

# **FINAL DECISION**

# Jemena Distribution Determination 2021 to 2026

Overview

April 2021



and an entering

© Commonwealth of Australia 2021

This work is copyright. In addition to any use permitted under the Copyright Act 1968, all material contained within this work is provided under a Creative Commons Attributions 3.0 Australia licence, with the exception of:

- the Commonwealth Coat of Arms
- the ACCC and AER logos
- any illustration, diagram, photograph or graphic over which the Australian Competition and Consumer Commission does not hold copyright, but which may be part of or contained within this publication. The details of the relevant licence conditions are available on the Creative Commons website, as is the full legal code for the CC BY 3.0 AU licence.

Requests and inquiries concerning reproduction and rights should be addressed to the:

Director, Corporate Communications Australian Competition and Consumer Commission GPO Box 3131, Canberra ACT 2601

or publishing.unit@accc.gov.au.

Inquiries about this publication should be addressed to:

Australian Energy Regulator GPO Box 520 Melbourne Vic 3001

Tel: 1300 585 165 Email: <u>VIC2021-26@aer.gov.au</u>

AER reference: 63601

## **Executive summary**

The Australian Energy Regulator (AER) works to make all Australian energy consumers better off, now and in the future. We regulate energy networks in all jurisdictions except Western Australia. This final decision sets out the amount of money Jemena can collect from electricity consumers for using its network over the 2021–26 regulatory control period.

Jemena owns and operates one of the five electricity distribution network service providers in Victoria and services over 324 000 households, 27 300 small business and 1500 large business consumers in the north-west greater Melbourne area. On 31 January 2020, Jemena submitted its proposal for the five year regulatory control period commencing 1 July 2021. On 3 December 2020, Jemena submitted a revised proposal based on the AERs draft decision of 30 September 2020.

Jemena accepted many parts of our draft decision and worked with its People's Panel in developing its revised proposal. A key area of difference between Jemena's revised proposal and our draft decision was the amount of operating expenditure (opex) it forecast to spend over the next regulatory control period. Our draft decision assessed Jemena's opex as inefficient and therefore we applied an efficiency adjustment, which Jemena did not fully accept in its revised proposal. Since then, it submitted an updated lower opex proposal that reflected actual opex in 2020, and the outcomes from its 2019 transformation program leading to reduced total opex for consumers over the next regulatory control period. Our final decision finds this updated lower opex forecast acceptable and note we engaged closely with Jemena to reconcile our respective forecasts.

Jemena largely accepted our draft decision on capital expenditure (capex) but proposed additional amounts of capex on a few capex categories. We focused our assessment on these categories and accepted the additions to make up the prudent and efficient total capex forecast.

We are satisfied that the amount of money we have allowed Jemena to recover from consumers is no more than necessary to replace ageing infrastructure and operate its network in a safe and reliable manner in the long-term interests of consumers.

Jemena can recover \$1335.7 million (\$ nominal) from its consumers over the 2021–26 regulatory control period. In real terms, this is 4.6 per cent lower than the revenue allowed for in our 2016–20 final decision and leads to lower network charges for Jemena's consumers from the next regulatory control period.

The revenue we allow forms the distribution network component of retail electricity bills, making up about 25 per cent of a standard residential bill (32 per cent for small businesses).

We estimate that Jemena's distribution network and metering charges in the first year of the 2021–26 regulatory control period will drop by \$54 (3.5 per cent) for residential consumers and \$179 (2.8 per cent) for small business consumers, relative to charges in 2020. Thereafter, these charges are estimated to increase by \$2 (0.1 per cent) and \$5 (0.1 per cent) per year respectively.

Consumers have already seen changes from last year's prices because new distribution network charges were passed through to Victorian consumers for six months on 1 January 2021, with the introduction of the *National Energy Legislation Amendment Act 2020* (Vic) (NELA Act)<sup>1</sup> In making this final decision we updated a range of components that were used to calculate the lower distribution network charges that were passed on to consumers on 1 January 2021. In particular, we updated the rate of return to reflect movements in interest rates and our revised estimate of expected inflation. As a result of these updates, distribution network charges starting from 1 July 2021 will be 2.2 per cent higher than the distribution network charges that were set on 1 January 2021, but will still be lower than the distribution network charges that were in place in 2020. We still need to consider other factors that will impact the final distribution network charge that consumers and businesses pay – these will be considered when we assess Jemena's annual pricing proposal.<sup>2</sup>

In making this final decision we have had regard to a range of sources including Jemena's revised proposal, submissions received, as well as analysis undertaken and published by us.

#### Jemena's engagement with consumers

A key development of the 2021–26 determination has been the positive shift by the distributors in relation to improved consumer engagement.

In recognition of this evolution, in our draft decision, we developed a framework<sup>3</sup> to assess the consumer engagement activities of the Victorian distributors which is replicated at appendix C. This framework informed how we viewed this engagement in relation to the initial expenditure proposals and our overall assessment. Stakeholder submissions provided positive support and feedback on this approach and we plan to undertake further stakeholder consultation on the future design of the framework following completion of the Victorian reset.

We recognise that consumer engagement can take many different approaches and to assist in the final decision, we have continued to refer to the framework as outlined in the draft decision, which provides a benchmark for the discussion. We acknowledge that each distributor approached engagement differently and Jemena sought to engage with its customers through a number of engagement strategies, including its People's Panel. The People's Panel is a representative sample of the demographic profile of residential consumers within Jemena's distribution area. This collaborative

<sup>&</sup>lt;sup>1</sup> The intention of the NELA was to change the timing of the regulatory control period for electricity distribution networks from a calendar year basis to a financial year basis, to align with other NEM states. We separately assessed the total allowed revenue for Jemena for the six month period from 1 January 2021 to 30 June 2021. See our final decision of 28 October 2020 at <u>https://www.aer.gov.au/networks-pipelines/determinations-accessarrangements/jemena-determination-2021-26/aer-position#step-72921</u>.

<sup>&</sup>lt;sup>2</sup> See Pricing proposals & tariffs webpage on the AER's website: <u>https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/pricing-proposals-tariffs.</u>

<sup>&</sup>lt;sup>3</sup> AER, Draft decision, *Jemena distribution determination 2021–26, Overview*, September 2020, Table 7, p. 43.

engagement enabled Jemena to develop a revised proposal that was aligned to the People's Panel preferences identified, being: sustainability, affordability and reliability.<sup>4</sup>

Jemena's initial proposal strongly reflected the feedback received through its consumer engagement. However, our draft decision did not accept Jemena's proposal, finding significant difference between what it proposed and what we considered sufficient and prudent levels of opex required for the next five years.<sup>5</sup> In responding to our draft decision, Jemena re-engaged with its customers and customer representatives.<sup>6</sup> It tested the People's Panel on their views regarding its revised proposal and our draft decision, including undertaking a series of deep-dive workshops on opex and efficiency benchmarking.<sup>7</sup> Ultimately, Jemena's commitment to ensuring that its customer's preferences, including affordability, are reflected in the updates to its revised proposal with a lower opex forecast, which we have accepted in our final decision.

Consumer engagement models will continue to mature over time. Ongoing development of the framework will support businesses to develop proposals that are prudent and efficient and demonstrate the express views and support of consumers.

# Ensuring consumers pay no more than necessary for safe and reliable services

Ensuring consumers pay no more than necessary for safe and reliable electricity is a cornerstone of the regulatory determination process. We must assess whether a business' proposal is a reasonable and realistic forecast of how much money it needs for the safe and reliable operation of the network. It also involves encouraging distributors to explore how they can provide better services at lower cost through a range of incentive schemes.

Our final decision accepts Jemena's additional capex included in its updated revised proposal of \$627.2 million. The additional capex relative to our draft decision included updates to real cost escalations, distributed energy resources (DER), information and communication technology (ICT) and rapid earth fault current limiter's (REFCLs). In reaching our final decision substitute of \$636.0 million, we have also included updates for real cost escalations and connections.<sup>8</sup> These updates have resulted in a net increase in Jemena's forecast capex. We have been satisfied by the additional information Jemena provided to support its revised proposal.

Our final decision accepts Jemena's updated revised total opex proposal of \$516.6 million (\$2020–21). This is because it is not materially different to our alternative opex estimate of \$509.2 million (\$2020–21), which is \$7.4 million (\$2020–21) or 1.4 percent lower than Jemena's updated revised opex forecast.

<sup>&</sup>lt;sup>4</sup> Jemena, *Revised regulatory proposal*, December 2020, p 6.

<sup>&</sup>lt;sup>5</sup> AER, *Draft decision - Jemena distribution determination 202–-26*, *Overview*, September 2020 p. 4.

<sup>&</sup>lt;sup>6</sup> See Jemena, *Att 01-01 Customer engagement,* December 2020, p 6-7, provide a detailed list of the engagement activities undertaken by Jemena since submitting its initial proposal, including Your grid updates, meetings with stakeholders such as its Customer Council and People's Panel.

<sup>&</sup>lt;sup>7</sup> Jemena's People's Panel – Submission on the Victorian EDPR revised proposal and draft decision 2021–26, p. 1.

<sup>&</sup>lt;sup>8</sup> Jemena's revised proposal requested that we include housing forecast updates that were not available at the time of its revised proposal.

Jemena's revised proposal included a total opex forecast of \$532.3 million (\$2020–21) for the 2021–26 period. This incorporated \$20.0 million (\$2020–21) of efficiency gains via a negative step change. Jemena subsequently submitted an updated revised total opex proposal of \$516.6 million (\$2020–21). This largely reflected lower actual opex in 2020, and the outcomes from its 2019 transformation program that Jemena considered could be passed back to customers in the next regulatory control period. It proposed additional opex savings over the next regulatory control period of \$10.1 million (\$2020–21). Its total opex forecast therefore includes \$30.2 million (\$2020–21) of efficiency gains via a negative step change.

The most significant driver of our lower alternative total opex forecast compared to Jemena's updated revised total opex forecast relates to the efficiency of Jemena's base opex. Our final decision continues to find that Jemena's opex in the base year is outside the efficient band and therefore, similar to our draft decision, our alternative opex forecast applies an efficiency adjustment of \$36.9 million (\$2020–21). Jemena also recognised the potential for future efficiencies, including a negative step change of \$30.2 million (\$2020–21). This is slightly less than our efficiency adjustment.

Having reviewed an application by CitiPower, Powercor and United Energy, we determined that the annual payments made by the Victorian distributors to Energy Safe Victoria (ESV) are a jurisdictional scheme.<sup>9</sup> This final determination includes a decision on how Jemena is to report to the AER on its recovery of amounts for the scheme and on adjustments made in pricing proposals to account for over or under recovery. For all Victorian distributors it will be recovered through annual prices rather than the allowed (opex) revenue we set in our decision. This was the other reason for Jemena's lower updated revised total opex proposal.

### Transition of the energy system

Facilitating the transition of the energy system is a key theme for this Victorian regulatory determination process. Mechanisms such as expenditure to physically accommodate greater solar exports, tariff price signals and demand management initiatives can help. We consider the transition of the energy system so important that we have made incentivising networks to become platforms for energy services a strategic objective in our regulation of networks.

We accepted Jemena's initial proposal on the amount of capex required to facilitate and integrate distributed energy resources (DER) on its network. Our decision supports Jemena accommodating solar PV growth on its networks to achieve consumer expectations regarding the Victorian Government's Solar Homes program.

We have engaged extensively with stakeholders in the development of consistent DER integration expenditure guidelines. We published CSIRO and CutlerMerz's final value of DER (VaDER) methodology study in November 2020. However, the Australian Energy Market Commission (AEMC) recently published draft rule changes which have

<sup>&</sup>lt;sup>9</sup> See <u>https://www.aer.gov.au/communication/aer-makes-determination-on-cpus-application-for-a-jurisdictional-scheme</u>.

implications for our DER integration expenditure guideline and which will delay its finalisation.<sup>10</sup>

Cost reflective network tariffs also have an important part to play in the energy transition by incentivising the location and use of DER to optimise benefits to consumers and networks.

We are encouraged by the Victorian distributors' efforts to progress network tariff reform during the 2021–26 regulatory control period. The distributors moved from opt–in to opt–out assignment to the new default time of use tariff for consumers receiving a new meter or who upgrade their connection. By working collaboratively with their stakeholders<sup>11</sup> they developed small consumer tariff proposals with aligned, more targeted, peak charging windows. We are also pleased to see the Victorian distributors reassigning small consumers on legacy cost reflective tariffs, to new and more targeted default time of use tariffs.

We engaged rigorously with the electric vehicle (EV) sector and heard many different perspectives. We encourage electric vehicle charging station and energy storage proponents to engage with the Victorian distributors on tariff trials. We see trials as a valuable way of proving out new and innovative service models to inform future network tariffs.

Our view is that it is important EV charging stations face cost reflective network tariffs to minimise new network investment which increases costs for all consumers. Consistent with our view, charging stations which install load limiting devices can access alternative cost reflective tariffs. Our final decision also makes clear, consistent with Victorian Government policy, that once small consumers with an EV are identified, they must be assigned to a cost reflective network tariff.

