Shared Asset Guidelines

Draft Guidelines for Consultation

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Version 2

AUSTRALIAN ENERGY REGULATOR

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1 Overview of the guidelines

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 Shared Asset Guideline (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 NER 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.[3] For the electricity distribution sector, shared assets provide standard control services.[4] 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 these guidelines, is constrained in a number of ways. Under the NER, we may make cost reductions:

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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 determine not to regulate, or non-electricity supply related – unregulated by us by definition.

3 Clause 6.4.4 of the NER provides for shared asset principles that the AER must have regard to when determining cost reductions without prescribing the methodology for its application. The transitional rule in clause 11.142.5(d) of the NER sets out a particular methodology for cost reduction as part of introducing the new shared asset principle in clause 6.4.4(c)(3).

4 Deemed to include the production of electricity for supply in a regulated stand-alone power alone system that is sold through a market under NER cl. 6.4.4(f).

- based on whether assets are classified as regulated stand-alone power systems (SAPS)[5]
- 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, except for *regulated SAPS net positive generation revenues*[6]
- that are backward looking and therefore based on actual (or estimate) for *regulated SAPS net positive generation revenues.*[7]

1.2 Key issues this guideline addresses

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

- Type of asset

  Revenues from production of electricity for supply in a regulated SAPS that is sold through a market is not subject to the materiality principle.[8] Regulated SAPS assets are considered shared assets from the onset.[9] These guidelines set out our approach to distinguish unregulated revenues earned through regulated SAPS assets (regulated SAPS net positive generation revenue) from other shared asset unregulated revenues. This is only applicable to distribution network service providers (DNSP).

- Materiality

  The shared asset principles establish that use of shared assets should be material before cost reductions are applied, unless it relates to revenues from production of electricity for supply in a regulated SAPS that is sold through a market.[10] But the NER do not define materiality in this context. These guidelines set out our approach to what constitutes a material use of shared assets.

- Cost reduction method

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5 As defined in NEL s 6B, noting that certain shared asset principles only apply to regulated SAPS providing net positive generation revenues.

6 For clarity, regulated SAPS net positive generation revenues in this context refers to unregulated revenue that relates to the production of electricity for supply in a regulated SAPS that is sold through a market.

7 NER cll. 6.4.4(c); 11.142.5

8 NER cl. 6.4.4(c)(3).

9 See Australian Energy Market Commission (AEMC), *Updating the Regulatory Frameworks for Distribution-led stand-alone power systems: Final Report*, 28 May 2020, pp. 58-59. The AEMC clarify that regulated SAPS will be providing a distribution service and a generation service from the onset.

10 NER cl. 6.4.4(c)(3).

The NER indicate that our proposed approach to applying the shared asset principles may include a methodology to determine cost reductions.[11] These guidelines set 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.[12]

- Information reporting

  The NER do not set out what information service providers should report 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.

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.[13] 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.[14] 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 (except regulated SAPS assets)[15] 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 general shared asset cost reductions.

Section 4 sets out our proposed method for *regulated SAPS net positive generation revenue* cost reductions.

Section 5 sets out information reporting requirements.

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11 NER cl, 6.4.4(c)(4).

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

13 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.

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

15 See AEMC, *Updating the Regulatory Frameworks for Distribution-led stand-alone power systems: Final Report*, 28 May 2020, pp. 58-59. The AEMC clarify that regulated SAPS will be providing a distribution service and a generation service from the onset.

