



FINAL DECISION
United Energy distribution
determination
2016 to 2020

Attachment 9 – Efficiency
benefit sharing scheme

May 2016

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Note

This attachment forms part of the AER's final decision on United Energy's distribution determination for 2016–20. 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 mechanisms

Attachment 15 – Pass through events

Attachment 16 – Alternative control services

Attachment 17 – Negotiated services framework and criteria

Attachment 18 – f-factor scheme

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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

Shortened form	Extended form
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 2011–15 regulatory control period, United Energy operated under the Electricity distribution network service providers' EBSS released in June 2008.¹

9.1 Final decision

Our final decision is to approve an EBSS carryover amount of \$36.6 million (\$2015) from the application of the EBSS in the 2011–15 regulatory control period.² This is consistent with United Energy's revised proposal. However, we have updated the carryover amounts to reflect the most recent actual CPI available.³

Our final decision for the EBSS carryover amounts from the 2011–15 regulatory control period is outlined in Table 9.1.

Table 9.1 AER's final decision on United Energy's EBSS carryover amounts (\$ million, 2015)

	2016	2017	2018	2019	2020	Total
United Energy's revised proposed carryover	2.7	17.6	6.5	9.5	0.0	36.3
Final decision	2.7	17.7	6.6	9.6	0.0	36.6

Source: AER analysis; United Energy, *Revised regulatory proposal, EBSS model*, January 2016.

We maintain our preliminary decision to apply version two of the EBSS to United Energy in the 2016–20 regulatory control period.⁴

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

² AER, *Electricity distribution network service providers' EBSS*, June 2008.

³ December 2015 CPI has become available since our preliminary decision.

⁴ AER *Efficiency benefit sharing scheme for electricity network service providers*, November 2013.

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 9.2 sets out our final decision on United Energy's target opex for the EBSS (total opex less excluded categories⁵), against which we will calculate efficiency gains in the 2016–20 regulatory control period.

Table 9.2 AER's final decision on United Energy's forecast opex for the EBSS (\$ million, 2015)

	2016	2017	2018	2019	2020
Total opex forecast	140.3	143.3	146.4	147.3	149.2
Less debt raising costs	-1.1	-1.1	-1.2	-1.2	-1.2
Less GSL payments	-0.6	-0.6	-0.6	-0.6	-0.6
Target opex for the EBSS	138.6	141.5	144.6	145.5	147.4

Source: AER, *Final decision, United Energy determination, opex model*, May 2016.

Note: The demand management incentive allowance (DMIA) is not part of the opex building block and therefore is not included in the opex target.

9.2 Preliminary decision

In our preliminary decision we calculated an EBSS carryover of \$24.7 million (\$2015).⁶ This was different to the carryover United Energy proposed in its initial regulatory proposal of \$27.7 million. The difference was because we:

- used a different formula to calculate EBSS carryover amounts for 2011 which reduced the carryover
- made an adjustment to forecast opex for the difference between actual and forecast network growth which increased the carryover by a small amount
- made a correction to the movements in provisions recorded for 2013 which increased the carryover.

Our preliminary decision was to apply version two of the EBSS⁷ to United Energy in the 2016–20 regulatory control period.

9.3 United Energy's revised proposal and submissions

United Energy did not accept our decision on the EBSS carryover amounts from the 2011–15 regulatory control period. Instead it proposed a carryover amount of \$36.3 million (\$2015) in its revised proposal.⁸

⁵ Debt raising costs and GSL payments.

⁶ AER, *Preliminary decision, United Energy determination, Attachment 9*, October 2015, p. 9-6.

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

United Energy did not accept our preliminary decision on the carryover amounts because it stated we needed to:⁹

- adjust 2010 actual opex to add Jemena Asset Management (JAM) losses
- remove the licence fees from the reported costs for each year of the regulatory period.

United Energy accepted our preliminary decision that 2011 should be treated as year six, not year one and it agreed that the efficiency gain for that year should be calculated in accordance with the formula set out in the EBSS.¹⁰ It also accepted our adjustment for network growth and movements in provisions in 2013.

United Energy accepted we would apply version two of the EBSS in the 2016–20 regulatory control period. It did not comment on our preliminary decision about how the EBSS will apply in the 2016–20 regulatory control period.¹¹

We received submissions from the Consumer Challenge Panel (CCP)¹² and the Victorian Energy Consumer and User Alliance (VECUA)¹³ who commented on the EBSS in the context of the regulatory framework. We address these comments in our opex attachment. The CCP also commented on excluded cost categories in 2016–20. We address its concerns below. We did not receive submissions on the calculation of carryover amounts from the application of the EBSS in 2011–15.

