



FINAL DECISION
Energex determination 2015–16
to 2019–20

Attachment 9 – Efficiency
benefit sharing scheme

October 2015

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Note

This attachment forms part of the AER's final decision on Energex'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

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 Final decision	9-6
9.2 Preliminary decision	9-7
9.3 Energex’s revised proposal and submissions	9-7
9.4 AER’s assessment approach	9-8
9.4.1 Interrelationships.....	9-9
9.5 Reasons for final decision	9-9
9.5.1 Carryover amounts from the 2010–15 regulatory control period ..	9-9
9.5.2 How the EBSS will apply in the 2015–20 regulatory control period	9-11

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 and additional penalties for increases in opex. In total these rewards and penalties work together to provide a continuous 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 Energex operated under the Electricity distribution network service providers EBSS, which was released in June 2008.¹

9.1 Final decision

Our final decision is the same as our preliminary decision:

- We will not apply the EBSS carryover to Energex from the 2010–15 regulatory control period. Otherwise, we estimate Energex would receive an EBSS penalty of –\$87.9 million (\$2014–15) from the application of the EBSS during the 2010–15 regulatory control period.²
- We will apply version two of the EBSS to Energex in the 2015–20 regulatory control period as outlined in section 9.5.2 below.³

When we apply version two of the EBSS we will exclude the cost categories listed in section 9.5.2 from forecast and actual opex for the calculation of EBSS carryover amounts. Table 9.1 sets out our final decision on Energex's target opex for the EBSS (total opex less excluded categories), against which we will calculate efficiency gains in the 2015–20 regulatory control period.

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

² AER, *Electricity distribution network service providers Efficiency benefit sharing scheme*, June 2008.

³ AER, *Efficiency benefit sharing scheme for electricity network service providers*, November 2013.

Table 9.1 AER's final decision on Energex's forecast opex for the EBSS (\$ million, 2014–15)

	2015–16	2016–17	2017–18	2018–19	2019–20
Forecast opex for the EBSS	336.0	332.6	337.2	348.0	350.0

Source: AER analysis. Energex, *Revised regulatory proposal, PTRM*.

Note: Total forecast opex less forecast opex on debt raising costs and DMIA.

9.2 Preliminary decision

In our preliminary decision, we estimated Energex would receive an EBSS carryover amount of $-\$56.9$ million (\$2014–15) from the application of the EBSS during the 2010–15 regulatory control period.⁴ The difference between our calculations and Energex's calculations (\$33.8 million) was because we:

- removed movements in provisions from actual opex
- did not adjust actual opex to take account of a greater share of overhead costs allocated to opex
- did not exclude costs related to the 2011 flood event or Cyclone Oswald.

Our preliminary decision was not to apply this penalty because our forecast for Energex's opex was a lower forecast than that based on Energex's revealed costs. Consequently, we considered it would be inconsistent with the intended operation of the EBSS and NER to carryover this EBSS penalty.

Our preliminary decision was to apply version two of the EBSS to Energex in the 2015–20 regulatory control period.⁵

9.3 Energex's revised proposal and submissions

Energex accepted our preliminary decision not to apply the EBSS carryover penalties it accrued during the 2010–15 regulatory control period. However, Energex had some concerns about the way we reached our preliminary decision:⁶

- It questioned the purpose of the EBSS in the context of our reliance on benchmarking tools to set the efficient base year opex, as opposed to relying on revealed costs, under our preferred base-step-trend forecasting methodology.
- It disagreed with our treatment of the 2011 flood event and Cyclone Oswald event costs.

⁴ AER, *Preliminary decision, Energex determination 2015-20, Attachment 9*, April 2015, p. 6.

⁵ AER, *Efficiency benefit sharing scheme for electricity network service providers*, November 2013.

⁶ Energex, *Revised regulatory proposal*, October 2015, p. 129.

- It found the ongoing operation of the EBSS, specifically the calculation of financial rewards or penalties, lacking in transparency.

