



FINAL DECISION
TasNetworks distribution
determination
2017–18 to 2018–19

Attachment 9 – Efficiency
benefit sharing scheme

April 2017

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Note

This attachment forms part of the AER's final decision on TasNetworks' distribution determination for 2017–19. It should be read with all other parts of the final decision.

This final decision consists of an Overview and 8 attachments. As many issues were settled at the draft decision stage or required only minor updates we have not prepared final decision attachments for:

- Regulatory asset base
- Regulatory depreciation
- Capital expenditure
- Operating expenditure
- Corporate income tax
- Capital expenditure sharing scheme
- Service target performance incentive scheme
- Demand management incentive scheme
- Classification of services
- Pass through events
- Connection policy.

The AER's final decision on these matters is set out in the Overview. For ease of reference the remaining attachments have been numbered consistently with the attachment numbering in our draft decision.

The final decision therefore includes the following documents:

Overview

Attachment 1 – Annual revenue requirement

Attachment 3 – Rate of return

Attachment 4 – Value of imputation credits

Attachment 9 – Efficiency benefit sharing scheme

Attachment 14 – Control mechanisms

Attachment 16 – Alternative control services

Attachment 17 – Negotiated services framework and criteria

Attachment 19 – Tariff structure statement

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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
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

9 Efficiency benefit sharing scheme

The efficiency benefit sharing scheme (EBSS) provides an additional incentive for service providers to pursue efficiency improvements in operating expenditure (opex). It is often used in incentive regulation.

To encourage a service provider to become more efficient, it is allowed to keep any difference between its approved opex forecast and its actual opex in a regulatory control period. This is supplemented by the EBSS, which allows the service provider to retain efficiency savings and efficiency losses for a longer period of time. 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 inflating its opex in the expected base year in order to receive a higher opex allowance in the following regulatory control period.

Consumers benefit from any efficiency gains made by the service provider as we base our next opex forecast (for the next regulatory control period) on the service provider's lower revealed opex. This is how efficiency improvements are shared between consumers and the business.

During the 2012–17 regulatory control period, TasNetworks operated under the Electricity distribution network service providers' EBSS released in June 2008.¹

9.1 Final decision

We have determined an EBSS carryover amount of \$23.7 million (\$2016–17) from the application of the EBSS during the 2012–17 regulatory control period.² This is broadly consistent with TasNetworks' revised proposal of \$23.8 million (\$2016–17).

The differences between this final decision and our draft decision are that we have updated:

- estimated opex for 2015–16 with actual audited opex
- estimated inflation with the most recent actuals.

Our method to calculate the EBSS has not changed between the draft and final decisions.

Our final decision for the EBSS carryover amounts from the 2012–17 regulatory control period is outlined in Table 9.1.

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

AER, *Aurora Energy - Final distribution determination 2012–17- attachments*, April 2012, p. 273.

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

Table 9.1 Final decision on TasNetworks' EBSS carryover amounts (\$ million, 2016–17)

	2017–18	2018–19	Total
TasNetworks' proposal	20.6	20.6	41.1
Draft decision	9.0	9.0	18.1
TasNetworks' revised proposal	11.9	11.9	23.8
Final decision	11.8	11.8	23.7

Source: TasNetworks, *Revised regulatory proposal 2017–19*, PTRM; AER analysis. Totals may not add up due to rounding.

Looking forward, we will apply version two of the EBSS to TasNetworks in the 2017–19 regulatory control period.³ This is consistent with our draft decision.⁴

Table 9.2 sets out our final decision on the target opex for the EBSS (total opex less excluded categories) we will use to calculate efficiency gains in the 2017–19 regulatory control period. It is based on TasNetworks' opex forecast which we accepted in our final decision and is subject to further adjustments allowed by the EBSS. When we apply the EBSS we will exclude the cost categories listed in Table 9.2 from the scheme. We discuss the reasons for our decision in section 9.4.2 below.

