



**PRELIMINARY DECISION**  
**Ergon Energy determination**  
**2015–16 to 2019–20**

**Attachment 9 – Efficiency**  
**benefit sharing scheme**

April 2015

© Commonwealth of Australia 2015

This work is copyright. In addition to any use permitted under the Copyright Act 1968, all material contained within this work is provided under a Creative Commons Attributions 3.0 Australia licence, with the exception of:

- the Commonwealth Coat of Arms
- the ACCC and AER logos
- any illustration, diagram, photograph or graphic over which the Australian Competition and Consumer Commission does not hold copyright, but which may be part of or contained within this publication. The details of the relevant licence conditions are available on the Creative Commons website, as is the full legal code for the CC BY 3.0 AU licence.

Requests and inquiries concerning reproduction and rights should be addressed to the Director, Corporate Communications, Australian Competition and Consumer Commission, GPO Box 4141, Canberra ACT 2601 or [publishing.unit@acc.gov.au](mailto:publishing.unit@acc.gov.au).

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](mailto:AERInquiry@aer.gov.au)

## Note

This attachment forms part of the AER's preliminary decision on Ergon Energy's 2015–20 distribution determination. 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 – Connection policy

# Contents

Note .....	9-2
Contents .....	9-3
Shortened forms .....	9-4
9 Efficiency benefit sharing scheme.....	9-6
9.1 Preliminary decision.....	9-6
9.2 Ergon Energy’s proposal .....	9-7
9.3 AER’s assessment approach.....	9-7
9.4 Reasons for preliminary decision .....	9-8

## 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

## 9 Efficiency benefit sharing scheme

The efficiency benefit sharing scheme (EBSS) provides an additional incentive for service providers to pursue efficiency improvements in opex.

To encourage a service provider to become more efficient it is allowed to keep any difference between its approved forecast and its actual opex during a regulatory control period. This is supplemented by the EBSS which provides the service provider with an additional reward for reductions in opex it makes and additional penalties for increases in opex. In total these rewards and penalties work together to provide a constant incentive for a service provider to pursue efficiency gains over the regulatory control period. The EBSS also discourages a service provider from incurring opex in the expected base year in order to receive a higher opex allowance in the following regulatory control period.

During the 2010–15 regulatory control period Ergon Energy operated under the Electricity distribution network service providers EBSS, which was released in June 2008.<sup>1</sup>

### 9.1 Preliminary decision

We are not satisfied Ergon Energy's proposed EBSS carryover amounts comply with the requirements in the EBSS Ergon Energy operated under during the 2010–15 regulatory control period. The difference between our calculations of the EBSS carryover amounts and Ergon Energy's proposal is due to the treatment of expenditure recorded as a provision. Our preliminary decision for the EBSS carryover amounts from the 2010–15 regulatory control period is outlined in Table 9.1.

**Table 9.1 AER's preliminary decision on Ergon Energy's EBSS carryover amounts (\$ million, 2014–15)**

	2015–16	2016–17	2017–18	2018–19	2019–20	Total
Ergon's proposed carryover	36.6	52.4	73.8	-16.6	0.0	146.1
Preliminary decision	34.5	48.8	64.1	-17.3	0.0	130.1

Source: AER analysis; Ergon, RIN template response, table 7.5.1.

As it is uncertain whether, and to what extent, we are likely to rely on Ergon Energy's revealed costs in the 2015–20 regulatory control period in forecasting its efficient opex in the future, our preliminary decision is that no expenditure will be subject to the EBSS during the 2015–20 regulatory control period.

<sup>1</sup> AER, *Electricity distribution network service providers Efficiency benefit sharing scheme*, June 2008.