We consider storage assets should both contribute to recovery of network costs commensurate with their network use and see cost reflective price signals to guide their operation. Our final decision on stand-alone grid scale storage connected to the Victorian networks is to assign such consumers according to the usual tariff classes unless they are only providing network support services. Regardless, ownership of storage assets should not affect tariff class assignment.

See <u>https://www.aemc.gov.au/rule-changes/access-pricing-and-incentive-arrangements-distributed-energy-resources</u>.

<sup>&</sup>lt;sup>11</sup> Including retailers and jurisdictional government entities.

# Note

This attachment forms part of the AER's final decision on the distribution determination that will apply to Jemena for the 2021–26 regulatory control period. It should be read with all other parts of the final decision.

The final 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 12 Not applicable to this distributor
- Attachment 13 Classification of services
- Attachment 14 Control mechanisms
- Attachment 15 Pass through events
- Attachment 16 Alternative control services
- Attachment 18 Connection policy
- Attachment 19 Tariff structure statement
- Attachment A Negotiating framework

# Contents

Exe	ecutive summary2
Not	te7
Со	ntents1-8
1	Our final decision1-10
	1.1 What's driving revenue?1-10
	1.2 Differences between revised proposal and our final decision .1-13
	1.3 Expected impact of our final decision on electricity bills1-14
2	Key components of our final decision on revenue2-17
	2.1 Regulatory asset base2-19
	2.2 Rate of return and value of imputation credits2-22
	2.3 Regulatory depreciation (return of capital)2-25
	2.4 Capital expenditure2-26
	2.5 Operating expenditure2-27
	2.6 Corporate income tax2-28
	2.7 Revenue adjustments2-29
3	Jemena's consumer engagement3-31
	3.1 Clarifying the role of consumer engagement
	3.2 An assessment of consumer engagement
4	Incentive schemes4-35
5	Tariff structure statement
6	Other price terms and conditions6-39
	6.1 Classification of services
	6.2 Negotiating framework and criteria6-39
	6.3 Connection policy

7 The National Electricity Law and Rules	7-41
A Constituent decisions	7-43
B List of submissions	7-47
C Consumer engagement framework	7-48
Shortened forms	7-49

# 1 Our final decision

Our final decision allows Jemena to recover a total revenue of \$1335.7 million (\$ nominal) from its consumers from 1 July 2021 to 30 June 2026.

Jemena is regulated using a revenue cap. Incentives are provided to it to reduce costs, improve service quality and undertake efficient investments.

Our final decision for Jemena determines the total revenue it can recover from consumers for the provision of common distribution services (standard control services (SCS)). This forms the basis of Jemena's distribution tariffs for the 2021–26 regulatory control period. Jemena's Tariff Structure Statement (TSS) sets out the tariff structure through which it will recover its regulated revenue for SCS from consumers.

Jemena also provides alternative control services (ACS), the costs of which are recovered only from users of those services. These costs are considered separately to our building block determination.<sup>12</sup> Our final decision sets out the prices Jemena is allowed to charge consumers for the provision of ACS: ancillary network services, public lighting and total revenue for metering. Jemena has not proposed to provide any services on a negotiated basis in the 2021–26 regulatory control period.<sup>13</sup>

We have taken Jemena's consumer engagement into account in developing our final decision. More information is provided in section 3.

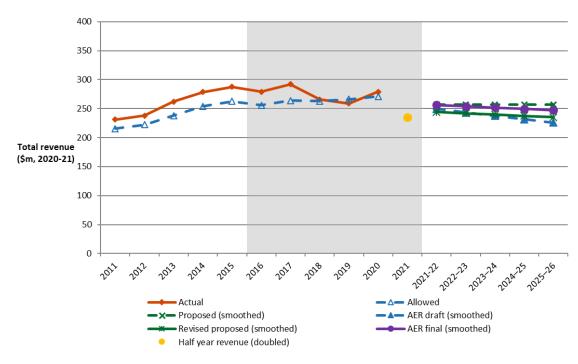
### 1.1 What's driving revenue?

Revenue is driven by changes in real costs and inflation. We assess costs (such as capital and operating expenditure) in real terms (using 2020–21 as a common year) to reveal the underlying cost trends over a number of years or regulatory control periods. The numbers presented in this overview are in real 2020–21 dollars unless otherwise noted. Some aspects of our decision are presented in nominal terms to be consistent with the National Electricity Rules (NER) and to enable consumers to see the full impact of our determination inclusive of expected inflation.

The total revenue allowance in this 2021–26 final decision is 4.6 per cent lower than the allowed revenue provided for in our 2016–20 final decision, in real terms. Figure 1 shows real revenue decreases from 2020 levels by 8.1 per cent in the first year of the next regulatory control period. After that, Jemena's revenue allowance is steady with a smaller 0.9 percent decrease per year.

<sup>&</sup>lt;sup>12</sup> We discuss alternative control services in Attachment 16 to this draft decision.

<sup>&</sup>lt;sup>13</sup> Our distribution determination for Jemena includes an approved negotiating framework and negotiated distribution service criteria, as required by the NER. Because Jemena has not included any negotiated services in its proposal, these elements of our determination will be inactive for the 2021–26 regulatory control period.



#### Figure 1 Revenue over time (\$ million, 2020–21)

Figure 2 highlights the key drivers of the change in Jemena's allowed revenue from the 2016–20 regulatory control period compared to what we expect in the 2021–26 regulatory control period. It illustrates that the largest driver of change is the return on capital building block. The rate of return has decreased from around 6.37 per cent in the 2016–20 regulatory control period to 4.91 per cent for the 2021–26 period. As a result, the total cost of capital had reduced by \$88.1 million (\$2020–21).<sup>14</sup> In 2019, we reviewed how we calculate the cost of corporate income tax and made changes to our approach to align with the latest rulings of the Australian Tax Office. This means we expect the cost of corporate income tax for Jemena will be lower than it was in the past. As a result, Figure 2 also shows a decrease in the net cost of corporate income tax building block of \$46.7 million.<sup>15</sup> Other changes include:

Increase to forecast regulatory depreciation by 5.7 per cent. Each year, Jemena builds new equipment to keep its network running. The cost of this new equipment is added to a cumulative total called the regulatory asset base or RAB. Over time, the cost of this equipment is paid back to Jemena through depreciation. Because Jemena added new equipment to its network over the last five years, its RAB is increasing and so is its depreciation. Jemena's increase in depreciation is also affected by lower expected inflation over the 2021–26 regulatory control period.<sup>16</sup>

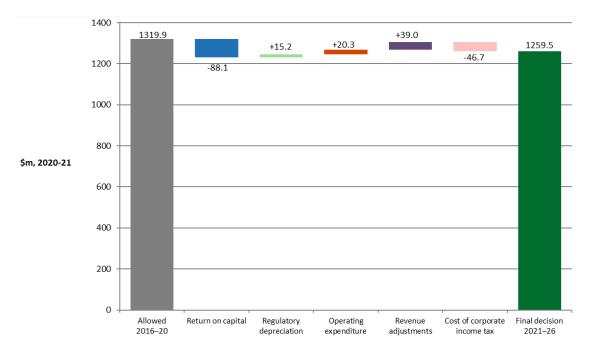
Source: AER analysis.

<sup>&</sup>lt;sup>14</sup> The rate of return is a nominal rate of return unless stated otherwise. The real rate of return has decreased by a similar amount. Please see section 2.2 for further details.

<sup>&</sup>lt;sup>15</sup> Please see section 2.6 for further details.

<sup>&</sup>lt;sup>16</sup> Please see section 2.3 for further details.

- Increase to revenue adjustments of \$39.0 million. This is mainly driven by the application of CESS.
- Increase to forecast opex compared to the 2016–20 regulatory control period, by 4.1 per cent.<sup>17</sup>



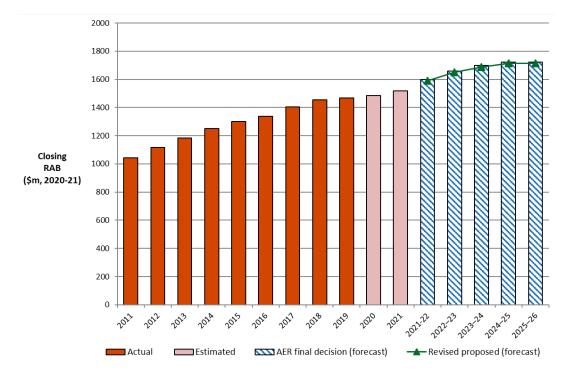
#### Figure 2 Change in revenue from 2016–20 to 2021–26 (\$ million, 2020–21)

Source: AER analysis.

Figure 3 compares our final decision forecast RAB to Jemena's revised proposed and actual RAB. Jemena's proposed capital expenditure going forward is higher than its current spend due to proposed investments in REFCLs. We reviewed this proposal carefully and have decided to largely accept its forecast spending. Jemena's RAB is forecast to increase by around 13.5 per cent in real terms over the 2021–26 regulatory control period. In the 2016–20 regulatory control period, its RAB increased by 14.0 per cent.<sup>18</sup>

<sup>&</sup>lt;sup>17</sup> Please see section 2.5 for further details.

<sup>&</sup>lt;sup>18</sup> Please see section 2.1 for further details.



### Figure 3 Value of Jemena's RAB over time (\$ million, 2020-21)

Source: AER analysis.

# 1.2 Differences between revised proposal and our final decision

Our final decision has determined total revenues of \$1335.7 million (\$ nominal) for the 2021–26 regulatory control period. This is \$49.6 million or 3.9 per cent higher than Jemena's revised proposal of \$1286.1 million.

We have largely accepted Jemena's revenue proposal and the difference is due to our updating of the proposed building block amounts using more recent information.

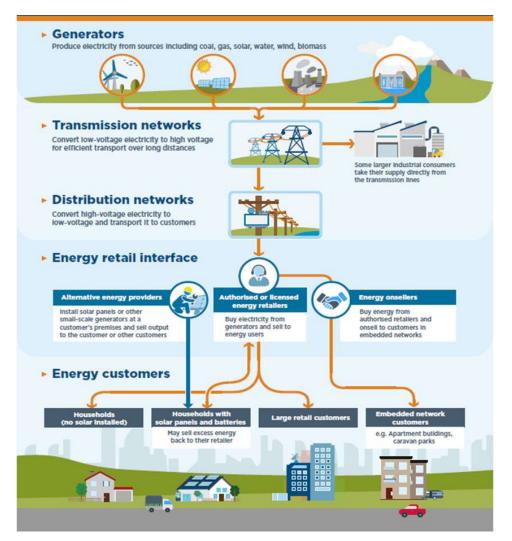
The biggest contributor to the difference between our final decision revenue and Jemena's revised proposal is regulatory depreciation. Our estimate of the regulatory depreciation of \$300.2 million is \$28.4 million (\$ nominal) or 10.5 per cent higher than Jemena's revised proposal estimate of \$271.8 million (\$ nominal). The main driver of this difference is the lower expected inflation which resulted from our inflation review. Our latest version of the Post-tax revenue model (PTRM) (version 5) released in April 2021 amended the way we estimate inflation, in order to improve our estimation in periods of economic instability or sustained periods of low or high inflation.<sup>19</sup> Our final decision estimates expected inflation of 2.00 per cent, which is lower than Jemena's estimate of expected inflation of 2.37 per cent.

<sup>&</sup>lt;sup>19</sup> AER, *Final position paper - Regulatory treatment of inflation*, December 2020, p. 6.

We determine the return on capital of \$380.9 million (\$ nominal), which is \$19.4 million or 5.4 per cent greater than the \$361.5 million in Jemena's revised proposal. This is driven by our estimate of Jemena's nominal return on equity of 5.31%, which is greater than the 4.56% in Jemena's revised proposal.

# 1.3 Expected impact of our final decision on electricity bills

Jemena's distribution network SCS charges make up around 25 per cent of the total residential bill and 32 per cent of the total small business retail electricity bill. Our decision also covers charges for revenue-capped metering services (that form part of ACS) and these costs are included in this estimated bill impact analysis. Other components of the electricity bill include wholesale electricity costs, retail costs and environmental policy costs. Figure 4 illustrates the different components of the electricity supply chain. Each of these costs contributes to the retail prices charged to customers by their chosen electricity retailer.



### Figure 4 Electricity supply chain

Source: AER, State of the Energy Market, December 2018, p. 28.

For this final decision, we have estimated some indicative average distribution price impacts flowing from our allowed revenue determination. These prices are indicative and might vary with changes in demand.

Table 1 shows the estimated average annual impact of our final decision for the 2021–26 regulatory control period on electricity bills for residential and small business customers.

