



**DRAFT DECISION**

**SA Power Networks**  
**Distribution Determination**  
**2020 to 2025**

**Attachment 1**  
**Annual revenue requirement**

October 2019

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Inquiries about this publication should be addressed to:

Australian Energy Regulator  
GPO Box 520  
Melbourne Vic 3001

Tel: 1300 585 165

Email: [SAPN2020@aer.gov.au](mailto:SAPN2020@aer.gov.au)

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## Note

This attachment forms part of the AER's draft decision on the distribution determination that will apply to SA Power Networks for the 2020–2025 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

Attachment 16 – Negotiated services framework and criteria

Attachment 17 – Connection policy

Attachment 18 – Tariff structure statement

# Contents

<b>Note</b> .....	<b>1-2</b>
<b>Contents</b> .....	<b>1-3</b>
<b>Shortened forms</b> .....	<b>1-4</b>
<b>1 Annual revenue requirement</b> .....	<b>1-5</b>
<b>1.1 Draft decision</b> .....	<b>1-5</b>
<b>1.2 SA Power Networks' proposal</b> .....	<b>1-7</b>
<b>1.3 Assessment approach</b> .....	<b>1-8</b>
1.3.1 The building block costs .....	1-9
<b>1.4 Reasons for draft decision</b> .....	<b>1-9</b>
1.4.1 Revenue smoothing .....	1-10
1.4.2 Shared assets .....	1-12
1.4.3 Indicative average distribution price impact .....	1-14
1.4.4 Expected impact of decision on electricity bills .....	1-16

## Shortened forms

Shortened form	Extended form
AER	Australian Energy Regulator
ARR	annual revenue requirement
CCP14	Consumer Challenge Panel, sub-panel 14
CESS	capital expenditure sharing scheme
CPI	consumer price index
DMIAM	demand management innovation allowance mechanism
distributor	distribution network service provider
EBSS	efficiency benefit sharing scheme
ECA	Energy Consumers Australia
NER or the rules	national electricity rules
opex	operating expenditure
PTRM	post-tax revenue model
RAB	regulatory asset base
RIN	regulatory information notice

# 1 Annual revenue requirement

The annual revenue requirement (ARR) is the sum of the various building block costs for each year of the regulatory control period before revenue smoothing. The ARR is smoothed across the period to reduce fluctuations between years and to determine expected revenues for each year. The expected revenues are the amounts that SA Power Networks will target for annual pricing purposes and recover from customers for the provision of standard control services (SCS) for each year of the regulatory control period. This attachment sets out our draft decision on SA Power Networks' ARR and expected revenues for the 2020–25 regulatory control period.

## 1.1 Draft decision

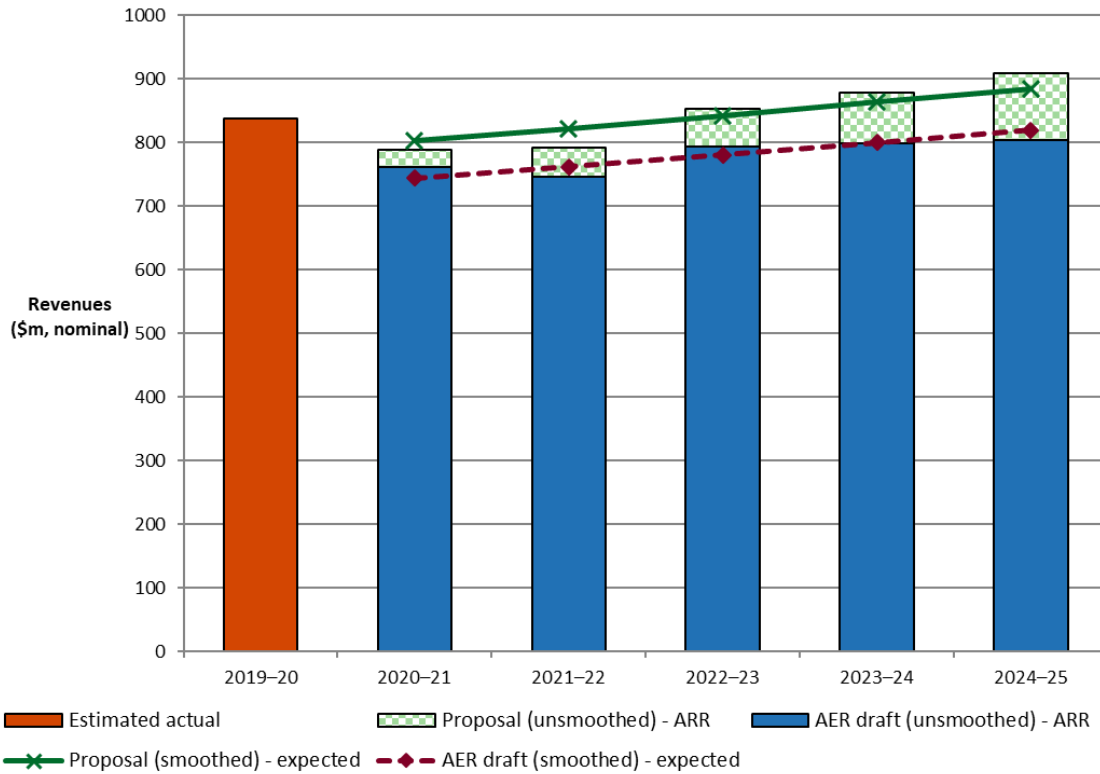
We do not accept SA Power Networks' proposed total ARR of \$4220.8 million (\$ nominal) over the 2020–25 regulatory control period. This is because we have not accepted the building block costs in SA Power Networks' proposal. We determine a total ARR of \$3902.9 million (\$ nominal) for SA Power Networks for the 2020–25 regulatory control period, reflecting our draft decision on the various building block costs. This is a reduction of \$317.9 million (\$ nominal) or 7.5 per cent to SA Power Networks' proposal.

