 1457
Email: AERInquiry@aer.gov.au

AER reference: 50341

Amendment record

Version	Date	Pages

Contents

1 Nature and authority

1.1 Introduction

These Shared Asset Guidelines (guidelines) set out how we propose to reduce regulated revenues earned by distribution and transmission network service providers (service providers) to reflect asset costs they recover by charging for unregulated services. These guidelines include our proposed method to determine shared asset cost reductions (cost reductions).

1.2 Authority

Clauses 6.4.4(d) and 6A.5.5(c) of the National Electricity Rules (NER) require us to make these guidelines in accordance with the distribution consultation procedures and the transmission consultation procedures. The guidelines must set out the approach we propose to take in applying the shared asset principles established by clauses 6.4.4(c) and 6A.5.5 of the NER. The guidelines may also include our proposed method to determine shared asset cost reductions for service providers.

1.2.1 Authority to reduce regulated revenues

The NER allow us to reduce regulated revenues in response to unregulated revenues earned with shared assets:[1]

> 'the AER may, in a distribution determination for a regulatory control period, reduce the annual revenue requirement for that [distributor] for a regulatory year in that regulatory control period by such amount as it considers reasonable to reflect such part of the costs of that asset as the [distributor] is recovering through charging for the provision of [an unregulated service].'

And:[2]

> 'In making a decision under paragraph (a), the AER must have regard to the shared asset principles and the Shared Asset Guidelines.'

1.2.2 The shared asset principles

As set out above, the NER require us to have regard to the shared asset principles when reducing regulated revenues earned by service providers.[3] The distribution shared asset principles are:[4]

(1) the distributor should be encouraged to use assets that provide standard control services for the provision of other kinds of services where that use is efficient and does not materially prejudice the provision of those services

(2) a shared asset cost reduction should not be dependent on the distributor deriving a positive commercial outcome from the use of the asset other than for standard control services

(3) a shared asset cost reduction should be applied where the use of the asset other than for standard control services is material

---

[1] For distribution, clause 6.4.4(a) of the NER. For transmission, clause 6A.5.5(a) of the NER.
[2] For distribution, clause 6.4.4(b) of the NER. For transmission, clause 6A.5.5(b) of the NER.
[3] For distribution, clause 6.4.4(c) of the NER. For transmission, clause 6A.5.5(c) of the NER.
[4] For transmission, the equivalent is clause 6A.5.5(c) of the NER. The shared asset principles are identical across the distribution and transmission chapters of the NER, other than substitution of 'TNSP' (transmission network service provider) for 'distributor' and substitution of 'transmission determination' for 'distribution determination'.

(4) regard should be had to the manner in which costs have been recovered or revenues reduced in respect of the relevant assets in the past and the reasons for adopting that manner of recovery or reduction

(5) a shared asset cost reduction should be compatible with the Cost Allocation Principles and Cost Allocation Method (CAM)

(6) any reduction effected under paragraph (a) should be compatible with other incentives provided under the NER. Because we must have regard to the principles when determining cost reductions, we intend these guidelines to also reflect them.

1.2.3 Application of one set of guidelines to both distribution and transmission

These guidelines apply to both distribution service providers and transmission service providers we regulate.[5] The distribution and transmission consultation procedures are identical in their effect, so that a process according with one also accords with the other.

1.3 Role of the guidelines

These guidelines set out our proposed approach to applying the shared asset principles. The shared asset principles apply where service providers use regulatory assets that provide distribution standard control services (or prescribed transmission services) to earn additional revenue from other unregulated services.

1.4 Definitions and interpretation

In these guidelines, key words and phrases have the meaning given to them in:

- the glossary, or
- if not defined in the glossary, the NER.

1.5 Process for revision

We may amend or replace these guidelines from time to time in accordance with the distribution consultation procedures.[6]

1.6 Version history and effective date

A version number and an effective date of issue will identify every version of these guidelines.

---

5 Electricity supply services are either transmission (higher voltage) or distribution (lower voltage) services. Transmission and distribution are different segments of the electricity market. Within these segments, services are further classified into groups and regulated in different ways depending on their classification. Shared asset clauses of the NER relate to distribution standard control services and prescribed transmission services, comprising most distribution and transmission services respectively.

6 NER, clause 6.2.8(e).

2 Overview of the draft shared asset guidelines

2.1 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'.[7] 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.[8] Because of this, electricity consumers may be paying more than their fair share for shared assets. To address this problem, the AEMC introduced new rules for shared assets. The NER now allow us to reduce the annual revenue requirement for service providers to reflect the costs attributable to services generating unregulated revenues.

