Draft decision

TasNetworks transmission determination

2015-16 to 2018-19

Attachment 9: Efficiency benefit sharing scheme (EBSS)

November 2014

AUSTRALIAN ENERGY REGULATOR

Inquiries about this document 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

AER reference: 53445

Note

This attachment forms part of the AER's draft decision on the transmission determination for TasNetworks' 2015–19 regulatory control period. It should be read in conjunction with other parts of the draft decision.

The draft decision includes the following documents:

Overview

Attachment 1 – maximum allowed revenue

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 – pricing methodology

Attachment 13 – pass through events

Attachment 14 – negotiated services

Contents

Shortened forms

Shortened form	Extended form
AARR	aggregate annual revenue requirement
AASB	Australian Accounting Standards Board
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
ASRR	aggregate service revenue requirement
augex	augmentation expenditure
capex	capital expenditure
CCP	Consumer Challenge Panel
CESS	capital expenditure sharing scheme
CPI	consumer price index
DRP	debt risk premium
EBSS	efficiency benefit sharing scheme
EMCa	Energy Market Consulting associates
ERP	equity risk premium
EUAA	Energy Users Association of Australia
MAR	maximum allowed revenue
MEU	Major Energy Users
MJA	Marsden Jacob Associates
MRP	market risk premium
NEL	national electricity law

Shortened form	Extended form
NEM	national electricity market
NEO	national electricity objective
NER	national electricity rules
NSP	network service provider
NTSC	negotiated transmission service criteria
opex	operating expenditure
PPI	partial performance indicators
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 pricing principles
SLCAPM	Sharpe-Lintner capital asset pricing model
STPIS	service target performance incentive scheme
TNSP	transmission network service provider
TUoS	transmission use of system
version one of the EBSS	AER, *Electricity transmission network service providers: Efficiency benefit sharing scheme*, September 2007
version two of the EBSS	AER, *Efficiency benefit sharing scheme for electricity network service providers*, November 2013
WACC	weighted average cost of capital

9 Efficiency benefit sharing scheme

The EBSS provides an additional incentive for service providers to pursue efficiency improvements in opex.

It is a key component of incentive regulation under the NER. Because opex is largely recurrent and predictable, opex in one period is generally a good indicator of opex in the next period. Where a service provider is relatively efficient, we use the actual opex it incurred in a base year of the regulatory control period to forecast opex for the next regulatory control period.

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 any reductions in opex it makes and additional penalties for any 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.[1]

When a service provider is rewarded for making efficiency gains, consumers benefit through lower prices in the next regulatory control period. This is because forecast opex in the next regulatory control period will reflect the service provider's lower level of opex in the current regulatory control period, and as a result, regulated prices will be lower.

During the 2009–14 regulatory control period TasNetworks operated under the EBSS released in September 2007 for TNSPs (version one of the EBSS).[2] In the 2014–19 period TasNetworks will receive an adjustment to its revenue for carryover amounts from the application of this version of the EBSS.

In November 2013 we released version two of the EBSS.[3] We will apply this version of the EBSS to TasNetworks during the 2014–19 period.[4]

9.1 Draft decision

We are not satisfied TasNetworks' proposed EBSS carryover amounts comply with the requirements of the EBSS that applied during 2009–14 regulatory control period. We consider that the carryover amounts in Table 9.1 comply with the relevant requirements.

Table 9.1 AER's draft decision on TasNetworks' carryover amounts ($ million, 2013–14)

	2014–15	2015–16	2016–17	2017–18	2018–19	Total
TasNetworks' proposed carryover	11.4	9.6	6.4	5.0	0.0	32.3
Draft decision	12.2	8.4	6.7	4.1	0.0	31.4

Source: AER analysis

1 These concepts are explained more fully in the explanatory statement to the EBSS, AER, *Efficiency benefit sharing scheme for electricity network service providers - explanatory statement*, November 2013.
2 AER, *Electricity transmission network service providers: Efficiency benefit sharing scheme*, September 2007.
3 AER, *Efficiency benefit sharing scheme for electricity network service providers*, November 2013.
4 In our determination for the 2014-15 regulatory control period, we decided to apply version two of the EBSS to TasNetworks as if 2014-15 was the first year of a period covering both the 2014-15 regulatory control period and the 2015-19 regulatory control period.

