



# **DRAFT DECISION**

## **Power and Water Corporation Distribution Determination 2019 to 2024**

### **Attachment 8 Efficiency benefit sharing scheme**

September 2018

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AER reference: 60610

## Note

This overview forms part of the AER's draft decision on the distribution determination that will apply to Power and Water Corporation for the 2019-2024 regulatory control period. It should be read with all other parts of the draft decision.

The draft decision includes the following attachments:

### Overview

Attachment 1 – Annual revenue requirement

Attachment 2 – Regulatory asset base

Attachment 3 – Rate of return

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

Attachment 6 – Operating expenditure

Attachment 7 – Corporate income tax

Attachment 8 – Efficiency benefit sharing scheme

Attachment 9 – Capital expenditure sharing scheme

Attachment 10 – Service target performance incentive scheme

Attachment 11 – Demand management incentive scheme

Attachment 12 – Classification of services

Attachment 13 – Control mechanisms

Attachment 14 – Pass through events

Attachment 15 – Alternative control services

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## Shortened forms

Shortened form	Extended form
ACS	alternative control services
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
augex	augmentation expenditure
capex	capital expenditure
CCP	Consumer Challenge Panel
CCP 13	Consumer Challenge Panel, sub-panel 13
CESS	capital expenditure sharing scheme
CPI	consumer price index
DRP	debt risk premium
DMIAM	demand management innovation allowance (mechanism)
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
NT NER or the rules	National Electricity Rules As in force in the Northern Territory

Shortened form	Extended form
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 and pricing principles
SAIDI	system average interruption duration index
SAIFI	system average interruption frequency index
SCS	standard control services
SLCAPM	Sharpe-Lintner capital asset pricing model
STPIS	service target performance incentive scheme
WACC	weighted average cost of capital

## 8 Efficiency benefit sharing scheme

The efficiency benefit sharing scheme (EBSS) is intended to provide a continuous incentive for distributors to pursue efficiency improvements in opex, and provide for a fair sharing of these between distributors and network users. Consumers benefit from improved efficiencies through lower regulated prices.

As this is the first time we have examined Power and Water Corporation's (Power and Water) expenditures, it does not currently operate under an EBSS. It also does not have in place a similar jurisdictional scheme. This section sets out our decision and reasons why we consider the EBSS should not apply in the 2019–24 regulatory control period.

### 8.1 Draft decision

Our draft decision is to not apply the EBSS to Power and Water in the 2019–24 regulatory control period.<sup>1</sup> This decision relates to our decision to not use revealed cost to forecast opex in the 2019–24 period as we do not consider Power and Water's past opex to be efficient. Further, it is uncertain whether we will rely on Power and Water's revealed cost in the 2019–24 regulatory control period to forecast opex in the period starting 1 July 2024. Our draft decision on forecast opex is set out in Attachment 6.

In making our decision not to implement an EBSS we have had regard to the factors required under the NER.<sup>2</sup> We consider that, in Power and Water's circumstances, an EBSS would not provide it a continuous incentive to reduce opex. Further, we are not convinced that applying the scheme would provide benefits to consumers that would warrant any reward or penalty under the scheme. We also consider that the EBSS is not required for Power and Water to be rewarded for efficiency gains and penalised for efficiency losses. We are also of the view that not having an EBSS in place will provide the best balance between the incentive for Power and Water to capitalise expenditure versus the incentive to expense it, and in turn to implement non-network options. This accounts for our decision to apply the Capital Expenditure Efficiency Scheme, Demand Management Incentive Scheme and the Demand Management Innovation Allowance (Mechanism).

We discuss the reasons for our decision in section 8.4 below.

### 8.2 Power and Water Corporation's proposal

Power and Water proposed to apply version 2 of the EBSS in the 2019–24 regulatory control period.<sup>3</sup> It recognised that the EBSS provides a continuous incentive to pursue efficiency improvements across the period. Power and Water also stated that it has

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<sup>1</sup> NT NER, cl 6.3.2(3) and cl 6.12.1(9).

<sup>2</sup> NT NER, cl 6.5.8(c).

<sup>3</sup> Power and Water, *Revenue proposal*, 16 March 2018, pp. 115–16.

used our preferred revealed cost approach to forecast opex for the 2019–24 regulatory control period.<sup>4</sup>

### 8.2.1 Stakeholder views

We have received two submissions on Power and Water's EBSS proposal. Jacana Energy strongly supported the application of the scheme.<sup>5</sup> However, the AER's Consumer Challenge Panel 13 (CCP 13) stated that the EBSS should only be applied if the AER satisfies itself that the proposed level of opex is efficient. CCP 13 noted it is generally supportive of the EBSS but cautious that it should be implemented in a way that genuinely incentivises productivity improvements and doesn't simply reward 'over promising and under delivering'.<sup>6</sup> Also, CCP 13 did not support a scheme which would result in Power and Water sharing in the benefits of getting to an efficient level of opex.