## 9.2 Ergon Energy's proposal

### *Carryover amounts accrued during the 2010–15 regulatory control period*

Ergon Energy proposed a total EBSS carryover amount of \$146.1 million (\$2014–15) be added to its regulated revenue in the 2015–20 regulatory control period arising from the application of the EBSS in the 2010–15 regulatory control period.<sup>2</sup>

### *Application of the EBSS in the 2015–20 regulatory control period*

Ergon Energy proposed that version two of the EBSS should be applied in the 2015–20 regulatory control period with a modification. It proposed we allow distributors to exclude costs from the EBSS that would have been eligible for a pass through if they had applied for one. It did not propose any other adjustments.<sup>3</sup>

## 9.3 AER's assessment approach

Under the National Electricity Rules (NER) we must decide:

1. the revenue increments or decrements (if any) for each regulatory year of the 2015–20 period arising from the application of the EBSS during the 2010–15 regulatory control period<sup>4</sup>
2. how any applicable EBSS is to apply to Ergon Energy in the 2015–20 regulatory control period.<sup>5</sup>

The EBSS must provide for a fair sharing between service providers and network users of opex efficiency gains and efficiency losses.<sup>6</sup> We must also have regard to the following factors when implementing the EBSS:<sup>7</sup>

- the need to ensure that benefits to electricity consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme
- the need to provide the service providers with continuous incentives to reduce opex
- the desirability of both rewarding the service providers for efficiency gains and penalising them for efficiency losses
- any incentives that service providers may have to capitalise expenditure
- the possible effects of the scheme on incentives for the implementation of non-network alternatives.

---

<sup>2</sup> Ergon Energy, *Revenue proposal - Attachment 03.01.03 - Application of incentive schemes*, p. 5.

<sup>3</sup> Ergon Energy, *Revenue proposal - Attachment 03.01.03 - Application of incentive schemes*, pp. 9-10.

<sup>4</sup> NER, cl. 6.4.3(a)(5).

<sup>5</sup> NER, cl. 6.3.2(a)(3); cl. 6.12.1(9).

<sup>6</sup> NER, cl. 6.5.8(a).

<sup>7</sup> NER, cl. 6.5.8(c).



### 9.3.1 Interrelationships

The EBSS is intrinsically linked to a revealed cost forecasting approach for opex. Under this forecasting approach, the EBSS has two specific functions:

- To mitigate the incentive for a service provider to increase opex in the expected 'base year' to increase its forecast opex allowance for the following regulatory control period.
- To provide a continuous incentive for a service provider to make efficiency gains - service providers receive the same reward for an underspend and the same penalty for an overspend in each year of the regulatory control period.

Where we do not propose to rely on the revealed costs of a service provider in forecasting opex this has consequences for the service provider's incentives to make productivity improvements and consequently our decision on how we apply the EBSS.

## 9.4 Reasons for preliminary decision

This section provides the reasons for our preliminary decision on the EBSS carryover amounts from the 2010–15 regulatory control period and the reasons why our preliminary decision is that no expenditure will be subject to the EBSS for the 2015–20 regulatory control period.

### 9.4.1 Carryover amounts accrued during the 2010–15 regulatory control period

We consider Ergon Energy should receive EBSS carryover amounts of \$130.1 million (\$2014–15) from the application of the EBSS during the 2010–15 regulatory control period. Our calculation is in accordance with section 2.3 of the Electricity distribution network service providers EBSS.<sup>8</sup>

In the 2010–15 regulatory control period, Ergon Energy was subject to the Electricity distribution network service providers EBSS.<sup>9</sup> Under this scheme the EBSS carryover amounts are to be based on the difference between:

- approved forecast opex which is set out in our determination for Ergon Energy for the 2010–15 regulatory control period
- actual opex for the regulatory years from 2010–11 to 2013–14 less excluded cost categories.

The formulae for calculating the carryover amounts are set out in this scheme.<sup>10</sup>

---

<sup>8</sup> AER, *Electricity distribution network service providers Efficiency benefit sharing scheme*, June 2008, pp. 4–6.

<sup>9</sup> AER, *Electricity distribution network service providers Efficiency benefit sharing scheme*, June 2008.

<sup>10</sup> AER, *Electricity distribution network service providers Efficiency benefit sharing scheme*, June 2008, pp. 5–6.

The difference between Ergon Energy's proposed EBSS carryover amount calculated for the 2010–15 regulatory control period (\$146.1 million) and the EBSS carryover amount we calculated (\$130.1 million) is due to the treatment of provisions.

