Jemena Electricity Networks (Vic) Ltd

2026-31 Electricity Distribution Price Review - Revised Proposal

Attachment 10-01

Response to the AER's draft decision - Advanced Metering Infrastructure

Jemena
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Glossary

ES Act	Electricity Safety Act 1998
ES Regulations	Electricity Safety (Bushfire Mitigation) Regulations 2013
Initial proposal	JEN's initial regulatory proposal to the AER submitted on 31 January 2020 for the setting of regulated prices for the next regulatory period
Jemena	Jemena is the corporate group entity that owns Jemena Electricity Networks (Vic) Ltd.
Next regulatory period	The regulatory period commencing 1 July 2021 and concluding 30 June 2026
Required capacity	The prescribed performance standards of polyphase electric lines for bushfire mitigation purposes, as defined in the Electricity Safety (Bushfire Mitigation Duties) Regulations 2017

Abbreviations

AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
AIMRO	Victorian advanced interval meter rollout
AIO	Annual Information Order
AM	Asset Management
AMI	Advanced Metering Infrastructure
ARR	Annual Revenue Requirement
ASMD	Accelerating Smart Meter Deployment
CPI	Consumer Price Inflation
DA	Distributed Analysis
DI	Distributed Intelligence
DEECA	Department of Energy Environment and Climate Action
EBA	Enterprise Bargaining Agreement
EDCoP	Electricity Distribution Code of Practice
ERG	Energy Reference Group
ESC	Essential Services Commission of Victoria
ESV	Energy Safe Victoria
ETU	Electrical Trade Union
FTA	Flexible Trading Arrangements
FTE	Full Time Equivalents
FY	Financial Year[1]
HV	High Voltage
ICT	Information & Communications Technology
IT	Information Technology
JEN	Jemena Electricity Networks (Vic) Ltd
LLS	Link Layer Security
LV	Low Voltage
MAC	Media Access Control
MDM	Meter Data Management
RAB	Regulatory Asset Base
RIN	Regulatory Information Notice
SOP	Standard Operating Procedure
TLS	Transport Layer Security
WPI	Wage Price Inflation

[1] When expressing the financial year, we follow the initials with a two-year digit code. The two digits represent the latest year that straddled the annual period. For example, the financial year 1 July 2021 to 30 Jun 2022 is represented as FY22.

Overview

This document sets out our response to the Australian Energy Regulator's (**AER**) draft decision on Jemena Electricity Networks (Vic) Ltd's (**JEN**'s) proposed 2026-31 regulatory period (**next regulatory period**) required revenues and prices for Advanced Metering Infrastructure (**AMI**) services. It also sets out our revised proposal for these alternative control services (**ACS**) revenues and charges.

We welcome the AER's draft decision on:

- The need for proactive replacement of end-of-life meters and that replacement is preferable to conducting physical inspections in line with our age-based inspection obligations in our metering asset management strategy (**MAMS**)
- Our ability to source meters and scale up to deliver the replacement program
- Our meter unit rates
- Our projected volumes of new meter installations (growth), reactive replacements, and customer-initiated replacements
- Our efficient operating expenditure (**opex**) base year costs, meter disposal step change and IT enhancements step change.

Our revised proposal substantively accepts the AER's draft decision reasoning as summarised in Table OV–1 below, whilst making changes to:

- Update our actual 2024-25 expenditure data and estimated 2025-26 expenditure data
- Increase our proactive AMI meter replacements to a level that avoids our physical inspection obligations
- Update our labour rates for proactive AMI meter replacements
- Account for expected costs for:
  - customer engagement and notifications amid a proactive replacement program
  - aborted installation attempts due to customer access issues
  - rectifications of meter panels
- Deliver our required lifecycle replacements for our first-generation of AMI communications equipment installed during the original mandated rollout between 2009 and 2013.