In its submission the Alliance of Electricity Consumers (Alliance) considered we should not apply the EBSS to Energex in the 2015–20 regulatory control period.⁷ We disagree with the Alliance. If the best information we have about Energex’s efficient opex is its revealed costs, without the EBSS, there is a risk it will not improve its efficiency. With the EBSS in place, we are more confident it will improve its efficiency over time. The Alliance also considered consumers should not have to share 30 per cent of inefficient costs incurred by Energex. We consider it is important that the EBSS is symmetrical. That is, if consumers share in ongoing cost reductions, they should also share in ongoing cost increases. This represents a fair sharing of efficiency gains and losses as required by the NER.⁸

9.4 AER’s assessment approach

Under the 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 period⁹
2. how any applicable EBSS is to apply to Energex in the 2015–20 regulatory control period.¹⁰

The EBSS must provide for a fair sharing between service providers and network users of opex efficiency gains and efficiency losses.¹¹ We must also have regard to the following factors when implementing the EBSS:¹²

- 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 service providers with continuous incentives, so far as is consistent with economic efficiency, to reduce opex
- the desirability of both rewarding 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.

⁷ Alliance of Energy Consumers, *Submission to the AER’s preliminary decision (Queensland)*, 3 July 2015, p. 30.

⁸ NER, cl. 6.5.8(a).

⁹ NER, cl. 6.4.3(a)(5).

¹⁰ NER, cl. 6.3.2(a)(3); cl. 6.12.1(9).

¹¹ NER, cl. 6.5.8(a).

¹² NER, cl. 6.5.8(c).

9.4.1 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 approved opex forecast 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 there are consequences for a service provider's incentives to make productivity improvements. This effects our decision on how we apply the EBSS. We have taken into account the interrelationship between the EBSS and our approach to opex forecasting in reaching our decision.

Incentives to reduce opex may also affect a service provider's incentives to undertake capex. We take into account these interactions in developing and implementing the EBSS as well as developing the capital expenditure sharing scheme (CESS). For instance:

- in developing and implementing the EBSS, we must have regard to any incentives that service providers may have to capitalise operating expenditure as well as the possible effects of the scheme on incentives for the implementation of non-network alternatives.¹³
- in developing the CESS, we must take into account the interaction of the scheme with other incentives that service providers may have in relation to undertaking efficient opex or capex as well as the capex objectives and, if relevant, the opex objectives.¹⁴

9.5 Reasons for final decision

Our final decision is the same as our preliminary decision and is outlined below. We also address Energex's concerns about our preliminary decision.

9.5.1 Carryover amounts from the 2010–15 regulatory control period

We maintain our preliminary decision not to apply the EBSS carryover penalty from the 2010–15 regulatory control period to Energex's revenue requirements in the 2015–20 regulatory control period.

¹³ NER, cl. 6.4.3(a)(4),(5).

¹⁴ NER, cl. 6.5.8A(d).

We calculate Energex would receive an EBSS penalty of $-\$87.9$ million ($\$2014-15$) from the application of the EBSS during the 2010–15 regulatory control period. This is higher than the penalty we calculated in our preliminary decision ($-\$56.9$ million). The accrued penalty is higher because we have excluded the costs of the 2011 flood event and Cyclone Oswald from actual opex, as Energex proposed.¹⁵

In its revised proposal, Energex had a number of concerns about our preliminary decision.¹⁶

Energex questioned the purpose of the EBSS in the context of our reliance on benchmarking tools to set the efficient base opex amount, as opposed to relying on revealed costs.¹⁷ It stated this reliance is contrary to the NER principle that a distributor be provided with a continuous incentive, so far as is consistent with economic efficiency, to reduce its opex from one regulatory period to the next. It is concerned its revealed costs may be ignored in favour of a lower external benchmark when the base year opex value for the forthcoming regulatory period is set.¹⁸

We do not agree with Energex's criticisms. The EBSS was intended to work in conjunction with a revealed cost forecasting approach. We did not ignore its revealed costs in favour of a lower external benchmark. Rather we accepted Energex's proposed opex forecast for the 2015–20 regulatory control period. Because we are using Energex's forecast which is substantially lower than a forecast based on its revealed costs, we consider if we were to carryover the EBSS penalty, it would be inconsistent with the intended operation of the EBSS. Further, it would not implement the EBSS in accordance with the NER. For instance, Energex's opex increased materially because of increased restructuring costs in 2013–14. Typically, if this occurred, a service provider would receive EBSS penalties as well as a higher opex forecast. In combination, this would lead to a fair sharing of efficiency losses. We do not consider it would lead to a fair sharing of efficiency losses if Energex received a significant EBSS penalty for an increase in redundancy costs but did not receive a corresponding increase in its opex forecast.