A provision is a type of accrual accounting practice. A business records an increase in a provision where it expects it will incur a future cost. Increases in provisions are often allocated to expenditure, and in particular, to opex. Accordingly if a business considers it is likely it will incur a future cost, or it expects the future cost will be different to that it has previously recorded, reported actual expenditure will increase. This means a business may sometimes record increases in expenditure when it estimates there is a change in a liability it faces. It may not actually expect to incur the cost for some time and the cost will not necessarily eventuate in the amount predicted.

In the 2010–15 regulatory control period, Ergon Energy reported movements in provisions for long service leave, annual leave and workers compensation as actual opex. This affected the reported EBSS carryover amounts - particularly changes in provisions for long service leave.

We consider movements in provisions should be excluded from EBSS calculations. This is because the increases in provisions do not represent the actual cost incurred in delivering network services when calculating efficiency gains or losses. This is consistent with the applicable EBSS.

In calculating carryover gains or losses, the AER must be satisfied that the actual and forecast opex accurately reflects the costs faced by the DNSP in the regulatory control period.<sup>11</sup>

The EBSS is designed to reward businesses for becoming more efficient over time and penalise them for becoming less efficient. It is the actual costs a service provider incurs that we are concerned about when measuring efficiency improvements. In contrast, provisions are estimates of future costs a business expects to incur. A change in a provision is, in essence, a revised estimate. Estimating future costs usually involves making assumptions. These assumptions often change over time as new information becomes available, creating forecasting uncertainty. The uncertainty about provisions is what distinguishes them from other liabilities in the accounting standards.<sup>12</sup>

For example, to calculate the change in provisions for employee entitlements, a business must make assumptions about how much its current workers will be paid in the future, when it expects them to leave or retire, the rate at which they will take leave, as well as the time value of money. Significant discretion and judgment is involved in forming these assumptions. The valuation of the future liability can be very sensitive to small changes in assumptions. Accordingly, the amount charged to opex could change significantly with relatively minor changes in assumptions.

---

<sup>11</sup> AER, *Electricity distribution network service providers Efficiency benefit sharing scheme*, June 2008, p. 7.

<sup>12</sup> AASB 137, cl. 11, p. 13.

To reward or penalise a service provider for changes in provisions would reward or penalise it for changes in assumptions, not efficiency improvements. This undermines what the EBSS is intended to do, namely reward efficiency improvements and penalise declines in efficiency. While provisions might need to be treated in a particular way for accounting purposes, for regulatory pricing purposes, treating provisions as actual costs can lead to perverse outcomes. Based on Ergon Energy's calculations its consumers would pay for efficiency carryover amounts that do not reflect changes in the underlying level of efficiency in providing standard control services during the 2010–15 regulatory control period. Instead, a significant proportion of the proposed amount simply represents changes in assumptions Ergon Energy used in valuing its long service leave obligations during that period. To significantly reward Ergon Energy for changes in assumptions would be contrary to the aims of the EBSS under the NER.

The Consumer Challenge Panel (CCP) and other stakeholders raised concerns about Ergon Energy's proposed EBSS carryover. Submissions questioned if this carryover amount was a result of genuine efficiency gains that would benefit consumers.<sup>13</sup> The CCP was concerned the large proposed EBSS carryover amounts reflected an overly generous opex allowance rather than genuine efficiency savings.

We determined Ergon Energy's carryover amounts in accordance with the formulas set out in the Electricity distribution network service providers EBSS.<sup>14</sup> We determined how the EBSS would apply in our determination of Ergon Energy's regulated revenue for the 2010–15 regulatory control period. This is based on the forecast opex amount we approved for this period and the actual opex Ergon Energy incurred. Under our approach to applying the EBSS, when calculating the EBSS carryover amounts we do not revisit the forecast opex amount we have already approved.

#### **9.4.2 Decision on how to apply the EBSS to Ergon Energy in the 2015–20 regulatory control period**

Our preliminary decision is that no expenditure will be subject to the EBSS during the 2015–20 regulatory control period.