When we apply version two of the EBSS to TasNetworks in the 2014–19 period 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 illustrates the opex forecasts we expect will use to calculate efficiency gains and losses for the 2014–19 period.

Table 9.2 AER's draft decision on TasNetworks' forecast opex for the EBSS ($ million, 2013–14)

	2014–15	2015–16	2016–17	2017–18	2018–19
Approved forecast opex for EBSS	42.4	41.8	42.0	42.2	41.7

Source: AER analysis

9.2 Proposal

Carryover amounts accrued during the 2009–14 regulatory control period

In the 2009–14 regulatory control period, TasNetworks was subject to version one of the EBSS. 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 TasNetworks for the 2009–14 regulatory control period, and
- actual opex for the regulatory years from 2009–10 to 2012–13, less excluded cost categories.

The formulas for calculating the carryover amounts are set out in version one of the EBSS.

TasNetworks proposed the following EBSS carryover amounts from the 2009–14 regulatory control period be added to its regulated revenue in the 2014–19 period:

Table 9.3 Proposed EBSS carryover amounts from the 2009–14 regulatory control period ($ million, 2013–14)

	2014–15	2015–16	2016–17	2017–18	2018–19	Total
Proposed EBSS carryover amounts	11.4	9.6	6.4	5.0	0.0	32.3

Source: TasNetworks, RIN, Worksheet 5.1.

Application of the EBSS in the 2014–19 period

TasNetworks proposed version two of the scheme would apply to it in the 2014–19 period. It proposed to exclude the following cost categories from the scheme:

- network support
- debt raising costs
- self insurance
- insurance premiums.[5]

[5] TasNetworks, *Revenue proposal*, p. 97.

9.3 Assessment approach

Under the NER we must decide:

1. the revenue increments or decrements (if any) for each regulatory year of the 2014–19 period arising from the application of the EBSS during the 2009–14 regulatory control period.[6]

2. the values that are to be attributed to the EBSS parameters for any EBSS that is to apply to TasNetworks in the 2014–19 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 have regard to the following factors when implementing the EBSS:[9]

- the need to provide service providers with a continuous incentive 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 inappropriately capitalise opex
- the possible effects of the scheme on incentives for the implementation of non–network alternatives.

Details of how the EBSS will operate in the future are set out in *Explanatory Statement - Efficiency Benefit Sharing Scheme for Electricity Network Service Providers*.[10]

9.4 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.

9.5 Reasons for draft decision

This section provides the reasons for our draft decision on the carryover amounts that arise from applying the EBSS during the 2009–14 regulatory control period, and how we will apply the EBSS in the 2014–19 period.

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6 NER, clause 6A.5.4(a)(5).
7 NER, clause 6A.14.1(iv).
8 NER, clause 6A.6.5(a).
9 NER, clause 6A.6.5(b).
10 AER, *Explanatory Statement - Efficiency Benefit Sharing Scheme for Electricity Network Service Providers,* November 2013.

9.5.1 Carryover amounts from the 2009–14 regulatory control period

We have calculated the carryover amounts for the EBSS that applied during the 2009–14 regulatory control period in accordance with section 2.4 of version one of the EBSS. Our calculation of the EBSS carryover amounts is different to TasNetworks' calculation for two reasons:

Firstly, to calculate the EBSS carryover amounts we have excluded superannuation costs from TasNetworks' actual opex in 2009–14. In determining that the EBSS would apply to TasNetworks for the 2009–14 regulatory control period, we determined that we would exclude these costs. TasNetworks did not remove these costs when it calculated its proposed EBSS amounts.

Secondly, we have removed movements in provisions from TasNetworks' actual opex in the 2009–14 regulatory control period.

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 records 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 2009–14 regulatory control period, TasNetworks reported increases in provisions for long service leave, annual leave, employee incentive payments and organisational restructuring as actual opex. This affected its reported EBSS carryover amounts.

We consider that 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 TNSP in the regulatory control period.[11]

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.[12]

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.

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11 AER, *Electricity transmission network service providers - Efficiency benefit sharing scheme*, September 2007, p.6.
12 AASB 137, clause. 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 TasNetworks' calculations, its consumers would pay for efficiency carryover amounts that do not reflect changes in the underlying level of efficiency in providing transmission services during the 2009–14 regulatory control period. To reward TasNetworks for changes in assumptions would be contrary to the aims of the EBSS under the NER.

