Draft decision

Jemena electricity distribution determination

1 July 2026 – 30 June 2031

Attachment 15 – Metering services

September 2025

AUSTRALIAN ENERGY REGULATOR

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15 Metering services

This attachment sets out our draft decision for the 2026–31 regulatory control period (**period**) for metering services provided by Jemena. These are alternative control services and additional to the other alternative control services we regulate (ancillary network services and public lighting services which are set out in Attachment 14). We are responsible for setting revenues for these services as they operate under a revenue cap form of control, consistent with our final position in our Framework & Approach paper[1], and as set out in Attachment 12. We are also responsible for setting price caps for metering exit fees.[2]

Metering services include maintenance, reading, data services, and the recovery of capital expenditure (**capex**) related to metering assets. Unlike other jurisdictions in the National Electricity Market (**NEM**), Victorian distributors are the monopoly providers of most metering services to small customers. In the rest of the NEM, metering services are contestable, and distributors are unable to install new meters.

Metering assets are used to measure electrical energy flows at a point in the network to record consumption for the purposes of billing. Not all customers have the same type of meter. There are different types of meters which each measure electricity usage in different ways:[3]

- Type 1 to 4 meters have a remote communication ability. We refer to these as smart meters.
- Type 5 meters are interval meters and Type 6 meters are accumulation meters. We refer to these as legacy meters, which are being progressively replaced by smart meters.
- Type 7 metering services are unmetered connections with a predictable energy consumption pattern (for example, public lighting connections). Type 7 metering services are fee-based ancillary network services, which are discussed in Attachment 14.

Distributors also provide some non-routine metering services which are charged to customers when requested, such as meter disconnection. These non-routine metering services are also fee-based ancillary network services, discussed in Attachment 14.

In Victoria, legislation redefines most smart meters as type 5 and 6 meters for the purpose of distributors provision of metering services.[4] This means that we consider expenditure related to smart meters as a part of regulated metering services (despite these services being classified as unregulated services).

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1 AER, *Final Framework and Approach – Victorian electricity distribution determinations 2026–31, July 2024,* pp. 12–13.

2 Metering exit fees recover the written down value, as well as the efficient costs of removing and disposing, of meters. This is discussed in Appendix A, section A.9.

3 AER, *Final Framework and Approach – Victorian electricity distribution determinations 2026–31*, July 2024, pp. 32–33.

4 Victorian Government, *Order-In-Council, No. S 346*, October 2017, cl. 2(b); Department of Primary Industries, *Minimum AMI Functionality Specification (Victoria) v1.2*, September 2013; Department of Primary Industries, *Minimum AMI Service Levels Specification (Victoria) v1.1*, September 2008.

In this attachment, we:

- Set out our draft decision (section 15.1), which draws on the reasons in Appendix A.
- Summarise Jemena's proposal (section 15.2).
- Set out the reasons for our draft decision (Appendix A).

15.1 Draft decision

Our draft decision is to not accept Jemena's proposal as submitted. Our draft decision is to:

- Substitute our total annual revenue requirement (**ARR**) to apply our smoothing profile. The smoothed ARR reflects updates to forecast inflation and inputs related to the 2022 rate of return instrument and weighted average cost of capital **(WACC)**, as well as our substituted:
  - Forecast metering capex, including revisions to projected volumes and labour costs of proposed proactive replacement of meters, revisions to components of proposed IT and communications capex, revisions to allocations of expenditure to standard control services (**SCS**) and to apply updates to forecast inflation and labour cost escalation.
  - Forecast metering operating expenditure (**opex**), including revisions to the proposed step changes for metering inspections and to apply updates to forecast inflation and labour cost escalation.
- Substitute our metering exit fees to apply updates to forecast inflation and inputs related to the 2022 rate of return instrument and WACC, as well as our substituted capex and opex forecasts.

The reasons for our draft decision and each of the above positions are provided at Appendix A.

In addition to considering Jemena's revised proposal in our final decision, we will also apply updates where appropriate for actual inflation, actual capex and opex for 2024–25, and for our final decision forecast inflation, labour cost escalators, and inputs related to the 2022 rate of return instrument and WACC.

15.2 Overview of proposal

15.2.1 Metering revenue

Jemena proposed a total ARR for metering services of $138.8 million ($2025–26, smoothed) for the 2026–31 period.[5] To determine its proposed revenue requirement, Jemena used the AER's standardised metering models which apply the building block approach to determine allowable revenue. Jemena's proposed ARR and building blocks are set out in Table 15.1.

We note that we provide building block and ARR data in this table as real $2025–26 to allow for better comparison to the 2021–26 period. We generally provide this data in $nominal as we consider it is a better representation of revenues that will be recovered from customers.

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5 Jemena, *JEN – Att 10-02M ACS Metering PTRM*, January 2025.

Data in Appendix A is therefore presented in $nominal, and therefore proposal data between this table and the appendix tables will differ.

Table 15.1 Jemena's proposal building blocks and annual revenue requirement ($million, 2025–26)

Category	2021–26 final decision	2026–31 proposal	Change from 2021–26	Proportion of total ARR proposed
Return on capital	13.7	20.4	49.3%	14.7%
Return of capital (regulatory depreciation)	50.9	41.4	-18.6%	29.7%
Operating expenditure	62.0	77.2	24.5%	55.4%
Net tax allowance	4.6	0.2	-95.3%	0.2%
ARR (unsmoothed)	131.1	139.2	6.2%	
ARR (smoothed)	**131.1**	**138.8**	**5.9%**	

Source: AER, *Final Decision - Jemena distribution determination - 2021–26 - ACS - Metering - Post-tax revenue model*, April 2021; Jemena, *JEN – Att 10-02M ACS Metering PTRM*, January 2025.

15.2.2 Capital expenditure

Jemena proposed total capex for metering services of $105.1 million ($2025–26) in the 2026–31 period.[6] This capex includes expenditure for installations of new meters for customer growth, replacement of meters on fault or failure, installation and replacement of communication equipment to support remote connection to meters, and IT capability to manage metering data.

In addition to these routine expenditures, Jemena also proposed $43.9 million ($2025–26) in the 2026–31 period to proactively replace meters that have reached end of life and are at an increased risk of failure.[7] This is a material and new capex category, reflecting that this is the first time smart meters have reached their end of life and will need replacement.

Jemena's total proposed capex for the 2026–31 period is set out in Table 15.2, along with allowed capex in the 2021–26 period, the change in capex between the 2021–26 and 2026–31 periods and the proportion of capex each category makes up of total proposed capex in the 2026–31 period.

6 Jemena, *JEN – Att 10-02M ACS Metering PTRM*, January 2025.

7 Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025.

Table 15.2 Jemena's proposed capex ($million, 2025–26)

Category	2021–26 final decision	2026–31 proposal	Change from 2021–26	Proportion of total capex proposed
Proactive replacement		43.9		38.5%
Growth	14.0	19.4	100.9%	17.0%
Reactive replacement		8.6		7.6%
Communications	4.6	19.6	328.2%	17.2%
IT	6.2	16.7	168.6%	14.6%
Other		5.3		4.7%
Equity raising costs	0.2	0.4	84.1%	0.4%
Total capex (including SCS allocations)	**25.0**	**114.0**	**356.2%**	
Total capex (excluding SCS allocations)	**25.0**	**105.1**	**320.7%**	

Note: In the 2021–26 final decision we did not have separate allowances for growth and reactive replacement.
Source: AER, *Final Decision - Jemena distribution determination - 2021–26 - ACS - Metering - Post-tax revenue model*, April 2021; Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025; Jemena, *JEN – Att 10-02M ACS Metering PTRM*, January 2025.

