PRELIMINARY DECISION
Jemena distribution determination 2016 to 2020

Attachment 10 – Capital expenditure sharing scheme

October 2015

AUSTRALIAN ENERGY REGULATOR

Inquiries about this publication 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

Note

This attachment forms part of the AER's preliminary decision on Jemena's revenue proposal 2016–20. It should be read with all other parts of the preliminary decision.

The preliminary 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 - f-factor scheme

Contents

Shortened forms

Shortened form	Extended form
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AMI	Advanced metering infrastructure
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

Shortened form	Extended form
RFM	roll forward model
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 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 Jemena in the 2016–20 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. 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. We can also make further adjustments to account for deferral of capex and ex post exclusions of capex from the RAB.
- 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 Preliminary decision

We will apply the CESS as set out in version 1 of the capital expenditure incentive guideline to Jemena in the 2016–20 regulatory control period.[1] This is consistent with the proposed approach we set out in our framework and approach paper.[2]

---

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

2 AER, *Final Framework and approach for the Victorian Electricity Distributors, Regulatory control period commencing 1 January 2016,* October 2014, p. 110.

10.2 Jemena's proposal

Jemena proposed that we apply the CESS as set out in the capex incentive guidelines subject to two modifications.[3]

Firstly Jemena proposed that we exclude reliability improvement capex from the CESS, considering its performance against capex benchmarks and other incentive schemes would be distorted. Jemena referred to their submission to the Better Regulation guideline development process as supporting reasons for this proposal. In that submission Jemena argued that because expenditure on reliability improvements is not forecast on an ex ante basis this could contribute to total capex exceeding the allowance if not excluded.[4] Jemena is concerned that failing to exclude these costs would distort the intended incentives of the regime because penalties could be overstated for capital expenditure overspends whilst rewards could be understated for capital expenditure underspends.[5]

Secondly Jemena proposed that CESS rewards and penalties be amortised over the 2016–20 regulatory control period.[6]

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 interaction of the CESS with any other incentives that the service provider may have to undertake efficient opex or capex, the capex objectives,[10] and, if relevant, the opex objectives, as they apply to the particular service provider, as well as 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.

---

3 Jemena, *Regulatory Proposal, 1 January 2016 - 30 December 2020*, April 2015, p. 56 (Jemena, *Regulatory Proposal*, April 2015).

4 Jemena, *Submission to AER issues paper: Expenditure incentives guidelines for electricity network service providers*, May 2013, p. 4.

5 Jemena, *Regulatory Proposal,* April 2015, p. 56.

6 Jemena, *Regulatory Proposal,* April 2015, p. 56.

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).

10.3.1 Interrelationships

The CESS relates to other incentives Jemena 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 preliminary decision

We do not accept Jemena's proposal to modify the CESS to exclude reliability improvement capital expenditure. We also do not accept Jemena's proposal to modify the CESS so that rewards and penalties be amortised over the 2016–20 regulatory control period.

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 control 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, Jemena will face the same reward and penalty in each year of a regulatory control period for capex underspends or overspends. The CESS will provide Jemena with an ex ante incentive to spend only efficient capex. Jemena will be rewarded through the CESS for making capex efficiency gains. Conversely, Jemena will be penalised through the CESS for making capex efficiency losses. In this way, Jemena 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 Jemena is subject to the CESS, its capex is more likely to be efficient and to reflect the costs of a prudent service provider.

[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.

The Victorian Department of Economic Development, Jobs, Transport & Resources raised concerns with the CESS potentially encouraging inefficient capex deferral and a pattern of underspending followed by overspending.[12] We addressed these issues in our explanatory statements to the capex incentive guideline.[13] As outlined above, the sharing of capex underspends and overspends between consumers and the distributor happens at the end of each regulatory control period when we update the RAB to include new capex. In the absence of the CESS the sharing ratio between consumers and the distributor will vary depending on the year in which the underspend or overspend occurs. Instead, under the CESS there will be a constant sharing ratio of 30:70. The CESS will also provide a continuous incentive for Jemena to incur efficient capex over the regulatory control period, rather than the declining incentive that is present without the CESS. We consider this continuous rather than declining incentive promotes more efficient decisions on when to incur capex, rather than encouraging deferrals or underspending. Further, we are able to make adjustments to the CESS reward or penalty to account for deferrals in some cases.[14]

10.4.1 Reliability improvement capex

In developing the CESS in consultation with stakeholders, we considered a range of capex categories that we could exclude from the CESS. The capex incentive guideline provides for a single exclusion related to the STPIS for transmission. Our reasoning for deciding to only allow this exclusion, and not any other categories of exclusions, is set out in the explanatory statement to the capex incentive guideline.

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

We considered exclusions for reliability improvement capex during consultation on the capex incentives guideline. Stakeholders argued that the inclusion of reliability improvement capex in the CESS would diminish the incentive for network businesses to pursue reliability improvements.[15]

The Victorian distributors proposed to exclude STPIS related expenditure (including reliability improvement capex) from the CESS and roll this capex into the RAB using

---

12 The Victorian Department of Economic Development, Jobs, Transport & Resources, *Submission to Victorian electricity distribution pricing review – 2016 to 2020*, July 2015, pp. 12–13.

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*.

14 AER, *Capital Expenditure Incentive Guideline for Electricity Network Service Providers*, November 2013, p. 9.

15 Energy Networks Australia, *Submission on Draft Capex Incentive Guidelines*, p. 4; SP AusNet, *Submission on Draft Capex Incentive Guidelines*, p. 1; Victorian Distribution Network Service Providers, *Submission on Draft Capex Incentive Guidelines*, p. 3-4.

forecast depreciation.[16] We did not adopt this proposal for a number of reasons including: [17]

- It is unclear whether applying a different sharing ratio for investments in reliability would lead to better outcomes for consumers.
- Excluding reliability capex from the CESS does not mean that a distributor's incentives to achieve efficiencies in capex will be balanced with its incentives to invest in reliability.
- If reliability capex is not included in the CESS it will mean that distributors face a sharply declining penalty for undertaking reliability capex within a regulatory control period. As there is only a small penalty for a distributor who undertakes capex at the end of the regulatory control period, distributors would be strongly incentivised to undertake reliability improving investments towards the end of a period rather than at the start. This may lead to reliability capex that is not valued by customers.
- It would be difficult to identify and verify discrete reliability capex projects for exclusion.

While Jemena argues in their proposal that failing to exclude reliability improvement capex will distort the intended incentives of the regime, we maintain the reasons outlined above that excluding reliability improvement capex from the CESS may distort expenditure towards reliability capex that is not valued by customers. Therefore we do not accept Jemena's proposal to modify the CESS to exclude reliability investment expenditure.

10.4.2 Amortising CESS rewards and penalties

We do not accept Jemena's proposal to modify the CESS so that rewards and penalties are amortised over the regulatory control period. Jemena did not provide supporting reasons for its proposal. It did not specify how this would differ from the current mechanism which treats the CESS as a separate building block which is then smoothed throughout the next period. As Jemena has not detailed its proposal or why it would be preferable to the approach in the guideline, we will apply the CESS as set out in the guideline.

---

[16] STPIS provides incentives to service providers to improve or maintain a high level of service for the benefit of participants in the NEM and end users of electricity.

[17] AER, *Explanatory Statement, Capital Expenditure Incentive Guideline for Electricity Network Service Providers, November 2013*, pp. 39–40.