We note that the MEU proposed we not apply the EBSS carryover amounts.[13] It considered TasNetworks overstated its opex needs in the 2009–14 regulatory control period so the EBSS carryover amounts are not justified.

This course of action is not open to us. The carryover is calculated under the terms of the EBSS which we set out and applied in our determination for the 2009–14 regulatory control period. Incentives work best where the rewards and penalties facing a business are clear in advance of when it makes a decision to spend money. A business bases its expenditure decisions on the potential rewards and potential penalties it would face. To not apply the EBSS when we have committed to this approach undermines the incentive based arrangements in the regulatory regime.

9.5.2 How the EBSS will apply in the 2014–19 period

We will apply version two of the EBSS to TasNetworks. We consider the EBSS is needed to provide TasNetworks with a continuous incentive to pursue efficiency gains during the 2014–19 period. As we typically rely on a single year revealed cost approach to forecasting opex, we consider the EBSS is also needed to provide TasNetworks with an incentive not to increase its opex in the expected base year.

In its submission, the EUAA noted the interactions between the EBSS and our opex forecasting approach. It supported the concept of the EBSS, provided that the approved opex is prudent and efficient and that any underspend can be realised by customers rather than overtaken by inflated step changes and escalators.[14] We agree with the EUAA that for consumers to benefit from the EBSS, reductions in actual opex must be passed through to consumers through a lower forecast. As outlined in attachment 7 our preference is to use a base year when forecasting opex. This approach helps to provide consumers potential benefits of lower prices where a NSP makes reductions in opex.

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 2014–19 period will be five years. This aligns the EBSS carryover period with the total length of TasNetworks' regulatory control periods (that is, the 2014–15 transitional period and the 2015–19 subsequent regulatory control period).

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13 Major Energy Users, *Tasmanian Electricity Transmission Revenue Reset*, August 2014, p. 62.
14 EUAA, *Submission on TasNetworks Revenue Proposal 2014–19*, 8 August 2014, p. 11.

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.[15]

When calculating actual opex under the EBSS we will adjust reported actual opex for the 2014–19 period to reverse any movements in provisions. As outlined in section 9.5.1 above, for regulatory purposes we 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 also allows for exclusions of categories of costs from the EBSS where we do not forecast them 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.

We propose to exclude the following costs from the EBSS:

- debt raising costs
- network support
- self insurance
- opex on network capability incentive projects.

Our draft decision to exclude debt raising costs, self insurance and network support from the EBSS is consistent with TasNetworks' proposal. TasNetworks' forecast of debt raising costs and self insurance is based on category-specific forecasts for these costs. We do not consider the EBSS is compatible with its forecasting approach. TasNetworks did not include any network support costs in its opex forecast. However, changes in these costs are subject to pass through arrangements. To apply the EBSS to this category of costs, if incurred, would not be compatible with those arrangements.

We also consider opex spent on network capability projects should be excluded from the EBSS. These costs are funded through the network capability component of the transmission STPIS, not through forecast opex. We exclude these costs from the EBSS so that TasNetworks does not face EBSS penalties for undertaking these projects.

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

We do not consider insurance premiums should be excluded from the EBSS. Insurance is a continuing business cost. While TasNetworks has not used a base year approach to forecast these costs, in most cases, we see no reason to forecast this cost differently to other costs facing a service provider. Going forward, we intend to include these costs in our base year opex forecast. To give a service provider incentives to reduce its opex, costs that are forecast using this approach should remain in the EBSS. As a result, we propose not to exclude these costs from the EBSS.

In addition to these excluded cost categories 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 2019 where doing so better achieves the requirements of clause 6A.6.5 of the NER.

Table 9.4 sets out our draft decision on TasNetworks' target opex for the EBSS (total opex less excluded categories), against which we will calculate efficiency gains in 2014–19.

Table 9.4 AER's draft decision on TasNetworks' forecast opex for the EBSS ($ million, 2013–14)

	2014–15	2015–16	2016–17	2017–18	2018–19
TasNetworks' total forecast opex[16]	43.1	42.5	42.7	42.9	42.4
Self insurance	0.7	0.7	0.7	0.7	0.7
Forecast opex for the EBSS	42.4	41.8	42.0	42.2	41.7

Source: AER analysis

[16] Exclusive of debt raising costs.