



Draft Decision

ActewAGL distribution determination

2015–16 to 2018–19

**Attachment 10: Capital expenditure sharing
scheme**

November 2014

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Note

This attachment forms part of the AER's draft decision on ActewAGL's 2015–19 distribution determination. It should be read with other parts of the draft decision.

The draft decision includes the following documents:

Overview

Attachment 1 – Annual revenue requirement

Attachment 2 – Regulatory asset base

Attachment 3 – Rate of return

Attachment 4 – Value of imputation credits

Attachment 5 – Regulatory depreciation

Attachment 6 – Capital expenditure

Attachment 7 – Operating expenditure

Attachment 8 – Corporate income tax

Attachment 9 – Efficiency benefit sharing scheme

Attachment 10 – Capital expenditure sharing scheme

Attachment 11 – Service target performance incentive scheme

Attachment 12 – Demand management incentive scheme

Attachment 13 – Classification of services

Attachment 14 – Control mechanism

Attachment 15 – Pass through events

Attachment 16 – Alternative control services

Attachment 17 – Negotiated services framework and criteria

Attachment 18 – Connection methodology

Attachment 19 – Pricing methodology

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Shortened forms

Shortened form	Extended form
AARR	aggregate annual revenue requirement
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
ASRR	aggregate service revenue requirement
augex	augmentation expenditure
capex	capital expenditure
CCP	Consumer Challenge Panel
CESS	capital expenditure sharing scheme
CPI	consumer price index
CPI-X	consumer price index minus X
DRP	debt risk premium
DMIA	demand management innovation allowance
DMIS	demand management incentive scheme
distributor	distribution network service provider
DUoS	distribution use of system
EBSS	efficiency benefit sharing scheme
ERP	equity risk premium
expenditure assessment guideline	expenditure forecast assessment guideline for electricity distribution
F&A	framework and approach
MRP	market risk premium

Shortened form	Extended form
NEL	national electricity law
NEM	national electricity market
NEO	national electricity objective
NER	national electricity rules
NSP	network service provider
opex	operating expenditure
PPI	partial performance indicators
PTRM	post-tax revenue model
RAB	regulatory asset base
RBA	Reserve Bank of Australia
repex	replacement expenditure
RFM	roll forward model
RIN	regulatory information notice
RPP	revenue pricing principles
SAIDI	system average interruption duration index
SAIFI	system average interruption frequency index
SLCAPM	Sharpe-Lintner capital asset pricing model
STPIS	service target performance incentive scheme
WACC	weighted average cost of capital

10 Capital expenditure sharing scheme

The capital expenditure sharing scheme (CESS) provides financial rewards for network service providers whose capex becomes more efficient and financial penalties for those that become less efficient. Consumers benefit from improved efficiency through lower regulated prices. This attachment sets out how we will apply the CESS to ActewAGL in the 2015–19 regulatory control period.

As part of the Better Regulation program we consulted on and published version 1 of the capital expenditure incentive guideline (capex incentive guideline), which sets out the CESS.¹ The CESS approximates efficiency gains and efficiency losses by calculating the difference between forecast and actual capex. It shares these gains or losses between service providers and consumers.

The CESS works as follows:

- We calculate the cumulative underspend or overspend for the current regulatory control period in net present value terms.
- We apply the sharing ratio of 30 per cent to the cumulative underspend or overspend to work out what the service provider's share of the underspend or overspend should be.
- We calculate the CESS payments taking into account the financing benefit or cost to the service provider of the underspends or overspends.² We can also make further adjustments to account for deferral of capex and ex post exclusions of capex from the RAB.³
- The CESS payments will be added or subtracted to the service provider's regulated revenue as a separate building block in the next regulatory control period.

Under the CESS a service provider retains 30 per cent of an underspend or overspend, while consumers retain 70 per cent of the underspend or overspend. This means that for a one dollar saving in capex the service provider keeps 30 cents of the benefit while consumers keep 70 cents of the benefit.