In implementing the EBSS we must consider whether benefits to electricity consumers likely to result from the scheme are sufficient to warrant any reward or penalty under

---

<sup>13</sup> CCP, *Submission on Energex and Ergon Energy capex and opex proposals*, 30 January 2015, p. 26; EUAA, *Submission on Ergon Energy's regulatory proposal 2015-20*, 30 January 2015, p. 30; COTA, *Submission on Ergon Energy's regulatory proposal 2015-20*, 30 January 2015, p. 2; Queensland Council of Social Service, *Submission on Qld distributors' regulatory proposals 2015-20*, 30 January, p. 91; Chamber of Commerce and Industry Queensland (CCIQ), *Submission on Ergon Energy's regulatory proposal 2015-20*, 30 January 2015, pp. 21-22; Cummings Economics, *Submission on Ergon Energy's regulatory proposal 2015-20*, 30 January, p. 41.

<sup>14</sup> AER, *Electricity distribution network service providers Efficiency benefit sharing scheme*, June 2008.

the scheme. Several stakeholders including the CCP suggested we use our discretion not to apply the EBSS.<sup>15</sup>

We discuss why we do not consider Ergon Energy's customers would benefit from us applying the EBSS in the 2015–20 regulatory control period below.

The EBSS is intrinsically linked to the revealed cost forecasting approach for opex. If a service provider has operated under an effective incentive framework, and sought to maximise its profits, the actual opex incurred in a base year should be a good indicator of the efficient opex required. In those cases, we rely on the revealed costs in the base year as the basis for our opex forecast.

There are two potential incentive problems with this forecasting approach when an EBSS is not in place:

1. A service provider has an incentive to increase opex in the expected base year to increase its forecast opex allowance for the following regulatory control period.
2. A service provider's incentive to make sustainable change to its practices, and reduce its recurrent opex, declines as the regulatory control period progresses. It then increases again after the base year used to forecast opex for the following regulatory control period.

We address these issues by applying an EBSS in combination with a revealed cost forecasting approach. Therefore, the EBSS serves these specific functions based on the way opex is forecast in future periods. The current national version of the EBSS that has been made by the AER after consultation with relevant stakeholders is inherently based on forecasts of operating expenditure from a service provider's revealed costs.

In our Expenditure Forecast Assessment Guideline, we stated our preference is to continue with the revealed cost forecasting approach for forecasting opex. However, we noted that we will test whether the revealed costs of a service provider are efficient. If we find that the base year opex is materially inefficient, we will make an adjustment. This means that where we have evidence that a service provider's opex is materially inefficient, we will place less weight on its revealed costs in forecasting opex.

Economic benchmarking indicates that Ergon Energy's opex is higher than opex incurred by a benchmark efficient service provider. This is discussed in the base opex appendix to attachment 7. Therefore it is uncertain whether, and to what extent, we are likely to rely on Ergon Energy's revealed costs in the 2015–20 regulatory control period in forecasting opex in the following regulatory control period.

If we do not use a revealed costs approach for forecasting opex in the future, there is not a strong reason to apply the current version of the EBSS.

---

<sup>15</sup> CCP, *Submission on Energex and Ergon Energy capex and opex proposals*, 30 January 2015, p. 26; EUAA, *Submission on Ergon Energy's regulatory proposal 2015-20*, 30 January 2015, p. 30; Alliance of Electricity Consumers, *Submission on Ergon Energy's Regulatory proposal 2015-20*, 30 January 2015, p. 6.

For instance we consider Ergon Energy will already face an incentive to make efficiency improvements while its actual opex is more than that of a benchmark efficient service provider. We do not need to apply an EBSS to further strengthen its incentives.

In the case where we apply the EBSS in the 2015–20 regulatory control period but do not rely on revealed costs to set forecast opex in the next regulatory control period, there are some potentially perverse outcomes. For instance a service provider will face high penalties if it continues to make incremental efficiency losses. It will receive negative EBSS carryovers as well as a benchmark opex allowance. This outcome is not consistent with what we are seeking to achieve with the application of the EBSS nor is it consistent with the implementation requirements for an EBSS set out in the NER.<sup>16</sup>

Ergon Energy could make efficiency improvements such that it benchmarks well compared to a benchmark efficient service provider in the future. In that case, we would intend to rely on its revealed costs to forecast opex and apply the EBSS, consistent with our preferred approach in the Expenditure forecast assessment Guideline.

---

<sup>16</sup> NER, cl. 6.5.8.