1.5 Summary of our proposed cost reduction approach

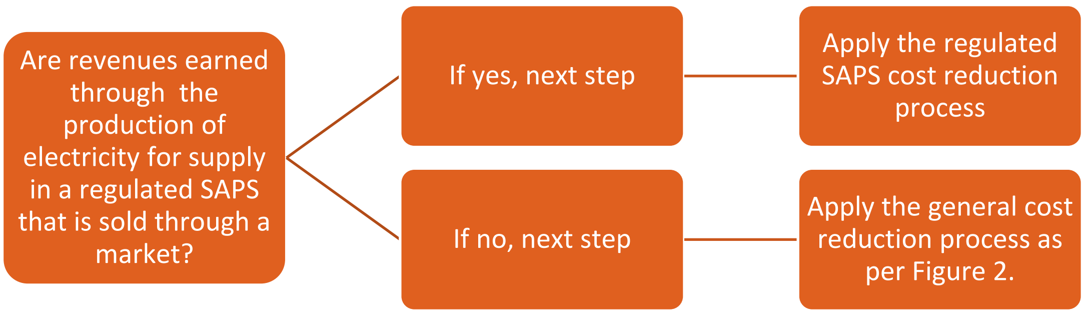
These guidelines set out that, for each service provider we regulate, we may:

- make cost reductions
  - retrospectively for revenues from production of electricity for supply in a regulated SAPS that is sold through a market; or
  - in advance for each year unregulated revenues earned from shared assets (except regulated SAPS)[16] are expected to exceed 1% 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[17]
- encourage service providers to submit proposed cost reductions calculated in accordance with the method set out in these guidelines
- consider proposed cost reductions calculated using alternative methods if the result leaves consumers no worse off than under the method set out in these guidelines
- 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 asset type threshold test to making cost reductions, as set out in this guideline.

Figure 1: Asset test



[16] Based on the AEMC's final report, we interpret the amendments to clause NER, cl. 6.4.4(c)(3) to mean that revenues from production of electricity for supply in a regulated SAPS that is sold through a market is not subject to the materiality principle.

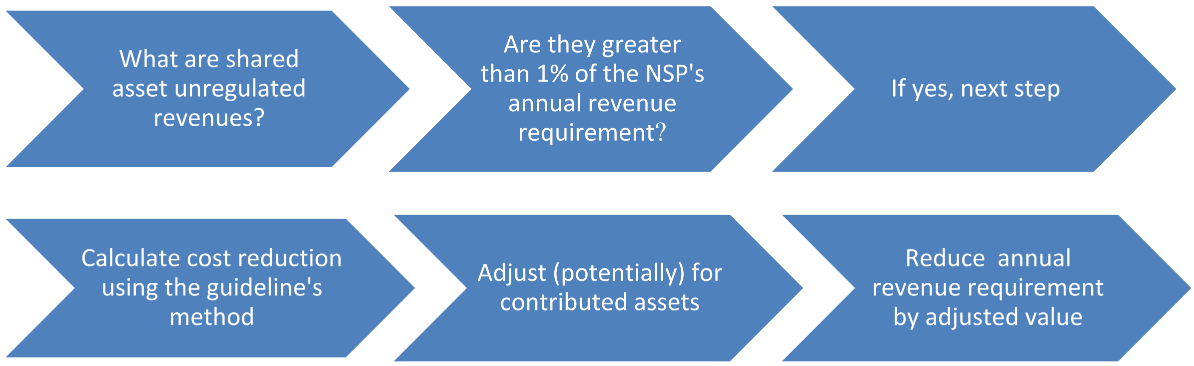
[17] Standard control (or prescribed transmission) revenues are referred to in aggregate as a service provider's annual revenue requirement (ARR).

A SAPS is an electricity supply arrangement that is not physically connected to the national grid. A regulated stand-alone power system consists of a system which is either owned, controlled or operated, or proposed to be owned, controlled or operated by a regulated distribution network service provider.[18]

When a DNSP earns net positive revenue for the production of electricity for supply in a regulated SAPS that is sold through a market, it should be deducted to prevent over recovery.[19] This is because regulated SAPS form part of DNSPs' regulatory asset base (RAB) that is taken into account in the distribution regulatory determinations. Therefore, positive payments received from the Australian Energy Market Operator (AEMO) for regulated SAPS will lead to additional revenue and should be deducted to prevent over recovery.[20] This additional net positive revenue recovered through AEMO is referred to as *regulated SAPS net positive generation revenues* in these guidelines.

Figure 2 illustrates the steps to making a general cost reduction, as set out in these guidelines.

Figure 2: General 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.[21] 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.