10.1 Draft decision

We will apply the CESS as set out in version 1 of the capital expenditure incentives guideline to ActewAGL in the 2015–19 regulatory control period.⁴ This is consistent with the proposed approach we set out in our framework and approach paper.⁵

¹ AER, *Capital Expenditure Incentive Guideline for Electricity Network Service Providers*, November 2013, pp. 5–9. (AER, *Capex incentive guideline*, November 2013).

² We calculate benefits as the benefits to the service provider of financing the underspend since the amount of the underspend can be put to some other income generating use during the period. Losses are similarly calculated as the financing cost to the service provider of the overspend.

³ The capex incentive guideline outlines how we may exclude capex from the RAB. AER, *Capex incentive guideline*, November 2013, pp. 13–20.

⁴ AER, *Capex incentive guideline*, November 2013, pp. 5–9.

⁵ AER, *Stage 2 Framework and approach, ActewAGL*, January 2014, p. 28.

10.2 ActewAGL's proposal

ActewAGL proposed that we apply the CESS as set out in the capex incentives guideline, but that we exclude the following categories of expenditure from the CESS:⁶

- customer initiated capex
- equity raising costs.

10.3 AER's assessment approach

In deciding whether to apply a CESS to a network service provider, and the nature and details of any CESS to apply to a service provider, we must:⁷

- make that decision in a manner that contributes to the capex incentive objective⁸
- take into account the CESS principles,⁹ the capex objectives,¹⁰ other incentive schemes, and, where relevant the opex objectives, as they apply to the particular service provider, and the circumstances of the service provider.

Broadly, the capex incentive objective is to ensure that only capex that meets the capex criteria enters the RAB used to set prices. Therefore, consumers only fund capex that is efficient and prudent.

10.3.1 Interrelationships

The CESS relates to the incentives ActewAGL faces to incur efficient opex, conduct demand management, and maintain or improve service levels.¹¹ Other schemes that target opex, service levels, and demand management incentives. We aim to incentivise network service providers to make efficient decisions on when and what type of expenditure to incur, and to balance expenditure efficiencies with service quality. We discuss these interrelationships where relevant as part of our reasons below and in our capex attachment.

10.4 Reasons for draft decision

We are satisfied with ActewAGL's proposal to apply the CESS as set out in the capex incentives guideline.

For capex, the sharing of underspends and overspends happens at the end of each regulatory control period when we update a network service provider's RAB to include new capex. If a network service provider spends less than its approved forecast during a period, it will benefit within that period. Consumers benefit at the end of that period when the RAB is updated to include less capex compared to if the service provider had spent the full amount of the capex forecast.

Without a CESS the incentive for a service provider to spend less than its forecast capex declines throughout the period. This is because as the end of the regulatory control period approaches, the

⁶ ActewAGL, *Regulatory Proposal 2015–19, Subsequent regulatory control period, Distribution services provided by the ActewAGL Distribution electricity network in the Australian Capital Territory*, June 2014, pp. 360–364. (ActewAGL, *Regulatory Proposal*, June 2014).

⁷ NER, clause 6.5.8A(e).

⁸ NER, clause 6.4A(a); the capex criteria are set out in clause 6.5.7(c) of the NER.

⁹ NER, clause 6.5.8A(c).

¹⁰ NER, clause 6.5.7(a).

¹¹ Related schemes are the efficiency benefit sharing scheme (EBSS) for opex, the demand management innovation allowance (DMIA), and the service target performance incentive scheme (STPIS) for service levels.

time available for the service provider to retain any savings gets shorter. So the earlier a service provider incurs a capex underspend in the regulatory period, the greater its reward will be. As a result, the incentive for a service provider to spend less than its capex forecast declines throughout the period. Because of this, a service provider may choose to spend capex earlier than necessary, spend on capex when it may otherwise have spent on opex, or spend less on capex at the expense of service quality—even if it may not be efficient to do so.