15.2.3 Operating expenditure

Jemena proposed total opex for metering services of $77.2 million ($2025–26) in the 2026–31 period.[8] Jemena developed its opex forecast using the 'base-step-trend' method, consistent with the standardised metering models and our standard approach for SCS. Jemena proposed a base opex (2024–25 with actual opex to be available in the revised proposal) with no adjustments, a trend that includes metering growth and real price changes in labour costs, and step changes to fund the expected increase in physical metering inspections, the disposal of meters, and the enhancing of IT systems capacity.[9] Jemena's proposed opex in the 2026–31 period is set out in Table 15.3 along with allowed opex in the 2021–26 period. The table also shows the change in opex between the 2021–26 and 2026–31 periods and the proportion of opex that each category makes up of total proposed opex in the 2026–31 period.

8 Jemena, *JEN – Att 10-02M ACS Metering PTRM*, January 2025.

9 Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025; Jemena, *JEN - Att 10-01 Advanced Metering Infrastructure,* January 2025, pp. 13–14.

Table 15.3 Jemena's proposed opex ($million, 2025–26)

Category	2021–26 final decision	2026–31 proposal	Change from 2021–26	Proportion of total opex proposed
Base opex	57.5	47.9	-16.6%	62.1%
Trend: Output growth	2.8	3.3	15.8%	4.2%
Trend: Price growth	1.5	1.2	-17.0%	1.6%
Total trend	4.4	4.6	4.9%	5.9%
Step change: Meter inspections		21.6		27.9%
Step change: Meter disposals		2.8		3.7%
Step change: IT systems enhancements		0.1		0.1%
Total step changes	-	24.5		31.7%
Debt raising costs	0.2	0.2	17.9%	0.2%
Total opex	**62.0**	**77.2**	**24.5%**	

Note: Trend components will not sum to total trend due to compounding effects.
Source: AER, *Final Decision - Jemena distribution determination - 2021–26 - Metering - Opex model*, April 2021; AER, *Final Decision - Jemena distribution determination - 2021–26 - ACS - Metering - Post-tax revenue model*, April 2021; Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025; Jemena, *JEN – Att 10-02M ACS Metering PTRM*, January 2025.

15.2.4 Stakeholder views

We received one submission on metering in response to Jemena's proposal and our issues paper. This was from Jemena's Energy Reference Group (**ERG**). The ERG noted that the group broadly considered proactive replacement appropriate for maintaining system reliability and ensuring compliance with market data upload requirements.[10] The ERG noted it found Jemena's proposed approach to proactive replacement to be reasonable and well-structured, and that aligning in-person inspections with meter replacements is highly efficient.[11] The ERG included commentary stressing the importance of clear communication with the community about the meter replacement process, including issues, viable alternatives, rationale behind the chosen approach, scheduling, and costs.[12] The ERG also noted the

[10] Jemena Energy Reference Group, *Submission – Jemena electricity distribution proposal 2026–31*, May 2025, p. 16.

[11] Jemena Energy Reference Group, *Submission – Jemena electricity distribution proposal 2026–31*, May 2025, p. 16.

[12] Jemena Energy Reference Group, *Submission – Jemena electricity distribution proposal 2026–31*, May 2025, pp. 16–17.

importance of maintaining customer privacy and appropriate data governance frameworks, as well as ensuring new meters are future-proof.[13]

15.3 Assessment approach

Metering services are classified as alternative control services.[14] The regulatory framework for assessing alternative control services is less prescriptive than for SCS. As such, we have a greater discretion under the NER in assessing proposals for metering services compared to SCS. However, where possible we seek to apply similar approaches as applied to SCS. In considering Jemena's proposal we have had regard to:

- The application of our standardised metering model templates for metering expenditure, management of the regulated asset base, smoothing of allowed revenues, and setting of price caps where appropriate.
- An assessment of the prudent efficient costs of providing metering services, having regard to historical expenditure, our previous determinations, benchmarked costs against other distributors, and against independent data and information as relevant.
- The wider regulatory context, including the existence or possibility of competition across metering services provided.
- Consistency of approach with other regulated services, particularly SCS, the current applicable determination, our recent determinations for other networks, and across the current proposals being assessed.
- Stakeholder engagement undertaken on the proposal, stakeholder feedback provided in response to the proposal or our issues papers and if / how it has been incorporated into proposals.
- Any other factors we considered relevant to our assessment.

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13 Jemena Energy Reference Group, *Submission – Jemena electricity distribution proposal 2026–31*, May 2025, p. 17.

14 AER, *Final Framework and Approach – Victorian electricity distribution determinations 2026–31*, July 2024, p. 32.

A Reasons for draft decision

A.1 Annual revenue requirement

Our draft decision is for a total ARR for metering services of $125.3 million ($nominal, smoothed) for Jemena over the 2026–31 period.[15] This is a decrease of $24.8 million ($nominal) or 16.5% from Jemena's proposed total ARR of $150.1 million ($nominal, smoothed) for this period.[16]

Our draft decision applies a flat real price path for years 2–5. This is done by applying 0% X factors in these years. This means that any real price movement is applied in the 2026–27 year. We consider this provides the most certainty for customers and will deliver material real price decreases as soon as possible, including in the context of the impact of the increase of capex for proactive replacements.

Our draft decision ARR and X factors are set out in Table A.1.

Table A.1 Metering total ARR ($million, nominal)

	2026–27	2027–28	2028–29	2029–30	2030–31	Total
Proposal – unsmoothed	22.9	25.8	30.5	34.0	37.5	150.8
Proposal – smoothed	25.6	26.8	29.5	32.5	35.7	150.1
Proposal – X factors	-1.7%	-1.8%	-7.5%	-7.4%	-7.4%	
Draft decision – unsmoothed	19.1	21.8	24.5	28.2	33.4	127.0
Draft decision – smoothed	23.8	24.4	25.0	25.7	26.3	125.3
Draft decision – X factors	14.0%	-	-	-	-	

Note: A positive X factor reflects a reduction in revenues.
Source: Jemena, *JEN – Att 10-02M ACS Metering PTRM*, January 2025; AER, *Metering PTRM – Draft decision – Jemena distribution determination 2026–31*, September 2025.

The AER's post tax revenue model (**PTRM**) calculates the ARR for each year of the 2026–31 period. This unsmoothed ARR for each year, is then smoothed (as in Table A.1) and is the sum of the building block costs. Table A.2 shows the component and total building block costs that form the ARR and where discussion on the components that drive these costs can be found within this appendix.

15 AER, *Metering PTRM – Draft decision – Jemena distribution determination 2026–31*, September 2025.

16 Jemena, *JEN – Att 10-02M ACS Metering PTRM*, January 2025.

Table A.2 Metering building block components and total AAR (unsmoothed, $million, nominal)

Building block component	Total – proposal	Total – draft decision	Sections discussed
Return on capital	22.2	22.7	A.3, A.5
Return of capital (regulatory depreciation)	45.0	42.9	A.4, A.5
Operating expenditure	83.3	60.7	A.6
Net tax allowance	0.2	0.7	-
Revenue requirement	**150.8**	**127.0**	**A.1**

Note: Return on and of capital are products of proposed capex, discussed at section A.5.
Source: Jemena, *JEN – Att 10-02M ACS Metering PTRM*, January 2025; AER, *Metering PTRM – Draft decision – Jemena distribution determination 2026–31*, September 2025.

A.2 Regulatory asset base

Our draft decision accepts Jemena's regulatory asset base (**RAB**) roll forward and calculation method. However, we substitute values for corrected historical inputs, our draft decision capex inputs, updated inflation, WACC inputs and other updated inputs related to the rate of return.

