Draft Decision

ActewAGL distribution determination

2015–16 to 2018–19

Attachment 9: Efficiency benefit sharing scheme

November 2014

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Note

This attachment forms part of the AER's draft decision on ActewAGL’s 2015–19 distribution determination. It should be read with other parts of the draft decision.

The draft 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

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Attachment 16 – Alternative control services

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Attachment 18 – Connection methodology

Attachment 19 – Pricing methodology

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Shortened forms

Shortened form	Extended form
AARR	aggregate annual revenue requirement
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
CPI-X	consumer price index minus X
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

Shortened form	Extended form
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
RFM	roll forward model
RIN	regulatory information notice
RPP	revenue 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 incentive for service providers to pursue efficiency improvements in operating expenditure. It does this by providing a service provider with additional revenue where it makes efficiency improvements and an additional penalty where it makes efficiency losses. It is designed to give effect to fair sharing of efficiency gains and losses between service providers and consumers.

During the 2009–14 regulatory control period ActewAGL operated under the *EBSS for the ACT and NSW 2009 distribution determinations*.[1] Our draft decision is not to apply EBSS carryover amounts to ActewAGL arising from the application of the scheme during the 2009–14 regulatory control period.

Our draft decision is that no expenditure will be subject to the EBSS during the 2015–19 regulatory control period.

9.1 Draft decision

Our draft decision is not to apply an EBSS carryover penalty to ActewAGL from the 2009–14 regulatory control period. The EBSS was intended to work in conjunction with a revealed cost forecast approach. Given how we are forecasting ActewAGL's opex for the 2014–19 period, we consider it would not be consistent with the intended operation of the EBSS, and it would not implement the EBSS in accordance with the terms of the NER, if we were to carryover the EBSS penalty.

As it is uncertain whether we will rely on ActewAGL's revealed costs in the 2014–19 period in forecasting ActewAGL's efficient opex in the future, our draft decision is that no expenditure will be subject to the EBSS during the 2015–19 regulatory control period.[2]

9.2 Proposal

Carryover amounts accrued during the 2009–14 regulatory control period

ActewAGL proposed a total EBSS carryover amount (penalty) of $19.6 million ($2013–14) be subtracted from its regulated revenue in the 2014–19 period arising from the application of the EBSS in the 2009–14 regulatory control period.[3]

Application of the EBSS in the 2015–19 regulatory control period

ActewAGL proposed that version two of the EBSS should apply to it in the 2015–19 regulatory control period consistent with our proposal in our Stage 2 framework and approach paper,[4] but with two modifications. Those modifications were the exclusion of uncontrollable costs from the EBSS and setting the 2014–15 allowance equal to the actual spend in that year.

1 AER, *Efficiency benefit sharing scheme for the ACT and NSW 2009 distribution determinations*, February 2008.

2 We have previously determined that the EBSS would apply to ActewAGL in the 2014–15 regulatory control period as if it were the first year of the 2015–19 regulatory control period (that is, the first year in a period running from 2014–19). The effect of our draft decision is that no expenditure will therefore be subject to the EBSS during the 2014–19 period. See AER, *Ausgrid, ActewAGL, ActewAGL, ActewAGL - Transitional distribution decision 2014–15*, 16 April 2014, pp. 47-48.

3 ActewAGL, *Revenue proposal*, p. 357.

4 AER, *Stage 2 Framework and Approach—ActewAGL*, January 2014, p. 27.

9.3 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 2014–19 period arising from the application of the EBSS during the 2009–14 regulatory control period.[5]

2. how the EBSS will apply to ActewAGL in the 2015-19 regulatory control period.[6]

The EBSS must provide for a fair sharing between service providers and network users of opex efficiency gains and efficiency losses.[7] We must also have regard to the following factors when implementing the EBSS:[8]

- 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 ActewAGL 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.

9.4 Interrelationships

The EBSS is intrinsically linked to a revealed cost forecasting approach for opex. Under this opex 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 in the following regulatory control period.

Under the carryover provisions of the EBSS, the fair sharing of efficiency gains and losses in one regulatory control period is intrinsically linked to the use of a revealed costs forecasting approach for the following regulatory control period. Where a different forecasting approach is used in the following period, the effective penalty for an increase in opex will be different. Where this imposes a higher penalty on a service provider than under a revealed cost forecasting approach we may not consider it appropriate to apply the carryover penalty.