We determine the annual expected revenue (smoothed) and X factor for each regulatory year of the 2020–25 regulatory control period by smoothing the ARR. Our draft decision is to approve total expected revenues (smoothed) of \$3905.3 million (\$ nominal) for SA Power Networks for the 2020–25 regulatory control period.

Figure 1.1 shows the difference between SA Power Networks' proposal and our draft decision.

Table 1.1 shows our draft decision on the building block costs, the ARR, annual expected revenue and X factor for the 2020–25 regulatory control period.

**Figure 1.1 AER's draft decision on SA Power Networks' revenue for the 2020–25 regulatory control period (\$million, nominal)**



Source: AER analysis; SA Power Networks, *2020–25 Regulatory proposal - supporting document 1.1 - PTRM Model*, 31 January 2019.

**Table 1.1 AER's draft decision on SA Power Networks' revenues for the 2020–25 regulatory control period (\$ million, nominal)**

	2020–21	2021–22	2022–23	2023–24	2024–25	Total
Return on capital	217.6	214.8	211.8	207.3	202.3	1053.7
Regulatory depreciation <sup>a</sup>	220.3	232.2	243.7	249.6	242.0	1187.7
Operating expenditure <sup>b</sup>	298.9	307.9	317.1	326.0	335.2	1585.1
Revenue adjustments <sup>c</sup>	17.5	-14.2	13.4	7.1	15.0	38.8
Net tax allowance	6.5	6.3	7.2	8.9	8.7	37.6
Annual revenue requirement (unsmoothed)	760.8	746.9	793.2	798.9	803.1	3902.9
<b>Annual expected revenue (smoothed)</b>	<b>743.7</b>	<b>761.9</b>	<b>780.6</b>	<b>799.7</b>	<b>819.3</b>	<b>3905.3</b>
X factor <sup>d</sup>	n/a <sup>e</sup>	0.00%	0.00%	0.00%	0.00%	n/a

Source: AER analysis.

- (a) Regulatory depreciation is straight-line depreciation net of the inflation indexation on the opening regulatory asset base (RAB).
- (b) Includes debt raising costs.

- (c) Includes revenue adjustments from the efficiency benefit sharing scheme (EBSS), capital expenditure sharing scheme (CESS) and demand management innovation allowance mechanism (DMIAM).
- (d) The X factors will be revised to reflect the annual return on debt update. Under the CPI-X framework, the X factor measures the real rate of change in annual expected revenue from one year to the next. A negative X factor represents a real increase in revenue. Conversely, a positive X factor represents a real decrease in revenue.
- (e) SA Power Networks is not required to apply an X factor for 2020–21 because we set the 2020–21 expected revenue in this decision. The expected revenue for 2020–21 is around 13.3 per cent lower than the approved total annual revenue for 2019–20 in real terms, or 11.2 per cent lower in nominal terms.

## 1.2 SA Power Networks' proposal

SA Power Networks proposed a total revenue requirement of \$4220.8 million (\$ nominal) for the 2020–25 regulatory control period. Table 1.2 shows SA Power Networks' proposed building block costs, the ARR, expected revenue and X factor for each year of the 2020–25 regulatory control period.

**Table 1.2 SA Power Networks' proposed revenues for the 2020–25 regulatory control period (\$ million, nominal)**

	2020–21	2021–22	2022–23	2023–24	2024–25	Total
Return on capital	239.8	248.2	256.9	263.0	268.8	1276.6
Regulatory depreciation <sup>a</sup>	217.3	233.8	252.1	264.6	265.6	1233.3
Operating expenditure <sup>b</sup>	309.4	321.1	334.2	346.7	359.4	1670.8
Revenue adjustments <sup>c</sup>	22.9	-11.1	9.0	4.0	15.3	40.1
Net tax allowance	0.0	-	-	-	-	0.0
Annual revenue requirement (unsmoothed)	789.4	791.9	852.1	878.2	909.1	4220.8
<b>Annual expected revenue (smoothed)</b>	<b>802.3</b>	<b>822.1</b>	<b>842.4</b>	<b>863.2</b>	<b>884.5</b>	<b>4214.5</b>
X factor	n/a <sup>d</sup>	0.00%	0.00%	0.00%	0.00%	n/a

Source: SA Power Networks, *2020–25 Regulatory proposal - supporting document 1.1 - PTRM Model*, 31 January 2019.

- (a) Regulatory depreciation is straight-line depreciation net of the inflation indexation on the opening RAB.
- (b) Includes debt raising costs.
- (c) Includes revenue adjustments from EBSS, CESS and DMIAM.
- (d) SA Power Networks is not required to apply an X factor for 2020–21 because we set the 2020–21 expected revenue in this decision.