We estimate the expected impact on bills by varying the distribution charges in line with our 2021–26 final decision, while holding all other components constant. This approach isolates the effect of our final decision on distribution network tariffs from other parts of the bill. However, this does not mean that other components will remain unchanged across the regulatory control period.<sup>20</sup>

Under the final decision, we estimate that compared to 2020 charges, the distribution network and metering charges (\$ nominal) in Jemena's area:

- for an average residential consumer would:
  - reduce by \$54 (3.5 per cent) in the first year of the 2021–26 regulatory control period
  - increase on average by \$2 (0.1 per cent) for each of the remaining four years of the 2021–26 regulatory control period.
- for an average small business consumer would:
  - reduce by \$179 (2.8 per cent) in the first year of the 2021–26 regulatory control period
  - increase on average by \$5 (0.1 per cent) for each of the remaining four years of the 2021–26 regulatory control period.

<sup>&</sup>lt;sup>20</sup> It also assumes that actual energy consumption will equal the forecast adopted in our final decision. Since Jemena operates under a revenue cap, changes in energy consumption will also affect annual electricity bills across the 2021–26 regulatory control period.

# Table 1 Estimated contribution to annual electricity bills for the 2021–26regulatory control period (\$ nominal)

	2020	2021–22	2022–23	2023–24	2024–25	2025–26
AER Final decision						
Residential annual bill	1514 <sup>s</sup>	1460	1460	1462	1465	1467
Annual change (per cent) <sup>c</sup>		-54 (-3.5%)	-1 (-0.1%)	2 (0.2%)	2 (0.2%)	2 (0.2%)
Standard control services		-29	-2	2	2	1
Metering		-25	1	1	1	1
Small business annual bill	6316 <sup>b</sup>	6137	6129	6138	6147	6156
Annual change (per cent) <sup>c</sup>		–179 (–2.8%)	-8 (-0.1%)	9 (0.2%)	9 (0.2%)	8 (0.1%)
Standard control services		-155	-9	9	8	7
Metering		-25	1	1	1	1
Jemena revised proposal						
Residential annual bill	1514ª	1444	1445	1449	1453	1456
Annual change (per cent) <sup>c</sup>		-70 (-4.6%)	1 (0.1%)	4 (0.3%)	4 (0.3%)	4 (0.3%)
Standard control services		-44	-0	3	3	3
Metering		-26	1	1	1	1
Small business annual bill	6316 <sup>b</sup>	6055	6054	6069	6085	6100
Annual change (per cent) <sup>c</sup>		-262 (-4.1%)	-1 (-0%)	16 (0.3%)	16 (0.3%)	15 (0.2%)
Standard control services		-236	-2	15	15	14
Metering		-26	1	1	1	1

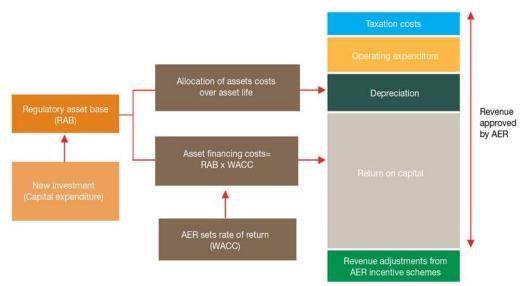
Source: AER analysis; Essential Services Commission, *Victorian Default Offer to apply from 1 January 2020 – Final decision*, 18 November 2019, p. 76.

- (a) Annual bill for 2020 is sourced from Essential Services Commission, Victorian Default Offer to apply from 1 January 2020 – Final decision and reflects the average consumption of 4000 kWh for residential customers in Victoria. This is then indexed by CPI for the half year period from 1 January 2021 to 30 June 2021 to allow comparison of the bill impact from 1 July 2021 onwards.
- (b) Annual bill for 2020 is sourced from Essential Services Commission, Victorian Default Offer to apply from 1 January 2020 – Final decision and reflects the average consumption of 20000 kWh for small business customers in Victoria. This is then indexed by CPI for the half year period from 1 January 2021 to 30 June 2021 to allow comparison of the bill impact from 1 July 2021 onwards.
- (c) Annual change amounts and percentages are indicative. They are derived by varying the distribution component of the 2020 bill amounts in proportion to yearly expected revenue divided by forecast energy as provided by Jemena. Actual bill impacts will vary depending on electricity consumption and tariff class.

# 2 Key components of our final decision on revenue

The total revenue Jemena proposed reflects its forecast of the efficient cost of providing network services over the 2021–26 regulatory control period. Jemena's proposal, and our assessment of it under the National Electricity Law (NEL) and NER, are based on a 'building block' approach to determining a total revenue allowance (see Figure 5) which looks at six cost components:

- a return on the RAB (or return on capital, to compensate investors for the opportunity cost of funds invested in this business) (section 2.2)
- depreciation of the RAB (or return of capital, to return the initial investment to investors over time) (section 2.3)
- capex the capital expenditure incurred in the provision of network services mostly relates to assets with long lives, the cost of which are recovered over several regulatory control periods. The forecast capex approved in our decisions directly affects the projected size of the RAB and therefore the revenue generated from the return on capital and depreciation building blocks (section 2.4)
- opex—the operating, maintenance and other non-capital expenses incurred in the provision of network services (section 2.5)
- the estimated cost of corporate income tax (section 2.6)
- revenue adjustments, including revenue increments or decrements resulting from the application of incentive schemes, such as the efficiency benefit sharing scheme (EBSS) and capital expenditure sharing scheme (CESS) that applied to Jemena for the 2016–20 regulatory control period and the Demand Management Innovation Allowance Mechanism (DMIAM) allowance for 2021–26 (section 2.7).



### Figure 5 The building block model to forecast network revenue

Source: AER, State of the Energy Market, December 2018, p.138.

We use an incentive approach where, once regulated, revenues are set for a five year period. Networks who keep actual costs below the regulatory forecast of costs retain part of the benefit. This incentive framework is a foundation of the regulatory framework, and is consistent with the National Electricity Objective (NEO). Service providers have an incentive to become more efficient over time, as they retain part of the financial benefit from improved efficiency. Consumers also benefit when efficient costs are revealed and a lower cost benchmark is set in subsequent regulatory periods.

Our final decision on Jemena's distribution revenues for the 2021–26 regulatory control period is set out in Table 2.

# Table 2 AER's final decision on Jemena's revenues for the 2021–26regulatory control period (\$ million, nominal)

	2021–22	2022–23	2023–24	2024–25	2025–26	Total
Return on capital	74.5	76.5	77.4	76.9	75.6	380.9
Regulatory depreciation <sup>a</sup>	52.2	56.6	59.6	63.7	68.1	300.2
Operating expenditure <sup>b</sup>	101.4	105.4	109.9	113.9	118.2	548.8
Revenue adjustments <sup>c</sup>	19.4	16.1	14.6	11.8	12.0	73.8
Cost of corporate income tax	7.4	6.2	5.3	7.4	7.2	33.6
Annual revenue requirement (unsmoothed)	254.8	260.8	266.9	273.6	281.1	1337.3
Annual expected revenue (smoothed)	261.4	264.3	267.1	270.0	272.9	1335.7
X factor <sup>d</sup>	n/a <sup>e</sup>	0.90%	0.90%	0.90%	0.90%	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), the capital expenditure sharing scheme (CESS), shared assets adjustments and the 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) Jemena is not required to apply an X factor for 2021–22 because we set the 2021–22 expected revenue in this decision. The expected revenue for 2021–22 is around 8.1 per cent lower than the approved total annual revenue for 2020 in real terms, or 6.3 per cent lower in nominal terms after taking into account the escalation by half year Consumer Price Index (CPI) to allow comparison of the revenue from 1 July 2021 onwards.

## 2.1 Regulatory asset base

The RAB is the value of assets used by Jemena to provide regulated distribution services. The value of the RAB substantially impacts Jemena's revenue requirement, and the price consumers ultimately pay. This makes it a key issue for many stakeholders. Other things being equal, a higher RAB would increase both the return on capital and depreciation (return of capital) components of the revenue determination.

As part of our decision on Jemena's revenue for 2021–26, we make a decision on Jemena's opening RAB as at 1 July 2021. We use the RAB at the start of each regulatory year to determine the return of capital (regulatory depreciation) and return on capital building block.

For this final decision, we accept Jemena's revised proposed opening RAB value as at 1 July 2021 of \$1517.9 million (\$ nominal).<sup>21</sup> This final decision is \$6.4 million (or 0.4 per cent) lower than our draft decision value for Jemena's opening RAB of \$1524.4 million (\$ nominal).

To determine the opening RAB as at 1 July 2021, we have rolled forward the RAB over the 2016–20 regulatory control period and a further roll forward for the six month 2021 period<sup>22</sup> to arrive at a closing RAB value at 30 June 2021 in accordance with our roll forward model (RFM). This roll forward includes an adjustment at the end of the 2016–20 regulatory control period to account for the difference between actual 2015 capex and the estimate approved in the 2016–20 determination.<sup>23</sup>

Table 3 sets out the roll forward of the RAB to the end of the 2016–21 period.

# Table 3 AER's final decision on Jemena's RAB for 2016–21 period(\$ million, nominal)

	2016	2017	2018	2019	2020ª	2021 <sup>ь</sup>
Opening RAB	1186.8	1238.2	1312.5	1386.1	1428.4	1466.9
Capital expenditure <sup>c</sup>	115.9	134.7	128.4	100.2	109.6	71.9
Inflation indexation on opening RAB	17.9	12.7	25.4	28.8	22.8	17.9
Less: straight-line depreciation <sup>d</sup>	82.4	73.0	80.2	86.7	93.7	38.8

<sup>&</sup>lt;sup>21</sup> Subject to our update for equity raising costs for the six month period of 1 January to 30 June 2021 (the six month 2021 period). This update does not have a material impact on the RAB (less than \$0.01 million).

<sup>&</sup>lt;sup>22</sup> The additional roll forward for six months is due to the decision by the Victorian government to change the timing of the annual Victorian electricity network price changes to financial year basis from calendar year basis. This change means the current regulatory control period of 2016–20 is extended by six months and the next regulatory control period will commence on 1 July 2021.

<sup>&</sup>lt;sup>23</sup> The adjustment will be positive (negative) if actual capex is higher (lower) than the estimate approved at the 2016– 20 determination.

	2016	2017	2018	2019	<b>2020</b> ª	2021 <sup>b</sup>
Interim closing RAB	1238.2	1312.5	1386.1	1428.4	1467.1	1517.9
Difference between estimated and actual capex in 2015					-0.2	
Return on difference for 2015 capex					-0.1	
Closing RAB as at 31 December 2020					1466.9	
Opening RAB as at 1 July 2021						1517.9

AER analysis.

- (a) Based on estimated capex provided by Jemena. We will true-up the RAB for actual capex at the next reset.
- (b) The six month 2021 period of 1 January to 30 June 2021. Based on estimated capex provided by Jemena. We expect to update the RAB roll forward with a revised capex estimate in the final decision, and true-up the RAB for actual capex at the next reset.
- (c) Net of disposals and capital contributions, and adjusted for actual CPI and half-year WACC.
- (d) Adjusted for actual CPI. Based on forecast capex.

Note: Summation of entries may not equal totals due to rounding.

For this final decision, we determine a forecast closing RAB value at 30 June 2026 of \$1902.1 million (\$ nominal) for Jemena. This is \$24.0 million (or 1.2 per cent) lower than Jemena's revised proposal of \$1926.1 million (\$ nominal). Our final decision on the forecast closing RAB reflects our final decisions on the expected inflation rate (attachment 3), forecast depreciation (attachment 4) and forecast capex (attachment 5).<sup>24</sup>

Table 4 sets out our final decision on the forecast RAB values for Jemena over the 2021–26 regulatory control period.

# Table 4 AER's final decision on Jemena's RAB for the 2021–26 regulatorycontrol period (\$ million, nominal)

	2021–22	2022–23	2023–24	2024–25	2025–26
Opening RAB	1517.9	1629.4	1727.6	1802.1	1864.9
Capital expenditure <sup>a</sup>	163.6	154.9	134.1	126.5	105.3
Inflation indexation on opening RAB	30.3	32.6	34.5	36.0	37.3
Less: straight-line depreciation	82.5	89.2	94.2	99.7	105.4
Closing RAB	1629.4	1727.6	1802.1	1864.9	1902.1

Source: AER analysis.

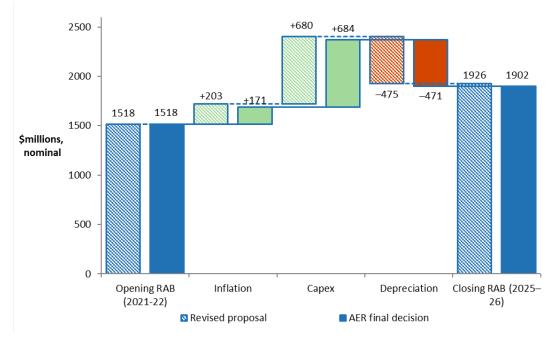
<sup>&</sup>lt;sup>24</sup> Capex enters the RAB net of forecast disposals. It includes equity raising costs (where relevant) and the half-year WACC to account for the timing assumptions in the PTRM. Therefore, our final decision on the forecast RAB also reflects our amendments to the rate of return for the 2021–26 regulatory control period (section 2.2 of the Overview).