The NER only sets out a high level framework for us to determine cost reductions. The detailed mechanism for the shared asset cost reduction has been the left to the AER. The NER requires us to publish shared asset guidelines setting out the approach we propose to take. We may vary our approach from these guidelines only if we explain our reasons for doing so. Together, the NERs' shared asset provisions and these guidelines 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 may benefit from the shared asset mechanism.

Our approach to determining cost reductions, as described in these guidelines, is constrained in a number of ways. Under the NER, cost reductions must:

- reasonably reflect asset costs recovered by charging for unregulated services
- only consider unregulated revenues earned from use of the shared assets, not other unregulated revenues
- be no greater than the depreciated regulatory value of the shared assets
- only be undertaken as part of our distribution and transmission regulatory determinations, usually every five years
- only be forward looking and therefore based on forecasts.

2.2 Key issues these guidelines address

These guidelines set out our proposed application of the shared asset principles. Within this approach, some key issues are significant.

---

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

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

- Materiality

  The cost allocation 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. These guidelines set out a definition, or threshold, for material use of shared assets.

- Cost reduction method

  The NER indicates that our proposed approach to applying the shared asset principles may include a methodology to determine cost reductions. These guidelines set out a methodology.

- Cost reductions may be proposed by regulated businesses

  The NER allows 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.[9]

- Information reporting

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

2.3 Shared assets and cost allocation

Cost allocation is the process of apportioning costs incurred by a service provider to the different services it provides.[10] 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.[11] 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.

2.4 Structure of these guidelines

Section 3 sets out the relationship between shared assets and cost allocation arrangements.

Section 4 sets out our proposed approach to making shared asset cost reductions.

Section 5 sets out our proposed method for shared asset cost reductions.

Section 6 sets out information reporting requirements.

---

9 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.

10 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.

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

2.5 Summary of our proposed cost reduction approach

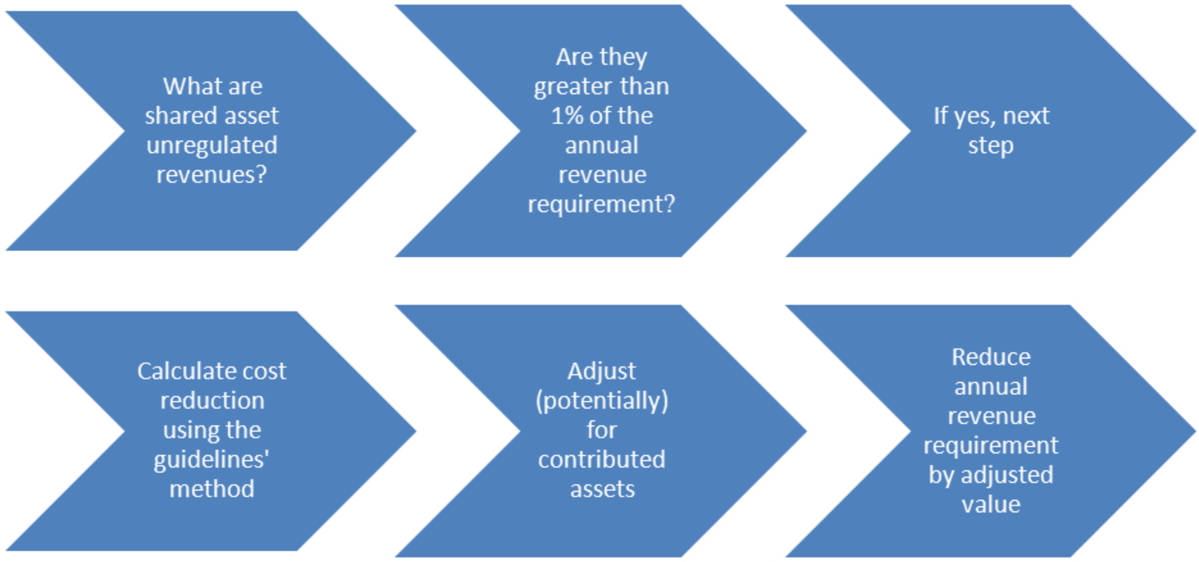
These draft guidelines set out that, for each service provider we regulate, we will:

- 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 the guidelines
- reduce standard control (or prescribed transmission) service revenues by an amount equal to the cost reductions we determine[12]
- encourage service providers to submit proposed cost reductions calculated in accordance with the method set out in the draft guidelines
- consider proposed cost reductions calculated using alternative methods only if the result leaves consumers no worse off than under the method set out in the guidelines
- require minimum annual reporting and more comprehensive reporting with regulatory proposals.

In determining cost reductions, we will 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 these draft guidelines.

Figure 1 Cost reduction process



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

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.[13] In this scenario, there will be no cost reduction for this service provider for the relevant regulatory year.