9.4 Assessment approach

Under the NER we must decide:

1. the revenue increments or decrements (if any) for each regulatory year of the 2016–20 period arising from the application of the EBSS during the 2011–15 regulatory control period¹⁴
2. how any applicable EBSS is to apply to United Energy in the 2016–20 period.¹⁵

The EBSS must provide for a fair sharing between service providers and network users of opex efficiency gains and efficiency losses.¹⁶ We must also have regard to the following factors when implementing the EBSS:¹⁷

⁸ United Energy, *Revised regulatory proposal, EBSS model*, January 2016.

⁹ United Energy, *Revised regulatory proposal*, January 2016, pp. 90–91.

¹⁰ United Energy, *Revised regulatory proposal*, January 2016, p. 90. The relevant EBSS is the *Electricity distribution network service providers - EBSS*, June 2008.

¹¹ United Energy, *Revised regulatory proposal*, January 2016, p. 6.

¹² CCP3, *Submission on the preliminary decision, Victorian DNSPs revenue determination 2016-20*, pp. 9, 12–14, 24, 26, 61, 105.

¹³ VECUA, *Submission to the Victorian DNSPs revenue reset, Comments on the preliminary decision*, January 2016, p. 58.

¹⁴ NER, cl. 6.4.3(a)(5).

¹⁵ NER, cll. 6.3.2(a)(3); 6.12.1(9).

¹⁶ NER, cl. 6.5.8(a).

¹⁷ NER, cl. 6.5.8(c).

- 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.

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 affects 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 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.¹⁸
- 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.¹⁹

¹⁸ NER, cl. 6.4.3(a)(4),(5).

¹⁹ NER, cl. 6.5.8A(d).

9.5 Reasons for final decision

9.5.1 Carryover amounts from the 2011–15 regulatory control period

Our final decision is to approve an EBSS carryover amount of \$36.6 million (\$2015) from the application of the EBSS in the 2011–15 regulatory control period. This is consistent with United Energy's revised proposal. However, we have updated the carryover amounts to reflect the most recent actual CPI available.²⁰

We updated two aspects of our preliminary decision in response to information United Energy provided in its revised proposal:²¹

- we adjusted 2010 actual opex (to add JAM losses) to be consistent with 2009 adjusted opex
- we excluded licence fees from reported opex.

Adjustment to 2010 opex for JAM loss

When we calculate the efficiency gains in the first year of the 2011–15 regulatory control period, we need to take into account the efficiency gains made since the base year (2009). In our preliminary decision, we did not calculate the efficiency gains made in 2010 correctly. Our final decision corrects this error and as a result the carryover amount has increased by \$16.1 million.

In 2009, United Energy outsourced its maintenance and construction activities to JAM who, it turned out, serviced the contract at a loss. That is, the agreed contract price did not cover the actual costs it incurred. We referred to the difference between United Energy's contract fee and the actual costs JAM incurred, as the JAM loss.²² When we forecast United Energy's opex for the 2011–15 regulatory control period, we adjusted base opex to reflect the actual costs of these activities rather than the contract price. We did this by adding the JAM loss to United Energy's reported opex for 2009.²³ Adding the JAM loss to the base year had implications for the opex used to calculate the efficiency gains made in 2009 and 2010.

During the 2006–10 regulatory control period, United Energy was subject to the Essential Service Commission of Victoria's Efficiency Carryover Mechanism (ECM), the predecessor to the EBSS. When we calculate the efficiency gains made in 2009 and 2010 under the ECM, because we added the JAM loss to the opex allowance we need to add JAM losses to reported opex to compare like with like. As discussed

²⁰ December 2015 CPI has become available since our preliminary decision.

²¹ United Energy, *Revised regulatory proposal*, January 2016, pp. 89–91.

²² AER, *Victorian electricity distribution network service providers, Distribution determination 2011–2015, Appendix I*, October 2010, p. 158.

²³ AER, *Victorian electricity distribution network service providers, Distribution determination 2011–2015, Appendix I*, October 2010, pp. 158–159.

above, in our preliminary decision we did not add the JAM loss to the reported opex for 2010 and we correct this in our final decision.