(a) Net of forecast disposals and capital contributions. In accordance with the timing assumptions of the post-tax revenue model (PTRM), the capex includes a half-year WACC allowance to compensate for the six-month period before capex is added to the RAB for revenue modelling.

We are satisfied that the use of a forecast depreciation approach in combination with the application of the CESS and our other ex post capex measures are consistent with the capex incentive objective.<sup>25</sup> Further, this approach is consistent with our draft decision, Jemena's initial proposal and our *Framework and approach*.<sup>26</sup>

Figure 6 shows the key drivers of the change in Jemena's RAB over the 2021–26 regulatory control period for this final decision. Overall, the closing RAB at the end of the 2021–26 regulatory control period is forecast to be 25.3 per cent higher than the opening RAB at the start of that period, in nominal terms. The approved forecast net capex increases the RAB by 45.1 per cent, while expected inflation increases it by 11.3 per cent. Forecast depreciation, on the other hand, reduces the RAB by 31.0 per cent.





Source: AER analysis.

- <sup>25</sup> Our ex post capex measures are set out in the capex incentive guideline, AER, *Capital expenditure incentive guideline for electricity network service providers,* November 2013, pp. 13–19 and 20–21. The guideline also sets out how all our capex incentive measures are consistent with the capex incentive objective.
- <sup>26</sup> AER, Draft decision: Jemena distribution determination 2021 to 2026, Attachment 2 Regulatory Asset Base, September 2020, p. 18; Jemena, Revised Regulatory Proposal 2021–26 - Overview, December 2020, p. 23; AER, Final framework and approach for AusNet Services, CitiPower, Jemena, Powercor and United Energy – Regulatory control period commencing 1 January 2021, January 2019, pp. 83–85.

Note: Capex is net of forecast disposals and capital contributions. It is inclusive of the half-year WACC to account for the timing assumptions in the PTRM.

Further detail on our final decision regarding the RAB is set out in attachment 2.

### 2.2 Rate of return and value of imputation credits

The return each business is to receive on its RAB (the 'return on capital') is a key driver of proposed revenues. We calculate the regulated return on capital by applying a rate of return to the value of the RAB. We estimate the rate of return by combining the returns of the two sources of funds for investment: equity and debt.

The allowed rate of return provides the business with a return on capital to service the interest on its loans and give a return on equity to investors. An accurate estimate of the rate of return is necessary to promote efficient prices in the long-term interests of consumers.

We are required by the NEL to apply a rate of return instrument—the current 2018 Rate of Return Instrument (2018 Instrument)—to estimate an allowed rate of return.<sup>27</sup>

The Victorian Government has moved the Victorian distributors from a calendar year regulatory control period to a financial year regulatory control period. <sup>28</sup> This entails a six month extension to the current regulatory control period (2016–20) through to June 2021 then a five year regulatory control period starting on 1 July 2021.<sup>29</sup> Our 2018 Instrument needs to be applied from 1 January 2021—that is, to the six month extension period as well as the following five financial years which form the 2021–26 regulatory control period. Some amendments to the 2018 Instrument were needed to accommodate the additional 6 month period. The Victorian government enabled these amendments through the NELA Act<sup>30</sup> and therefore, we apply modified 2018 Instruments to both periods.<sup>31 32</sup>

Application of a modified 2018 Instrument in this final decision estimates an allowed rate of return of 4.91 per cent (nominal vanilla) for the five year regulatory control

<sup>&</sup>lt;sup>27</sup> NEL, Part 3, division 1B. AER, *Rate of return instrument*, December 2018, available at <u>https://www.aer.gov.au/networks-pipelines/guidelinesschemes-models-reviews/rate-of-return-guideline-2018/finaldecision</u>

<sup>&</sup>lt;sup>28</sup> National Energy Legislation Amendment Act 2020 (Vic). Available at: <u>https://www.legislation.vic.gov.au/as-made/acts/national-energy-legislation-amendment-act-2020</u>

<sup>&</sup>lt;sup>29</sup> The six month extension period was also labelled as the 'mini-year' when we consulted on the modifications to the 2018 Rate of Return Instrument.

<sup>&</sup>lt;sup>30</sup> National Energy Legislation Amendment Act 2020.

<sup>&</sup>lt;sup>31</sup> National Energy Legislation Amendment Act 2020.

<sup>&</sup>lt;sup>32</sup> For the six month extension period instrument see: AER, Modified rate of return instrument for the Victorian electricity distribution networks during the extension period of 1 January 2021 to 30 June 2021, 27 October 2020; For the financial year regulatory control period instrument, see the Order in Council made on 27 October 2020 under section 16VE of the NEVA (Attachment A - Modified rate of return instrument for the regulatory control period commencing on 1 July 2021 for the Victorian DNSPs).

period commencing 1 July 2021. We note Jemena's proposal and revised proposal also applied these modifications to the 2018 Instrument.<sup>33</sup>

Our calculated rate of return (in Table 5) will apply to the first year of the 2021–26 regulatory control period. A different rate of return will apply for the remaining regulatory years of the period. This is because we will update the return on debt component of the rate of return each year in accordance with a modified 2018 Instrument, which uses a 10-year trailing average portfolio return on debt that is rolled-forward each year.

	AER draft decision (2021–26)	Jemena's revised proposal (2021–26)	AER final decision (2021–26)	Allowed return over regulatory control period
Nominal risk free rate	0.90%ª	0.90%ª	1.65% <sup>c</sup>	
Market risk premium	6.1%	6.1%	6.1%	
Equity beta	0.6	0.6	0.6	
Return on equity (nominal post–tax)	4.56%	4.56%	5.31%	Constant (%)
Return on debt (nominal pre–tax)	4.74% <sup>b</sup>	4.67% <sup>b</sup>	4.64% <sup>d</sup>	Updated annually
Gearing	60%	60%	60%	Constant (60%)
Nominal vanilla WACC	4.67%	4.63%	4.91%	Updated annually for return on debt
Expected inflation	2.37%	2.37%	2.0%	Constant (%)

### Table 5 AER's final decision on Jemena's rate of return (nominal)

Source: AER analysis; Jemena, 2021–26 Electricity distribution price review regulatory proposal, Attachment 03-01 Response to AER's Draft Decision - Annual Revenue Requirement, December 2020, pp. 7–11.

<sup>a,b</sup> Calculated using a placeholder averaging period.

<sup>c,</sup> Calculated using an averaging period of 17 February to 17 March 2021.

<sup>d</sup> Final decision return on debt is calculated using the proposed and accepted debt averaging period.

Our final decision is also to accept Jemena's proposed risk free rate averaging period<sup>34</sup> and debt averaging periods because they comply with conditions in the modified 2018 Instrument.<sup>35</sup> These were submitted with its initial regulatory proposal and we specify the debt averaging periods in confidential appendix A.

<sup>&</sup>lt;sup>33</sup> Jemena, 2021–26 Electricity distribution price review, Regulatory proposal, Attachment 07-02, Rate of Return, January 2020, p. 9; Jemena, 2021–26 Electricity revised regulatory proposal, December 2020, p. 15.

<sup>&</sup>lt;sup>34</sup> This is also known as the return on equity averaging period.

<sup>&</sup>lt;sup>35</sup> For the modified application of the 2018 instrument to the regulatory control period 2021–26, see the Order in Council made on 27 October 2020 under section 16VE of the NEVA (*Attachment A - Modified rate of return instrument for the regulatory control period commencing on 1 July 2021 for the Victorian DNSPs*).; see also AER,

### Debt and equity raising costs

In addition to providing for the required rate of return on debt and equity, we provide an allowance for the transaction costs associated with raising debt and equity. We include debt raising costs in the opex forecast because these are regular and ongoing costs. We include equity raising costs in the capex forecast because these costs are only incurred once and would be associated with funding the particular capital investments.

We note Jemena has proposed to use our approach to estimate equity raising costs.<sup>36</sup> We have updated our estimate for this regulatory control period based on the benchmark approach using updated inputs. This results in equity raising costs of \$4.04 million.

Our final decision is to accept the method used in Jemena's revised proposal which uses an annual rate of 8.2 basis points per annum.<sup>37</sup> We have considered this annual rate and found our alternative benchmark estimate (8.3 basis points) is similar to Jemena's revised proposal.

#### Imputation credits

Our final decision is to apply a gamma of 0.585 as provided in a modified 2018 Instrument.<sup>38</sup> Jemena's revised proposal has adopted a value of 0.585.<sup>39</sup>

#### Inflation

We estimate an expected inflation of 2.0 per cent based on the approach adopted in our final position paper from our 2020 inflation review.<sup>40 41</sup> Jemena supported the new approach to estimating expected inflation, and advocated that the AER adopt the new approach immediately.<sup>42</sup>

#### True up for six month extension period

We applied placeholder averaging periods in our final decision for the six month extension period of 1 January 2021 to 30 June 2021.<sup>43</sup> This was due to the

Final decision, Jemena distribution determination 2021 to 2026, Attachment 3—Rate of return confidential appendix A: Equity and debt averaging periods, April 2021.

<sup>&</sup>lt;sup>36</sup> Jemena, Revised Regulatory Proposal - 2021–26 - Att 03-01 Annual revenue requirement, December 2020, p. 13; and Jemena, 03-02M SCS PTRM FY22-26 20201203 - Public.xls; Jemena, Jemena – Revised Regulatory Proposal - 3-01M SCS PTRM FY22-26 – March 2021, March 2021.

<sup>&</sup>lt;sup>37</sup> Jemena, Jemena – Revised Regulatory Proposal - 3-01M SCS PTRM FY22-26 – March 2021, March 2021.

<sup>&</sup>lt;sup>38</sup> For the modified application of the 2018 instrument to the regulatory control period 2021–26,, see the Order in Council made on 27 October 2020 under section 16VE of the NEVA (*Attachment A - Modified rate of return instrument for the regulatory control period commencing on 1 July 2021 for the Victorian DNSPs*).

<sup>&</sup>lt;sup>39</sup> Jemena Electricity Networks (Vic) Ltd, 2021–26 Electricity revised regulatory proposal, December 2020, p. 15.

<sup>&</sup>lt;sup>40</sup> AER, *Final position, Regulatory treatment of inflation*, December 2020.

<sup>&</sup>lt;sup>41</sup> See our latest version of the PTRM (version 5) released in April 2021; AER, *Final position, Regulatory treatment of inflation*, December 2020.

<sup>&</sup>lt;sup>42</sup> Jemena, *Revised Regulatory Proposal - 2021–26 - Att 03-01 Annual revenue requirement*, December 2020, p. 9.

<sup>&</sup>lt;sup>43</sup> For example, see: AER, *Final decision Jemena six-month extension – variation decision*, October 2020, pp. 11–12.

unanticipated delay in the passing of the NELA Act, and to facilitate our pricing process – the nominated (and accepted) averaging periods would not have finished in time to allow practical estimation of the final rate of return (based on the accepted averaging periods).

We have calculated the updated rate of return for the extension period based on the nominated and accepted averaging periods, and in accordance with the modified six-month instrument and the Order in Council. We determine that the difference with the placeholder rate of return will be recovered through the C-factor as noted in our control mechanisms attachment (attachment 14).

# 2.3 Regulatory depreciation (return of capital)

Depreciation is the amount provided so capital investors recover their investment over the economic life of the asset (return of capital). Jemena invests capital in large assets to provide electricity network services to its consumers. The costs of these assets are recovered over the asset's useful life, which in many cases can be 50 or more years. This means only a small part of the cost of such assets are recovered from consumers upfront or in any year. The greater proportion is recovered over time through the depreciation allowance.

In deciding whether to approve the depreciation schedules submitted by Jemena, we make determinations on the indexation of the regulatory asset base (RAB) and depreciation building blocks for Jemena's 2021–26 regulatory control period.<sup>44</sup> The regulatory depreciation amount is the net total of the straight-line depreciation less the indexation of the RAB.

Our final decision is to determine a regulatory depreciation amount of \$300.2 million (\$ nominal) for Jemena for the 2021–26 regulatory control period. This amount represents an increase of \$28.4 million (or 10.5 per cent) to the \$271.8 million (\$ nominal) in Jemena's revised proposal.<sup>45</sup> It is \$26.1 million (or 9.5 per cent) higher than the regulatory depreciation amount determined in the draft decision. This significant increase is driven by our review of lower expected inflation which resulted from our inflation review. This lower expected inflation (amongst other things) impacts the indexation component of the regulatory depreciation allowance.

In coming to this decision:

- We accept Jemena's revised proposed straight-line method to calculate the regulatory depreciation, which is consistent with our draft decision.
- We accept Jemena's revised proposal to continue with the year-by-year tracking approach to implement straight-line depreciation of existing assets, consistent with our draft decision.