[18] NEL, section 6B.

[19] AEMC, *Updating the Regulatory Frameworks for Distribution-led stand-alone power systems: Final Report*, 28 May 2020, pp. 58-59.

[20] AEMC, *Updating the Regulatory Frameworks for Distribution-led stand-alone power systems: Final Report*, 28 May 2020, pp. 58-59.

[21] A service provider's annual revenue requirement is the revenue it earns from standard control services or prescribed transmission services in a given year. This generally equates to around 80% of 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. The method of cost reduction, depending on the type of asset is set out in section 3 (for general shared assets i.e. unregulated shared asset revenues other than regulated SAPS net positive generation revenues) and section 4 (for regulated SAPS with net positive generation revenue).

2.1 Cost reductions

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, except for instances where a DNSP earns regulated SAPS net positive generation revenue. In instances where DNSPs' earn regulated SAPS net positive generation revenue, we will make cost reductions based on the actual or estimated revenues.[22]

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[23]

    iii) defined in regulatory terms, rather than physical terms

    iv) which are classified as regulated SAPS within the NER.

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.

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22 Please refer to section 4 of the Guideline.

23 Cost allocation in accordance with a service provider's approved CAM.

2.3 Type of asset

a) Service providers should distinguish whether the asset is classified as regulated SAPS. If so, service providers should determine whether there is regulated SAPS net positive generation revenues and apply the cost reduction set out in section 4 of this guideline.

b) The method set out in section 3 is only applicable for shared assets that are not providing regulated SAPS net positive generation revenues.

2.4 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 (except for regulated SAPS net positive generation revenues) from shared assets are expected to be greater than 1 per cent of its total smoothed annual revenue requirement for that regulatory year.

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 (except for regulated SAPS net positive generation revenues) across each regulatory year to which those revenues relate.

e) For clarity, materiality does not apply to assets classified as regulated SAPS. All regulated SAPS net positive generation revenues are material.

2.5 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 and section 4 of this guideline where applicable. 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 or section 4 method had been used.

2.6 Shared asset cost reductions apply to regulated revenues

a) Cost reductions apply to a service provider's annual revenue requirement,[24] 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.

2.7 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 and is not classified as regulated SAPS), 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.

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

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[24] Annual revenues a service provider earns from its standard control or prescribed transmission services.

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.

2.8 Making cost reductions

We will reduce a service provider's annual revenue requirement by the value of the cost reduction determined under section 3 and/or section 4 of these guidelines. Section 3 of these guidelines set out the general shared asset cost reduction method. Section 4 of these guidelines set out the cost reduction method for regulated SAPS providing regulated SAPS net positive generation revenues.

For clarity, a DNSP should apply both methods of cost reductions if its regulatory asset base includes a SAPS generating system and earns regulated SAPS net positive generation revenues.

3 General shared asset cost reduction method

This section sets out our proposed method for determining general shared asset cost reductions. This method applies to all unregulated shared assets revenues other than regulated SAPS net positive generation revenues. 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.[25] 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[26]

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 2.4.d of these guidelines (materiality), unregulated revenue (except for regulated SAPS net positive generation revenues) 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 2.7 of this guideline (apportioning unregulated revenues earned from shared assets), unregulated revenue (except for regulated SAPS net positive generation revenues) relevant to cost reductions may include apportionment.

d) A cost reduction will reduce a service provider's standard control (or prescribed transmission) revenues (except for regulated SAPS net positive generation revenues) by 10% 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 5.

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

25 For example, a telecommunications company may replace power poles it uses to support fiber optic cable.

26 Appendix A sets out a worked example of these calculations.

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.

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 Regulated SAPS cost reduction approach and method

This section sets out our approach and method for determining regulated SAPS cost reductions where there is a net positive generation revenue. This section is limited to DNSPs.

This section will take effect from 1 July 2025 for all DNSPs.

