Draft decision

Essential Energy distribution determination

2015–16 to 2018–19

Attachment 10: Capital expenditure sharing scheme

November 2014

AUSTRALIAN ENERGY REGULATOR

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Note

This attachment forms part of the AER's draft decision on Essential Energy'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 policy

Contents

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 Essential Energy 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 on 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 Essential Energy 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]

10.2 Essential Energy's proposal

Essential Energy proposed that we apply the CESS as set out in the capex incentives guideline.[6]

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1 AER, *Capital Expenditure Incentive Guideline for Electricity Network Service Providers*, November 2013, pp. 5–9. (AER, Capex incentive g*uideline*, 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, Ausgrid, Endeavour Energy and Essential Energy*, January 2014, p. 28.

6 Essential Energy, *Regulatory Proposal, 1 July 2014 to 30 June 2019*, May 2014, p. 24. (Essential Energy, *Regulatory Proposal*, May 2014).

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 objective[8]
- 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 Essential Energy faces to incur efficient opex, conduct demand management, and maintain or improve service levels.[11] 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 Essential Energy 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 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, Essential Energy will face the same reward and penalty in each year of a regulatory control period for capex underspends or overspends. The CESS will provide Essential Energy with an ex ante incentive to spend only efficient capex. Essential Energy

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7 NER, cl. 6.5.8A(e).
8 NER, cl. 6.4A(a); the capex criteria are set out in cl. 6.5.7(c) of the NER.
9 NER, cl. 6.5.8A(c).
10 NER, cl. 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.

will be rewarded through the CESS for making capex efficiency gains. Conversely, Essential Energy will be penalised through the CESS for making capex efficiency losses. In this way, Essential Energy 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 Essential Energy is subject to the CESS, its capex is more likely to be efficient and to reflect the costs of a prudent service provider.

The National Generators Forum raised issues regarding how the CESS measures efficiencies, the importance of forecasting a prudent and efficient amount of total capex, along with issues around capex deferrals.[12] We addressed each of these issues in our explanatory statements to the capex incentive guideline.[13]

We are satisfied that we should apply the CESS to Essential Energy as set out in our guideline. Our reasons in these circumstances are as follows. In deciding how to apply the CESS to Essential Energy 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.

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12 National Generators Forum, *NGF Submission to The Revenue Determinations (2014–2019) of The NSW Distribution Network Service Providers*, pp. 4–9.

13 AER, *Explanatory Statement, Draft Capital Expenditure Incentive Guideline for Electricity Network Service Providers, August 2013*; AER, *Explanatory Statement, Capital Expenditure Incentive Guideline for Electricity Network Service Providers, November 2013*.