<sup>&</sup>lt;sup>44</sup> NER, cll. 6.12.1, 6.4.3.

<sup>&</sup>lt;sup>45</sup> Jemena, 03-01M SCS PTRM FY22-26, updated 19 March 2021.

• We accept Jemena's revised proposed asset classes and standard asset lives, which are consistent with our draft decision. We have amended the equity raising costs standard asset life consistent with our standard weighted average approach.

The difference in our final decision and the revised proposed regulatory depreciation allowance is largely due to the following determinations on related parts of our decision:

- expected inflation over the 2021–26 regulatory control period (attachment 3)
- forecast capex (attachment 5) including its effect on the projected RAB over the 2021–26 regulatory control period.<sup>46</sup>

Further detail on our final decision regarding depreciation is set out in attachment 4.

### 2.4 Capital expenditure

Capex refers to the investment in assets to provide network services. This investment mostly relates to assets with long lives and these costs are recovered over several regulatory periods. Capex is added to Jemena's RAB, which is used to determine the return on capital and return of capital (regulatory depreciation) building block allowances. All else being equal, higher forecast capex will lead to a higher projected RAB value and higher return on capital and regulatory depreciation allowances.

Our final decision is to accept Jemena's revised proposal of \$627.2 million.<sup>47</sup> However, our substitute capex forecast of \$636.0 million reflects updates to real cost escalations and connections forecasts.<sup>48</sup>

Jemena's revised proposal largely accepted our draft decision but included updates to REFCL, real cost escalations, ICT, DER and also requested that we use more up to date housing data to forecast connections when this data became available.

We have focussed our assessment of Jemena's revised proposal on these categories of capex that were a departure from our draft decision. We are satisfied by Jemena's supporting information and responses to our information requests.

We note our substitute capex forecast is 10.3 per cent above current period actual capex. However, we recognise this increase is largely driven by \$42.8 million for REFCL in the forecast period that is not a material part of current period capex. We also consider Jemena has undertaken an innovative approach to meeting its REFCL compliance obligations.

<sup>&</sup>lt;sup>46</sup> Capex enters the RAB net of forecast disposals and capital contributions. It includes equity raising costs (where relevant) and the half-year WACC to account for the timing assumptions in the PTRM. Our final decision on the RAB (Attachment 2) also reflects our updates to the WACC for the 2021–26 regulatory control period.

<sup>&</sup>lt;sup>47</sup> Jemena updated its revised proposal capex of \$625.9 million to \$627.2 million to account for modelling errors as part of its response to information request 65.

<sup>&</sup>lt;sup>48</sup> Jemena requested that we update its connections forecast for new information. We have also updated real cost escalations consistent with Jemena's revised proposal methodology.

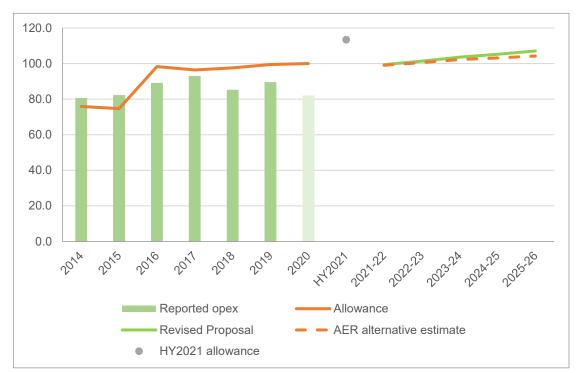
Further detail on our final decision regarding capex is set out in attachment 5.

## 2.5 Operating expenditure

Opex is the forecast of operating, maintenance and other non-capital costs incurred in the provision of standard control services. Forecast opex is one of the building blocks we use to determine Jemena's total regulated revenue requirement.

Our final decision is to accept Jemena's updated revised opex proposal of \$516.6 million, including debt raising costs, for the 2021–26 regulatory control period. This is because our alternative estimate of \$509.2 million is not materially different than Jemena's updated revised total opex. Therefore we consider that Jemena's total opex forecast reasonably reflects the opex criteria.<sup>49</sup>

Figure 7 shows Jemena's opex forecast for the next five years, which is increasing by \$80.7 million or 18.5 per cent relative to its actual (and estimated) opex in the current regulatory control period.



### Figure 7 Jemena's opex over time (\$ million, 2020–21)

Source: Jemena, 2021–26 Regulatory proposal – Supporting document RIN 5 – Workbook 1 – Regulatory determination, March 2020; Jemena, 2021–26 Revised Regulatory Proposal – 05-01M SCS Opex Model FY22–26, 19 March 2021; AER, Final Decision, Jemena distribution determination 2021–26, Opex model, April 2021; AER, Final Decision, Jemena distribution determination 2021–26, EBSS model, April 2021; AER analysis.

<sup>49</sup> NER, cl.6.5.6(c).

Note: Opex for 2020 is an estimate based off Jemena's efficiency savings as mentioned in its updated revised proposal.

We applied (as did Jemena) our top down base-step-trend approach to forecast increasing opex for the 2021–26 regulatory control period. This consists of:

- Starting with reported opex in 2018 as the opex base. Jemena updated its revised proposal to pass \$30.2 million of opex back to customers in the next regulatory control period, reflecting savings in 2020 from its transformation program.<sup>50</sup> Our assessment found that Jemena's opex in the base year is outside the efficient band and we applied an efficiency adjustment of \$36.9 million. The opex savings proposed by Jemena are not materially different (\$6.8 million) to those we have determined via our alternative estimate as being required for Jemena's base opex to be relatively efficient.
- Adding to base opex newly expensed corporate overhead costs which will be incurred in the 2021–26 regulatory control period as a result of changes to its Cost Allocation Methodology, which we are satisfied have been applied appropriately.
- Escalating these costs to account for forecast changes in price growth, output growth and productivity over the next regulatory control period, which we consider is reasonable and consistent with our standard approach.
- Adding a number of step changes. The most significant step change proposed is for increasing insurance premium costs over the 2021–26 regulatory control period. Other increases include costs to meet new obligations such as those for REFCL testing and maintenance and cyber security. We have assessed these and consider they are prudent and efficient. These additions are a key driver for forecast opex being higher than historical levels.

We have set out the reasons for our final decision on opex in more detail in attachment 6. Our opex model which calculates our alternative estimate of opex is available on our website.

### 2.6 Corporate income tax

Our revenue determination includes the estimated cost of corporate income tax for Jemena's 2021–26 regulatory control period. Under the post-tax framework, cost of corporate income tax is calculated as part of the building block assessment using our PTRM.

Our final decision on Jemena's estimated cost of corporate income tax is \$33.6 million over the 2021–26 regulatory control period. This represents an increase of \$8.0 million (or 31.4 per cent) from Jemena's revised proposed cost of corporate income tax of \$25.6 million (\$ nominal). The key reasons for this change are:

<sup>&</sup>lt;sup>50</sup> This reflects the \$20 million of opex savings Jemena included in its revised proposal and an additional \$10.1 million of opex savings it added to these in the update to its revised proposal.

- Our final decision to increase the regulatory depreciation (attachment 4).<sup>51</sup>
- Our final decision to apply an updated rate of return on equity (attachment 3).<sup>52</sup>
- Our final decision to change the tax treatment of gifted assets, consistent with a recent ruling by the Full Federal Court of Australia<sup>53</sup> made after our draft decision.

We accept the revised proposed opening tax asset base (TAB) value as at 1 July 2021 of \$1272.9 million. We also accept Jemena's revised proposal on the standard tax asset lives for all of its asset classes, consistent with our draft decision. We have updated Jemena's remaining tax asset lives as at 1 July 2021 to reflect our amendments to the opening TAB value.

Our adjustments to the return on capital (attachments 2, 3 and 5) and the regulatory depreciation (attachment 4) building blocks affect revenues, which in turn impacts the tax calculation. The changes affecting revenues are discussed in attachment 1.

Further detail on our final decision on corporate income tax is set out in attachment 7.

### 2.7 Revenue adjustments

Our final decision on Jemena's total revenue also includes a number of adjustments:

- **EBSS** Jemena accrued EBSS carryovers totalling \$25.0 million (\$2020–21) from the application of the EBSS in the 2016–20 regulatory control period. This is the same carryover amount Jemena included in its revised proposal. The 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 forecast opex in subsequent periods. Attachment 8 sets out our final decision on Jemena's EBSS.
- CESS –Jemena has accrued rewards under the CESS we applied in the current 2016–20 regulatory control period to incentivise Jemena to undertake efficient capex throughout the period. The CESS rewards efficiency gains and penalises efficiency losses, each measured by reference to the difference between forecast and actual capex. In the 2016–20 period, Jemena out-performed our capex forecast, and our final decision is to approve a CESS revenue increment amount of \$44.4 million (\$2020–21). This amount reflects updated CPI and weighted average cost of capital figures.
- **Shared assets** Distributors, such as Jemena, may use assets to provide both the SCS we regulate and unregulated services. These assets are called 'shared

<sup>&</sup>lt;sup>51</sup> All else equal, a higher regulatory depreciation amount will increase the cost of corporate income tax because it increases the taxable income.

<sup>&</sup>lt;sup>52</sup> All else equal, a higher rate of return on equity will increase the cost of corporate income tax because it reduces the return on equity, a component of the taxable income.

<sup>&</sup>lt;sup>53</sup> Federal Court of Australia, Victoria Power Networks Pty Ltd v Commissioner of Taxation [2020] FCAFC 169, 21 October 2020.

assets'. 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. For this final decision, we determine a revenue adjustment of \$1.5 million (\$2020–21) to be shared with customers across the 2021–26 regulatory control period.

• Demand management innovation allowance mechanism (DMIAM) – Table 6 sets out the DMIAM allowance for Jemena for the 2021–26 regulatory control period, based on the final PTRM for Jemena. The DMIAM aims to encourage distribution businesses to find investments that are lower cost alternatives to investing in network solutions.

### Table 6 AER's final decision on the DMIAM (\$ million, 2020–21)

	2021–22	2022–23	2023–24	2024–25	2025–26	Total
DMIAM	0.40	0.40	0.40	0.40	0.40	2.01

Source: AER analysis.

Section 4 sets out our final decision on the incentive schemes that apply to Jemena over the next regulatory control period

# 3 Jemena's consumer engagement

A significant development in the preparation of proposals for the Victorian electricity distribution 2021–26 regulatory control period, has been the improvement in consumer engagement approaches undertaken by the distributors. Stakeholders have commented favourably on the observed improvement in consumer engagement across all Victorian distributors.<sup>54</sup> As a result of this advancement, we developed a framework<sup>55</sup> for assessing the Victorian distributor's consumer engagement activities, which we published in our draft decision.<sup>56</sup>

The framework sought to provide increased transparency around our assessment of consumer engagement outcomes and how this has influenced our decisions on expenditure forecasts. It was developed, based on our observations on the quality of engagement, to represent a range of considerations we thought clearly demonstrated if consumers had been genuinely engaged during development of proposals.<sup>57</sup> The framework, in its current form, represents a high threshold a distributor would need to meet - among other things - should it be seeking to submit a proposal that is 'capable of acceptance'. Used in conjunction with our technical analysis, the framework allowed us to place weight on the outcomes of the engagement activities undertaken by each distributor to assist in providing an overall assessment of expenditure proposals. In response to a number of submissions<sup>58</sup>, this final decision also provides further clarity on the use of the framework in our decision making process. Noting that while we take the quality of consumer engagement, and the extent to which proposals are influenced by consumer preferences into account, it does not displace our technical assessment under the NER. The assessment of consumer engagement under the framework can however, inform the depth of technical assessment required.

Stakeholder submissions on our draft decision supported the framework<sup>59</sup>, as a tool in our kit, along with the further development of our approach to consumer engagement.<sup>60</sup> We also recognise there may be other elements of engagement which

<sup>60</sup> Op cit.

<sup>&</sup>lt;sup>54</sup> CCP17, Submission on the Victorian EDPR Revised Proposal and draft decision 2021–26, January 2021, pp 6-42.; CCP17, Submission on the Victorian Electricity Distribution Regulatory Proposal 2021–26, June 2020, p.10.; Department of Environment, Land, Water and Planning, Victorian Government submission on the electricity distribution price review 2021–26, May 2020, p. 2;, EUAA, Submission on the Victorian EDPR Revised Proposal and draft decision 2021–26, January 2021, p. 2.; ECA, Submission on the Victorian EDPR Revised Proposal and draft decision 2021–26, January 2021, p. 6.

<sup>&</sup>lt;sup>55</sup> See Table 7: AER, *Draft decision, Jemena distribution determination 2021–26, Overview - September 2020*, p. 43.

<sup>&</sup>lt;sup>56</sup> AER, Draft decision, Jemena distribution determination 2021–26, Overview - September 2020, p. 43.

<sup>&</sup>lt;sup>57</sup> AER, *Draft decision, Jemena distribution determination 2021–26, Overview - September 2020*, p. 42.