## 1.3 Assessment approach

In this section, we describe the approach used to determine the ARR and expected revenue for SA Power Networks for each year of the 2020–25 regulatory control period.<sup>1</sup>

In this determination we first calculate the ARR for each year of the 2020–25 regulatory control period. To do this we consider the various costs facing the distributor and the trade-offs and interactions between these costs, service quality and across years. This reflects our holistic assessment of the distributor's proposal.

The ARR for each year is the sum of the building block costs. These building block costs are set out in section 1.3.1. The AER's post-tax revenue model (PTRM) brings together these building block costs and calculates the resulting ARRs.

We understand the trade-offs that occur between building block costs and test the sensitivity of these costs to their various driver elements. These trade-offs are discussed in the interrelationships section of the various attachments to this draft decision and are reflected in the calculations made in the PTRM.<sup>2</sup> Such understanding allows us to exercise judgement in determining the final inputs into the PTRM and the ARRs that result from this modelling.

Having calculated the total revenue requirement for the 2020–25 regulatory control period, we smooth the ARRs for each regulatory year across that period. This step reduces revenue variations between years, and calculates the expected revenue and X factor for each year.<sup>3</sup> The X factors equalise (in net present value terms) the total expected revenues to be earned by the distributor with the total revenue requirement for the 2020–25 regulatory control period.<sup>4</sup> They must usually minimise, as far as reasonably possible, the variance between the expected revenue and ARR for the last regulatory year of the period.<sup>5</sup> By minimising this divergence, it helps to manage the prospect of a significant revenue change (and consequently prices) between the last year of the 2020–25 regulatory control period, and first year of the following 2025–30 regulatory control period. We therefore consider a divergence of up to 3 per cent between the expected revenue and ARR for the last year of the regulatory control

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<sup>1</sup> NER, cl. 6.3.2(a)(1) and 6.5.9(b)(2).

<sup>2</sup> There are trade-offs that are not modelled in the PTRM but are reflected in the inputs to the PTRM. For example, service quality is not explicitly modelled in the PTRM, but the trade-offs between service quality and price are reflected in the forecast capital expenditure and operating expenditure inputs to the model. Other trade-offs are obvious from the calculations in the PTRM. For example, while someone may expect a lower regulatory asset base to also lower revenues, the PTRM shows that this will not occur if the reduction in the regulatory asset base is due solely to an increase in the depreciation rate. In such circumstances, revenues increase as the increased depreciation allowance more than offsets the reduction in the return on capital caused by the lower regulatory asset base.

<sup>3</sup> NER, cl. 6.5.9(a).

<sup>4</sup> NER, cl. 6.5.9(b)(3)(i). The X factors represent the real revenue path over the 2020–25 regulatory control period under the CPI–X framework.

<sup>5</sup> NER, cl. 6.5.9(b)(2).

period is reasonable, if this can promote smoother price changes over the regulatory control period.

The building block costs (and the elements that drive those costs) used to determine the unsmoothed ARR are set out in section 1.3.1.

### 1.3.1 The building block costs

The efficient costs to be recovered by a distributor can be thought of as being made up of various building block costs. Our draft decision assesses each of the building block costs and the elements that drive these costs. The building block costs are approved reflecting trade-offs and interactions between the cost elements, service quality and across years.

Table 1.3 shows the building block costs that form the ARR for each year and where discussion on the elements that drive these costs can be found within this draft decision.

**Table 1.3 Building block costs**

Building block costs	Attachments where elements are discussed
Return on capital	Regulatory asset base (attachment 2)
	Rate of return (attachment 3)
	Capital expenditure (attachment 5)
Regulatory depreciation (return of capital)	Regulatory asset base (attachment 2)
	Regulatory depreciation (attachment 4)
	Capital expenditure (attachment 5)
Operating expenditure	Operating expenditure (attachment 6)
Estimated cost of corporate tax	Corporate income tax (attachment 7)
Other revenue adjustments	
Adjustment for shared assets	Annual revenue requirement (attachment 1)
Operating efficiency benefits/penalties	Efficiency benefit sharing scheme (attachment 8)
Capital efficiency benefits/penalties	Capital expenditure sharing scheme (attachment 9)
Demand management innovation allowance	Demand management incentive scheme (attachment 11)