Table 9.2 Forecast opex for the EBSS (\$ million, 2016–17)

	2017–18	2018–19	Total
Forecast opex	66.6	65.2	131.8
less debt raising costs	-1.1	-1.1	-2.2
less GSL payments*	-2.3	-2.3	-4.6
less electrical safety inspection levy payments*	-2.0	-2.0	-4.1
less NEM levy payments*	-0.4	-0.4	-0.8
Forecast opex for the EBSS target	60.8	59.4	120.2

Source: TasNetworks, *Revised opex model, 14 December 2016*, TasNetworks, *Revised PTRM*, 1 December 2016. Numbers may not add up to total due to rounding.

Note: * Where these categories of opex are forecast using a single year revealed cost approach for the regulatory control period beginning in 2019–20, we will not exclude them from the EBSS.

In addition to the excluded cost categories in Table 9.2, we will make other adjustments to actual opex as discussed in section 9.4.2.

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

⁴ AER, *Draft Decision – TasNetworks distribution determination 2017–19 – Attachment 9 – Efficiency benefit sharing scheme*, September 2016, p. 9-7.

9.2 TasNetworks' revised proposal

In its revised proposal, TasNetworks accepted our draft decision which identified an inconsistency between:⁵

- the method it used to calculate the efficiency carryover
- the method it used to forecast its operating expenditure.

It agreed these two aspects of our decision need to be consistent because of the link between the EBSS and the base year used to forecast opex.

TasNetworks revised its EBSS carryover accordingly and updated the calculation for the latest data.

9.3 Assessment approach

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

1. the revenue increments or decrements for each year of the 2017–19 regulatory control period arising from the application of the EBSS during the 2012–17 regulatory control period.⁶
2. how the EBSS will apply to TasNetworks in the 2017–19 regulatory control period.⁷

The EBSS must provide for a fair sharing between service providers and network users of opex efficiency gains and efficiency losses.⁸ We must also have regard to the following matters when implementing the EBSS:⁹

- 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 network service provider 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.

⁵ TasNetworks, *Distribution revised regulatory proposal 2017-2019*, December 2016, pp. 7-8.

⁶ NER, cl. 6.4.3(a)(5).

⁷ NER, cll. 6.3.2(a)(3) and 6.12.1(9).

⁸ NER, cl. 6.5.8(a).

⁹ NER, cl. 6.5.8(c).

9.3.1 Interrelationships

The EBSS is intrinsically linked to our opex revealed cost forecasting approach. When we develop our opex forecast, the rules require us to have regard to whether the opex forecast is consistent with any incentive schemes.¹⁰

Our opex forecasting method relies on identifying an efficient opex amount in the base year (the 'revealed costs' of the service provider), which we use to develop a total opex forecast. Under this approach, a service provider has an incentive to spend more opex in the expected base year. Also, a service provider has less incentive to reduce opex towards the end of the regulatory control period, where the benefit of any efficiency gains is retained for less time.

The application of the EBSS serves two important functions:

- it reduces the incentive for a service provider to inflate opex in the expected base year in order to gain a higher opex forecast for the next regulatory control period
- it provides a continuous incentive for a service provider to pursue efficiency improvements across the regulatory control period. This is because the EBSS allows a service provider to retain efficiency gains for a total of six years, regardless of the year in which it was made.

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 and our decision on how we apply the EBSS.

When a business makes an incremental efficiency gain, it receives a reward through the EBSS, and consumers benefit through a lower revealed cost forecast for the subsequent period. This is how efficiency improvements are shared between consumers and the business. If we subject costs to the EBSS that are not forecast using a revealed cost approach, a business would in theory receive a reward for efficiency gains through the EBSS (at a cost to consumers), but consumers would not benefit through a lower revealed cost forecast in the subsequent period.

Therefore, we typically exclude costs where we do not rely on a revealed cost forecasting approach to forecast those costs.

9.4 Reasons for final decision

This section provides the reasons for the carryover amounts that arise from applying the EBSS during the 2012–17 regulatory control period, and how we will apply the EBSS in the 2017–19 regulatory control period.

¹⁰ NER, cl. 6.5.6(e)(8).