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5 NER, clause 6.4.3(a)(5).
6 NER, clause 6.3.2(a)(3); clause 6.12.1(9).
7 NER, clause 6.5.8(a).
8 NER, clause 6.5.8(c).

9.5 Reasons for draft decision

This section provides the reasons for our draft decision on the EBSS carryover amounts from the 2009–14 regulatory control period and the reasons why no forecast expenditure will be subject to the EBSS in the 2014–19 period.

9.5.1 Carryover amounts accrued during the 2009–14 regulatory control period

In the 2009–14 regulatory control period, ActewAGL was subject to the *EBSS for the ACT and NSW 2009 distribution determinations*.[9] 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 ActewAGL for the 2009–14 regulatory control period
- actual opex for the regulatory years from 2009–10 to 2012–13 less excluded cost categories.

The formulae for calculating the carryover amounts are set out in this scheme.[10]

If we applied the EBSS carryover amounts to ActewAGL, we estimate it would receive an EBSS carryover amount of –$19.6 million ($2013-14). Our calculation is the same as ActewAGL's calculation in its regulatory proposal.

As noted above, the opex forecasting approach and the EBSS are closely related. For instance, if a service provider reduces its costs in the most recent year of the regulatory control period it will receive EBSS rewards. In addition, it will keep the forecast opex allowance where it did not spend opex. If we then use its actual opex to forecast its opex in the next regulatory control period it will also receive a lower opex forecast because of the reduction in opex.

In this way, the service provider receives a reward, spread out over a number of years, for making an efficiency gain. The efficiency gain is eventually passed on to consumers through lower forecast opex. Both the service provider and the consumer benefit from the gain. When the EBSS is applied in combination with a revealed cost forecasting approach to opex, the efficiency gain will effectively be shared between a service provider and its consumers at a ratio of 30:70.

Conversely, if a service provider increases its opex in the most recent year of the regulatory control period it will receive an EBSS carryover penalty. This is in addition to the fact that it will carry the cost (or face a reduced benefit) of funding the increase in opex in the short term. The penalties will last for a number of years. In this way, the service provider carries a penalty in the short term, but eventually the efficiency loss will be shared with consumers at a later time through higher forecast opex. Again, when the EBSS is applied in combination with a revealed cost forecasting approach to opex, the penalty will effectively be shared between a service provider and its with consumers at a ratio of 30:70.

We consider this approach gives effect to fair sharing of efficiency gains and losses and provides the appropriate incentive to service providers to avoid efficiency losses and to promote efficiency gains.

In most circumstances, we consider we should apply the EBSS rewards and penalties that have accrued during a regulatory control period. Incentives work best where the rewards and penalties

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9 AER, *Efficiency benefit sharing scheme for the ACT and NSW 2009 distribution determinations*, February 2008.

10 AER, *Efficiency benefit sharing scheme for the ACT and NSW 2009 distribution determinations*, February 2008, pp. 4-5.

facing a business are clear in advance of its decision to spend money. A business bases its expenditure decisions on the potential rewards and potential penalties it would face. If rewards and penalties are not applied consistently between different service providers it may create investment uncertainty for all service providers subject to those arrangements. For that reason, we consider a decision not to apply incentive rewards and/or penalties should only be considered in limited circumstances.

In this case, we consider our change in our opex forecasting approach warrants reconsideration of the EBSS penalties that apply to ActewAGL. As discussed in attachment 7, we have not used ActewAGL's actual opex as a base for forecasting its opex for the 2014–19 period, as this would not produce a total forecast that reasonably reflects the opex criteria. After benchmarking ActewAGL's base opex against other service providers in the NEM, we consider base opex needs to be adjusted lower in our alternative forecast.

If we applied both the EBSS penalties and a benchmark opex allowance for the next regulatory control period, this has implications for whether the efficiency losses ActewAGL made during the 2009–14 regulatory control period would be shared fairly with consumers. This would mean ActewAGL would carry a greater share of efficiency losses than was intended when we decided to apply the EBSS prior to the start of the 2009–14 regulatory control period.

