FINAL DECISION
Ergon Energy determination 2015–16 to 2019–20

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 final decision on Ergon Energy's 2015–20 distribution determination. It should be read with all 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

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Contents

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

Shortened form	Extended form
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 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 Ergon Energy in the 2015–20 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 Final decision

We will apply the CESS as set out in version 1 of the Capex Incentive Guideline to Ergon Energy in the 2015–20 regulatory control period.[1]

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

10.2 Ergon Energy's revised proposal

Ergon Energy did not support our preliminary decision to apply the CESS as set out in the Capex Incentive Guideline. Ergon Energy remained of the view that in applying the CESS, we should consider the potential impacts on the operation of the CESS that may be generated by:[2]

- expenditure on customer connection initiated capital works being above or below the expected AER allowances or forecasts
- decisions by a distributor to not apply for a pass through for events that may meet the materiality threshold but generate capex that could contribute to over-expenditure of allowances.

Ergon Energy also submitted that if the EBSS did not to apply in the 2015–20 regulatory control period then it would not be appropriate to apply the CESS.[3]

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:[4]

- make that decision in a manner that contributes to the capex incentive objective[5]
- take into account the CESS principles,[6] the interaction of the CESS with any other incentives that the service provider may have to undertake efficient opex or capex, the capex objectives,[7] 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.

10.3.1 Interrelationships

The CESS relates to other incentives Ergon Energy faces to incur efficient opex, conduct demand management, and maintain or improve service levels.[8] 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.

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2 Ergon Energy, *Regulatory Proposal (revised), 2015 to 2020*, July 2015, p. 36.
3 Ergon Energy, *Regulatory Proposal (revised), 2015 to 2020*, July 2015, p. 36.
4 NER, cl. 6.5.8A(e).
5 NER, cl. 6.4A(a); the capex criteria are set out in cl. 6.5.7(c) of the NER.
6 NER, cl. 6.5.8A(c).
7 NER, cl. 6.5.7(a).
8 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.

10.4 Reasons for final decision

We are satisfied that the CESS, as set out in the Capex Incentive Guideline, should apply to Ergon Energy.

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, Ergon 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 Ergon Energy with an ex ante incentive to spend only efficient capex. Ergon Energy will be rewarded through the CESS for making capex efficiency gains. Conversely, Ergon Energy will be penalised through the CESS for making capex efficiency losses. In this way, Ergon 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 Ergon 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 Total Environment Centre disagreed with a reliance on incentive schemes to drive demand management activity. It considered the regulatory framework has failed to incentivise demand management to date, and exhibits an unreasonable level of faith in newly introduced incentives that remain untested.[9]

We addressed these issues in our explanatory statements to the Capex Incentive Guideline.[10] Expenditure on demand management generally takes the form of opex

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[9] Total Environment Centre, *Submission to the AER on the Preliminary Decisions on the QLD DBs' Regulatory Proposals 2015-20*, July 2015, p. 4.

[10] 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.

rather than capex. Successful demand management should result in the network service provider spending less on capex than it otherwise would have. Both the CESS and EBSS will apply to Ergon Energy in the subsequent regulatory control period. As a result Ergon Energy has an incentive to implement a demand management solution if the increase in opex is less than the corresponding decrease in capex. In this way, it will receive a net reward for implementing demand management.[11] This is because the rewards and penalties under the EBSS and CESS are balanced and symmetric. In the past where the EBSS operated without a CESS, we excluded expenditure on demand management when calculating rewards and penalties under the scheme. This was because service providers may otherwise receive a penalty for increasing opex without a corresponding reward for decreasing capex.[12]

Additionally, the Australian Energy Market Commission finalised its demand management rule change in August 2015. Under the new rules we must develop and publish a demand management incentive scheme and innovation allowance by December 2016. The new incentive scheme and innovation allowance can be applied from the next round of regulatory determinations, preparation for which commences in early 2017. The AEMC did not consider it was appropriate to provide for the application of the new incentive scheme or innovation allowance midway through a regulatory control period.[13]

We will apply the CESS as set out in the Capex Incentive Guideline and develop and implement other demand management incentives in accordance with the new rules.