Objectives for our AMI metering expenditure forecast, required revenues and proposed charges are to:

- Continue providing ACS AMI metering services to our 386,000 customers and meet our forecast customer growth
- Meet the growing demand for 5-minute settling meter configurations and associated increases in data volumes
- Prudently commence replacing our aged fleet of *first-generation* AMI meters at a scale and profile that minimises program delivery costs whilst avoiding our age-based AMI meter physical inspection obligations which the AER's draft decision considered should be met through our replacement program not the operating expenditure involved in conducting physical inspections
- Prudently commence replacing our aged fleet of communications infrastructure which was installed during the 2009-2013 Victorian AMI rollout.

Our revised forecast

What our revised proposal means for our customers

Our revised proposal not only means our customers will receive compliant and reliable AMI services, but also means 166,354 existing customers will gain access to the benefits of the current generation of AMI meters which include:

- 5-minute interval data capable of supporting both enhanced market participation options and Type 8 metering
- Improved cyber security.

Our revised proposal also means our customers will pay higher ACS AMI charges than in our initial proposal, with most customer's bills increasing by under $10 in real terms over the five years to FY31.

The key decision items outlined in the AER's draft decision and our responses to each of these are summarised in Table OV–1, with Table OV–2 presenting our revised capital expenditure forecast. The remainder of this document details our responses to the draft decision and our revised forecasts. Unless otherwise stated, dollar figures throughout this document are expressed in real June 2026 dollars, exclusive of overheads which JEN does not apply to AMI ACS services.

Table OV–1: Key elements of the AER's draft decision

Issue	AER positions	JEN response
Required revenues		
Annual revenue requirement	Applied a flat real revenue path for years 2–5 by applying 0% X factors in these years, with any real revenue movement in 2026–27	Update to a 4.4% increase in real revenue path for each year over the 5 years.
Regulatory asset base	Accepted JEN's regulatory asset base (**RAB**) roll forward and calculation method	Retain the accepted roll forward and calculation method
	Increased JEN's opening RAB on 1 July 2026 for substituted data from JEN's regulatory information notices (**RIN**s) and Annual Information Orders (**AIO**)	Increase JEN's opening RAB on 1 July 2026 for actual 2024-25 data and a revised 2025-26 estimate which includes JEN's costs of delivering its approved legacy meter retirement plan
	Increased JEN's forecast closing RAB on 30 June 2031 for consequential changes in the draft decision, including increasing the volume of proactive replacements	Increase JEN's forecast closing RAB on 30 June 2031 for revised capital expenditure (**capex**) forecast including further increasing the volume of proactive replacements to avoid the need for any physical inspections
Rate of return	Applied the same rate of return (**WACC**) as applied throughout the determination	Applied the same rate of return approach as our standard control services discussed in Att 08-10[2]
Regulatory depreciation	Accepted JEN's proposed weighted average remaining life depreciation approach for its RAB, and straight-line depreciation approach for its tax asset base	Retain the accepted approach

[2] JEN-RP-Att 08-10 Annual revenue requirement-20251201- Public.

Issue	AER positions	JEN response
Capital expenditure		
Proactive meter replacement	Increased JEN's ~20% proactive replacement, substituting higher 33% replacement forecast on the basis that it considered replacements more efficient than physical inspections	Accept decision to not conduct physical inspections and instead, increase our proactive replacement volumes to 43%[3] to avoid any physical inspection obligations in the 2026-31 regulatory control period and ensure a manageable profile for the 2031-36 period.
Meter growth	Accepted JEN's proposed volume of new meter installations	Retain accepted approach with updates for 2024-25 actual new connections and for Blunomy's updated customer forecasts which are applied to historical actual customer numbers up to 2024-25 (from the AIO.
Reactive meter replacement	Accepted JEN's proposed volume of reactive replacement of meters	Retain the accepted approach with updates for the actual 2024-25 data and approved trend thereafter
Meter installation – unit costs	Accepted JEN's proposed meter unit costs	Retain accepted meter unit costs
Meter installation – labour costs	Accepted JEN's labour rate which was benchmarked using Hayes data and found to be: • the lowest of the Victorian distribution networks, and • lower than the maximum efficient labour rate for a field worker that the AER draft decision approved for ancillary network services	Update JEN's labour rate to the maximum efficient labour rate for a field worker that the AER draft decision approved for ancillary network services (adjusted to remove overheads) which is lower than the labour rate JEN now expects to incur as explained in section 2.4.2.3 which explains how Hay's past (and now ceased) field worker and technical specialist benchmarking is below current market rates which must meet the Electrical Trade Union's current Enterprise Bargaining Agreement
	Substituted a lower time for JEN's meter replacement	Accept draft decision
Other meter-related capex	Accepted JEN's proposed capex related to customer-initiated replacements	Accept draft decision
	Accepted JEN's proposal to not forecast 2026-31 legacy meter replacement costs, with these being incurred by 30 June 2026	Accept draft decision and reflect JEN's costs of delivering its approved legacy meter retirement plan by 30 June 2026 in the opening RAB
Communications capex	Reduced JEN's forecast capex by 41.4%	Update JEN's forecast capex to reflect JEN's lifecycle replacement of communications assets originally installed during the 2009-13 AMI rollout that have exceeded their design life and do not comply with current data security standards.
Information technology capex	Reduced JEN's forecast capex by 53.6%	Updated JEN's forecast IT capex for AER feedback and to reflect the scale of our updated AMI meter replacement program