9.4.1 Carryover amounts from the 2012–17 regulatory control period

We consider TasNetworks should receive a total EBSS carryover amount of \$23.7 million (\$2016–17) from the application of the EBSS during the 2012–17 regulatory control period. This is consistent with TasNetworks' revised proposal of \$23.8 million (\$2016–17).

In our draft decision, we calculated an EBSS carryover amount of \$18.1 million (\$2016–17) from the application of the EBSS during the 2012–17 regulatory control period.¹¹ However, we stated we would update TasNetworks' EBSS carryover amounts using:

- actual audited opex for 2015–16
- the latest forecast of CPI for June 2017 in the RBA's *Statement on monetary policy*
- the rate of return we determine in our final decision.

The carryover amount of \$23.7 million (\$2016–17) reflects these updates.

Table 9.3 compares our forecast carryover amounts with TasNetworks' revised proposed carryover amounts. Normally the carryover amounts accrue over a five year period, however, we calculated a net present value equivalent amount over two years.

Table 9.3 EBSS carryover amounts

	2017–18	2018–19	2019–20	2010–21	2021–22	Total	NPV
TasNetworks' revised proposal	8.7	4.5	9.2	0.0	1.9	24.4	\$22.8
Two year equivalent	11.9	11.9				23.8	\$22.8
Final decision	8.7	4.5	9.2	0.0	1.9	24.3	\$22.5
Two year equivalent	11.8	11.8				23.7	\$22.5

Source: TasNetworks, *Revised regulatory proposal and proposed PTRM*; AER analysis.

Note: Based on a real discount rate of 3.48 per cent, consistent with our final decision on the rate of return. Because we updated our real discount rate to reflect our final decision, our NPV calculation differs from TasNetworks'.

¹¹ AER, *Draft Decision – TasNetworks distribution determination 2017–19 – Attachment 9 – Efficiency benefit sharing scheme*, September 2016, p. 9-10.

9.4.2 Application of the EBSS in the 2017–19 regulatory control period

We will apply version two of the EBSS¹² to TasNetworks in the 2017–19 regulatory control period, consistent with our draft decision.

The length of the carryover period for the 2017–19 regulatory control period should be the same length as the regulatory control period commencing on 1 July 2019. This is consistent with our draft decision. Aligning the length of the carryover period for the 2017–19 regulatory control period with the length of the regulatory control period commencing on 1 July 2019 should provide a continuous incentive.¹³

The EBSS allows us to exclude categories of costs that we do not forecast using 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. On this basis we will exclude the following categories of costs from the EBSS:

- debt raising costs
- GSL payments.

We will also exclude the following categories because they are subject to a true-up each year via the revenue cap mechanism:

- electrical safety inspection levy payments
- NEM levy payments.¹⁴

We will not exclude NEM and retail contestability costs as initially proposed by TasNetworks as we consider it likely we will forecast these costs using a single year revealed cost approach for the regulatory control period beginning in 2019–20.

The demand management innovation allowance (DMIA) is not subject to the EBSS as it is not funded through the opex building block.

In addition to the excluded cost categories listed above, we will adjust actual opex to reverse any movements in provisions.

¹² AER, *Efficiency benefit sharing scheme for electricity network service providers*, November 2013.

¹³ NER, cl. 6.5.8(c)(2).

¹⁴ Where these categories of opex are forecast using a single year revealed cost approach for the regulatory control period beginning in 2019–20, we will not exclude them from the EBSS.

As required by the EBSS, we will also:¹⁵

- adjust forecast opex to add (subtract) any approved revenue increments (decrements) made after this regulatory determination, including approved pass through amounts
- adjust actual opex to add capitalised opex that has been excluded from the RAB¹⁶
- exclude categories of opex not forecast using a single year revealed cost approach for the regulatory control period beginning in 2019–20 where doing so better achieves the requirements of clause 6.5.8 of the NER.

¹⁵ AER, *Efficiency benefit sharing scheme for electricity network service providers*, November 2013, section 1.4, p. 7.

¹⁶ NER, cl. 6.5.8(c)(4) requires us to have regard to any incentives the service provider may have to capitalise expenditure.