10.4.1 Considerations in how we apply the CESS

As noted above, Ergon Energy supported the application of the CESS but raised issues about: [14]

- expenditure on customer connection initiated capital works being above or below the expected AER allowances or forecasts
- decisions by a distributor to not apply for a pass through for events that may meet the materiality threshold but generate capex that could contribute to over-expenditure of allowances.
- the interaction of the EBSS and the CESS.

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11 When the service provider spends more on opex it receives a 30 per cent penalty under the EBSS. However, when there is a corresponding decrease in capex the service provider receives a 30 per cent reward under the CESS. So where the decrease in capex is larger than the increase in opex the service provider receives a larger reward than penalty, a net reward.

12 Without a CESS the reward for capex declines over the regulatory period. If an increase in opex corresponded with a decrease in capex, the off-setting benefit of the decrease in capex depends on the year in which it occurs.

13 AEMC, *Rule Determination, National Electricity Amendment (Demand Management Incentive Scheme) Rule 2015*, August 2015, p. 78.

14 Ergon Energy, *Regulatory Proposal (revised), 2015 to 2020*, July 2015, p. 36.

Ergon Energy did not propose these categories of expenditure be automatically excluded from the CESS. But it proposed that in assessing the operation of the scheme we consider any overspend or underspend of capex in these categories against the capital objectives, criteria and factors under the Rules in assessing whether the overspend or under spend is efficient or inefficient.[15] Ergon Energy noted that not all categories of capex were subject to distortions and forms of 'gaming', in particular, those capex categories driven by circumstances beyond the distributor's control. It considered we should take this into account so our incentive schemes minimise the possibility of windfall gains or losses driven by factors unconnected to a distributors' performance.[16]

For the reasons we set out below, we are not satisfied the issues Ergon Energy raised regarding application of the CESS warrant modifying how we apply the CESS in the 2015–20 regulatory control period. The issues Ergon Energy raised are not new to those we considered during our development of the Capex Incentive Guideline.[17] We have considered Ergon Energy's circumstances and the specific matters it raised in its proposal regarding the application of the CESS. We note we decided to apply the CESS as set out in the Guideline to all NSW, QLD, SA and VIC distributors. We are of the view that Ergon Energy has not provided sufficient evidence to demonstrate why its circumstances warrant a departure from our approach.

Uncontrollable capex categories

Ergon Energy submitted that a distributor has limited ability to improve its efficiency in relation to uncontrollable categories of capex such as customer initiated capex. To the extent a distributor can improve efficiency Ergon Energy considers it will continue to be rewarded or penalised by reference to the difference between the forecast customer initiated capex allowance and actual expenditure in a given year. However, it submitted that this effect should not exacerbated by the additional reward or penalty associated with the CESS.[18]

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.[19] 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.

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15 Ergon Energy, *Regulatory Proposal (revised), 2015 to 2020*, July 2015, p. 36.

16 Ergon Energy, *Submission on Incentive Schemes,* pp. 13–14.

17 AER, *Explanatory Statement, Capital Expenditure Incentive Guideline for Electricity Network Service Providers, November 2013*, p. 30, 37–39.

18 Ergon Energy, *Submission on Incentive Schemes*, pp. 14–15.

19 AER, *Explanatory Statement, Capital Expenditure Incentive Guideline for Electricity Network Service Providers, November 2013*, pp. 38–39. (AER, *Explanatory Statement, Capex incentive guideline*, November 2013).

Applying the CESS alters the way capex resulting from uncontrollable events is shared between the distributor and consumers. We do not agree with the characterisation that the CESS will excessively reward or penalise distributors. This is because a capex underspend or overspend from an uncontrollable event is still shared between the service provider and consumers regardless of how the CESS applies. If we excluded capex resulting from uncontrollable events the relative sharing ratio between the service provider and consumers will instead depend on the year in which the overspend or underspend occurs, and will vary across the regulatory control period. We do not consider there is a 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.