License fees

In our preliminary decision we did not exclude licence fees from the EBSS.²⁴

In its revised proposal, United Energy stated we should remove licence fees from the reported opex for each year of the regulatory period.²⁵ It stated these costs are recovered via a separate part of the tariff formula and should not be included in reported opex for the EBSS.

We agree. Because license fees are paid to the Victorian Department of Treasury and Finance and are recovered via a separate part of the tariff formula, they should not be included in reported opex.

Excluding license fees from reported opex reduces the total carryover amount by around \$4.6 million.

9.5.2 How the EBSS will apply in the 2016–20 regulatory control period

We have maintained our preliminary decision to apply version two of the EBSS to United Energy in the 2016–20 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 2016–20 regulatory control period will be five years. This aligns the EBSS carryover period with the length of United Energy'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

²⁴ United Energy noted that the reported licence fee in 2014 was a negative amount of \$0.9 million. The -\$0.9 million was a reversal of accrued amounts made during the 2006 to 2010 period. United Energy stated the reversal was due to an accounting error corrected for in 2014.

²⁵ United Energy, *Revised regulatory proposal*, January 2016, p. 91.

- the final regulatory year.

We will do this according to the formulas set out in version two of the EBSS.²⁶

When calculating actual opex under the EBSS, we will adjust reported actual opex for the 2016–20 regulatory control period to reverse any movements in provisions. We consider actual opex net of movement in provisions best reflects the actual opex incurred by the service provider during the regulatory control period.

We will also adjust actual opex to remove any accounting losses from the scrapping of assets which have been reported as opex.²⁷ As discussed in our preliminary decision, losses on the scrapping of assets are accounting records of the shortfalls between the proceeds from selling assets and their accounting written down values.²⁸ Some of the Victorian distributors report these losses as opex in their statutory accounts.²⁹ When measuring efficiency improvements for the EBSS we are concerned with the actual opex a service provider incurs. As a loss on the scrapping of an asset is an accounting adjustment to expenditure, rather than an actual outlay, including it in the EBSS would mean a distributor would be rewarded or penalised for accounting adjustments. We do not consider this would be consistent with the aims of the EBSS.³⁰ In its revised proposal, United Energy agreed with our preliminary position to adjust base opex to remove losses on the scrapping of assets.³¹ It did not comment on this matter in the context of the EBSS.

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 the following categories of costs from the EBSS:

²⁶ AER, *Efficiency benefit sharing scheme for electricity network service providers*, November 2013, pp. 7–9.

²⁷ We discuss our decision to exclude losses on the scrapping of assets in our preliminary decision; AER, *Preliminary decision, United Energy determination, Attachment 9*, October 2015, p. 9-12.

²⁸ AER, *Preliminary decision, United Energy determination, Attachment 9*, October 2015, p. 9-12.

²⁹ Jemena, *Response to IR#011* [email to AER], 14 July 2015, p. 2.

³⁰ We need to ensure that benefits to consumers likely to result from the EBSS are sufficient to warrant any reward or penalty; NER, cl. 6.5.8.

³¹ United Energy, *Revised regulatory proposal*, January 2016, p. 61.

- debt raising costs
- GSL payments.

As debt raising costs and GSL payments are not forecast based on revealed expenditure, they should be excluded from the EBSS.

In addition to the excluded cost categories we will also:

- adjust forecast opex to add (subtract) any approved revenue increments (decrements) made after the regulatory determination. This may include approved pass through amounts
- adjust actual opex to remove demand management innovation allowance (DMIA) operating expenditure because it is not included in the opex forecast
- 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 2021 where doing so better achieves the requirements of clause 6.5.8 of the NER.

In its submission, the CCP supported our decision to limit the number of categories excluded from the EBSS. It supported our decision to exclude DMIA, GSL payments and losses on the scrapping of assets from the scheme. However, it did not support our decision to exclude debt raising costs. The CCP considered there needs to be an incentive for network service providers to limit the costs of debt raising and including this in the EBSS would provide an appropriate incentive.³²

We disagree that debt raising costs should be included in the EBSS. If debt raising costs were included in the EBSS, consumers might pay for efficiency gains that they would not receive through the opex forecast. As discussed above, this is because debt raising costs are not forecast based on revealed expenditure.

³² CCP3, *Submission to the Victorian DNSPs revenue reset, Comments on AER Preliminary Decisions*, 25 February 2016, p. 73.