4.1 SAPS cost reduction approach

DNSPs should distinguish regulated SAPS net positive generation revenue from other shared assets unregulated revenue. Shared asset decrements for regulated SAPS net positive generation revenue should follow the cost reduction method set out in this section. These deductions apply in addition to any other cost reductions made, or to be made, for unregulated revenues in accordance with section 3 of this guideline.

Our SAPS cost reduction approach broadly adopts the transitional approach set out in in the NER clauses 11.142.5(d)-(e) to maintain consistency.

DNSPs should deduct net positive revenues earned from the sale of electricity via regulated SAPS generation assets from their forward looking allowed annual revenues. However, regulated SAPS net positive generation revenues are calculated on a backward-looking basis, therefore on actual revenues earned. Where actual revenues are not available at the time of determination, estimated revenues may be used to calculate the regulated SAPS net positive generation revenues for the current regulatory control period.

4.2 Cost reduction method[27]

a) Regulated SAPS net positive generation revenues are not subject to a materiality test.[28]

b) All regulated SAPS net positive generation revenue earned by a DNSP in the current regulated control period should be reduced. Consistent with our determination approach, actual (or estimate) regulated SAPS net positive generation revenues should be inflated to account for the time value of money.

c) SAPS cost reduction should be made retrospectively based on actual (or estimate) regulated SAPS net positive generation revenues earned during the current regulatory control period.

d) Where actual revenue is not available, estimated revenue may be used for the final year or the penultimate year of the regulatory control period.

e) The revenue adjustments will be made on the first year of the subsequent regulatory control period.

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27 Appendix B sets out a worked example of these calculations.

28 NER cl 6.4.4(c)(3); AEMC, Updating the Regulatory Frameworks for Distribution-led stand-alone power systems: Final Report, 28 May 2020, pp. 58-59.

f) Consistent with general shared asset cost reduction, we adjust the network's smoothed annual revenue requirement in the regulatory determination.

4.3 Control

a) SAPS cost reduction is subject to the control mechanism set out in section 3.2 and 3.3.

4.4 Transitional arrangement

a) As per clause 11.142.5(d) we must deduct the net positive generation revenues for the SAPS generation systems from the annual revenue requirement for a DNSP from 1 August 2022.

b) We must make this deduction in the first regulatory year in the relevant regulatory control period.[29]

c) The deduction applies in addition to any other shared asset reduction to the annual revenue requirement for a DNSP.[30]

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29 NER cl. 11.142.5(d)(2).

30 NER cl. 11.142.5(e).

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 instrument (RIIs) 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

   iii) total regulated SAPS revenue

5.2 Regulatory proposal reporting

a) Through RIIs 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, and current regulatory period actual and estimated regulated SAPS revenue.

b) If an upcoming regulatory period is expected to be a relevant regulatory period, or the current regulatory period includes regulated SAPS revenue, our regulatory proposal RIIs 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.

6 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 these guidelines 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 these guidelines
guidelines	These shared asset guidelines
material	for the purposes of the application of these guidelines, 'material' is as set out in 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

Term	Definition
	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
Regulated SAPS	A regulated stand-alone power system is a stand-alone power system (which may be a microgrid or an individual power system) operated by a distribution network service provider. Regulated stand-alone power system is: – a stand-alone power system implemented as part of a distribution network service provider led project; or – an existing stand-alone power system of a DNSP designated by a law of a participating jurisdiction to be a part of the national electricity system.
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
regulated SAPS net positive generation revenues	revenues received by the Australian Energy Market Operator for the production of electricity for supply in a regulated SAPS that is sold through a market

Appendix A: General cost reduction method – worked example

Table A1 sets out a worked example of a general 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	Value
Annual revenue requirement (ARR)[31]	$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[32] 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.

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31 Example input value from our draft decision for EnergyAustralia (Ausgrid) for 2009-10 regulatory year.

32 Return on and of capital are defined in the glossary.

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 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.

Appendix B: SAPS cost reduction worked example

This section provides an example for making SAPS cost reductions in practice. This is a hypothetical example.

Scenario

Assume we are making a revenue determination for a DNSP for the 2026-31 regulatory control period. In this determination, we are considering how the shared asset cost reduction should be applied.