For instance, ActewAGL's opex for EBSS purposes increased by $13 million ($2013–14) from 2009–10 to 2012–13. This would lead to EBSS penalties of $19.6 million ($2013–14) relative to if it had not increased its opex in these years.

If we used a revealed cost forecasting approach, ActewAGL’s increase in opex in the 2009–14 regulatory control period would be reflected in our forecast of ActewAGL’s opex in each year of the 2014–19 period. That is, ActewAGL's opex forecast would be $13 million higher in each year of the 2014–19 regulatory control period as a result of its increase in opex in the 2009–14 period. This forecasting approach, in combination with the EBSS penalties is the way the increase in opex in these years is shared between ActewAGL and its consumers.

However, as we are using a benchmarking approach to forecast opex, ActewAGL’s increase in opex in this time does not affect our alternative opex forecast. This means, if we applied the EBSS penalties, ActewAGL would wear a greater penalty from increasing its opex in these years than it would under a revealed cost forecasting approach. We consider that applying the EBSS would not give effect to the objectives of fair sharing of efficiency losses as defined under the NER. We consider we should not apply the EBSS penalties to ActewAGL for this reason.

We acknowledge that this is a different position to what we considered we would do when we established the EBSS. We originally intended to apply all EBSS carryover amounts - both positive and negative. However, at the same time, we also highlighted the inter-relationships between the EBSS and a revealed cost forecasting approach. For instance, we considered we were likely to be relying on revealed costs to some degree to forecast ActewAGL's opex in the next period.[11]

When implementing an efficiency benefit sharing scheme, we have regard to whether benefits to electricity consumers from the scheme are sufficient to warrant a penalty we might apply under the scheme.[12] As we have not used a revealed cost forecasting approach for this draft decision, we have

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[11] AER, *Efficiency benefit sharing scheme for the ACT and NSW 2009 distribution determinations - Final decision*, February 2008, p. 10.

revisited our earlier position that all negative EBSS carryover amounts should apply when implementing the EBSS. A change in opex forecasting approach away from a revealed cost approach leads to different sharing of efficiency losses than was intended when we established the EBSS. We do not believe a carryover penalty is warranted in these circumstances.

We note that this draft decision only applies because of the change in opex forecasting approach. We still intend to apply negative EBSS carryover amounts to other service providers where we continue to rely on a revealed cost forecasting approach.

9.5.2 Decision on how to apply the EBSS to ActewAGL for the 2015–19 regulatory control period

Our draft decision is that no expenditure will be subject to the EBSS during the 2015–19 regulatory control period.[13]

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 the scheme. Several stakeholders asked us to review the benefit to consumers of applying the EBSS[14] and some submitted that we should not apply it.[15] We discuss why we do not consider ActewAGL's customers would benefit from us applying the EBSS in the 2014–19 period below.

As discussed above, the EBSS is intrinsically linked to the revealed cost forecasting approach for opex. 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 ActewAGL's opex is higher than opex incurred by a benchmark efficient service provider. This is discussed in the base opex appendix to attachment 7. We also note that ActewAGL has just over three years before it submits its next regulatory proposal. Based on these factors, it is uncertain whether and to what extent we are likely to rely on ActewAGL's revealed costs in the 2014–19 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.

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13 We have previously determined that the EBSS would apply to ActewAGL in the 2014–15 regulatory control period as if it were the first year of the 2015–19 regulatory control period (that is, the first year in a period running from 2014–19). The effect of our draft decision is that no expenditure will therefore be subject to the EBSS during the 2014–19 period. See AER, *Ausgrid, Endeavour Energy, Essential Energy, ActewAGL - Transitional distribution decision 2014–15*, 16 April 2014, pp. 47–48.

14 CCP, *Submission on NSW DNSPs regulatory proposals 2014-19 (updated)*,15 August 2014, p. 30. AGL, *Submission on NSW DNSPs regulatory proposals*, 8 August 2014, pp.15-18. PIAC, *Submission to NSW DNSPs regulatory proposals*, 8 August 2014, pp. 16–17.

15 EUAA, *Submission on NSW DNSPs regulatory proposals*, 8 August 2014, pp. 3, 11.

For instance we consider ActewAGL 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 2015–19 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.[16]

ActewAGL 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, consistent with our preferred approach in the *Expenditure forecast assessment guideline*.

16 NER, clause 6.5.8.