In developing the CESS we took into account the capex incentive objective, capex criteria, capex objectives, and the CESS principles. With the CESS, ActewAGL will face the same reward and penalty in each year of a regulatory control period for capex underspends or overspends. The CESS will provide ActewAGL with an ex ante incentive to spend only efficient capex. ActewAGL will be rewarded through the CESS for making capex efficiency gains. Conversely, ActewAGL will be penalised through the CESS for making capex efficiency losses. In this way, ActewAGL will be more likely to incur only efficient capex when subject to a CESS, so any capex included in the RAB is more likely to reflect the capex criteria. In particular, if ActewAGL is subject to the CESS, its capex is more likely to be efficient and to reflect the costs of a prudent service provider.

We are satisfied that we should apply the CESS to ActewAGL as set out in our guideline. Our reasons in these circumstances are as follows. In deciding how to apply the CESS to ActewAGL we have taken into account our decision that no expenditure will be subject to the EBSS during the 2015–19 period. As outlined above, without a CESS the incentive for a service provider to spend less than its forecast capex declines throughout the period. The CESS works to provide a continuous incentive for a service provider to seek capex efficiencies throughout the regulatory period. The way in which capex underspends and overspends are shared occurs independently of how the EBSS applies. So although no expenditure will be subject to the EBSS during the 2015–19 period, the service provider will still face the same reward and penalty in each year of a regulatory control period for capex underspends or overspends under the CESS.

Additionally, in developing the CESS we determined a relative sharing ratio of 30:70 for capex underspends and overspends was appropriate. That is, under the CESS a service provider retains 30 per cent of a capex underspend or overspend, while consumers retain the remaining 70 per cent. As explained above, without a CESS, capex underspends and overspends will still be shared between the service provider and consumers. However, in the absence of a CESS, the relative sharing ratio between the service provider and consumers will depend on the year in which the overspend or underspend occurs, and will vary across the regulatory control period. We do not see a reason to depart from the 30:70 ratio by not applying the CESS as set out in our guideline.

10.4.1 Exclusions

The way exclusions work with the CESS are as follows:¹²

- We consider a network service provider's allowance is our best estimate of efficient capex. In this way, if the service provider spends less than its capex allowance, we consider this is an efficiency gain for the purpose of applying the CESS. Conversely, if a service provider spends more than its allowance, this counts as an efficiency loss when applying the CESS.
- To calculate the annual efficiency gain/loss, we subtract the service provider's actual capex from its capex allowance in each year of the regulatory control period. The capex allowance is calculated as our approved allowance (as determined prior to the start of the regulatory control

¹² AER, *Capex incentive guideline*, November 2013, p. 6.

period), plus any adjustments we allow from pass-throughs, reopening of capex or contingent projects.

In developing the CESS in consultation with stakeholders, we considered a range of capex categories that we could exclude from the CESS but concluded that no exclusions were required. Consequently, the capex incentive guideline does not provide for any exclusions for distribution network service providers. Our reasoning for deciding not to allow any exclusions is set out in the explanatory statement to the capex incentive guideline.

We will apply the CESS to ActewAGL as set out in the capex incentive guideline without any further exclusions. For the reasons we set out below, we are not satisfied ActewAGL's reasons for its proposed exclusions justify those exclusions. We note that ActewAGL did not raise new issues different to those we considered during our development of the capex incentive guideline.

Customer initiated capex

ActewAGL considers we should exclude customer initiated capex from the CESS because it is an uncontrollable cost and there is uncertainty in forecasting this expenditure.¹³ For example, where the network service provider must incur expenditure to meet customer requests for connection to new dwellings.

We are not satisfied that customer initiated capex warrants different treatment under the CESS to other capex ActewAGL incurs. In our explanatory statement to the capex incentive guideline we explained that we did not consider there was a convincing reason to allow exclusions for capex resulting from uncontrollable events. When included in the CESS, the cost of any capex increase or decrease from an uncontrollable event is shared between network service providers and consumers in the same way as any other capex efficiency gain or loss. That is, under the CESS a service provider retains 30 per cent of a capex underspend or overspend, while consumers retain the remaining 70 per cent.