The value of the RAB impacts Jemena's revenue requirement, and the price consumers ultimately pay. Other things being equal, a higher RAB increases both the return on capital and return of capital (depreciation) components of the distribution determination and therefore results in higher prices. Our draft decision is set out in Table A.3 and shows a higher closing RAB at the end of the 2026–31 period compared to Jemena's proposal. This reflects that our draft decision includes higher amounts of capex for proactive replacement of meters than Jemena proposed.

Table A.3 Summary of metering asset roll forward ($million, nominal)

Summary of asset roll forward	Proposal	Draft decision
Opening RAB on 1 July 2026	48.0	48.5
Net capex	116.0	125.8
Regulatory depreciation	-54.0	-52.3
Inflation on opening RAB	9.0	9.3
Forecast closing RAB on 30 June 2031	**119.0**	**131.3**

Source: Jemena, *JEN – Att 10-02M ACS Metering PTRM*, January 2025; AER, *Metering PTRM – Draft decision – Jemena distribution determination 2026–31*, September 2025.

We used the roll forward model (RFM) to roll forward Jemena's RAB from the 2021–26 period to arrive at an opening RAB value as of 1 July 2026. This includes application of a bespoke RFM template to factor in the transition to financial year regulation which occurred

in 2021. The roll-forward calculation accounts for inflation, the WACC, actual net capex and actual depreciation.

In updating the RFM for actual capex, we have had difficulty reconciling these amounts across the amounts reported by distributors in their regulatory information notices (**RIN**s). Where available, we have updated the RFM total actual capex for amounts reported in the annual reporting RIN (table 8.2.3). As this capex is not disaggregated, we have used the reported communications and IT capex related to metering services from the category analysis RIN (table 4.2.2) for the relevant asset classes, with the residual being attributed to the metering asset class. Where actual capex values have not been reported in the annual reporting RIN, we have used data reported for meter purchase and replacement collectively to represent actual capex for the metering asset class. We expect distributors to consider the actual capex amounts and how they reconcile with the RINs in their revised proposals, along with any required resubmissions of RINs to support.

In the 2026–31 period, we expect distributors to report actual metering capex by purpose in the new annual orders (table 8.2.3)[17] in a way that can be reconciled against future RFMs. We expect this will be disaggregated to meter, communications and IT components as a minimum. But we would prefer it to be disaggregated further at the meter component by purpose to align with categories of capex considered in this draft decision (e.g., proactive replacement, reactive replacement, customer-initiated replacement, etc.).

Some capex amounts in the RFM are estimated based on forecasts where actual data is not available (for example, actual capex for 2024–25 and 2025–26). We have updated these forecasts using calculations in the metering expenditure model to reflect the impact of updated modelling inputs (such as updates for inflation and labour escalators). Where amounts were provided in the proposal for IT capex and these were not present in the expenditure model, we have retained the proposed amounts in the RFM to reflect IT capex, for projects allowed in the 2021–26 period.

The opening RAB at the beginning of the 2026–31 period may also be adjusted to reflect any changes in the use of the assets, with only assets used to provide metering services to be included in the RAB. No such adjustments have been made for the 2026–31 period.

The PTRM used to calculate the ARR for the 2026–31 period generally adopts the same RAB roll-forward approach as the RFM, with the forward-looking annual adjustments to the RAB being based on forecasts. These will then be updated for actual amounts in the RFM in the 2031–36 period.

A.3 Rate of return

Our draft decision on metering services applies the same rate of return (WACC) as applied throughout our determination, as set out in section 2.2 of the Overview to this draft decision. This states that the draft decision uses the 2022 rate of return instrument. This includes updated rates for return on debt, inflation, and equity raising costs.

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17 AER, *DNSP – Annual Order 2024–25 – Data submission workbook*, January 2025.

A.4 Regulatory depreciation

Our draft decision accepts Jemena's proposed weighted average remaining life depreciation approach for its RAB, and straight-line depreciation approach for its tax asset base, with substitute values for corrected historical inputs, our draft decision capex inputs, updated inflation, WACC inputs, and other updated inputs related to the rate of return. This includes the application of our standardised RFM, PTRM, and depreciation tracking model templates.

A.5 Capital expenditure

Our draft decision is for a total capex for metering services of $113.3 million ($2025–26) for Jemena over the 2026–31 period.[18] This is an increase of $8.2 million ($2025–26) or 7.8% from Jemena's proposed total capex of $105.1 million ($2025–26) for this period.[19] Our draft decision capex for the 2026–31 period is set out in Table A.4, along with a comparison against Jemena's proposed capex for that period.

Table A.4 Draft decision capex ($million, 2025–26)

Category	2026–31 proposal	2026–31 draft decision	Change from proposal	Draft decision proportion of total capex
Proactive replacement	43.9	62.4	42.3%	55.1%
Growth	19.4	19.3	-0.8%	17.0%
Reactive replacement	8.6	8.5	-0.8%	7.5%
Communications	19.6	11.5	-41.4%	10.1%
IT	16.7	5.7	-65.8%	5.0%
Other	5.3	5.3	-0.7%	4.6%
Equity raising costs	0.4	0.6	42.1%	0.5%
Total capex (including SCS allocations)	**114.0**	**113.3**	**-0.6%**	
Total capex (excluding SCS allocations)	**105.1**	**113.3**	**7.8%**	

Source: Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025; Jemena, *JEN – Att 10-02M ACS Metering PTRM*, January 2025; AER, *Metering expenditure model – Draft decision – Jemena distribution determination 2026–31*, September 2025; AER, *Metering PTRM – Draft decision – Jemena distribution determination 2026–31*, September 2025.

[18] AER, *Metering expenditure model – Draft decision – Jemena distribution determination 2026–31*, September 2025.

[19] Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025.

A.5.1 Direct metering capex

A.5.1.1 Proactive meter replacement

Assessment overview

Our draft decision is for proactive replacement capex for metering services of $62.4 million ($2025–26) for Jemena over the 2026–31 period.[20] This is an increase of $18.5 million ($2025–26) or 42.3% from Jemena's proposed proactive replacement capex of $43.9 million ($2025–26) for this period.[21] While the capex is higher, for the draft decision we have not included the proposed $21.6 million ($2025–26) opex step change for proactive metering inspections.

Our draft decision accepts the need for Jemena to undertake a proactive meter replacement program in the 2026–31 period, reflecting the emerging risks of it not meeting metering obligations, given its aging smart meter fleet that is approaching its end of life. However, our draft decision does not accept Jemena's proactive replacement proposal as submitted. Instead, we have adjusted the capex to incorporate greater labour efficiencies compared to those proposed. The cost reductions from these efficiency gains have been offset by increasing the proposed reactive replacement volumes to reflect replacement rates across Victorian distributors. The draft decision also does not include the proposed opex step change for physical inspections given we have concerns that the inspection led replacement approach is not efficient.

We note that Jemena's proposal intended to co-optimise the cost of inspection and end of life replacements and was broadly supported by stakeholders for delivering on expectations on affordability within this framework.[22] However, our assessment, informed by benchmarking across the Victorian distributors, suggests there are more efficient approaches. In particular, we question whether an inspection-led approach is efficient and in the long-term interests of end users compared to other proactive approaches.

Cost-benefit analysis, procurement and delivery

The Victorian distributors proposed proactive meter replacement programs for their ageing smart meters across their networks. This reflects that most smart meters in Victoria were rolled out in a 5-year period from 2009 and are reaching the end of their expected 15-year asset lives. As these meters reach the end of their asset lives, they are more likely to fail and require replacement, particularly during the 2026–31 period. This could impact the distributors' ability to meet their metering obligations, for example no less than 99% of actual data within 24 hours of the time in previous point to be available.[23]

As the Victorian smart meter rollout was one of the first large-scale rollouts to occur, there is little data on the rate of failure of these assets. International benchmarking provided by the distributors suggests that utilities with similar ageing smart meter fleets are experiencing

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20 AER, *Metering expenditure model – Draft decision – Jemena distribution determination 2026–31*, September 2025.