<sup>&</sup>lt;sup>58</sup> EUAA, Submission on the Victorian EDPR Revised Proposal and draft decision 2021–26, January 2021, p. 7.; VCO, Submission on the Victorian Electricity Distribution Regulatory Proposal 2021–26, June 2020, p. 12; VCO, Submission on the Victorian EDPR Revised Proposal and draft decision 2021–26, January 2021, p. 12, 14.

<sup>&</sup>lt;sup>59</sup> EUAA, Submission on the Victorian EDPR Revised Proposal and draft decision 2021–26, January 2021, pp.2, 3-4.; CCP17, Submission on the Victorian EDPR Revised Proposal and draft decision 2021–26, January 2021, pp. 6-42; ECA, Submission on the Victorian EDPR Revised Proposal and draft decision 2021–26, January 2021, p. 8.; VCO, Submission on the Victorian EDPR Revised Proposal and draft decision 2021–26, January 2021, p. 12.

are also worthy of inclusion as our assessment approach develops.<sup>61</sup> As a result, we plan to take any further development of the framework with full consultation with stakeholders, outside of the Victorian reset process. However, to maintain consistency of our assessment of the Victorian distributor's consumer engagement in this final decision, we have continued with the approach outlined in our draft decision.

### 3.1 Clarifying the role of consumer engagement

Some stakeholders have expressed concern that an assessment of high quality consumer engagement may lead to a decreased level of technical assessment. In particular, the Energy Users Association of Australia (EUAA) and the Victorian Community Organisations suggested that successful participation in a New Reg process could lead to a network business getting a 'rails run', with less detailed regulatory scrutiny.<sup>62</sup>

The NER outlines that we must have regard to consumer concerns and be satisfied that expenditure forecasts we approve reasonably reflect prudent and efficient costs. One of the assessment factors that we must have regard to is the extent to which the capex and opex forecasts address consumer concerns identified throughout distributors' engagement with its customers.<sup>63</sup> However, this must be balanced against other capex and opex factors, including that we must have regard to distributors' actual and expected capex and opex in preceding regulatory periods<sup>64</sup>, and whether the forecasts are consistent with any relevant incentive schemes.<sup>65</sup> In undertaking our reviews, we apply a number of bottom-up and top-down assessment techniques. Our technical analysis makes use of a range of measures, none of which are used deterministically in isolation. The quality of a distributor's consumer engagement informs the nature of our technical assessment but does not displace it.

### 3.2 An assessment of consumer engagement

In our assessment of consumer engagement in the development of proposals for the 2021–26 regulatory control period, we recognise that each distributor has approached consumer engagement differently. From the outset, in the development of its regulatory proposal, Jemena's stated objective was to operate at the "collaborate" level of

<sup>&</sup>lt;sup>61</sup> CCP17, Submission on the Victorian EDPR Revised Proposal and draft decision 2021–26, January 2021, pp. 6-42; EUAA, Submission on the Victorian EDPR Revised Proposal and draft decision 2021–26, January 2021, pp. 3-4.; ECA, Submission on the Victorian EDPR Revised Proposal and draft decision 2021–26, January 2021, p. 9.; CitiPower, Powercor and United Energy, Revised Regulatory Proposal - 2021–26 - December 2020, p. 26.; VCO, Submission on the Victorian EDPR Revised Proposal and draft decision 2021–26, January 2021, pp. 12-13.

<sup>&</sup>lt;sup>62</sup> EUAA, Submission on the Victorian EDPR Revised Proposal and draft decision 2021–26, January 2021, p. 1; VCO, Submission on the Victorian EDPR Revised Proposal and draft decision 2021–26, January 2021, p 14.

<sup>&</sup>lt;sup>63</sup> NER, cl. 6.5.7(e)(5A) and 6.5.6(e)(5A).

<sup>&</sup>lt;sup>64</sup> NER, cl. 6.5.7(e)(5) and 6.5.6(e)(5).

<sup>&</sup>lt;sup>65</sup> NER, cl. 6.5.7(e)(8) and 6.5.6(e)(8).

engagement in the IAP2 spectrum.<sup>66</sup> To accomplish this Jemena conducted a deliberative process, which it called its 'People's Panel'. This model, also known as a "Citizen's Jury", was chosen because of its representative nature and the capacity to deliver outcomes trusted by the broader community.<sup>67</sup>

In coming to our draft decision, we found that Jemena's consumer engagement was effective with the proposal reflecting consumers' input. Taking its consumers preferences into consideration, along with both our top-down and bottom-up technical assessments, we concluded that Jemena's proposed capex forecast in aggregate reasonably reflects prudent and efficient costs,<sup>68</sup> subject to updates and some adjustments due to changed economic conditions.<sup>69</sup> However, in the draft decision our technical assessments found that Jemena's opex forecast was outside of the band considered to be efficient.<sup>70</sup> In addition to our technical assessment, we were unable to establish a clear line of sight between Jemena's proposed opex forecast and any engagement that had taken place on its efficiency.<sup>71</sup> As a result, our substitute opex forecast in the draft decision was 13.3 per cent lower than Jemena's proposal.<sup>72</sup>

The remainder of this section provides our assessment of Jemena's consumer engagement in the period from the draft decision to the submission of its revised regulatory proposal. In providing this assessment, we recognise that the limited timeframe, between the draft decision and submission of the revised proposals, presented challenges for distributors to meet all of the weighting criteria under each element of the framework.

From submission of its initial proposal, Jemena continued its business as usual engagement with customers and customer representatives, the purpose of which was to test its approach and gather customer views in preparation of its revised proposal.<sup>73</sup> On release of the draft decision, Jemena increased the engagement frequency, engaging broadly through its Customer Council and People's Panel, which was designed to be a representative sample of the diversity of its customer base.<sup>74</sup> The purpose of this engagement was to seek its customer's views on issues raised in the draft decision and how the revised proposal should respond.<sup>75</sup>

<sup>&</sup>lt;sup>66</sup> Jemena, 2021–26 Electricity Distribution Price Review Regulatory Proposal, Attachment 02-01, Our customer, stakeholder and community engagement, January 2020, p. 1. See also: https://iap2.org.au/wpcontent/uploads/2020/01/2018 IAP2\_Spectrum.pdf.

<sup>&</sup>lt;sup>67</sup> Jemena, 2021–26 Electricity Distribution Price Review Regulatory Proposal, Attachment 02-01, Our customer, stakeholder and community engagement, January 2020, p.12.

<sup>&</sup>lt;sup>68</sup> AER, Draft decision, Jemena distribution determination 2021–26, Overview - September 2020, p. 8.

<sup>&</sup>lt;sup>69</sup> AER, Draft decision, Jemena distribution determination 2021–26, Overview - September 2020, p. 8.

<sup>&</sup>lt;sup>70</sup> AER, Draft decision, Jemena distribution determination 2021–26, Overview - September 2020, p. 7.

<sup>&</sup>lt;sup>71</sup> AER, Draft decision, Jemena distribution determination 2021–26, Overview - September 2020, p. 49.

<sup>&</sup>lt;sup>72</sup> AER, Draft decision, Jemena distribution determination 2021–26, Overview - September 2020, p. 18.

<sup>&</sup>lt;sup>73</sup> Jemena, Electricity Distribution Price Review Regulatory Proposal 2021–26, Attachment 01-01 – Response to the AER's draft decision – Customer engagement – December 2020, p.6

<sup>&</sup>lt;sup>74</sup> Jemena, *Electricity Distribution Price Review Regulatory Proposal 2021–26*, Attachment 02-01, *Our customer, stakeholder and community engagement*, January 2020, p. 16.

<sup>&</sup>lt;sup>75</sup> Jemena, *Electricity Distribution Price Review Regulatory Proposal 2021–26*, p. 4

One aspect of engagement with its People's Panel focused specifically on our draft decision in relation to Jemena's opex productivity. To assist members of the People's Panel to understand some of the complexity in relation to opex benchmarking, Jemena conducted a series of 'deep-dive' workshops. The objective of the workshops was to facilitate feedback, resulting in a separate submission on opex productivity benchmarking by the People's Panel.<sup>76</sup>

The Consumer Challenge Panel, sub-panel 17 (CCP17), who observed the deep dive sessions, remarked on the difficulty of the challenge to seek an independent and informed consumer perspective, while wanting support for its perspective compared to that of the AER.<sup>77</sup> The challenge was further exacerbated by the complexity of the subject matter and the limited timeframe, which CCP17 observed "stretched" both the distributor and the engagement approach. Nevertheless, CCP17 were complementary of the sincerity with which the engagement was conducted.

We found that overall, Jemena has remained true to its stated objective of operating at the collaborate level of customer engagement on the IAP2 spectrum.<sup>78</sup> Jemena has built a level of trust with its People's Panel and other stakeholders who have developed a good understanding of the distributor's business.<sup>79</sup> Ultimately, Jemena's commitment to ensuring that its customers preferences, including affordability, are reflected in the updates to its revised proposal with a lower opex forecast, which we have accepted in our final decision.

<sup>&</sup>lt;sup>76</sup> Jemena, Electricity Distribution Price Review Regulatory Proposal 2021–26, Attachment 01-01 – Response to the AER's draft decision – Customer engagement – December 2020, p. 2.

<sup>&</sup>lt;sup>77</sup> CCP17, Submission on the Victorian EDPR Revised Proposal and draft decision 2021–26, January 2021, p. 39.

<sup>&</sup>lt;sup>78</sup> Jemena, *Electricity Distribution Price Review Regulatory Proposal 2021–26*, Attachment 02-01, *Our customer, stakeholder and community engagement*, January 2020, p. 1. See also: https://iap2.org.au/wpcontent/uploads/2020/01/2018 IAP2 Spectrum.pdf

 <sup>&</sup>lt;sup>79</sup> See CCP17, Submission on the Victorian EDPR Revised Proposal and draft decision 2021–26, January 2021, p.
 39. And Jemena, *Electricity Distribution Price Review Regulatory Proposal 2021–26*, p. 5.

# 4 Incentive schemes

Incentive schemes are a component of incentive based regulation and complement our approach to assessing efficient costs. These schemes provide important balancing incentives under the revenue determination we've discussed in section 2, to encourage Jemena to pursue expenditure efficiencies and demand side alternatives while maintaining the reliability and overall performance of its network.

The incentive schemes that might apply to an electricity distribution network as part of our decision are:

- the EBSS
- the CESS
- the service target performance incentive scheme (STPIS)
- the Customer Service Incentive Scheme (CSIS)
- the demand management incentive scheme (DMIS) and allowance (DMIAM)
- the f-factor scheme.

Once we make our decision on Jemena's revenue cap, it has an incentive to provide services at the lowest possible cost, because its returns are determined by its actual costs of providing services. Our incentive schemes encourage network businesses to make efficient decisions. They give network businesses an incentive to pursue efficiency improvements in opex and capex, and to share them with consumers. If networks reduce costs to below our forecast of efficient costs, the savings are shared with its consumers in future regulatory periods through a lower opex allowance and a lower RAB.

Our final decision is to apply the EBSS to Jemena in the 2021–26 regulatory control period. This is consistent with our past decisions where we have applied the EBSS when we have accepted the businesses proposed total opex but applied an efficiency adjustment to base opex in our alternative estimate. This reflects our view that we are likely to use revealed costs to set Jemena's base opex in the subsequent (2026–31) regulatory control period. This is a change from our draft decision, which did not apply the EBSS. This was because our draft decision did not accept Jemena's opex proposal, and used benchmarking (rather than revealed costs) to set base opex. Given our final decision is to accept Jemena's total opex proposal, we can be more confident than in the draft decision that we will use revealed costs to set base opex in the 2026–31 regulatory control period.

We understand the strong concerns of stakeholders, that the CESS not only rewards efficiency gains but also over forecasting and deferral of capex. The current CESS guideline includes protections against material deferrals that have been triggered for some elements of Powercor's proposal.<sup>80</sup> Jemena included a deferral adjustment and

<sup>&</sup>lt;sup>80</sup> AER, Final Decision, Powercor Distribution Determination 2021–26, Attachment 9 Capital Expenditure Sharing Scheme, September 2020.

we made no further adjustments. Protection against over forecasting of capex lies in the rigorous assessment of proposed capex. Our draft decision also noted that we will be conducting a review of incentive schemes to examine these stakeholder concerns. Any unspent DMIAM allowance will be returned to the consumers.

The DMIS and the DMIAM provide businesses an incentive to undertake efficient expenditure on non-network options relating to demand management research and development in demand management projects that have the potential to reduce long-term network costs. All five Victorian distributors accepted our draft decision to apply the DMIS and DMIAM. We acknowledge that the Victorian Greenhouse Alliances expressed its concern that the full DMIAM allowance has been approved for Jemena, CitiPower and Powercor, without justification or evidence of the types of activities that will be undertaken.<sup>81</sup> While we acknowledge this concern, we consider that the DMIAM research and development works have the potential to deliver long-term savings to consumers. The scheme has an in-built control framework to ensure that only those expenditures that meet the tests prescribed by the scheme will be approved.