[3] Calculated as 166,000 over an AMI metering base of 386,000.

Issue	AER positions	JEN response
Operating expenditure		
Base opex	Accepted JEN's proposed base year (2024-25) and expected it to update the base opex for 2024–25 actuals in its revised proposal	Accept draft decision and update for 2024–25 actuals
Rate of change (trend)	Accepted JEN's proposed change in customer numbers to calculate the expected growth in outputs	Accept draft decision and update for 2024–25 actuals and for Blunomy's updated customer forecasts
	Substituted the AER's standard control service (**SCS**) labour cost escalators	JEN has adopted the same customer growth forecasts and labour escalation forecasts for ACS AMI metering as it has for its SCS opex revised proposal. This is explained in Attachment 6-01[4]
Step changes	Accepted JEN's proposed step changes meter disposals and enhancements to the capacity of IT systems	Retained approved step changes and updated the meter disposals costs for the revised volume of proactive meter replacements
	Rejected JEN's proposed step change for meter inspection obligations considering it inefficient and substituting increase replacements instead	Accept the decision not to conduct physical inspections Increase our proactive meter replacement volumes to avoid any physical inspection obligations
Other matters		
Expenditure allocated to SCS	Accepted JEN's proposal to continue not to allocate any metering expenditure to SCS	Accept draft decision
Metering exit fees	Accepted proposed approach to setting these price-capped fees	Accept draft decision
Cost pass through mechanism	Set out the AER's proposed approach to clarify future operation of the ACS pass through mechanism for metering services	Accept the AER's approach to clarifying the operation of this important pass through mechanism and provide feedback

[4] JEN - RP - Att 06-01 Operating expenditure - 20251201

Table OV–2: How our revised proposal expenditure forecasts compare (5 years, $ June 2026, millions)

Expenditure category	Initial Proposal	Draft Decision	Revised Proposal
Capital			
Proactive replacement	43.9	62.4	124.3
Growth	19.4	19.3	20.3
Reactive replacement	8.6	8.5	9.3
Communications	15.1	11.5	17.7
IT	7.4	5.7	23.5
Other	10.1	5.3	5.7
Equity raising costs	0.4	0.6	1.2
Total capital expenditure	**105.1**	**113.3**	**202.0**
Operating			
Base year total operating expenditure (excluding debt raising costs)	47.9	47.6	54.0
Price growth	1.2	2.1	2.3
Output growth	3.4	3.4	2.9
Productivity growth	-	-	-
Step changes	24.5	2.9	5.1
Debt raising costs	0.2	0.2	0.3
Total operating expenditure	**77.2**	**56.2**	**64.6**

Supporting material

Additional information provided in support of JEN's revised proposal is outlined in Table OV–3.