## 8.3 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 2019–24 period arising from the application of the EBSS during the 2014–19 regulatory control period<sup>7</sup>
2. how any applicable EBSS is to apply to Power and Water in the 2019–24 period.<sup>8</sup>

The EBSS must provide for a fair sharing between service providers and network users of opex efficiency gains and efficiency losses.<sup>9</sup> We must also have regard to the following factors when implementing the EBSS:<sup>10</sup>

- 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.

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<sup>4</sup> Power and Water, *Revenue proposal*, 16 March 2018, pp. 116.

<sup>5</sup> Jacana Energy, *Power and Water distribution determination*, 16 May 2018, p. 3.

<sup>6</sup> Consumer Challenge Panel subpanel 13, *Issues paper Power and Water electricity network revenue proposal 2019–24*, 16 May 2018, p. 39–40.

<sup>7</sup> NT NER, cl. 6.4.3(a)(5).

<sup>8</sup> NT NER, cl. 6.3.2(a)(3); cl. 6.12.1(9).

<sup>9</sup> NT NER, cl. 6.5.8(a).

<sup>10</sup> NT NER, cl. 6.5.8(c).



### 8.3.1 Interrelationships

The EBSS is closely 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.<sup>11</sup>

Our opex forecasting method relies on using the 'revealed costs' of the service provider in a chosen base year 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:

1. It removes 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
2. It provides a continuous incentive for a service provider to pursue efficiency improvements across the regulatory control period.

The EBSS does this by allowing a service provider to retain efficiency gains (or losses) for a total of six years, regardless of the year in which the service provider makes them.

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 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 that we do not forecast using a revealed cost forecasting approach.

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

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<sup>11</sup> NT NER, cl. 6.5.6(e)(8).

possible effects of the scheme on incentives for the implementation of non-network alternatives<sup>12</sup>

- 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.<sup>13</sup>

## 8.4 Reasons for draft decision

Our draft decision is to not apply the EBSS during the 2019–24 regulatory control period.

The EBSS was designed to fairly share opex efficiency gains and efficiency losses between a distributor and consumers.<sup>14</sup> It was designed to work in conjunction with a revealed cost forecasting approach.

We stated, in the final framework and approach paper, we would decide in our determination if and how to apply the EBSS to Power and Water over the 2019–24 regulatory control period. We stated we would take into account our assessment of Power and Water's revealed costs and the basis on which we approve Power and Water's forecast opex over the period.<sup>15</sup> This informs our analysis in relation to the specific factors that we must have regard to under the NER when implementing the EBSS.<sup>16</sup>

One factor we must have regard to is the need to provide service providers with continuous incentives, so far as is consistent with economic efficiency, to reduce opex.<sup>17</sup>

The EBSS was designed to provide continuous incentives when we use a revealed cost approach to forecast opex for the following regulatory control period. However, our opex assessment shows areas where Power and Water could achieve further efficiencies. This is discussed in the base opex section in attachment 6 of this determination. Specifically, we have assessed the efficiency of Power and Water's opex in the 2016–17 base year using multiple techniques and information sources, including a detailed review of Power and Water's operating expenditure cost categories and its operating and maintenance practices.

Based on our analysis, we have concluded that Power and Water's revealed costs do not reflect efficient costs incurred by a prudent distribution network service provider. As a result we have not relied on Power and Water's revealed cost in determining forecast

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<sup>12</sup> NT NER, cl. 6.5.8(e)(4)-(5).

<sup>13</sup> NT NER, cl. 6.5.8A(d).

<sup>14</sup> NT NER, cl. 6.5.8(a).

<sup>15</sup> AER, *Final framework and approach for Power and Water Corporation*, July 2017, p. 45.

<sup>16</sup> NT NER, cl. 6.5.8(c).

<sup>17</sup> NT NER, cl. 6.5.8 (c)(2).

opex for 2019–24 and it is uncertain whether we would rely on its revealed costs in 2019–24 to forecast opex in the period starting 1 July 2024.

Given our assessment, we consider Power and Water will already face a strong continuous incentives without an EBSS in place to make efficiency improvements while its actual opex is relatively higher than efficient levels and allowed forecasts. This is because expenditure that is higher than the allowed forecast will directly impact Power and Water's financial outcomes and profits—if it does not respond to the incentives it will bear the inefficient overspend in the 2019–24 regulatory control period. To the extent it does not respond to these incentives, and revealed opex is higher than efficient levels, it may also bear any inefficient overspend in the following regulatory control period.

