PRELIMINARY DECISION
CitiPower distribution determination 2016 to 2020

Attachment 9 – Efficiency benefit sharing scheme

October 2015

AUSTRALIAN ENERGY REGULATOR

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Note

This attachment forms part of the AER's preliminary decision on CitiPower's revenue proposal 2016–20. It should be read with all other parts of the preliminary decision.

The preliminary 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

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Attachment 12 - Demand management incentive scheme

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Attachment 18 - f-factor scheme

Contents

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
GSL	guaranteed service level
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 it makes, 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 CitiPower operated under the Electricity distribution network service providers' EBSS released in June 2008.[1]

9.1 Preliminary decision

We approve an EBSS carryover amount of –$3.1 million ($2015) from the application of the EBSS in the 2011–15 regulatory control period.[2] The difference between our calculations of the EBSS carryover amounts and CitiPower's proposal is mostly attributable to a different formula used to calculate EBSS carryover amounts for 2011. Our preliminary decision for the EBSS carryover amounts from the 2011–15 regulatory control period is outlined in Table 9.1.

Table 9.1 AER's preliminary decision on CitiPower's EBSS carryover amounts ($ million, 2015)

	2016	2017	2018	2019	2020	Total
CitiPower's proposed carryover	–3.6	–2.0	0.7	–1.8	0.0	–6.7
Preliminary decision	–0.1	–2.7	1.0	–1.3	0.0	–3.1

Source: AER analysis; CitiPower, *Regulatory proposal*, April 2015, p. 249.

Our preliminary decision is to apply version two of the EBSS to CitiPower in the

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.

2016–20 regulatory control period.[3] When we apply version two of the EBSS, we will exclude the cost categories listed in section 9.4.2 from forecast and actual opex for the calculation of EBSS carryover amounts. Table 9.2 sets out our preliminary decision on CitiPower's target opex for the EBSS (total opex less excluded categories[4]), against which we will calculate efficiency gains in the 2016–20 regulatory control period.

Table 9.2 AER's preliminary decision on CitiPower's forecast opex for the EBSS ($ million, 2015)

	2016	2017	2018	2019	2020
Forecast opex for the EBSS	78.5	79.8	81.8	83.4	84.9

Source: AER analysis.

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

9.2 CitiPower's proposal

9.2.1 Carryover amounts accrued during the 2011–15 regulatory control period

CitiPower proposed –$6.7 million ($2015) be subtracted from its regulated revenue in the 2016–20 regulatory control period.

In estimating its proposed EBSS carryover amounts, CitiPower adjusted its approved forecast opex for:

- differences between actual growth and forecast growth
- regulatory compliance costs associated with new regulatory information notice (RIN) reporting requirements.

It adjusted its actual opex for the following costs

- defined benefits superannuation contributions
- opex funded through the Demand Management Innovation Allowance (DMIA)
- guaranteed service level (GSL) payments
- licence fees
- movements in provisions.

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

[4] Debt raising costs, DMIA and GSL payments.

9.2.2 Application of the EBSS in the 2016–20 regulatory control period

CitiPower proposed version two of the scheme would apply to it in the 2016–20 regulatory control period subject to specific exclusions and adjustments. It proposed we exclude the following cost categories from the scheme:

- debt raising costs
- self-insurance
- superannuation costs for defined benefits and retirement schemes
- the demand management innovation allowance (DMIA)
- GSL payments
- pass throughs.[5]

9.3 AER's assessment approach

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

1. the revenue increments or decrements (if any) for each year of the 2016–20 regulatory control period arising from the application of the EBSS during the 2011–15 regulatory control period.[6]
2. how the EBSS will apply to CitiPower in the 2016–20 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 factors 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.

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5 CitiPower, *Regulatory proposal*, April 2015, p. 186.
6 NER, cl. 6.4.3(a)(5).
7 NER, cl. 6.3.2(a)(3); cl. 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. 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.

9.4 Reasons for preliminary decision

9.4.1 Carryover amounts from the 2011–15 regulatory control period

We consider CitiPower should receive EBSS carryover amounts of –$3.1 million ($2015) from the application of the EBSS during the 2011–15 regulatory control period. Our calculation is in accordance with section 2.3 of the Electricity distribution network service providers EBSS.[10]

In the 2011–15 regulatory control period, CitiPower was subject to the Electricity distribution network service providers EBSS.[11] 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 CitiPower for the 2011–15 regulatory control period
- actual opex for the regulatory years from 2011–12 to 2014–15 less excluded cost categories.