Also assume that fixed real weight average cost of capital (WACC) for this DNSP is 5%.[33]

Table B1 sets out the DNSP's current period revenues and forecast period revenues earned via shared assets. The table also details the DNSP's forecast period annual revenue requirement (excluding other revenue adjustment component).

Table B1: DNSP's current and forecast unregulated revenues ($ million real 25-26)

Input	21-22	22-23	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31
Basis	Actual	Actual	Actual	Actual	Estimate	Forecast	Forecast	Forecast	Forecast	Forecast
Annual revenue requirement	-	-	-	-	-	1200	1200	1200	1200	1200
Total unregulated revenue	30	30	30	30	40	45	45	45	45	45
Regulated SAPS generation revenue	10	10	10	10	20	15	15	15	15	15

Shared asset decrements calculation for the 2026-31 period

We will be undertaking the total shared asset decrements in two parts. The first part is to deduct regulated SAPS net positive generation revenues, and the second part is to consider a general shared asset cost reduction for all other unregulated revenues. The total shared asset decrement is the sum of both of these parts.

Part 1: Regulated SAPS net positive generation revenue cost reduction component

The first step for making the SAPS cost reduction is for the network service provider to distinguish the regulated SAPS net positive generation revenues from the total unregulated revenues. This is because the cost reduction method to be applied is different based on the

33 Please note, the real WACC is varying and may differ between each year. We have simplified for the purposes of the illustrative example.

type of asset. The last row of Table 1 sets out the regulated SAPS net positive generation revenues that will be subject to the SAPs costs reduction.

The SAPS cost reduction method will use a backward-looking approach as it looks at the net generation revenue for the previous regulatory control period for the SAPS generating systems. This is the actual or estimated regulated SAPS net positive generation revenues in the regulatory years between 2021−22 and 2025−26. Consistent with our current revenue determination approach, we then inflate these amounts with the WACC. We will need to consider the WACC in two parts, the first part is to determine the future value at the end of the regulatory period (2025−26). Then, we will determine the future value in terms of the first year of the subsequent regulatory control period (2026−27).

Future value calculation in 2025−26

Table B2 below illustrates the calculations to account for the time value of money using the WACC. For simplicity, we have assumed the values are reported in real terms at end of the year. If reported values are in in mid-year nominal terms, then it should include inflation and half year WACC adjustments in the time value of money calculation.

Table B2: Application of SAPS cost reduction ($ million real 25-26)

Parameter	21-22	22-23	23-24	24-25	25-26	Future Value
Regulated SAPS net positive generation revenue	10	10	10	10	20	-
Real vanilla WACC (%)	5.00%	5.00%	5.00%	5.00%	5.00%	-
Year 1 revenue future value in 2025−26	-	-	-	-	-	$10x(1.05)^4$=12.16
Year 2 revenue future value in 2025−26	-	-	-	-	-	$10x(1.05)^3$=11.58
Year 3 revenue future value in 2025−26	-	-	-	-	-	$10x(1.05)^2$=11.03
Year 4 revenue future value in 2025−26	-	-	-	-	-	$10x(1.05)^1$=10.50
Year 5 revenue future value in 2025−26	-	-	-	-	-	$20x(1.05)^0$=20.00
Total revenue in future value in 2025−26	**-**	**-**	**-**	**-**	**-**	**65.26**

Future value calculation in 2026−27

As the proposed shared asset deductions are to be made to revenues for the first year of the subsequent regulatory period, we will also need to account for the time value of money in the first year of the subsequent regulatory control period. The calculation is done separately because the real WACC for year one of the following regulatory control period is made at the time of the revenue determination. Applying this concept to this scenario, we will further escalate the total regulated SAPS net generation revenue with the relevant real WACC. Here, $65.26 million ($ real 25-26) calculated in Table 2 will be further escalated to 2026−27 period. This can be calculated as:

$$= \$65.26\,million\ \times\ (1 + 0.05)^1 = \$68.52\,million$$

Therefore, the sum of the time value adjusted regulated SAPS net positive generation revenue, in future value terms of year 2026−27, that should be deducted from the DNSP's first year of the following regulatory control period, is $68.52 million ($ real 25-26). This amount is the SAPS component of the shared asset decrements that will be applied to the upcoming regulated period 2026-31.