## 1.4 Reasons for draft decision

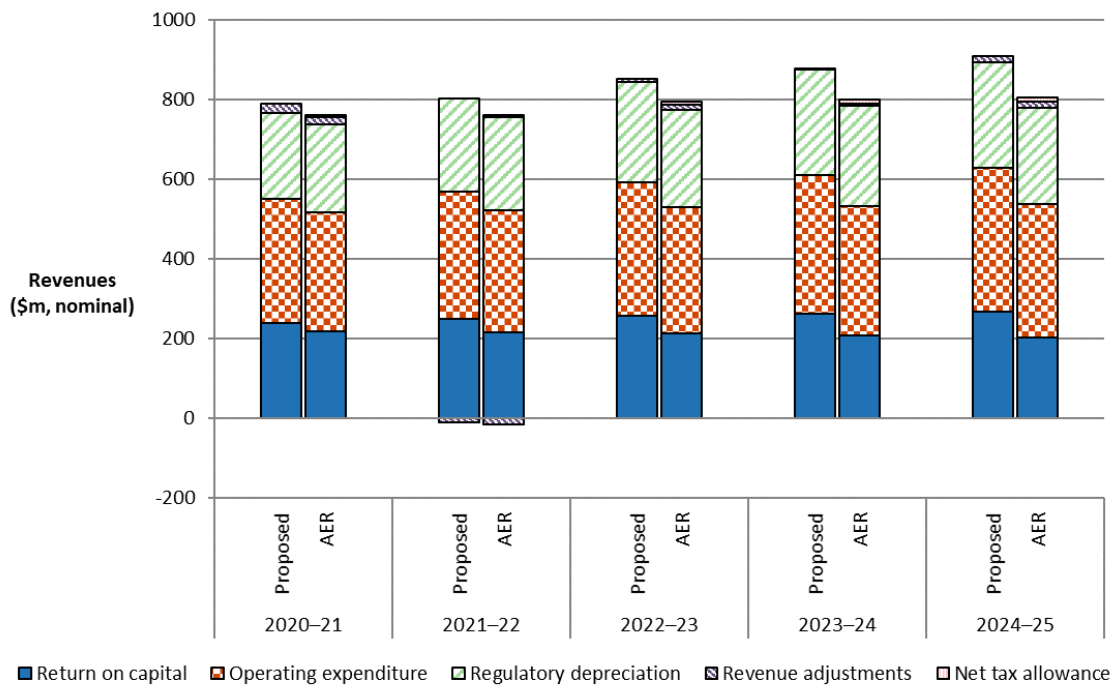
We determine a total ARR of \$3902.9 million (\$ nominal) for SA Power Networks over the 2020–25 regulatory control period. This is a reduction of \$317.9 million (\$ nominal) or 7.5 per cent to SA Power Networks' proposed total ARR of \$4220.8 million (\$ nominal) for this period. This reflects the impact of our draft decision on the various building block costs.

The changes we made to SA Power Networks' proposed building blocks include (in nominal terms):

- a reduction in the return on capital allowance of \$222.8 million or 17.5 per cent (attachments 2, 3 and 5).
- a reduction in the regulatory depreciation allowance of \$45.5 million or 3.7 per cent (attachments 2, 4 and 5).
- a reduction in the operating expenditure (opex) allowance of \$85.7 million or 5.1 per cent (attachment 6).
- an increase in the cost of corporate income tax of \$37.6 million compared to its proposed \$1 (attachment 7).
- a reduction in the revenue adjustments of \$1.3 million or 3.3 per cent arising from changes to EBSS (attachment 8), CESS (attachment 9) and DMIAM (attachment 11).

Figure 1.2 shows the building block components from our determination that make up the ARR for SA Power Networks, and the corresponding components from its proposal.

**Figure 1.2 AER's draft decision and SA Power Networks' proposed annual revenue requirement (\$million, nominal)**



Source: SA Power Networks, 2020-25 Regulatory proposal - supporting document 1.1 - PTRM Model, 31 January 2019; AER analysis.

Note: Revenue adjustments include EBSS, CESS, and DMIAM. Opex includes debt raising costs.

### 1.4.1 Revenue smoothing

We have taken into account the building block costs determined in this decision when smoothing the expected revenues for SA Power Networks over the 2020-25 regulatory

control period. In doing so, we first set the expected revenue for the first regulatory year (2020–21) at \$743.7 million (\$ nominal). This is lower than the 2020–21 ARR (unsmoothed) of \$760.8 million we determined. It is also \$93.6 million lower than the expected revenue for 2019–20. We then applied a profile of X factors to determine the expected revenue in subsequent years.

To smooth the revenue movements from the second regulatory year (2021–22) onwards, we have applied X factors of zero as proposed by SA Power Networks. This allows for a relatively predictable price movement over the regulatory control period. This approach smooths the revenues by allowing for a path for revenues over the 2020–25 regulatory control period that match the rate of actual inflation.

Based on the X factors we have determined for SA Power Networks, the difference between the expected revenue and ARR for 2024–25 is 2.0 per cent. This divergence lies within our target band of 3 per cent. Therefore, we consider that our profile of X factors results in an expected revenue in the last year of the regulatory control period that is as close as reasonably possible to the ARR for that year.<sup>6</sup> We will review this smoothing for the final decision.

Energy Consumers Australia (ECA) submitted that SA Power Networks had deviated from the AER's standard approach to projecting its revenue path, based on consumer feedback for savings up front and in order to avoid bill shock. ECA supported a smoother revenue path for stable prices that would build consumer confidence and trust.<sup>7</sup> We consider that based on the revision to the numbers noted above, customers should have confidence in relatively stable network prices going forward. After an initial price reduction in 2020–21, prices should remain stable in real terms (\$2019–20) for the following four years. Only within period adjustments, such as any cost pass throughs or rewards/penalties under the service quality scheme, and demand fluctuations from forecast, could cause further fluctuations in network prices during the period.

An alternative smoothed revenue path could pass on savings in a more progressive manner. While the price fall would be more modest in 2020–21, from 2022–23 onwards prices will be lower than under SA Power Networks' proposed path. We have adopted SA Power Networks' proposed path for this draft decision, but are open to further feedback for the final decision.