Energex also disagreed with our treatment of its 2011 flood and Cyclone Oswald costs.¹⁹ It stated our approach appears to be directly contrary to the generic EBSS exclusion event relating to uncontrollable costs that was established in the Queensland 2010–15 distribution determination. We have reconsidered this position and we now agree that the provisions of the EBSS allow Energex to exclude these costs from actual opex. Consequently, we have excluded the costs of the flood and cyclone from the actual opex we used to calculate its carryover amounts. As a result Energex's carryover penalty would be increased by a further $\$31.0$ million.

¹⁵ Energex, *Revised regulatory proposal*, October 2015, p. 187.

¹⁶ Energex, *Revised regulatory proposal*, October 2015, p. 129.

¹⁷ Energex, *Revised regulatory proposal*, October 2015, p. 129.

¹⁸ We did not use a lower external benchmark to establish the base year opex for our forecast.

¹⁹ Energex, *Revised regulatory proposal*, October 2015, p. 130.

Energex also finds the ongoing operation of the EBSS, specifically the calculation of financial rewards or penalties, lacking in transparency.²⁰ It states this is evidenced by the significant variation between its (and other network service providers') calculations of the EBSS carryover amounts for the 2010–15 regulatory control period and ours.

The only adjustment we made to Energex's EBSS carryovers that was not explicitly stated in our 2010 determination for Energex was to exclude movements in provisions.²¹ However we have applied this approach in implementing the EBSS since the Victorian distribution determination in 2010.²² It is difficult to see how our approach lacks transparency. Our decision to exclude movements in provisions is discussed in more detail in our preliminary decision.²³

9.5.2 How the EBSS will apply in the 2015–20 regulatory control period

We have maintained our preliminary decision to apply version two of the EBSS to Energex in the 2015–20 regulatory control period.

Version two of the EBSS specifies our approach to determining the length of the carryover period, calculating the incremental efficiency gains and adjusting forecast or actual opex when calculating carryover amounts. These are detailed below.

Length of carryover period

The length of the carryover period for the 2015–20 regulatory control period will be five years. This aligns the EBSS carryover period with the length of Energex's regulatory control periods.

Incremental efficiency gains

We will calculate incremental efficiency gains differently depending on whether they are in:

- the first regulatory year
- the second regulatory year to the penultimate regulatory year
- the final regulatory year.

We will do this according to the formulas set out in version two of the EBSS.²⁴

When calculating actual opex under the EBSS we will adjust reported actual opex for the 2015–20 regulatory control period to reverse any movements in provisions. We

²⁰ Energex, *Revised regulatory proposal*, October 2015, p. 130.

²¹ AER, *Final decision, Energex determination 2010-15*, 6 May 2010, pp. 282-289.

²² AER, *Final decision, Victorian distribution determination 2011-15*, 29 October 2010, p. 589.

²³ AER, *Preliminary decision, Energex determination 2015-20, Attachment 9*, April 2015, p. 9-9 to 9-10.

²⁴ AER, *Efficiency benefit sharing scheme for electricity network service providers*, November 2013, pp. 5–7.

consider actual opex net of movement in provisions best reflects the actual opex incurred by the service provider during the regulatory control period.

Adjustments to forecast or actual opex when calculating carryover amounts

The EBSS allows for exclusions of categories of costs from the EBSS where we do not use a single year revealed cost forecasting approach. This is designed to fairly share efficiency gains and losses. For instance, where a service provider achieves efficiency improvements, it receives a benefit through the EBSS and consumers receive a benefit through lower forecast opex in the next period. This is the way consumers and the service provider share in the benefits of an efficiency improvement.

If we do not use a single year revealed cost forecasting approach, lower actual opex will not necessarily be passed through to consumers. Consumers should not pay for EBSS benefits where they do not receive the benefits of a lower opex forecast.

We will exclude debt raising costs and the demand management innovation allowance (DMIA) from the EBSS because the forecasts for these categories are not based on a single year of revealed expenditure.

In addition to the excluded cost category we will also:

- adjust forecast opex to add (subtract) any approved revenue increments (decrements) made after the initial regulatory determination. This may include approved pass through amounts
- adjust actual opex to add capitalised opex that has been excluded from the RAB
- exclude categories of opex not forecast using a single year revealed cost approach for the regulatory control period beginning in 2020 where doing so better achieves the requirements of clause 6.5.8 of the NER.