Our final decision is to apply the DMIS and the DMIAM to Jemena for the 2021–26 regulatory control period, without any modification. Our draft decision reasons form part of this final decision.

The STPIS is intended to balance incentives to reduce expenditure with the need to maintain or improve service quality. Our final decision is to apply our national STPIS version 2.0 (November 2018) to Jemena for the 2021–26 regulatory control period. We will not apply the guaranteed service level component to Jemena as the existing jurisdictional arrangements will continue to apply.

Jemena has opted *not* to apply our CSIS in the revised proposal. Attachment 10 sets out our final decision on Jemena's STPIS.

Our final decision is that each of the EBSS, CESS, STPIS, DMIS, and DMIAM should apply to Jemena for the 2021–26 regulatory control period.

Our final decision also includes how the f-factor scheme is applied to Jemena in the 2021–26 regulatory control period. The f-factor scheme is prescribed by the Victorian Government's F-Factor Scheme Order 2016 to reduce the risk of fire starts by network assets.<sup>82</sup> The 2016 Order was amended by the F-factor Scheme Amendment Order 2020. We have made an f-factor scheme determination for Jemena under the F-Factor Scheme Order in respect of the 2021–26 regulatory control period, as detailed in attachment A of our draft decision. Our final decision is to make revenue adjustments for Jemena in accordance with the F-Factor Scheme Order by way of an annual adjustment through the "I-factor" component in the control mechanism, as specified in attachment 14 of the final decision. We discuss our final decisions on each incentive scheme in attachments 8 to 10.

<sup>&</sup>lt;sup>81</sup> LGR, prepared by Victorian Greenhouse Alliance, *Submission to the AER Victorian Electricity Distribution Price Review (EDPR) 2021–26, Local Government Response to the AER's Draft Determination,* December 2020, p. 10.

<sup>&</sup>lt;sup>82</sup> Victoria Government Gazette, G 51, 22 December 2016, p. 3239.

## **5** Tariff structure statement

Jemena's 2021–26 proposal includes the second iteration of its tariff structure statement (TSS). Its current TSS applies from 1 January 2016 to 30 June 2021.<sup>83</sup>

The requirement on distributors to prepare a TSS arises from significant reforms to the rules governing distribution network pricing. These reforms aim to:

- help distributors provide better price signals to retailers to reflect what it costs to use the network
- manage future expectations for retailers, distributors and consumers by providing guidance on distributors' tariff strategy
- help the transition to more cost reflecting pricing.

Distributors do not directly charge end customers. Rather, distributors charge retailers for the network services provided to end customers. Retailers can then decide how best to pass on these price signals to end customers.

A TSS applies to a distributor's tariffs for the duration of the regulatory control period. It describes a distributor's tariff classes and structures, the distributor's policies and procedures for assigning and reassigning customers to tariffs, the charging parameters for each tariff, and a description of the approach the distributor takes to setting tariffs in pricing proposals.<sup>84</sup> It is accompanied by an indicative pricing schedule.<sup>85</sup> A TSS provides consumers and retailers with certainty and transparency in relation to how and when network prices will change.

While an indicative pricing schedule must accompany the TSS, Jemena's tariffs for the entire 2021–26 regulatory control period are not set as part of this determination. Rather, tariffs for 2021–22 will be subject to a separate approval process that takes place in May 2021, after this final revenue determination in April 2021. Tariffs for the following four years will also be approved on an annual basis in May of each year.

Our final decision is to amend Jemena's TSS by:

- requiring stand-alone (grid scale) storage to face network price signals to guide their operation and contribute to the cost of operating and maintaining the electricity distribution networks they use
- specifying electric vehicles owners, once they are identified by the relevant network, will no longer have access to flat tariffs
- clarifying retailers can request tariff reassignment from distributors to help optimise their portfolios while consumers retain control over their retail offer

<sup>&</sup>lt;sup>83</sup> The regulatory control period (1 January 2016 to 31 December 2020) was extended by six months. Refer to the Executive Summary above for an overview of changes to the regulatory control period.

<sup>&</sup>lt;sup>84</sup> NER, cl. 6.18.1A(a).

<sup>&</sup>lt;sup>85</sup> NER, cl. 6.18.1A(e).

These amendments complement the changes Jemena already made to align with our draft decision. These changes include:

- reassigning residential consumers on legacy time of use, flexibility and demand tariffs to the new time of use or demand equivalent
- adopting United Energy's incentive peak demand component into its large user tariff structure with transitional arrangements to help consumers adjust
- refining large user peak charging windows to more closely target network conditions
- providing greater clarity about continued access for consumers with consumption under 160 MWh a year but demand greater than 120 kVA to a zero demand tariff structure
- providing greater clarity on how its tariff strategy aligned with DER integration and demand management initiatives

On large customer tariff choice, our final decision is to allow Jemena to:

• not offer large user tariff choice at this time given the tight timelines between our draft decision and its revised proposal, as well as its intention to trial new large customer tariffs during the 2021–26 regulatory control period.

On energy storage, we consider batteries should contribute to recovery of network costs and should face network price signals to guide their operation. This will retain consistency with other NEM jurisdictions given the absence of new rules or policy direction between our draft and final decisions. If the asset falls into a particular tariff class, it should be assigned to the same network tariffs as other customers in that tariff class, whether owned by a distributor, its affiliate or a third party. We have amended Jemena's TSS to reflect this position. To the extent batteries are used for network support they are exempt from network tariffs, as they are currently.

We note the AEMC has foreshadowed its intention to consult with stakeholders on efficiently integrating distributed energy resources and that charging arrangements may be considered more generally in the context of the Energy Security Board reforms. The Victorian distributors have also committed to trialling new tariffs for energy storage over the 2021–26 regulatory control period.

Attachment 19 of this final decision provides detailed reasons for our decision on Jemena's TSS.

### 6 Other price terms and conditions

In this section, we consider the other aspects of our determination. These may be described as the terms and conditions of our determination that cover how Jemena must set its prices. This includes the classification of services and the framework for Jemena's negotiated services.

### 6.1 Classification of services

Service classification determines the nature of economic regulation, if any, that is applicable to specific distribution services. Classification is important to customers as it determines which network services are included in basic electricity charges, the basis on which additional services are sold, and which services we will not regulate. Our decision reflects our assessment of a number of factors, including existing and potential competition to supply these services.

In its revised proposal, Jemena accepted our draft decision on the classification of the services it provides.<sup>86</sup> Our final decision is to retain the classification structure and the services list as published in our draft decision for Jemena.<sup>87</sup> The list of classified services Jemena will provide for the 2021–26 regulatory control period is set out in attachment 13 of this decision.

### 6.2 Negotiating framework and criteria

In our draft decision, we approved Jemena's proposed distribution negotiating framework for the 2021–26 regulatory control period.<sup>88</sup> We did not receive any objections or submissions on our draft decision. Our final decision is to approve Jemena's negotiating framework. The distribution negotiating framework that will apply to Jemena for the period of this determination is set out in Attachment A. We are also required to make a decision on the negotiated distribution service criteria (NDSC) for the distributor.<sup>89</sup> Our final decision is to retain the NDSC that we published for Jemena in September 2020<sup>90</sup> for the 2021–26 regulatory control period. The NDSC gives effect to the negotiated distribution services principles.<sup>91</sup>

### 6.3 Connection policy

In our draft decision, we did not approve Jemena's proposed connection policy for the 2021–26 regulatory control period. We modified Jemena's connection policy nominated

<sup>&</sup>lt;sup>86</sup> Jemena, *Revised Regulatory proposal 2021–26* - December 2020, Attachment 02-01, Response to the AER's draft decision - Classification of services, p. 2.

<sup>&</sup>lt;sup>87</sup> AER, *Draft decision - Jemena distribution determination 202–-26*, Attachment 12 Classification of services, September 2020. The services list can be found in Attachment A

<sup>&</sup>lt;sup>88</sup> AER, Draft decision, Jemena distribution determination 2021–26, September 2020, Attachment 17, p, 17-4

<sup>&</sup>lt;sup>89</sup> NER, cl. 6.12.1(16).

<sup>90</sup> AER Draft decision, Jemena distribution determination 2021–26, September 2020, Attachment 17, p, 17-4

<sup>&</sup>lt;sup>91</sup> NER, cl. 6.7.1.

in its original proposal, to the extent necessary to enable it to be approved in accordance with the rules' requirements.

Jemena accepted all the changes we made to the initial proposed connection policy. We, however, made minor corrections to the mistakes contained in the revised connection policy.

The approved connection policy for Jemena's 2021–26 regulatory control period is appended to attachment 18 of our final decision.

## 7 The National Electricity Law and Rules

The NEL and NER provide the regulatory framework governing electricity distribution networks. Our work under this framework is guided by the NEO:<sup>92</sup>

"...to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to—

(a) price, quality, safety, reliability and security of supply of electricity; and

(b) the reliability, safety and security of the national electricity system."

The NEL requires us to make our decision in a manner that contributes, or is likely to contribute, to achieving the NEO.<sup>93</sup> The focus of the NEO is on promoting efficient investment in, and operation and use of, electricity services (rather than assets) in the long-term interests of consumers.<sup>94</sup> This is not delivered by any one of the NEO's factors in isolation, but rather by balancing them in reaching a regulatory decision.<sup>95</sup>

Electricity determinations are complex decisions. In most cases, the provisions of the NER do not point to a single answer, either for our decision as a whole or in respect of particular components. They require us to exercise our regulatory judgement. Where there are choices to be made among several plausible alternatives, we have selected what we are satisfied would result in an overall decision that is likely to contribute to the achievement of the NEO to the greatest degree.<sup>96</sup>

Our distribution determinations are predicated on a number of constituent decisions that we are required to make.<sup>97</sup> These are set out in appendix A and the relevant attachments. In coming to a decision that contribute to the achievement of the NEO, we have considered interrelationships of the constituent components of our final decision in the relevant attachments. Examples include:

- Underlying drivers and context which are likely to affect many constituent components of our decision. For example, forecast demand affects the efficient levels of capex and opex in the regulatory control period (see attachment 5 and 6).
- Direct mathematical links between different components of a decision. For example, the level of gamma has an impact on the appropriate tax allowance; the benchmark efficient entity's debt to equity ratio has a direct effect on the cost of

<sup>&</sup>lt;sup>92</sup> NEL, s. 7.

<sup>&</sup>lt;sup>93</sup> NEL, section 16(1)(a)

<sup>&</sup>lt;sup>94</sup> This is also the view of the Australian Energy Markets Commission (the AEMC). See, for example, the AEMC, *Applying the Energy Objectives: A guide for stakeholders*', 1 December 2016, p. 5.

<sup>&</sup>lt;sup>95</sup> Hansard, SA House of Assembly, 26 September 2013, p. 7173. See also the AEMC, 'Applying the Energy Objectives: A guide for stakeholders', 1 December 2016, pp. 7–8.

<sup>&</sup>lt;sup>96</sup> NEL, s. 16(1)(d).

<sup>&</sup>lt;sup>97</sup> NER, 6.12.1

equity, the cost of debt, and the overall vanilla rate of return (see attachments 3 and 7).

• Trade-offs between different components of revenue. For example, undertaking a particular capex project may affect the need for opex or vice versa (see attachments 5 and 6).

In general, we consider that the long-term interests of consumers are best served where consumers receive a reasonable level of safe and reliable service that they value at least cost in the long run.<sup>98</sup> A decision that places too much emphasis on short term considerations may not lead to the best overall outcomes for consumers once the longer term implications of that decision are taken into account.<sup>99</sup>

There may be a range of economically efficient decisions that we could make in a revenue determination, each with different implications for the long-term interests of consumers.<sup>100</sup> A particular economically efficient outcome may nevertheless not be in the long-term interests of consumers, depending on how prices are structured and risks allocated within the market.<sup>101</sup> There are also a range of outcomes that are unlikely to advance the NEO, or advance the NEO to the degree than others would. For example, we consider that:

- the long-term interests of consumers would not be advanced if we encourage overinvestment which results in prices so high that consumers are unwilling or unable to efficiently use the network.<sup>102</sup>
- equally, the long-term interests of consumers would not be advanced if allowed revenues result in prices so low that investors do not invest to sufficiently maintain the appropriate quality and level of service, and where consumers are making more use of the network than is sustainable leading to safety, security and reliability concerns.<sup>103</sup>

<sup>&</sup>lt;sup>98</sup> Hansard, SA House of Assembly, 9 February 2005, p. 1452.

 <sup>&</sup>lt;sup>99</sup> See, for example, the AEMC, 'Applying the Energy Objectives: A guide for stakeholders', 1 December 2016, pp. 6–
 7.

<sup>&</sup>lt;sup>100</sup> Re Michael: Ex parte Epic Energy [2002] WASCA 231 at [143].

<sup>&</sup>lt;sup>101</sup> See, for example, the AEMC, 'Applying the Energy Objectives: A guide for stakeholders', 1 December 2016, p. 5.