We do not agree with the assumption that actual spend on customer initiated capex will always exceed Ergon Energy's forecast, and hence penalise the distributor. The forecasting methodology for customer initiated capex is not precise, and we do not see any evidence to suggest the forecasting is asymmetric. Ergon Energy overspent on customer initiated capital works during the 2005–10 regulatory control period, and then underspent during the 2010–15 period.[20]

Applying a symmetric CESS means that overs and unders will be treated equally. If the CESS did not apply, the amount to be borne by the distributor and consumers would depend on the year in which the underspend or overspend (expected or not) occurs, and declines over the period. We view a continuous 30 per cent retention of underspends or overspends as a fair sharing of these risks between distributors and their customers.

Importantly, Ergon Energy will not always be penalised or rewarded under the CESS for overspending or underspending specifically on customer initiated capex. This is because CESS rewards and penalties are determined relative to total forecast capex.

Capex is generally lumpy and non-recurrent and different capex categories have different drivers. The extent to which a distributor can influence capex drivers can vary. However, we assess forecast capex at an overall rather than component level. The purpose of the CESS is to provide a continuous incentive for a distributor 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 incentives provided by the CESS are part of a package of measures to incentivise distributors to make efficient decisions on when and what type of expenditure to incur, and to balance expenditure efficiencies with service quality.

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[20] Ergon Energy, *Forecast Expenditure Summary – Customer Initiated Capital Works*, p. 7.

Pass through events

In our explanatory statement to the CESS we considered that a distributor could seek approval for additional material capex not included in its total forecast capex via the contingent projects and pass-through mechanisms.[21]

Ergon Energy noted that a distributor may decide to absorb the cost of capex events that might otherwise qualify for a pass through during the period to avoid price increases. However, a distributor may then be penalised later on if economic conditions, network demand or customer requirements necessitate over-expenditure of allowances later on in the same period. Ergon Energy also noted a distributor had several additional issues to consider when applying for a pass through such as administrative costs. Additionally, a pass through event affects not only CESS calculations but the distributor's return on capital and depreciation during the period. Finally, a pass through arms the distributor with the ability to pass those costs through to consumers, whether or not it had intended to do so when it made the pass through application.[22]

We consider these are issues for a distributor to take into account when making its expenditure decisions. The CESS provides a distributor with up front incentives for it to factor into its expenditure decisions. In order to avoid or reduce a capex overspend a distributor may decide to apply for a pass through for additional material capex not included in its total forecast capex. Or it may seek to reduce spending in other capex categories. Or it may decide to do nothing and receive the CESS penalty. These are all matters the distributor should consider and the regime should remain neutral about the choices the distributor ultimately makes on how these considerations should be balanced.

As outlined above, the purpose of the CESS is to provide a continuous incentive for a distributor 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. This is as part of the package of measures to incentivise distributors to make efficient decisions on when and what type of expenditure to incur, and to balance expenditure efficiencies with service quality.

Application of the EBSS

In our preliminary decision we determined that no expenditure would be subject to the EBSS during the 2015–20 regulatory control period. This was 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 preliminary decision that we are unlikely to rely on Ergon Energy's revealed costs in the 2015–20 period in forecasting opex in the following regulatory control period. If

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[21] AER, *Explanatory Statement, Capex incentive guideline*, November 2013, pp. 38–39.

[22] Ergon Energy, *Submission on Incentive Schemes*, pp. 15–16.

we did 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.[23]

However, we have changed our position on applying the EBSS in our final decision because we have decided to use Ergon Energy's revealed opex to forecast its opex. In our preliminary decision we based our forecast on a benchmark. However in our final decision we have used Ergon Energy's revealed costs to forecast its opex. Where we use this approach, we consider an EBSS is needed to incentivise efficient opex.

Although this addresses Ergon Energy's view in its revised proposal that we should not apply the CESS if the EBSS did not apply, we note that we would apply the CESS regardless of our application of the EBSS. This is because 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.[24] The CESS will provide the incentives discussed earlier in this attachment independently of how the EBSS applies, and independently of the precise amount of total forecast capex.

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[23] AER, *Preliminary Decision Ergon Energy determination 2015−16 to 2019−20, Attachment 9 − Efficiency benefit sharing scheme*, April 2015, pp. 10–12.

[24] 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.