Part 2: General shared asset cost reduction component (excluding regulated SAPS net positive generation revenue)

This step is applied to calculate the unregulated revenues earned through shared assets that are not classified as regulated SAPS. For a DNSP, all other shared assets, we will first apply the asset threshold test and then apply the (current) general shared asset cost reduction methodology. The general cost reduction methodology for shared assets has been set out in our current Guideline and described in Section 1.1 above.

For clarity, the SAPS rule change is specific to regulated SAPS and does not require us to make any amendments to other unregulated revenues. Therefore, consistent with our current approach, we will apply the general cost reduction on unregulated revenues (except regulated SAPS net positive generation revenue) on a forecast basis.

The first step is to the asset threshold test for the upcoming regulatory control period, or the 2026-31 period in this scenario. This is to determine the total unregulated revenue that is subject to a general shared asset cost reduction.[34] This is calculated by subtracting the total forecast unregulated revenues from the forecast regulated SAPS net positive generation revenues. This is because regulated SAPS net positive generation revenues (unregulated earned via regulated SAPS) will be deducted based on actual revenues, whereas other unregulated revenues deductions are based on forecast revenues as per the current Guidelines.

In this scenario, in 2026−27 the total forecast unregulated revenue is $45 million ($2025−26), this amount includes the $15 million ($2025−26) for the regulated SAPS net positive generation revenues. Here, only the other unregulated revenues (excluding the regulated SAPS net positive generation revenues) is subject to the forward-looking general cost reduction method.[35] Therefore, the DNSP must subtract the $15 million from the total forecast unregulated revenues, or $45 million ($2025-26) to calculate the other unregulated revenues that is subject to general cost reduction method. On this basis, for 2026−27 the

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34 Please note, the general cost reduction is applied to the unregulated shared asset revenues that is not considered regulated SAPS net positive generation revenues. Therefore, the 10% cost reduction value for unregulated revenues (except regulated SAPS net positive generation revenues) still applies in accordance with the current Guideline.

35 For clarity, shared asset cost reduction for the regulated SAPS net positive generation revenues in the forecast period (2026-31 period) should be undertaken in the subsequent revenue determination. This reduction will be based on actual revenues rather than forecasts, noting that the final or penultimate year of the regulatory control period may be based on an estimated value.

forecast unregulated revenue amount that will be subject to a general cost reduction is $30 million ($2025−26).

Then, as per these guidelines, we will assess whether this amount meets the materiality threshold. The materiality is calculated based on 1% of the annual revenue requirement. In this case, 1% of $1,200 million ($2025−26) is $12 million ($2025−26). The materiality threshold would be met as $30 million is greater than $12 million for 2026−27.

As per the general cost reduction methodology, we will make a deduction equal to 10% of the forecast unregulated revenue.[36] This would amount to $3 million ($2025−26) for 2026−27. The same calculation should be done for the rest of the forecast period. Here, the general cost reduction amount is $3 million ($2025−26) for each year.

Total shared asset decrement

The total shared asset decrement that would be applied to the period 2026−31 is the sum of the SAPS component and the general shared asset component.

Table B3 shows the total shared asset decrement that would apply for the 2026−31 regulatory control period.

Table B3: DNSP's shared asset decrements for 2026−31 period ($2025−26)

Parameter	26-27	27-28	28-29	29-30	30-31
Annual revenue requirement	1200	1200	1200	1200	1200
SAPS cost reduction for 2021−26 period as per Part 1	68.5				
General shared asset cost reduction for 2026−31 period as per Part 2	3	3	3	3	3
Total shared asset decrements	71.5	3	3	3	3
Reduced annual revenue requirement	**1128.5**	**1197**	**1197**	**1197**	**1197**

[36] Please note, this is in accordance with section 3 of these guidelines.