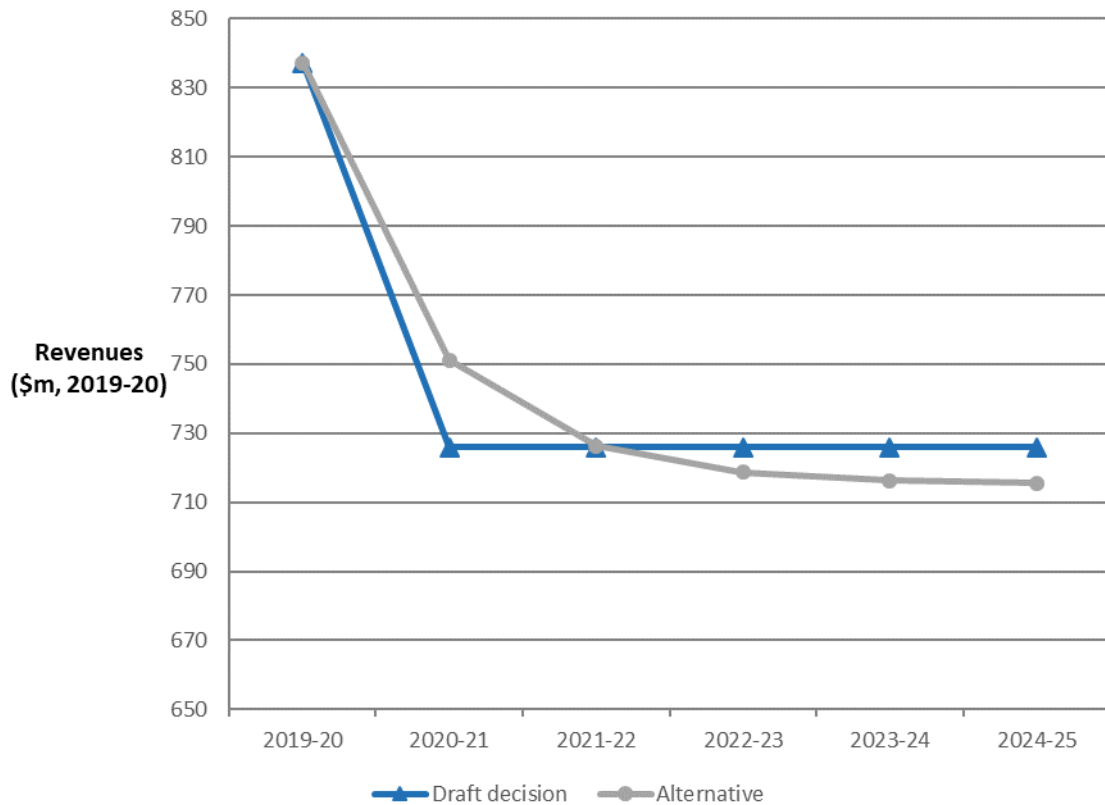
Figure 1.3 shows the real revenue path proposed by SA Power Networks as adopted in this draft decision and an alternative revenue path with savings passed on more progressively. It is important to note that both these paths give identical revenues over the regulatory control period in NPV terms.

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<sup>6</sup> NER, cl. 6.5.9(b)(2).

<sup>7</sup> Energy Consumers Australia, *AER Issues Paper: SA Power Networks Electricity distribution determination 2020 to 2025 Submission*, 16 May 2019, p. 9.

**Figure 1.3 Draft decision and alternative smoothed revenue paths (\$ million, real)**



Source: SA Power Networks, *2020–25 Regulatory proposal - supporting document 1.1 - PTRM Model*, 31 January 2019; AER analysis.

## 1.4.2 Shared assets

Distributors, such as SA Power Networks, may use assets to provide both SCS we regulate and unregulated services. These assets are called 'shared assets'.<sup>8</sup> If the revenue from shared assets is material, ten per cent of the unregulated revenues that a distributor earns from shared assets will be used to reduce the distributor's revenue for SCS.<sup>9</sup>

The shared asset principles establish that use of shared assets should be material before cost reductions are applied.<sup>10</sup> The NER does not define materiality in this context. Our approach to what constitutes a material use of shared assets is that unregulated use of shared assets in a specific regulatory year is material when a

<sup>8</sup> NER, cl. 6.4.4.

<sup>9</sup> AER, *Shared asset guideline*, November 2013, p.11.

<sup>10</sup> NER, cl. 6.4.4(c)(3).

distributor's annual average unregulated revenue from shared assets is expected to be greater than one per cent of its expected revenue for that regulatory year.<sup>11</sup>

SA Power Networks submitted that its total revenue requirement is subject to a shared asset adjustment because its forecast annual unregulated revenue from shared assets exceeds the AER's materiality threshold.<sup>12</sup>

We consider SA Power Networks' forecast unregulated revenues from shared assets for the 2020–25 regulatory control period are reasonable, noting that its forecasts are expected to increase significantly from the previous period. However, SA Power Networks' forecast unregulated revenues must be compared to the regulated revenues we determine, rather than those proposed by SA Power Networks. While our draft decision sets lower expected revenues than SA Power Networks' proposal, we estimate that the unregulated revenues will be greater than one per cent of its expected revenues in each year of the 2020–25 regulatory control period. Hence, the materiality threshold is met in each year of the 2020–25 regulatory control period and we apply a shared asset revenue adjustment.<sup>13</sup>

For this draft decision, we have determined a shared asset revenue adjustment as shown in Table 1.4. The adjustment will see \$6.3 million (\$ 2019–20) shared with customers across the 2020–25 regulatory control period. SA Power Networks appears to have used a slightly different method<sup>14</sup> than required by the shared asset guideline. The difference creates small annual variations between the two approaches, but in total the differences between our adjustment and SA Power Networks' adjustment are not material in real terms.