The formulas for calculating the carryover amounts are set out in this scheme.[12]

The EBSS carryover we calculated (–$3.1 million) is different to the carryover CitiPower proposed (–$6.7 million) mainly because we used a different formula for calculating carryover amounts for 2011.

In the determination for the 2011–15 regulatory control period, we determined that the following formula would apply to calculate carryover amounts from 2011:

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[10] AER, *Electricity distribution network service providers Efficiency benefit sharing scheme*, June 2008, pp. 4−6.

[11] AER, *Electricity distribution network service providers Efficiency benefit sharing scheme*, June 2008.

[12] AER, *Electricity distribution network service providers Efficiency benefit sharing scheme*, June 2008, pp. 5−6.

$$E_{2011} = (F_{2011} - A_{2011}) - (F_{2010} - A_{2010}) + (F_{2009} - A_{2009})$$

where E = carryover amount, F = forecast opex, A= actual opex

We stated we would use this formula to preserve continuity in the rewards and penalties accruing to CitiPower between the Efficiency Carryover Mechanism that applied in the 2010–15 regulatory control and the EBSS that applied in the 2016–20 regulatory control period. We must have regard to the need to provide CitiPower with continuous incentives in implementing the EBSS.[13]

In its proposal, CitiPower estimated its EBSS carryover amounts for 2011 by applying a formula that did not recognise forecast and actual opex in 2009 and 2010, that is:

$$E_{2011} = (F_{2011} - A_{2011})$$

The above formula only applies in calculating carryover amounts when the EBSS (or a similar scheme) does not apply in the prior regulatory control period. As CitiPower was subject to the ESCV's efficiency carryover mechanism in the 2005–10 regulatory control period, we stated we would use a different formula to calculate carryover amounts for 2011.[14] CitiPower's proposed approach leads to larger negative EBSS carryovers than we estimated it was entitled to.

We have also made a minor adjustment to CitiPower's proposed EBSS carryover amounts to correct for the amount CitiPower reported in 2014 in its audited regulatory accounts for licence fees.[15]

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

We will apply version two of the EBSS to CitiPower.[16] We consider the EBSS is needed to provide CitiPower with a continuous incentive to pursue efficiency gains during the 2016–20 regulatory control period. As we typically rely on a single year revealed cost approach to forecasting opex, we consider the EBSS is also needed to provide CitiPower with an incentive not to increase its opex in the expected base year.

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.

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13 NER, cl. 6.5.8(c).

14 AER, *Victorian electricity distribution network service providers, distribution determination 2011–15 Final decision*, October 2010, pp. 643-644.

15 CitiPower reported licence fees of $24,961 in 2014. The amount it reported in its regulatory accounts was $6,845.

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

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 total length of CitiPower's regulatory control period.

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.[17]

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. Consistent with the approach we applied in implementing the EBSS for the 2011–15 regulatory control period, 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 categories of costs from the EBSS:

- debt raising costs
- demand management innovation allowance (DMIA)
- GSL payments

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

- losses on the scrapping of assets.

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

We also propose to exclude losses on the scrapping of assets from the EBSS. This was proposed by Jemena in its regulatory proposal.[18] Losses on the scrapping of assets are accounting records of the shortfalls between the proceeds from selling assets and their accounting written down values. Jemena stated that consistent with accounting standards, and subject to audit, these losses are reported as opex in its statutory accounts.[19] The EBSS is designed to reward businesses for becoming more efficient over time and penalise them for becoming less efficient. It is the actual opex a service provider incurs that we are concerned about when measuring efficiency improvements. As a loss on the scrapping of an asset is an accounting adjustment to expenditure, rather than an actual outlay made by a service provider in providing network services, including it in the EBSS would mean CitiPower would be rewarded or penalised for accounting adjustments. We do not consider this would be consistent with the aims of the EBSS.

We do not propose to exclude opex on self-insurance and superannuation for defined benefits and retirement schemes from the EBSS. CitiPower proposes to exclude these costs because it has not used a revealed cost forecasting approach. We would typically exclude such costs where we do not rely on a revealed cost forecasting approach. However, as noted in attachment 7 ─ Operating expenditure, we do not agree with CitiPower's forecasting approach for superannuation costs for defined benefits. CitiPower did not forecast any self insurance for the 2016–20 regulatory control period. For these reasons we have not excluded these categories of opex 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 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 2021 where doing so better achieves the requirements of clause 6.5.8 of the NER.

[18] Jemena, *Regulatory proposal,* 30 April 2015, p. 41.

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