21 Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025.

22 Jemena, *Information request - IR022 – Metering Replacement*, July 2025, Q5a, b.

23 Department of Primary Industries, *Minimum AMI Service Levels Specification (Victoria) v1.1*, September 2008, p. 9.

increasing annual failure rates, with older meters contributing to an overall fleet-wide failure rate of around 2% per year for meters older than 10+ years.[24] Experience in Australia to date shows that the smart meter battery and memory are the major drivers of meter failure.[25]

Jemena developed a business case and cost-benefit analysis assessing three options for undertaking meter replacement. Specifically, it examined the following options:[26]

- Option 1 – Maintain a business-as-usual reactive replacement approach, undertaking replacement of meter failures and faults while meeting age-based physical inspection requirements.
- Option 2 – Proactively replace aged meters during the required physical meter inspections, replacing meters found to have failures and faults or if the meter is found to be in poor physical condition.
- Option 3 – Replace all aged meters requiring inspection that are beyond their design life, regardless of their physical condition.

Jemena's cost-benefit analysis was developed to assess how it could fulfill its metering obligations under the NER, and in accordance with Australian Energy Market Operator (**AEMO**) guidelines, and Jemena's AEMO approved Meter Asset Management Strategy (**MAMS**).[27] This included that under its MAMS Jemena is required to physically inspect all meters on site within a 5-year period following a meter's 15-year asset-life, unless it intends to replace that meter within the 5-year period.[28] We understand this MAMS requirement is unique among the Victorian distributors as other distributors are permitted to undertake meter inspections remotely. Further, Jemena's proposal included the use of manufacturer-specific condition-based assessment to inform meter replacement decisions in the field.[29]

To inform its cost befit analysis, and in particular Options 1 and 2, Jemena engaged Frontier Economics to assess its need for proactive replacement and the associated failure rates.[30] Jemena also undertook its own analysis and noted that Frontier Economics' failure rate forecast was nearly double its internal forecast that it used in the business case. It stated it had decided to use the lower internal forecasts and would revisit this assumption if additional insights and trend confidence is gained in 2025 from actual failure data.[31]

Jemena also examined a meter component replacement option (repairing or replacing faulty parts) as part of its assessment. It found this option to be non-credible and therefore did not

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24 CitiPower, *CP ATT 11.03 - Blunomy - Smart meters replacement benchmark study, January 2025*, p. 9.

25 CitiPower, *CP BUS 11.01 – Metering*, January 2025, p. 7; Powercor, *PAL BUS 12.01 – Metering*, January 2025, p. 7; United Energy, *UE BUS 12.01 – Metering*, January 2025, p. 7; AusNet Services, *ASD - AusNet - Business case for smart meter replacement*, January 2025, pp.4–5; Jemena, *JEN – RIN – 4.6.1 – Inspection of Metering Installations – Business Case*, January 2025, p. ix.

26 Jemena, *JEN – RIN – 4.6.1 – Inspection of Metering Installations – Business Case*, January 2025, p. 7.

27 Jemena, *JEN – RIN – 4.6.1 – Inspection of Metering Installations – Business Case*, January 2025, p. viii.

28 Jemena, *JEN – RIN – Support – Meter Asset Management Strategy*, January 2025, pp. 18–19.

29 Jemena, *JEN – RIN – 4.6.1 – Inspection of Metering Installations – Business Case*, January 2025, p. 10.

30 Jemena, *JEN – RIN – 4.6.1 – Inspection of Metering Installations – Business Case*, January 2025, p..D-1; Jemena, *JEN – Frontier Economics Att 10-07 – Forecast replacement of smart meters*, January 2025.

31 Jemena, *JEN – RIN – 4.6.1 – Inspection of Metering Installations – Business Case*, January 2025, pp..D-1–D-2.

include it in its costs-benefit analysis. Jemena determined that due to the closed unit design of meters any component replacement requires the meter to be removed from the field, involving labour and component replacement costs significantly higher than the cost of a new meter unit cost. Further, that the replacement of a single failed component is not likely to significantly extend the expected residual life of the meter as component failure indicates a broader level of asset degradation.[32] We agree with Jemena that this option does not appear feasible.

Jemena's identified Option 2 as the preferred replacement approach and it noted that Option 2 allowed it to:

- fulfil its meter inspection obligations (under its MAMS)
- mitigate the risk of meter family failures while extending the operational life of the existing meters beyond their design life through enhance inspections
- ensure safe compliant performance of metering assts at the lowest cost.[33]

Option 2 had slightly lower costs than Option 1 and a slightly positive market benefit. Jemena noted that while Option 2 provided a positive net market benefit, additional non-quantified customer benefits, such as improved meter reliability and new product features had not been quantified.[34] Option 3 had significantly higher costs, which Jemena noted were due to replacing all meters in operation beyond their design life without consideration to the specific conditions of each meter.[35] It also noted this option forgoes the opportunity to extend the life of the meters beyond their nominal design life. This resulted in Option 3 producing a negative NPV and it was not considered cost-effective.

Jemena advised that under Option 2 it anticipated approximately 40% of the meters that have been in operation for 15 years or more will require replacement at the time of physical inspection.[36] This means that the remaining 60% of meters will be left in service until they either fail or are a part of further family testing after 5 years. Jemena considered that this option allows it to leverage additional efficiencies and travel time savings as the proactive replacements are performed only as part of the age-based metering installation inspection program. The costs of these replacements are capitalised, which avoids the expense of the inspection.[37]

Jemena noted that it engaged stakeholders on its proposed metering options as part of its regulatory proposal.[38] It presented what it considered was a co-optimised approach that combined mandatory meter inspections with proactive replacement of aging meters (Option 2), including the indicative bill impact. Jemena reported that survey respondents broadly

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32 Jemena, *JEN – RIN – 4.6.1 – Inspection of Metering Installations – Business Case*, January 2025, p. 13.

33 Jemena, *JEN – RIN – 4.6.1 – Inspection of Metering Installations – Business Case*, January 2025, p. ix.

34 Jemena, *JEN – RIN – 4.6.1 – Inspection of Metering Installations – Business Case*, January 2025, p. 15.

35 Jemena, *JEN – RIN – 4.6.1 – Inspection of Metering Installations – Business Case*, January 2025, pp. 12–13.

36 Jemena, *Information request - IR039 – Metering*, July 2025, Q7b.

37 Jemena, *JEN – RIN – 4.6.1 – Inspection of Metering Installations – Business Case*, January 2025, p. 10.

38 Jemena, *Information request - IR022 – Metering Replacement*, July 2025, Q5b.

considered the proposal met customer expectations on affordability, and Jemena's ERG supported the approach, recognising its efficiency and cost-effectiveness.

The ERG also made a submission in response to Jemena's proposal and our issue paper, expressing support for Jemena's strategic replacement of aging meters.[39] The ERG considered that aligning in-person inspections with meter replacements was an efficient approach and noted its support for Jemena's proactive stance in meeting smart meter inspection obligations.