**Table 1.4 AER's draft decision on SA Power Networks' shared asset revenue adjustment (\$ million, 2019–20)**

	2020–21	2021–22	2022–23	2023–24	2024–25	Total
SA Power Networks' proposal	-1.3	-1.3	-1.3	-1.2	-1.2	-6.3
AER's draft decision	-1.2	-1.2	-1.3	-1.3	-1.3	-6.3

Source: SA Power Networks, *2020–25 Regulatory proposal - supporting document 1.1 - PTRM Model*, 31 January 2019; AER analysis.

<sup>11</sup> AER, *Shared asset guideline*, November 2013, p. 8.

<sup>12</sup> SA Power Networks, *2020–25 Regulatory Proposal – Attachment 1 – Annual Revenue Requirement and Control Mechanism*, 31 January 2019, pp. 12–13.

<sup>13</sup> We will reassess the materiality of the forecast shared asset unregulated revenues for our final decision.

<sup>14</sup> SA Power Network appears to have averaged forecast shared asset revenues in nominal terms before applying the 10 per cent sharing factor, and then determined the real amounts set out in the proposed PTRM. We apply the 10 per cent sharing factor to the real forecast shared asset revenues.

### 1.4.3 Indicative average distribution price impact

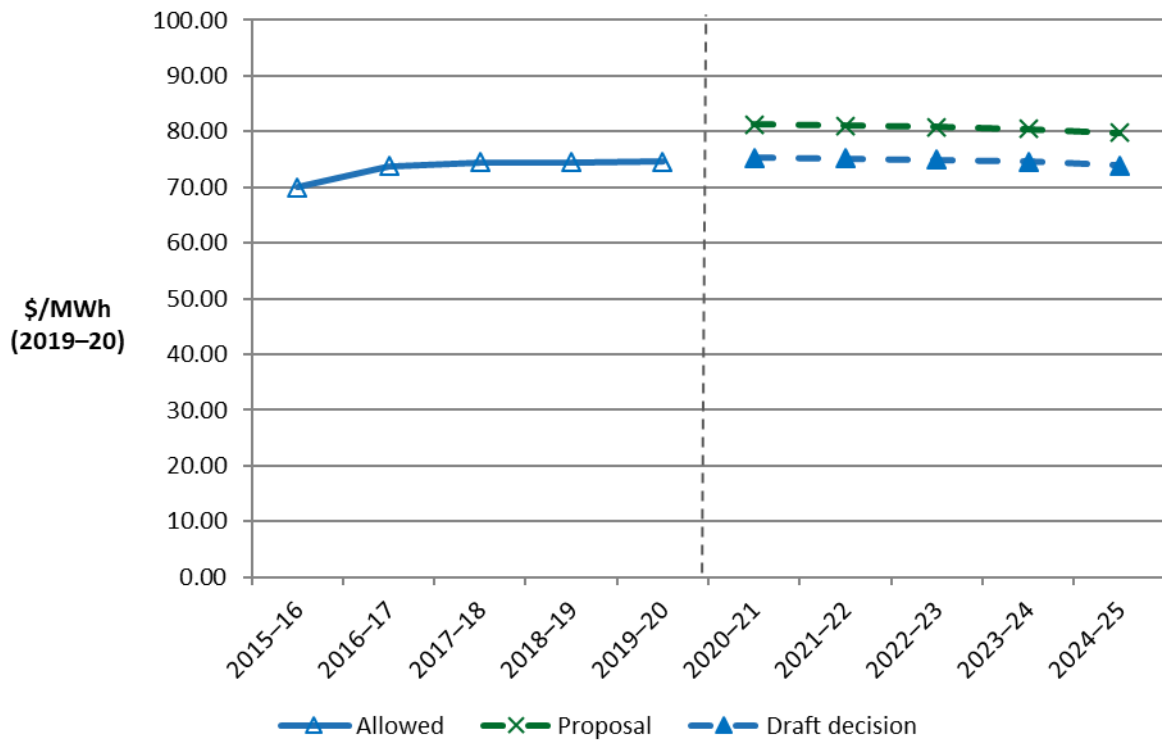
Our draft decision on SA Power Networks' expected revenues ultimately affects the prices consumers pay for electricity. There are several steps required in translating our revenue decision into indicative distribution price impact.

We regulate SA Power Networks' SCS under a revenue cap form of control. This means our draft decision on SA Power Networks' expected revenues does not directly translate to price impacts. This is because SA Power Networks' revenue is fixed under the revenue cap form of control, so changes in the consumption of electricity will affect the prices ultimately charged to consumers. We are not required to establish the distribution prices for SA Power Networks as part of this determination. However, we will assess SA Power Networks' annual pricing proposals before the commencement of each regulatory year within the 2020–25 regulatory control period. In each assessment we will administer the pricing requirements set in this distribution determination.

For this draft decision, we have estimated some indicative average distribution price impacts flowing from our determination on the expected revenues for SA Power Networks over the 2020–25 regulatory control period. In this section, our estimates only relate to SCS (that is, the core electricity distribution charges), not alternative control services (such as metering charges). These indicative price impacts assume that actual energy consumption across the 2020–25 regulatory control period matches SA Power Networks' forecast energy consumption, which we have adopted for this draft decision.

Figure 1.4 shows SA Power Networks' indicative average price path over the period 2015–16 to 2024–25 in real 2019–20 dollar terms based on the expected revenues established in our draft decision compared to SA Power Networks' proposed revenue requirement.

