



FINAL DECISION
Essential Energy distribution
determination
2015–16 to 2018–19

Attachment 10 – Capital
expenditure sharing scheme

April 2015

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Note

This attachment forms part of the AER's final decision on Essential Energy's revenue proposal 2015–19. It should be read with other parts of the final decision.

The final 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
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
augex	augmentation expenditure
capex	capital expenditure
CCP	Consumer Challenge Panel
CESS	capital expenditure sharing scheme
CPI	consumer price index
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
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

Shortened form	Extended form
RIN	regulatory information notice
RPP	revenue and 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 distributors 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 distributors 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 distributor's share of the underspend or overspend should be.
- We calculate the CESS payments taking into account the financing benefit or cost to the distributor 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 distributor's regulated revenue as a separate building block in the next regulatory control period.

Under the CESS a distributor 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 distributor keeps 30 cents of the benefit while consumers keep 70 cents of the benefit.

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.

10.1 Final 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 revised proposal

Essential Energy's revised proposal was based on the outcomes of other elements of our final decision. Essential Energy assumed based on our draft decision that no expenditure will be subject to the Efficiency Benefit Sharing Scheme (EBSS) during the 2015–19 regulatory control period. Based on this, if we did not accept Essential Energy's revised capex and instead substituted a lower amount, Essential Energy was of the view that the CESS would not provide a symmetric incentive and therefore should not apply.⁶

10.3 AER's assessment approach

In deciding whether to apply a CESS to a distributor, and the nature and details of any CESS to apply to a distributor, 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 distributor, and the circumstances of the distributor.

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 other incentives Essential Energy faces to incur efficient opex, conduct demand management, and maintain or improve service levels.¹¹ We aim to incentivise distributors to make efficient decisions on when and what type of expenditure to incur, and to balance expenditure efficiencies with service quality. We

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, *Revised Regulatory Proposal*, 1 July 2014 – 30 June 2019, January 2015, p. 78.

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.

discuss these interrelationships where relevant as part of our reasons below and in our capex attachment.

10.4 Reasons for final decision

We do not accept Essential Energy's revised proposal that we should not apply the CESS based on our decision that no expenditure will be subject to the EBSS during the 2015–19 period, and where we do not accept Essential Energy's revised capex forecast and have substituted a lower amount of total forecast capex.

In deciding how to apply the CESS to Essential Energy we have taken into account our final decision that no expenditure will be subject to the EBSS during the 2015–19 regulatory control period. This is based on the relationship between a revealed cost forecasting approach and the EBSS. The EBSS is intrinsically linked to the revealed cost forecasting approach for opex. We outlined in our draft decision that we are unlikely to rely on Essential Energy's revealed costs in the 2014–19 period in forecasting opex in the following regulatory control period. If we do not use a revealed costs approach and instead use an exogenous approach such as benchmarking to forecast opex in the future, there is not a strong reason to apply the current version of the EBSS.¹² We maintained this view in our final decision on the application of the EBSS in the 2015–19 period.

The CESS is not predicated on addressing incentives resulting from a revealed cost forecasting approach for opex. 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 distributor and consumers. The way in which capex underspends and overspends are shared occurs independently of how the EBSS applies, and independently of the precise amount of total forecast capex.¹³

Without a CESS the incentive for a distributor 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 distributor to retain any savings gets shorter. So the earlier a distributor incurs a capex underspend in the regulatory control period, the greater its reward will be. As a result, the incentive for a distributor to spend less than its capex forecast declines throughout the period. This declining incentive is present regardless of the actual amount of total forecast capex. Because of this, a distributor 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

¹² AER, *Draft Decision Essential Energy distribution determination 2015–16 to 2018–19, Attachment 9: Efficiency benefit sharing scheme*, November 2014, pp. 11–12.

¹³ 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.

quality—even if it may not be efficient to do so. The CESS works to provide a continuous incentive for a distributor to seek capex efficiencies throughout the regulatory period.

The CESS will provide Essential Energy with an ex ante incentive to spend only efficient capex. The CESS will reward Essential Energy for making capex efficiency gains, and penalise Essential Energy 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 distributor.

The CESS will provide these incentives independently of how the EBSS applies, and independently of the precise amount of total forecast capex. Additionally, our substitute estimate of total forecast capex provides Essential Energy with a reasonable opportunity to recover at least its efficient costs. Under the CESS overspends and underspends are treated equally, so we consider the incentive will be symmetric.

Finally, in the absence of a CESS, the relative sharing ratio between the distributor and consumers will instead depend on the year in which the overspend or underspend occurs, and will vary across the regulatory control period. 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 distributor retains 30 per cent of a capex underspend or overspend, while consumers retain the remaining 70 per cent. We do not see a reason to depart from the 30:70 ratio by not applying the CESS.