We have assessed Jemena's cost-benefit analysis, including the specific inputs. We had a number of concerns with this analysis. In particular:

- We found the cost-benefit analysis only accounted for the costs in the 2026–31 period. In response to an information request, Jemena provided modelling beyond this period. This update extended the analysis to 2044–45 and accounted for actions once a meter had been inspected but not replaced.[40] As for its original cost-benefit analysis, this update also found Option 2 delivered a higher net present value (NPV) and lower overall costs compared to Option 3, which was found to result in significantly higher costs and a negative NPV.
- We found that Jemena's cost-benefit analysis capex does not reconcile with the capex proposed in its expenditure model. Jemena's modelling averaged the replacement costs across its meters without weighting based on the forecast number of replacements, which overstates its capex. As this is the same for all options, it has not affected our consideration of the preferred option.
- We identified that, for those meters inspected but not replaced, Jemena's modelling did not incorporate the effect of ongoing 5-yearly family inspections and the high likelihood of family failures (given that these meters will be between 21 and 25 years old at the next family inspection), and the subsequent cost of replacement in any of its modelling scenarios.
- We identified that, for those meters inspected but not replaced, Jemena's modelling did not incorporate higher failure rates within the next 5 years (prior to the family inspection) and the cost of replacement upon failure. We would expect higher failure rates as evidence shows that failure rates increase beyond the expected life.
- The cost-benefit analysis covered Jemena's entire meter fleet, including meters that were installed as late as 2020. We are unclear why all meters have been included as we understood the intent of the cost-benefit analysis was to determine the optimal way to replace the meters initially installed as a part of the AMI rollout from 2009, and those meters coming to their end of life with an increased risk of failure.
- We question whether, over the long term, the MAMS requirement to physically inspect all meters on site within a 5-year period following a meter's 15-year asset-life, combined with Jemena's proposal to replace 40% of those meters, is efficient. This is because:

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39 Jemena Energy Reference Group, *Jemena Energy Reference Group - Submission - Jemena electricity distribution proposal 2026-31*, May 2025. p. 16.

40 Jemena, *Information request - IR039 – Metering*, July 2025, Q2.

  - for those meters not initially replaced, the likelihood of failure either at or before the next 5-year family inspection is high, requiring a second visit to site; and
  - for those meters that are replaced, the labour costs for replacement after inspection are higher because the need for inspection requires higher qualified resources (as compared to replacement without inspection) and the time at site would be longer than a proactive replacement without inspection.

  We note our understanding that the other Victorian distributors do not have a physical inspection requirement when the meter is at its nominal asset life.

- We also undertook bottom-up analysis and benchmarking of Jemena's proposed replacement rates, meter unit costs, and labour costs using data from the Victorian distributors standardised metering expenditure models.[41] Our analysis identified:
  - Jemena's proposed meter costs are in line with our approved 2021–26 determination for Jemena, escalated for inflation, and benchmark well (see section A.5.1.4). Given this we accept Jemena's proposed meter unit costs.
  - Jemena's proposed labour rate ($136/hour) is lower than the field worker labour rates that are used in our draft decision for ancillary network services and it also benchmarks well (see section A.5.1.5). We therefore also accept this proposed labour rate.
  - Jemena's proposed time to undertake proactive meter replacements is higher than proposed by CitiPower, Powercor and United Energy (**CPU**), being 1.8 hours for single phase meters, 2.2 hours for multi-phase meters and 3.5 hours for multi-phase CT meters compared to 1.0 hour, 1.3 hours and 3.0 hours respectively[42] (see section A.5.1.5). This in part goes to Jemena's proposed approach of physically inspecting all meters before replacing them. We consider it suggests that Jemena could achieve greater labour cost efficiencies in the proactive replacement of meters.
  - In terms of its meter replacement volumes over the next 5 years, these do not benchmark well against the other Victorian distributors and are lower than the other four distributors. Jemena proposed to replace 20.8% of its total base population of smart meters while CitiPower, Powercor, United Energy and AusNet (adjusted for a 5-years replacement period) proposed to replace 33.1%, 34.2%, 33.6% and 32.6% of their total base population of smart meters respectively.

Despite these concerns, we accept the need for Jemena to undertake a proactive meter replacement program in the 2026–31 period. However, we do not accept Jemena's proposed meter inspection and replacement capex and opex. In light of our benchmarking, we have reduced the labour component of the proactive replacement unit rates to reflect a higher efficiency compared to reactive replacement. Specifically, to apply 60% of the labour time used for reactive replacement for single-phase meters and 90% for multi-phase CT meters. These adjustments are consistent with the efficiencies assumed in CitiPower, Powercor and

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41 CitiPower, *CP MOD 11.03 – Standardised metering capex and opex*, January 2025; Powercor, *PAL MOD 12.03 - Standardised metering capex and opex*, January 2025; United Energy, *UE MOD 12.03 - Standardised metering capex and opex*, January 2025; AusNet, ASD - *AusNet EDPR 2026-31 - Metering Capex and Opex Model*, January 2025; Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025.

42 Labour times are averaged across CitiPower, Powercor and United Energy.

United Energy's proposal and align with the adjustments we also made in our draft decision on AusNet's metering proposal.

Our draft decision also assumes there is no need to physically inspect all meters given we question whether this is efficient. As a result, we have not included Jemena's proposed opex step change for physical inspections in our draft decision (see also section A.6). We consider that this reduces the need for repeat site visits and further mitigates the risk of family failures. Further, we have increased the volume of proactive meter replacement to 33% of Jemena's forecast 2025–26 meter population. This is broadly consistent with the replacement rates proposed by CPU and AusNet (adjusted for a 5-year view) and with our top-down review and analysis of Option 2 with the above adjusted labour time and costs. We note that this should mean that in the 2026–31 period Jemena is still able to meet the requirement in its MAMS for physical inspection of all meters within 5 years of the end of their 15-year asset-life (unless replaced within those 5 years). However, we also encourage Jemena to review and discuss with AEMO the physical inspection requirement in its MAMS to determine whether it can adopt an approach that is more consistent with the other Victorian distributors.

In addition to the cost-benefit analysis, we also considered procurement and deliverability, both in terms of availability of meters and labour and the scale of the proactive replacement proposed. This included in the context of concurrent implementation of a Victorian proactive replacement program and the smart rollout in the wider NEM.

Jemena, and the other Victorian distributors, all considered that the risk of material shortages and limited supplier capacity is low as forecast volumes for each Victorian distributor only represent a small portion of the global metering market.[43] We note meter vendors are international suppliers with broad manufacturing capability. We therefore consider it unlikely the forecast volumes over the 2026–31 period will be constrained by meter availability.

Jemena noted that engagement with its current global meter technology supplier, along with recent experience, shows that lead times for meter supply can be up to 12 months and that suppliers require advance forecasts for their production capacity planning.[44] Jemena also stated that its current supply contracts do not have upper limit restrictions on order volumes.[45] Jemena had planned to review its existing meter supply contract in 2025 in the context of an open tender for supply.[46] However, we understand this process has been postponed until an expected update to the Victorian Advanced Metering Infrastructure Minimum Functional Specification is finalised.[47]

In terms of labour, Jemena noted that it has an established panel of contractors and recently undertook a tender process to add additional contractors to perform meter inspection and

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43 CitiPower, *Information request #032 - Metering*, June 2025, Q3a; Powercor, *Information request #032 - Metering*, June 2025, Q3a; United Energy, *Information request #029 – Meter Replacement*, June 2025, Q3a; AusNet Services, *AusNet EDPR 2026–31 – information request #048 – Metering*, July 2025, Q5a; Jemena, *Information request #022 – Metering Replacement*, July 2025, Q3a.