<sup>&</sup>lt;sup>102</sup> NEL, s. 7A(7).

<sup>&</sup>lt;sup>103</sup> NEL, s. 7A(6).

## A Constituent decisions

### **Constituent decision**

In accordance with clause 6.12.1(1) of the NER, the AER's final decision is that the classification of services set out in Attachment 13 will apply to Jemena for the 2021–26 regulatory control period.

In accordance with clause 6.12.1(2)(i) of the NER, the AER's final decision is not to approve the annual requirement set out in Jemena building block proposal. Our final decision on Jemena's annual revenue requirement for each year of the 2021–26 regulatory control period is set out in Attachment 1 of the final decision.

In accordance with clause 6.12.1(2)(ii) of the NER, the AER's final decision is to approve Jemena's proposal that the regulatory control period will commence on 1 July 2021. Also in accordance with clause 6.12.1(2)(ii) of the NER, the AER's final decision is to approve Jemena's proposal that the length of the regulatory control period will be 5 years from 1 July 2021 to 30 June 2026.

The AER did not receive a request for an asset exemption under clause 6.4.B.1 (a) (1) and therefore has not made a decision in accordance with clause 6.12.1(2A) of the NER.

In accordance with clause 6.12.1(3)(ii) and acting in accordance with clause 6.5.7(d) of the NER, the AER's final decision is not to accept Jemena's proposed total forecast capital expenditure of \$627.2 million (\$2020–21). Our final decision therefore includes a substitute estimate of Jemena' total forecast capex for the 2021–26 regulatory control period of \$636.0 million (\$2020–21). The reasons for our final decision are set out in Attachment 5.

In accordance with clause 6.12.1(4)(ii) of the NER and acting in accordance with clause 6.5.6(c) of the NER, the AER's final decision is to accept Jemena's proposed total forecast operating expenditure, inclusive of debt raising costs and exclusive of DMIAM of \$516.6 million (\$2020–21). This is discussed in Attachment 6 of the final decision. The reasons for our final decision are set out in Attachment 6 of the final decision.

Jemena did not propose any contingent projects and therefore the AER has not made a decision under clause 6.12.1(4A) of the NER.

In accordance with clause 6.12.1(5) of the NER and the modified 2018 Rate of Return Instrument for the regulatory control period commencing on 1 July 2021 for the Victorian DNSPs set out in the Order in Council made under section 16VE of the amended National Electricity (Victoria) Act 2005 (Vic), the AER's final decision is that the allowed rate of return for the 2021–22 regulatory year is 4.91 per cent (nominal vanilla) as set out in Attachment 3 of the final decision. The rate of return for the remaining regulatory years 2022–26 will be updated annually because our decision is to apply a trailing average portfolio approach to estimating debt which incorporates annual updating of the allowed return on debt.

In accordance with clause 6.12.1(5A) of the NER and the modified 2018 Rate of Return Instrument for the regulatory control period commencing on 1 July 2021 for the Victorian DNSPs set out in the Order in Council made under section 16VE of the amended National Electricity (Victoria) Act 2005 (Vic), the AER's final decision on the value of imputation credits

### **Constituent decision**

as referred to in clause 6.5.3 is to adopt a value of 0.585. This is discussed in Section 2.2 of this final decision overview.

In accordance with clause 6.12.1(6) of the NER, the AER's final decision on Jemena's regulatory asset base as at 1 July 2021 in accordance with clause 6.5.1 and schedule 6.2 is \$1517.9 million (\$ nominal). This is discussed in Attachment 2 of the final decision.

In accordance with clause 6.12.1(7) of the NER, the AER's final decision on the estimate of Jemena's corporate income tax is \$33.6 million (\$ nominal) for the 2021–26 regulatory control period. This comprises (\$ nominal):

- \$7.4 million in 2021–22,
- \$6.2 million in 2022–23,
- \$5.3 million in 2023–24,
- \$7.4 million in 2024–25 and
- \$7.2 million in 2025–26.

This is discussed in Attachment 7 of the final decision.

In accordance with clause 6.12.1(8) of the NER, the AER's final decision is to not approve the depreciation schedules submitted by Jemena. Our final decision substitutes alternative depreciation schedules that accord with clause 6.5.5(b) and this is discussed in Attachment 4 of the final decision.

In accordance with clause 6.12.1(9) of the NER the AER makes the following final decisions on how any applicable efficiency benefit sharing scheme (EBSS), capital expenditure sharing scheme (CESS), service target performance incentive scheme (STPIS), demand management incentive scheme (DMIS), demand management innovation allowance mechanism (DMIAM) or small scale incentive scheme (customer service incentive scheme) is to apply:

- We will apply version 2 of the EBSS to Jemena in the 2021–26 regulatory control period. This is discussed in Attachment 8 of the final decision.
- We will apply the CESS as set out in version 1 of the Capital Expenditure Incentives Guideline to Jemena in the 2021–26 regulatory control period. This is discussed in Attachment 9 of the final decision.
- We will apply our Service Target Performance Incentive Scheme (STPIS) to Jemena for the 2021–26 regulatory control period. This is discussed in Attachment 10 of the final decision.
- We will apply the DMIS and DMIAM to Jemena for the 2021–26 regulatory control period. This is discussed in the Overview of the final decision.
- We will not apply the CSIS as Jemena withdrew its proposed scheme.

In accordance with clause 6.12.1(10) of the NER, the AER's final decision is that all other appropriate amounts, values and inputs are as set out in this final determination including attachments.

In accordance with clause 6.12.1(11) of the NER and our framework and approach paper, the AER's final decision on the form of control mechanisms (including the X factor) for standard

#### **Constituent decision**

control services is a revenue cap. The revenue cap for Jemena for any given regulatory year is the total annual revenue calculated using the formulae in Attachment 14 which includes any adjustment required to move the DUoS unders and overs account to zero. This is discussed in Attachment 14 of the final decision.

In accordance with clause 6.12.1(12) of the NER and our framework and approach paper, the AER's final decision on the form of the control mechanism for alternative control services is to apply a revenue cap for type 5 and 6 metering (including smart metering) services and price caps for all other services. The revenue cap for Jemena's type 5 and 6 metering (including smart metering) services for any given regulatory year is the total annual revenue for type 5 and 6 (including smart metering) services calculated using the formulae in Attachment 14, which includes any adjustment required to move the metering unders and overs account to zero. This is discussed in Attachment 14 of the final decision.

In accordance with clause 6.12.1(13) of the NER, to demonstrate compliance with its distribution determination, the AER's final decision is that Jemena must maintain a DUoS unders and overs account and a metering unders and overs account. It must provide information on these accounts to us in its annual pricing proposal. This is discussed in Attachment 14 of the final decision.

In accordance with clause 6.12.1(14) of the NER the AER's final decision is to apply the following nominated pass through events to Jemena for the 2021–26 regulatory control period in accordance with clause 6.5.10:

- Terrorism event
- Insurance coverage event
- Natural disaster event
- Insurer credit risk event
- Retailer insolvency event

These events have the definitions set out in Attachment 15 of the final decision.

In accordance with clause 6.12.1(14A) of the NER, the AER's final decision is to not approve the tariff structure statement proposed by Jemena. This is discussed in Attachment 19 of the final decision.

In accordance with clause 6.12.1(15) of the NER, the AER's final decision is that the negotiating framework as proposed by Jemena will apply for the 2021–26 regulatory control period. This is discussed in section 6.2 of this final decision overview and the negotiating framework is in Attachment A of this final decision.

In accordance with clause 6.12.1(16) of the NER, the AER's final decision is to apply the negotiated distribution services criteria, published in our draft decision in September 2020, to Jemena for the 2021–26 regulatory control period. This is set out in section 6.2 of this final decision overview.

#### **Constituent decision**

In accordance with clause 6.12.1(17) of the NER, the AER's final decision on the procedures for assigning and reassigning retail customers to tariff classes for Jemena is set out in Attachment 19 of the final decision.

In accordance with clause 6.12.1(18) of the NER, the AER's final decision is that the depreciation approach based on forecast capex (forecast depreciation) is to be used to establish the RAB at the commencement of Jemena's regulatory control period as at 1 July 2026. This is discussed in Attachment 2 of the final decision.

In accordance with clause 6.12.1(19) of the NER, the AER's final decision on how Jemena is to report to the AER on its recovery of designated pricing proposal charges for each regulatory year of the 2021–26 regulatory control period and on the adjustments to be made to subsequent pricing proposals to account for over or under recovery of those charges is to set this out in its annual pricing proposal. The method to report recovery of the charges and account for the under or over recovery of designated pricing proposal charges is discussed in Attachment 14 of the final decision.

In accordance with clause 6.12.1(20) of the NER, the AER's final decision on how Jemena is to report to the AER on its recovery of amounts for each regulatory year of the 2021–26 regulatory control period and on the adjustments to be made to subsequent pricing proposals to account for over or under recovery of those charges is to set this out in its annual pricing proposal.. The method to report recovery of the charges and account for the under or over recovery of jurisdictional scheme amounts is discussed in Attachment 14 of the final decision.

In accordance with clause 6.12.1(21) of the NER, the AER's final decision is to amend Jemena's proposed connection policy as set out in Attachment 18 of the final decision.

In accordance with section 16C of the National Electricity (Victoria) Act 2005, the NEL, the NER and the "f-factor scheme order 2016", 104 the AER's final decision is to apply the f-factor incentive payments/penalties as a part of the "I-factor" adjustment to the calculation of the total annual revenue requirement using the formulae in Attachment 14 of the final decision.

<sup>&</sup>lt;sup>104</sup> <u>http://www.gazette.vic.gov.au/gazette/Gazettes2016/GG2016G051.pdf</u>, Victoria Government Gazette, G 51 22 December 2016, p. 3239.

## **B** List of submissions

We received public submissions from the following stakeholders on our draft decision and Jemena's revised proposal:

Stakeholder		
AGL		
Ausgrid		
Consumer Challenge Panel 17		
Electric Vehicle Council		
EnergyAustralia		
Energy Consumers Australia		
Energy Users Association of Australia		
Evie Networks		
Firm Power		
Groundline Engineering		
Jemena Electricity Networks People's Panel		
Local Government Response, prepared by Victorian Greenhouse Alliances		
Origin Energy		
Red Energy and Lumo Energy		
Victorian Community Organisations, prepared by Brotherhood of St Laurence, Renew, Victorian		

Victorian Community Organisations, prepared by Brotherhood of St Laurence, Renew, Victorian Council of Social Service

### C Consumer engagement framework

The following table represented the framework outlined in our draft decision for considering consumer engagement.<sup>105</sup>

Element	Examples of how this could be assessed	
Nature of engagement	Consumers partner in forming the proposal rather than asked for feedback on distributor's proposal	
	<ul> <li>Relevant skills and experience of the consumers, representatives, and advocates</li> </ul>	
	<ul> <li>Consumers provided with impartial support to engage with energy sector issues</li> </ul>	
	Sincerity of engagement with consumers	
	Independence of consumers and their funding	
	<ul> <li>Multiple channels used to engage with a range of consumers across a distributor's consumer base</li> </ul>	
Breadth and depth	Clear identification of topics for engagement and how these will feed into the regulatory proposal	
	Consumers consulted on broad range of topics	
	Consumers able to influence topics for engagement	
	Consumers encouraged to test the assumptions and strategies underpinning the proposal	
	<ul> <li>Consumers were able to access and resource independent research and engagement</li> </ul>	
Clearly evidenced	Proposal clearly tied to expressed views of consumers	
impact	<ul> <li>High level of business engagement, e.g. consumers given access to the distributor's CEO and/or board</li> </ul>	
	Distributors responding to consumer views rather than just recording them	
	Impact of engagement can be clearly identified	
	<ul> <li>Submissions on proposal show consumers feel the impact is consistent with their expectations</li> </ul>	
Proof point	Reasonable opex and capex allowances proposed	
	$\circ$ In line with, or lower than, historical expenditure	
	<ul> <li>In line with, or lower than, our top down analysis of appropriate expenditure</li> </ul>	
	<ul> <li>If not in line with top down, can be explained through bottom up category analysis</li> </ul>	

<sup>&</sup>lt;sup>105</sup> AER, Draft decision, Jemena distribution determination 2021–26, Overview, September 2020, Table 7, p. 43.

# **Shortened forms**

Shortened form	Extended form
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
capex	capital expenditure
CCP17	Consumer Challenge Panel, sub-panel 17
CESS	capital expenditure sharing scheme
CPI	consumer price index
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
ECA	Energy Consumers Australia
NEL	National Electricity Law
NELA	National Energy Legislation Amendment Act 2020 (Vic)
NEM	National Electricity Market
NEO	National Electricity Objective
NER	National Electricity Rules
opex	operating expenditure
PTRM	post-tax revenue model
RAB	regulatory asset base
RFM	roll forward model
STPIS	service target performance incentive scheme
WACC	weighted average cost of capital