**Figure 1.4 Indicative distribution price path for SA Power Networks (\$/MWh, 2019–20)**



Source: AER analysis.

We estimate that our draft decision on SA Power Networks' annual expected revenue will result in a decrease to average distribution charges by about 3.1 per cent per annum over the 2020–25 regulatory control period in real 2019–20 dollar terms.<sup>15</sup> This compares to the real average decrease of approximately 1.6 per cent per annum proposed by SA Power Networks over the 2020–25 regulatory control period.<sup>16</sup> These high-level estimates reflect the aggregate change across the entire network and do not reflect the particular tariff components for specific end users.

Consumer Challenge Panel, sub-panel 14 (CCP 14) submitted that SA Power Networks' proposal acknowledged the importance of price, noted consumers' desire to see downward pressure on electricity prices, and stated that it will deliver further reductions in charges for the 2020–25 regulatory control period. However, CCP 14 noted that without the AER decisions on rate of return and regulatory tax approach, SA Power Networks' prices from 1 July 2020 for residential customers would have been an

<sup>15</sup> In nominal terms we estimate average distribution charges to decrease by 0.7 per cent per annum. This amount reflects an expected inflation rate of 2.45 per cent per annum as determined in this draft decision.

<sup>16</sup> In nominal terms SA Power Networks' proposal would increase distribution charges by 0.8 per cent per annum. This amount reflects an expected inflation rate of 2.47 per cent per annum as proposed by SA Power Networks in its proposal.



\$11 (2 per cent) increase rather than the \$40 (11 per cent) decrease in the proposal and for small business customers, it would have been a \$75 (4 per cent) increase rather than the \$111 (5 per cent) decrease in the proposal.<sup>17</sup> We agree that the change in the tax approach from previous periods and the reductions in the rate of return have had a significant impact on average bill outcomes. The average bill impacts below show the combined effect of those decisions and the other decisions made in this draft determination.

Table 1.5 displays in nominal terms the comparison of the revenue and price impacts of SA Power Networks' proposal and our draft decision.

**Table 1.5 Comparison of revenue and price impacts of SA Power Networks' proposal and the AER's draft decision (\$ nominal)**

	2019–20	2020–21	2021–22	2022–23	2023–24	2024–25
<b>AER draft decision</b>						
Revenue (\$million)	837.3	743.7	761.9	780.6	799.7	819.3
Price path (\$/MWh) <sup>a</sup>	86.39	77.16	78.84	80.58	82.13	83.44
Revenue (change)		-11.2%	2.4%	2.4%	2.4%	2.4%
Price path (change)		-10.7%	2.2%	2.2%	1.9%	1.6%
<b>SA Power Networks proposal</b>						
Revenue (\$million)	837.3	802.3	822.1	842.4	863.2	884.5
Price path (\$/MWh) <sup>a</sup>	86.39	83.23	85.07	86.96	88.65	90.08
Revenue (change)		-4.2%	2.5%	2.5%	2.5%	2.5%
Price path (change)		-3.7%	2.2%	2.2%	1.9%	1.6%

Source: AER analysis; SA Power Networks, *2020–25 Regulatory proposal - supporting document 1.1 - PTRM Model*, 31 January 2019; SA Power Networks - *RIN 7 - Workbook 7 - Bill Impacts*, 31 January 2019.

(a) The price path is in nominal terms and is constructed by dividing nominal expected revenue for SCS by forecast energy consumption for each year of the regulatory control period.

#### 1.4.4 Expected impact of decision on electricity bills

The annual electricity bill for customers in SA Power Networks' network reflects the combined cost of all the electricity supply chain components—wholesale energy generation, transmission, distribution, metering, and retail costs. This draft decision primarily relates to the distribution charges for SCS, which represent approximately 30.6 per cent of residential customers' and approximately 29.0 per cent of small business customers' annual electricity bill in SA Power Networks' network area.<sup>18</sup>

<sup>17</sup> CCP 14, *Advice to the AER on the SA Power Networks 2020-25 Regulatory Proposal*, 16 May 2019, pp.17-18.

<sup>18</sup> SA Power Networks, *Information request 066 - Bill impact calculation inputs*, 16 July 2019.

We estimate the expected bill impact by varying the distribution charges in accordance with our draft decision, while holding all other components—including the metering component—constant. This approach isolates the effect of our draft decision on the core distribution charges only. However, this does not imply that other components will remain unchanged across the regulatory control period.<sup>19</sup>

Based on this approach in our draft decision, we expect that the distribution component of the average annual residential electricity bill in 2020–21 to decrease by about \$63 (\$ nominal) from the 2019–20 total bill level, followed by average annual increases of \$11 (\$ nominal) over the remaining years of the 2020–25 regulatory control period (2021–25).<sup>20</sup> By comparison, had we accepted SA Power Networks' proposal, the expected distribution component of the average annual residential electricity bill in 2020–21 would decrease by about \$22 (\$ nominal) from the 2019–20 total bill level, followed by average annual increases of \$12 (\$ nominal) over the remaining years of the 2020–25 regulatory control period (2021–25).<sup>21</sup>

Similarly, for an average small business customer, we expect that the distribution component of the average annual small business electricity bill in 2020–21 to decrease by about \$283 (\$ nominal) from the 2019–20 total bill level, followed by average annual increases of \$48 (\$ nominal) over the remaining years of the 2020–25 regulatory control period (2021–25).<sup>22</sup> By comparison, had we accepted SA Power Networks' proposal, the expected distribution component of the average annual small business electricity bill in 2020–21 would decrease by about \$97 (\$ nominal) from the 2019–20 total bill level, followed by average annual increases of \$53 (\$ nominal) over the remaining years of the 2020–25 regulatory control period (2021–25).<sup>23</sup>

Our estimated impact is based on an average annual electricity usage of around 4000 kWh per annum for residential households and 20000 kWh per annum for small businesses.<sup>24</sup> Therefore, customers with different usage will experience different changes in their bills. We also note that there are other factors, such as metering, wholesale and retail costs, which affect electricity bills.