44 Jemena, *JEN – RIN – 4.6.1 – Inspection of Metering Installations*, January 2025. p. ix.

45 Jemena, *Information request - IR022 – Metering Replacement*, July 2025, Q3b.

46 Jemena, *Information request - IR022 – Metering Replacement*, July 2025, Q3b.

47 Jemena, *Information request - IR039 – Metering*, July 2025, Q10b.

replacement activities.[48] It therefore considered it had sufficient and diversified resources to perform the meter replacement activities. Given this, we are reasonably assured that labour should be available to resource the proactive replacement.

Together, we are not concerned in Jemena's ability to procure the necessary meters and labour to deliver its proposed replacement program.

We also considered the deliverability of Jemena's proposed proactive replacement volumes relative to its current rate of meter replacements on failure. Jemena's proposed proactive replacement program adopts a continual step up in volumes over the next period. We consider the proposed step up over this period is a reasonable approach and likely to be deliverable. In our draft decision which increases the replacement volumes over the next period we have adopted the same profile as Jemena proposed.

A.5.1.2 Meter growth

Our draft decision is to accept Jemena's proposed volume of new meter installations over the 2026–31 period at an annual growth rate of 2.4%.[49] This reflects that Jemena's proposed annual growth rates are consistent with its historical average annual growth rate of 2.3%[50], with a slight increase following slower growth during and after COVID-19 lockdowns, as well as new meters requiring installation to support the shift away from gas connections. These growth rates are supported by our assessments of growth rates for metering opex, as well as SCS opex (see Attachment 3).

A.5.1.3 Reactive meter replacement

Our draft decision is to accept Jemena's proposed volume of reactive replacement of meters on fault or failure for the 2026–31 period at an annual replacement rate of 0.6%.[51] This reflects that Jemena's proposed replacement rates are broadly consistent with its historical average annual replacement rate of 0.2%[52] and with an increase in the 2026–31 period to reflect the expected increase as meters reach end of life and become more likely to fail. The capex for these reactive replacements is a product of the same meter and labour unit costs discussed at sections A.5.1.4 and A.5.1.5.

A.5.1.4 Meter installation – unit costs

Our draft decision is to accept Jemena's proposed meter unit costs for the 2026–31 period.[53] Jemena's proposed meter unit costs are broadly consistent with those approved in the 2021–26 period, other than the multi-phase CT meter, which has increased by 25%. Jemena's proposed unit costs also benchmark well against those proposed by the other Victorian

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48 Jemena, *Information request - IR022 – Metering Replacement*, July 2025, Q3b.

49 AER, *Metering expenditure model – Draft decision – Jemena distribution determination 2026–31, September 2025*; Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025.

50 AER analysis from data reported in the regulatory information notices for 2021–22 to 2023–24, adjusted for a 5-year period.

51 AER, *Metering expenditure model – Draft decision – Jemena distribution determination 2026–31, September 2025*; Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025.

52 For the 2020–21 to 2023–24 years. AER analysis; Jemena, *JEN – RIN6 – Workbook 2 – Historical*, January 2025.

53 AER, *Metering expenditure model – Draft decision – Jemena distribution determination 2026–31, September 2025*; Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025.

distributors, having the lowest meter costs other than for the multi-phase CT meter. While the unit cost for the multi-phase CT meter is a material increase from the 2021–26 period, it still benchmarks well against other Victorian distributors, despite not being the lowest unit cost.

A.5.1.5 Meter installation – labour costs

Labour costs are the product of the labour rate and average labour time for the relevant activity. We also apply our draft decision labour cost escalators to reflect wage price growth consistent with the rest of our draft decision.

Our draft decision accepts Jemena's proposed labour rate of $136 per hour ($2025–26) for the 2026–31 period.[54] This labour rate is lower than the maximum efficient labour rate for a field worker that we applied in our draft decision for ancillary network services (see Attachment 14). We consider that the field worker is the highest possible level of skilled worker required for such replacement, with the only higher skill level being that of a senior engineer.

We benchmarked estimated labour time for reactive replacements on fault or failure across the Victorian distributors' proposals. We then considered the estimated labour time in relation to the proactive replacement program, and how the efficiencies of proactive replacement presented as a discount from the estimated labour time for reactive replacements, and how these efficiencies compared across the Victorian distributors.

Jemena proposed estimated labour times for reactive replacements that were the highest across the Victorian distributors for all other than multi-phase CT meters.[55] Though they were the highest, they were only slightly higher than the lowest benchmarked distributor (2.5 to 2.8 hours compared to 1.6 to 2.3 hours) and considered to be in an acceptable range.

Jemena proposed estimated labour times for proactive replacement that reflected the reactive replacement labour times discounted by approximately 25%, except for multi-phase CT that adds around 10% labour time to that for reactive replacements.[56] We consider that the 25% discount reflects an estimated 25% efficiency associated with proactively replacing meters.

As set out in section A.5.1.1 we consider that Jemena has understated the potential efficiencies associated with proactive replacement, and our draft decision applies a 40% efficiency rate broadly consistent with that proposed by CPU for most meters (and effected through a 40% discount from reactive replacement labour times). This reflects our draft decision on the proactive replacement program that Jemena can proactively replace meters without requiring a physical inspection of the meter. We consider this creates additional efficiencies beyond what was proposed by Jemena.

We have applied a 10% efficiency for multi-phase CT meters, in line with that proposed by CPU.

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54 AER, *Metering expenditure model – Draft decision – Jemena distribution determination 2026–31, September 2025*; Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025.

55 AER analysis; Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025.

56 AER analysis; Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025.

A.5.1.6 Other meter-related capex

Our draft decision is to accept Jemena's proposed capex of $5.3 million ($2025–26)[57] related to customer-initiated replacements, revised for other updated modelling inputs (such as inflation and labour escalators). Our draft decision also accepts no capex for legacy meter replacement or overheads, reflecting Jemena's proposal that legacy meters will all be replaced before the 2026–31 period[58], and that Jemena's cost allocation methodology does not allow for the recovery of overheads within metering expenditure.[59]

We consider the volumes of customer-initiated replacements to be in line with what we would expect for the 2026–31 period. Specifically, there is an increase in customer-initiated replacements to support the shift away from gas connections and the adoption of electric vehicles. This capex is a product of the same meter and labour unit costs discussed at sections A.5.1.4 and A.5.1.5.

A.5.2 Communications capex

Communications capex for metering services consists of the installation and replacement of communications assets to support the remote capabilities of smart meters. This includes equipment such as access points and relays, antennas, modems, and batteries.

Our draft decision is for a total communications capex for metering services of $11.5 million ($2025–26) for Jemena over the 2026–31 period.[60] This is a decrease of $8.1 million ($2025–26) or 41.4% from Jemena's proposed total communications capex of $19.6 million ($2025–26) for this period.[61] Jemena's proposed communications capex was 328.2% higher than the approved communications capex for the 2021–26 period. Our draft decision communications capex is set out in Table A.5.

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57 AER, *Metering expenditure model – Draft decision – Jemena distribution determination 2026–31, September 2025*; Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025.

58 AER, *Metering expenditure model – Draft decision – Jemena distribution determination 2026–31,* September 2025; Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025.

59 Jemena, *Jemena Electricity Networks (Vic) – Cost Allocation Methodology*, March 2019.

60 AER, *Metering expenditure model – Draft decision – Jemena distribution determination 2026–31*, September 2025.

61 Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025.

Table A.5 Draft decision communications capex ($million, 2025–26)

Category	2026–31 proposal	2026–31 draft decision	Change from proposal	Draft decision prop. of total comms capex
Growth – equipment	5.8	5.5	-4.9%	47.7%
Growth – installation	4.1	2.5	-38.5%	21.9%
Replacements – equipment	5.0	2.4	-52.4%	20.8%
Replacements – installation	4.8	1.1	-76.6%	9.7%
Net total (including SCS allocations)	**19.6**	**11.5**	**-41.4%**	

Note: Jemena's proposal included an erroneous allocation of 90% of growth expenditure of access points to SCS – see section A.7.
Source: Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025; AER, *Metering expenditure model – Draft decision – Jemena distribution determination 2026–31*, September 2025.