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.

[13] 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.

3 Our approach

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

3.1 Cost allocation and shared assets

This section describes shared assets for the purpose of these guidelines, consistent with the shared asset definition set out in the NER.

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

   i. which are established

   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 services14

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

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

   i. which are new

   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.

3.2 Materiality

a. We will make a cost reduction only if the unregulated use of the shared asset is material.

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

   i. For clarity, unregulated revenues earned from use of assets which are not shared assets as defined by the NER and above (section 3.1) are not relevant to these guidelines.

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

---

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

3.3 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.

   i. 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 4 of these guidelines. If a service provider uses an alternative method to calculate a cost reduction, it must demonstrate that consumers would be no worse off than if our method had been used.

3.4 Shared asset cost reductions apply to standard control, or prescribed transmission, revenues

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

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

   i. the shared asset principles and these guidelines

   ii. the cost allocation principles

   iii. the service provider's approved CAM.

4 Shared asset cost reduction method

This section sets out our proposed method for determining and making shared asset cost reductions. Our proposed method is a relatively straightforward set of calculations. It incorporates a primary set of calculations 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.[15] Service providers may provide to us evidence of consumer benefits from such contributed assets. We may take such evidence into account by reducing the value of a cost reduction to reflect such consumer benefits.

4.1 Cost reduction method[16]

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

b. For each regulatory year, a service provider should identify its:

   i. annual revenue requirement

   ii. regulatory depreciation (return of capital) for the RAB

   iii. return on capital for the RAB

   iv. shared asset unregulated revenues.

c. For the purposes of these guidelines, total asset revenues equal the sum of return on capital, return of capital and shared asset unregulated revenues.

d. Calculate shared asset unregulated revenues as a percentage of total asset revenues.

e. Divide the result of step 4.d. by 10. This step will provide the cost reduction proportion X%.

f. Calculate X% of the sum of return on and return of capital. This step will provide the cost reduction amount.

g. Subtract the result of step 4.f. from the annual revenue requirement.

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

4.2 Control[17]

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 must provide the method used to calculate an estimate reported to us under step 4.2.a.

---

15 For example, a telecommunications company may replace power poles it uses to support fibre optic cable.
16 Appendix B sets out a worked example of these calculations.
17 Appendix B sets out a worked example of these calculations.

c. We will accept the estimated value as the cap for cost reductions where we consider the estimate and method are reasonable. We will estimate the cap value ourselves if we consider a service provider's proposed estimate and method are not reasonable, or is not provided to us.

4.3 Applying the control

a. Subject to the cap calculated under section 4.2:

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

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

4.4 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 will take such evidence into account when approving or determining cost reductions.

5 Information reporting

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

5.1 Annual reporting

a. Through annual regulatory information notices (RINs) or other appropriate mechanisms we will 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.

5.2 Regulatory proposal reporting

a. Through regulatory proposal RINs or other appropriate mechanisms we will 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 will 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. 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 distributor.

Glossary

These guidelines use 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
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 section 6 of these guidelines
guidelines	Draft shared asset guidelines
material	for the purposes of the application of these guidelines, 'material' is as set out by section 4.2 of these guidelines
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
standard control services	electricity supply services classified by us as standard control services under Chapter 6 (distribution) of the NER

A Cost reduction method – worked example

Table A1 sets out a worked example of a cost reduction for a service provider. We have taken values for the annual revenue requirement, return of capital and return on capital 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.

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

Inputs	
Annual revenue requirement (ARR)[18]	$1,284.8
Regulatory depreciation (return of capital)[19]	$70.8
Return on capital[20]	$699.9
Total return on/of capital	$770.7
Shared asset unregulated revenues (for example)	$30.0
Total asset revenues (total return on/of capital) + (shared asset unregulated revenues)	$800.7
Assess materiality	
Shared asset unregulated revenues are 1% of ARR?	Yes
Cost reduction method	
Shared asset unregulated revenues as % of total shared asset revenues	3.746%
One tenth of % calculated in step above	0.375%
Calculate 0.375% of total return on/of capital	$2.89
Subtract the result of the step above from ARR	$1,281.91

Estimating the upper limit of a cost reduction

The total return on/of capital of a service provider's shared assets forms a cap for cost reductions calculated under any method. The method set out in these guidelines uses aggregated return on/of capital, so a separate estimation of the return on/of capital for the shared assets is required.

18 Example input value from our draft decision for EnergyAustralia (Ausgrid) for 2009–10 regulatory year.
19 Example input value from our draft decision for EnergyAustralia (Ausgrid) for 2009–10 regulatory year.
20 Example input value from our draft decision for EnergyAustralia (Ausgrid) for 2009–10 regulatory year.