In responding to these continuous incentives, Power and Water will take into account the information available about efficient benchmarks, including potentially through inclusion of Power and Water in future AER annual benchmarking reports. We intend to investigate how we can include Power and Water in these reports, and to the extent they are included, we consider this will mitigate any incentives Power and Water has to increase its opex in the base year of the next regulatory period.

Reflecting the above, we do not consider we need to apply an EBSS to ensure continuous incentives are in place.

We must also have regard to the need to ensure that the benefits to consumers that are likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme.<sup>18</sup>

If an EBSS was applied to Power and Water for the 2019–24 regulatory control period, it is unclear that consumers would share the benefits of any efficiency improvements. This is because when an efficiency improvement is achieved Power and Water would receive a benefit through the EBSS. However, consumers would only receive a benefit if Power and Water's revealed opex is used to forecast opex in the 2024–29 regulatory control period. As we have not used revealed costs to forecast opex for the 2019–24 regulatory period, and it is uncertain whether we would rely on revealed costs to forecast opex for the 2024–29 regulatory control period, it is not clear any benefit would be shared with consumers. We consider that consumers should not pay for EBSS benefits where they are not likely receive the benefits of a lower opex forecast.

Reflecting the above, we are not convinced there would be benefits to consumers under an EBSS that would warrant any reward under the scheme.

CCP 13 agreed with this view. It submitted that it does not support an EBSS being in place which would result in Power and Water sharing the benefits of getting to an efficient level of opex.<sup>19</sup>

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<sup>18</sup> NT NER, cl. 6.5.8 (c)(1).

In contrast, Jacana Energy stated in its submission on Power and Water's proposal that it strongly supports the implementation of the EBSS.<sup>20</sup> However, it did not justify its view apart from suggesting that Power and Water share opex cost saving with customers given networks costs constitute a significant proportion of a customer's energy bill. We disagree with Jacana Energy for the reasons stated above.

We must also have regard to the desirability of both rewarding service providers for efficiency gains and penalising them for efficiency losses.<sup>21</sup> Like with the other criteria, here we must be mindful of how efficiency gains and losses will be shared absent the EBSS. This in turn will depend on how Power and Water's revealed opex will influence its future revenues. If in the future we do not use Power and Water's revealed opex to forecast subsequent opex allowances, then the efficiency gains and losses it makes will not influence its future revenues. In this case Power and Water would retain 100 per cent of any efficiency gains and losses it makes in the 2019–24 regulatory control period. Because we don't know whether we will use Power and Water's revealed opex to forecast for the 2024–29 control period we consider the EBSS is not required for Power and Water to be rewarded for efficiency gains and penalised for efficiency losses.

Under the NER we must also have regard to any incentives that service providers may have to capitalise expenditure when implementing the EBSS.<sup>22</sup> As stated earlier, we have determined not to apply the EBSS because in our view Power and Water already will face continuous incentives to reduce opex in the 2019–24 regulatory control period. In forming this view, we had regard to the incentives Power and Water may have to capitalise expenditure. We consider that the capital expenditure sharing scheme (CESS), which we have determined to apply in this decision (see attachment 9), would, in the absence of an EBSS, provide more balanced incentives than not applying the CESS.

The CESS provides a mechanism to share efficiency gains and losses resulting from capex, between network service providers and network users. Our decision on CESS is set out in attachment 9.

We must also have regard under the NER to the possible effects of the EBSS on incentives for the implementation of non-network options.<sup>23</sup> We consider that the incentive to implement non-network options could be reduced with an EBSS in place. This is because any non-network options will increase opex and the application of the EBSS would increase the penalty Power and Water faces for such an opex increase. However, we are applying the Demand Management Incentive Scheme and Demand Management Innovation Allowance (Mechanism), without any modification, in the

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<sup>19</sup> Consumer Challenge Panel subpanel 13, *Issues paper Power and Water electricity network revenue proposal 2019–24*, 16 May 2018, p. 40.

<sup>20</sup> Jacana Energy, *Power and Water distribution determination*, 16 May 2018, p. 3.

<sup>21</sup> NT NER, cl. 6.5.8 (c)(3).

<sup>22</sup> NT NER, cl. 6.5.8(c)(4).

<sup>23</sup> NT NER, cl. 6.5.8 (c)(5).

2019–24 regulatory control period which will incentivise the implementation of non-network options (see attachment 11 for further detail).