If we excluded capex resulting from uncontrollable events from the CESS, the associated capex underspend or overspend will still be shared between the service provider and consumers. However, when excluded from the CESS the relative sharing ratio between the service provider and consumers will depend on the year in which the overspend or underspend occurs, and will vary across the regulatory control period. We considered there was no reason why capex overspends or underspends resulting from uncontrollable events should be shared differently between service providers and consumers in each regulatory year, or shared differently to all other costs facing service providers.

Additionally, we considered the contingent projects and pass-through mechanisms meant a service provider could seek approval for additional material capex not included in its total forecast capex. If the associated capex did not meet the materiality thresholds for these mechanisms, we saw no reason why relatively immaterial capex should be excluded ex ante from the CESS.¹⁴

We acknowledged the CESS will reward or penalise service providers for some uncontrollable events. However, on the whole, the risk of uncontrollable events presents both upside and downside risk to service providers. Further, while we accept that some events may be uncontrollable, in most cases, a service provider can strive to control the resulting costs. Allowing exclusions would increase the risk that we would dilute a service provider's incentives to improve its capex efficiency.

¹³ ActewAGL, *Regulatory proposal*, June 2014, pp. 360–363.

¹⁴ AER, *Explanatory Statement, Capital Expenditure Incentive Guideline for Electricity Network Service Providers*, November 2013, pp. 38–39.

Equity raising costs

ActewAGL proposed we exclude equity raising costs from the CESS since they are forecast using exogenous methods, which is different to the rest of capex.¹⁵ Further, since we can exclude debt raising costs from the EBSS, we should also exclude equity raising costs from the CESS.¹⁶

We do not consider we should exclude a category of expenditure from the CESS on the basis it is forecast differently to the rest of capex, or is forecast using exogenous methods. Capex is generally lumpy and non-recurrent, so we may employ different forecasting methods for different capex categories. However, we assess forecast capex at an overall rather than component level. The purpose of the CESS is to provide a continuous incentive to deliver efficient overall capex and to share the benefits of capex efficiency gains (or costs of capex efficiency losses) between the service provider and consumers.

We do not consider equity raising costs should be excluded ex ante from the CESS on the basis that we may exclude debt raising costs ex post from the EBSS. The reason for excluding debt raising costs from the EBSS does not correspond to excluding equity raising costs from the CESS.

We revised exclusions under the EBSS in developing version 2 of the scheme during the Better Regulation program. Exclusion of specific expenditure categories under the revised EBSS falls under the following clause:¹⁷

Exclude categories of opex not forecast using a single year revealed cost approach for the regulatory control period $n + 1$ where doing so better achieves the requirements of clauses 6.5.8 and 6A.6.5 of the NER.

In our explanatory statement to the EBSS we used debt raising costs as an example of an expenditure category that could fall under this exclusion.¹⁸ This exclusion is to address issues arising from the relationship between the revealed cost forecasting approach and the EBSS.¹⁹ These reasons do not directly apply to the CESS. This is because the CESS is not predicated on addressing incentives resulting from a revealed cost forecasting approach. Rather, as outlined earlier, the CESS is designed to address the declining incentive to incur efficient capex over the regulatory control period.

¹⁵ We also note that ActewAGL is not expected to incur equity raising costs, that is, equity raising costs do not form part of our total forecast capex for ActewAGL.

¹⁶ ActewAGL, *Regulatory proposal*, June 2014, p. 364.

¹⁷ AER, *Efficiency Benefit Sharing Scheme for Electricity Network Service Providers*, November 2013, p. 7.

¹⁸ AER, *Explanatory Statement, Proposed Efficiency Benefit Sharing Scheme*, August 2013, pp. 27–29.

¹⁹ AER, *Explanatory Statement, Efficiency Benefit Sharing Scheme for Electricity Network Service Providers*, November 2013, pp. 12–14.