Jemena's proposed annual growth and replacement rates were materially higher than other Victorian distributors. Some of these proposed replacement rates do not appear efficient, or make sense, such as end-of-life replacement for micro access points less than 2 years after installed, or end-of-life replacement of antennas that do not exist. As such, our draft decision applies the following through the metering expenditure model:[62]

- Accepts the growth rates of access points and antennas, reflecting the significantly lower populations of these assets compared to other Victorian distributors.
- Reduces end-of-life replacement rates of micro access points (33.3% annually, reflecting an estimated 2 to 5-year life), access points and relays (5% annually, roughly in line with other Victorian distributors), and antennas (5% annually).
- Removes proposed poles as communications assets, as we consider new poles solely for communications devices has not been justified and is not currently proposed by other Victorian distributors.

Jemena's equipment and installation costs were mostly in the mid-range across those proposed by the Victorian distributors. We consider this benchmarking position to be sufficient to accept these proposed unit costs.

Our draft decision also removes an allocation of 90% of access point growth expenditure to SCS, as discussed in section A.7.

A.5.3 Information technology capex

Information technology (**IT**) capex for metering services consists of expenditure on IT systems to manage metering data for billing and network management purposes, for asset management, or to make the most of the capabilities of smart meters. This expenditure can

62 AER, *Metering expenditure model – Draft decision – Jemena distribution determination 2026–31*, September 2025.

be recurrent for regular upgrades and security updates, or non-recurrent for time-in-point investments or overhauls of systems.

Our draft decision is for a total IT capex for metering services of $5.7 million ($2025–26) for Jemena over the 2026–31 period.[63] This is a decrease of $6.6 million ($2025–26) or 53.6% from Jemena's proposed total IT capex of $12.3 million ($2025–26) for this period.[64] Our draft decision IT capex is set out in Table A.6.

Table A.6 Draft decision IT capex ($million, 2025–26)

Category	2026–31 proposal	2026–31 draft decision	Change from proposal	Draft decision prop. of total IT capex
Lifecycle upgrades	8.8	4.3	-50.4%	76.0%
Capacity enhancements to support replacement program	1.4	1.4	-0.8%	24.0%
Meter replacement and inspection program	1.7	-	-100.0%	
Access points and relays	4.9	-	-100.0%	
Net total (including SCS allocations)	**16.7**	**5.7**	**-65.8%**	
Net total (excluding SCS allocations)	**12.3**	**5.7**	**-53.6%**	

Note: Jemena's proposal included a 50% allocation of lifecycle upgrades expenditure to SCS.
Source: Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025; AER, *Metering expenditure model – Draft decision – Jemena distribution determination 2026–31*, September 2025.

Jemena proposed recurrent IT capex for lifecycle upgrades and management of systems.[65] Jemena included an allocation of 50% of the proposed lifecycle expenditure to SCS in its model, but did not propose any allocation to SCS or justification of this allocation in its initial proposal, nor include these amounts in the SCS capex model. We have removed this SCS allocation, and in doing so have removed the expenditure that was allocated to SCS from the overall project to align with Jemena's justification of the proposal metering expenditure in its metering attachment (that does not include the amounts allocated to SCS).[66]

Jemena also proposed non-recurrent IT capex relating to enhancement of systems capacity to accommodate higher volumes of inspections and replacements. This reflects the increase of new meters proposed to be installed in the 2026–31 period and related management of

63 AER, *Metering expenditure model – Draft decision – Jemena distribution determination 2026–31*, September 2025.

64 Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025.

65 Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025.

66 Jemena, *JEN – Att 10-01 Advanced Metering Infrastructure*, January 2025, pp. 25–26.

these replacements and relevant inspections.[67] While our draft decision rejects the proposed inspections activities (see sections A.5.1.1 and A.6.3), this is replaced by a higher volume of meters to be proactively replaced, which we consider justifies no change to the proposed expenditure.

Jemena further proposed IT capex for a "meter replacement and inspection program" and for "access points and relays".[68] We do not consider that Jemena has sufficiently justified how this expenditure is not already captured in the proposed expenditure noted above for "enhancement of systems capacity to accommodate higher volumes of inspections and replacements" and the communications expenditure for access points and relays respectively.

We assessed Jemena's proposed IT capex and supporting information from its proposal to determine if it was prudent and efficient. We corrected what appeared to be an erroneous SCS allocation for the recurrent IT capex and in doing so effectively reduced this proposed expenditure by 50% and bringing it to a level that we consider efficient and justified by Jemena. We consider the $1.4 million ($2025–26) non-recurrent IT capex to accommodate increasing replacements to be efficient and prudent, noting our earlier discussion of the reduction of inspection activities and increase of proactive replacement activities compared to Jemena's proposal. Our draft decision removes what we consider duplicative amounts for meter replacement and inspection program and access points and relays.

A.6 Operating expenditure

Our draft decision is for a total opex for metering services of $56.2 million ($2025–26) for Jemena over the 2026–31 period.[69] This is a decrease of $21.0 million ($2025–26) or 27.2% from Jemena's proposed total opex of $77.2 million ($2025–26).[70] This reflects the base-step-trend estimate provided by Jemena adjusted for updates to labour cost escalation and inflation, and the removal of the proposed step change for meter inspections. Our draft decision opex is set out in Table A.7 and we discuss each of the base, trend and step components in the following sections.

67 Jemena, *JEN – Att 10-01 Advanced Metering Infrastructure*, January 2025, pp. 26–27.

68 Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025.

69 AER, *Metering PTRM – Draft decision – Jemena distribution determination 2026–31*, September 2025.

70 Jemena, *JEN – Att 10-02M ACS Metering PTRM*, January 2025.

Table A.7 Draft decision opex ($million, 2025–26)

Category	2026–31 proposal	2026–31 draft decision	Change from proposal	Draft decision proportion of total opex
Base opex	47.9	47.6	-0.8%	84.7%
Trend: Output growth	3.3	3.2	-0.8%	5.8%
Trend: Price growth	1.2	2.1	69.8%	3.7%
Total trend	4.6	5.5	19.5%	9.8%
Step change: Meter inspections	21.6	-	-100.0%	-
Step change: Meter disposals	2.8	2.8	-	5.1%
Step change: IT systems enhancements	0.1	0.1	-	0.2%
Total step changes	24.5	2.9	-88.0%	5.2%
Debt raising costs	0.2	0.2	-1.4%	0.3%
Total opex	**77.2**	**56.2**	**-27.2%**	

Source: Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025; Jemena, *JEN – Att 10-02M ACS Metering PTRM*, January 2025; AER, *Metering expenditure model – Draft decision – Jemena distribution determination 2026–31*, September 2025; AER, *Metering PTRM – Draft decision – Jemena distribution determination 2026–31*, September 2025.

A.6.1 Base opex

If we find the distributor is operating efficiently, our preferred methodology is to use the distributor's historical or 'revealed' costs in a recent year as a starting point for our opex forecast.

Jemena proposed 2024–25 opex as the base year. Opex in 2024–25 is an estimate, with actual opex not being known until the revised proposal. The estimate is in line with previous years and the opex allowed for the 2021–26 period.[71] We consider that 2024–25 is an appropriate base year for our draft decision and have accepted Jemena's proposed base year and its current estimate of opex in that year. We expect Jemena to update the base opex for 2024–25 actuals in its revised proposal, and we will consider that for our final decision. No adjustments to the base were proposed.[72]

A.6.2 Rate of change (trend)

We trend the adjusted base opex forward by applying our forecast 'rate of change'. We estimate the rate of change by forecasting the expected growth in input prices and outputs.