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<sup>19</sup> It also assumes that actual energy consumption will equal the forecast adopted in our draft decision. Since SA Power Networks operates under a revenue cap, changes in energy consumption will also affect annual electricity bills across the 2020–25 regulatory control period.

<sup>20</sup> This equates to a 3.3 per cent decrease in the average residential customer's total electricity bill in 2020–21, followed by average annual increases of 0.6 per cent in the remaining years of the 2020–25 regulatory control period.

<sup>21</sup> This equates to a 1.1 per cent decrease in the average residential customer's total electricity bill in 2020–21, followed by average annual increases of 0.6 per cent in the remaining years of the 2020–25 regulatory control period.

<sup>22</sup> This equates to a 3.1 per cent decrease in the average small business customer's total electricity bill in 2020–21, followed by average annual increases of 0.5 per cent in the remaining years of the 2020–25 regulatory control period.

<sup>23</sup> This equates to a 1.1 per cent decrease in the average small business customer's total electricity bill in 2020–21, followed by average annual increases of 0.6 per cent in the remaining years of the 2020–25 regulatory control period.

<sup>24</sup> AER, *Final determination, Default Market Offer Prices 2019–20*, April 2019, p.8.

CCP14 submitted that the Australian Energy Market Commission's analysis uses an average residential consumption of 5000 kWh per annum for South Australia, whereas SA Power Networks advised that average residential household consumption is around 4000 kWh per annum and falling. CCP14's analysis indicated that SA Power Networks' per-unit distribution charge is average to above-average relative to other electricity distributors. This data suggested that there remains 'room for improvement' for SA Power Networks to reduce its revenue requirement, especially given a background of only moderate customer growth and relatively flat energy growth.<sup>25</sup> We note CCP14's observations. As stated above, we adopt an average annual electricity usage of around 4000 kWh per annum, which is consistent with SA Power Networks' proposal and with our final determination for Default Market Offer prices for 2019–20. It is also consistent with the CCP14's observation of flat energy growth. Variable costs that depend on consumption growth have been assessed in this draft decision and revisions made where appropriate. These decisions are reflected in the bill impacts in this attachment. However, there are also costs that do not depend on consumption growth. For example, asset replacement can be costly and cause overall price rises even though overall consumption is unchanged on the affected part of the network.

Table 1.6 shows our estimated impact of our draft decision and SA Power Networks' proposal on the average annual electricity bills for residential and small business customers in its network over the 2020–25 regulatory control period.

**Table 1.6 Estimated impact of SA Power Networks' proposal and AER's draft decision on annual electricity bills for the 2020–25 regulatory control period (\$ nominal)**

	2019–20	2020–21	2021–22	2022–23	2023–24	2024–25
<b>AER draft decision</b>						
Residential annual bill	1941 <sup>a</sup>	1878	1889	1901	1912	1921
Annual change <sup>c</sup>		–63 (–3.3%)	12 (0.6%)	12 (0.6%)	11 (0.6%)	9 (0.5%)
Small business annual bill	9120 <sup>b</sup>	8837	8889	8942	8990	9030
Annual change <sup>c</sup>		–283 (–3.1%)	52 (0.6%)	53 (0.6%)	48 (0.5%)	40 (0.4%)
<b>SA Power Networks proposal</b>						
Residential annual bill	1941 <sup>a</sup>	1919	1932	1945	1957	1966
Annual change <sup>c</sup>		–22 (–1.1%)	13 (0.7%)	13 (0.7%)	12 (0.6%)	10 (0.5%)
Small business annual bill	9120 <sup>b</sup>	9023	9080	9138	9189	9233
Annual change <sup>c</sup>		–97 (–1.1%)	56 (0.6%)	58 (0.6%)	52 (0.6%)	44 (0.5%)

<sup>25</sup> CCP 14, *Advice to the AER on the SA Power Networks 2020-25 Regulatory Proposal*, 16 May 2019, p.16.

Source: AER analysis; AER, *Final determination, Default Market Offer Prices 2019–20*, April 2019, p. 8; SA Power Networks - *RIN 7 - Workbook 7 - Bill Impacts*, 31 January 2019.

- (a) Annual bill for 2019–20 is sourced from [AER, Final determination, Default Market Offer Prices 2019–20](#), and reflects the average consumption of 4000 kWh for residential customers in South Australia.
- (b) Annual bill for 2019–20 is sourced from [AER, Final determination, Default Market Offer Prices 2019–20](#), and reflects the average consumption of 20000 kWh for small business customers in South Australia.
- (c) Annual change amounts and percentages are indicative. They are derived by varying the distribution component of the 2019–20 bill amounts in proportion to yearly expected revenue divided by forecast energy as provided by SA Power Networks. Actual bill impacts will vary depending on electricity consumption and tariff class.