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71 Jemena, *JEN – Att 10-01 Advanced Metering Infrastructure*, January 2025, pp. 13–14.

72 Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025.

Our draft decision applies labour cost escalators consistent with SCS to forecast the expected growth in input prices. For more information, see Attachment 3.

Our draft decision also applies Jemena's proposed change in customer numbers to calculate the expected growth in outputs.[73] This reflects Jemena's proposed growth rates being consistent with historical growth, with a slight increase following slower growth during and after COVID-19 lockdowns. These growth rates are supported by our assessments of growth rates for metering capex (section A.5.1.2), as well as SCS opex (Attachment 3).

A.6.3 Step changes

Lastly, we add or subtract any components of opex that are not appropriately compensated for in base opex or the rate of change, but which should be included in the forecast total opex to ensure prudent and efficient costs are recovered.

Our draft decision accepts Jemena's proposed metering step changes for meter disposals and enhancements to the capacity of IT systems but rejects Jemena's proposed step change for meter inspections.

Jemena's proposed step change for meter inspection obligations is related to its proposed proactive meter replacement program and reflects the increased inspections of the ageing smart meters in line with its MAMS.[74] This includes the operating cost of site inspections of meters after 15 years of operation that do not result in a replacement (Jemena proposed to capitalise these costs where the inspection results in a replacement).[75]

Our draft decision considers the proposed inspection opex is inefficient. This complements our position that Jemena should further consider options around the most efficient strategy to proactively replace these meters as set out in section A.5.1.1. Our draft decision removes this opex step change and redirects that expenditure to proactively replacing more meters to avoid the need to inspect. This is discussed more fully in section A.5.1.1.

Our draft decision also considers the $2.8 million proposed for meter disposals[76] and $0.1 million for enhancements to the capacity of IT systems to be reasonable.[77] We consider that an increase in costs related to meter disposals is justified considering the increased volume of replacements required as meters fail or reach end of life. We also consider some operating costs related to enhancements to the capacity of IT systems to be in line with our considerations of IT capex.

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73 AER, *Metering expenditure model – Draft decision – Jemena distribution determination 2026–31*, September 2025; Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025.

74 Jemena, *JEN - Att 10-01 Advanced Metering Infrastructure*, January 2025, pp. A-1–A-2; Jemena, *JEN – RIN – 4.6.1 – Inspection of Metering Installations – Business Case,* January 2025, p. viii.

75 Jemena, *Jemena EDPR 2026–31 – information request #039 - Metering*, July 2025; Jemena, *JEN - Att 10-01 Advanced Metering Infrastructure*, January 2025, pp. A-2–A-3.

76 Jemena, *JEN – Att 10-01 Advanced Metering Infrastructure*, January 2025, p. 14.

77 Jemena, *JEN – Att 10-03M ACS Metering opex and capex model*, January 2025.

A.7 Expenditure allocated to SCS

Our draft decision accepts Jemena's proposal to continue not to allocate any metering expenditure to SCS.

Jemena did include in its modelling SCS allocation rates of 50% for network management system lifecycle capex and 90% for the installation of access points. As Jemena did not propose any SCS allocations, historically has no SCS allocations, and these SCS allocations were not apparent in the SCS capex model, we have considered these to be modelling errors and removed them. If Jemena proposes to allocate metering expenditure to SCS in its revised proposal, and incorporates this into it modelling, it should ensure that there is sufficient detail and justification of these changes for us to consider.

A.8 Metering exit fees

Metering exit fees allow Jemena to recover the written down value, as well as the efficient costs of removing and disposing, of meters. An example of where these fees may occur is when an existing site with multiple meters, such as an apartment building, becomes an embedded network, resulting in the removal of existing meters from the RAB.

Our draft decision accepts Jemena's proposed approach to setting these price-capped fees, using the calculation of the RAB and the building blocks for metering services ARR, in line with the historical approach and the standardised metering pricing model template.[78] We substitute our metering exit fees to apply updates to forecast inflation and inputs related to the 2022 rate of return instrument, as well as our substituted capex and opex forecasts.

We note that we identified an issue in the metering pricing model template where the template does not treat differing cost basis of inputs correctly. It appears that Jemena has identified this and adjusted the metering pricing model template in its proposal. We have not made any further amendments to this model template (other than for updated inputs).

The price caps applicable in the first year of the 2026–31 period, as well as the X factors to escalate those prices in subsequent years, are set out in Table A.8. These X factors are calculated based on the real difference between the calculated price caps for each year, based on the RAB and building blocks for metering services. Increases are represented by negative X factors, and decreases represented by positive X factors, as the price cap is escalated using the CPI-X form.

[78] AER, *Metering pricing model – Draft decision – Jemena distribution determination 2026–31*, September 2025; Jemena, *JEN – Att 10-06M ACS Metering exit fees model*, January 2025.

Table A.8 Draft decision metering exit fee year 1 price caps ($2025–26) and year 2–5 X factors

Category	2026–27 price cap	2027–28 X factor	2028–29 X factor	2029–30 X factor	2030–31 X factor
Single phase (inc. DC)	180.26	-2.7%	-9.2%	-11.2%	-10.3%
Single-phase, Two element	189.65	-2.9%	-9.6%	-11.7%	-10.8%
Three Phase (inc. DC)	231.02	-3.6%	-11.3%	-13.3%	-12.2%
Three Phase CT	292.13	-4.3%	-12.8%	-14.8%	-13.5%

Source: AER, *Metering pricing model – Draft decision – Jemena distribution determination 2026–31*, September 2025.

The price path over the 2026–31 period reflects the increases in the RAB that result from the proactive replacement program. We are concerned that the price paths for exit fees, where there is expected increases over the coming 2026–31 period and beyond, may incentivise exiting activities.

We intend to consider whether it is appropriate to smooth this price path, likely adopting a flat price path in years 2–5 similar to our smoothing approach for metering revenues, in our final decision. As such, we encourage Jemena to consider this as part of its revised proposal. We also encourage stakeholders to provide feedback in response to our draft decision and Jemena's revised proposal on this matter.

A.9 Cost pass through mechanism

The Victorian distributors' proposals all included expenditure (either in metering services or in SCS) to support services that may become regulated as a result of upcoming legislative changes. We have not accepted these proposed expenditures at this time as the legislative changes are yet to occur, and therefore there is uncertainty about where this expenditure should be recovered. If this uncertainty continues into the final decision, the distributors may not be allowed expenditure to cover these regulatory changes that may arise within the 2026–31 period.

The NER provides a cost pass-through framework for SCS to enable distributors to recover the costs of defined yet unpredictable, high-cost events that are not built into the distribution determination. We are seeking views about a proposed approach for considering and implementing any metering cost pass-throughs via the annual pricing process, which we consider has a level of administrative burden that is more relative to the magnitude of metering services revenues. This is set out in Attachment 12 and we seek feedback on the proposed approach.

Shortened forms

Term	Definition
2026–31 period	2026–31 regulatory control period
ARR	Annual revenue requirement
AusNet	AusNet Services
Capex	Capital expenditure
CPI	Consumer price index
CPU	CitiPower, Powercor, and United Energy
IT	Information technology
NPV	Net present value
NEM	National Electricity Market
NER	National Electricity Rules
Opex	Operating expenditure
PTRM	Post tax revenue model
RAB	Regulatory asset base
RFM	Roll forward model
RIN	Regulatory information notice
SCS	Standard control services
WACC	Weighted average cost of capital