Table OV–3: Additional documents supporting this submission

Document reference	Document title
Attachment 10-02M	JEN – RP - Att 10-02M ACS Metering PTRM – 20251201
Attachment 10-03M	JEN – RP - Att 10-03M AMI Expenditure model – 20251201
Attachment 10-04M	JEN – RP – Att 10-04M Metering exit fees model – 20251201
Attachment 10-05M	JEN – RP - Att 10-05M ACS Metering RFM – 20251201
Attachment 10-06M	JEN – RP - Att 10-06M ACS Metering RFM depreciation – 20251201
Attachment 10-06M	JEN – RP – Att 10-06M aged meter inspection and replacement obligation volumes – 20251201
Attachment 10-07	JEN - RP - Att 10-07 Customer management plan – 20251201
Attachment 10-08	JEN - RP - Att 10-08 Meter replacement program Quality Management Plan – 20251201
Attachment 10-09	JEN - RP - Att 10-09 Meter replacement program Environment Management Plan – 20251201
Attachment 10-10	JEN - RP - Att 10-10 Meter replacement program Operational Management Plan - 20251201 *or 'standard operating procedures'*
Attachment 10-11	JEN - RP - Att 10-11 Meter replacement program business continuity plan – 20251201
Attachment 10-12	JEN – DEECA – RP - Att 10-12 - Email - Accelerated meter rollout deployment – 20250625 – Confidential
Attachment 10-13M	JEN – RP – Att 10-13M aged meter inspection and replacement obligation volumes – 20251201
Attachment 11-03M	JEN - RP - Att 11-03M 2024-25 ACS Labour rate model – 20251201
Attachment 05-02M	JEN - RP - Att 05-02M SCS Capex model – 20251201

1. Required revenues

1.1 Annual revenue requirement

Our revised proposal is for a total annual revenue requirement (**ARR**) for AMI metering services of $147.0 million ($June 2026, smoothed) over the 2026–31 period. This is an increase of $8.15 million ($ June 2026) or 5.87% from our initial proposed total ARR of $138.85 million ($ June 2026, smoothed) for this period, and is an increase of $30.88 million ($ June 2026) or 26.59% from the AER's draft decision.

Our revised proposal has not accepted the AER's draft decision revenue path which applied a flat real revenue path for years 2–5 by applying 0% X-factors in these years with an initial P0 adjustment. Instead, JEN has applied a smooth revenue path involving a 4.4% increase in real revenue for each year over the 5 years. This smooths the price impacts on our customers and better aligns our revenues with our required revenues in each year of the period. JEN notes that the effect of growth in our meter customer base means the annual price increase is less than the annual revenue increase as discussed below.

Table 1–1: Revised proposed Alternative Control Services revenue and revenue path ($ June 2026, millions)

	FY27	FY28	FY29	FY30	FY31	NPV
Initial proposal						
Unsmoothed revenue requirement	22.4	24.6	28.3	30.8	33.2	125.0
Smoothed revenue requirement	25.0	25.5	27.4	29.4	31.6	125.0
Revenue path change (% pa) (1)	**1.7%**	**1.8%**	**7.5%**	**7.4%**	**7.4%**	**N/A**
Draft decision						
Unsmoothed revenue requirement	18.7	20.7	22.7	25.5	29.4	105.0
Smoothed revenue requirement	23.2	23.2	23.2	23.2	23.2	105.0
Revenue path change (% pa) (1)	**14.0%**	**-**	**-**	**-**	**-**	**N/A**
Revised proposal						
Unsmoothed revenue requirement	20.5	25.0	29.3	33.9	39.4	132.9
Smoothed revenue requirement	26.9	28.1	29.3	30.6	32.0	132.9
Revenue path change (% pa) (1)	**4.43%**	**4.41%**	**4.40%**	**4.38%**	**4.37%**	**N/A**

(1) Relative to FY26 revenue.

Source: *JEN-RP-Att 10-02M ACS Metering PTRM – 20251201.*

1.1.1 Smart metering prices

Table 1–2 shows our indicative metering charges for the next regulatory period. This table shows that most of our customers will face a real price increase between FY26 and FY31 of $10.75 even after accounting for our increased costs to deliver the proactive AMI meter replacement program, which will mean by the end of FY31 over half of our customers will have access to the current generation of AMI meters capable of 5-minute settlement data.

Table 1–2: Proposed indicative metering charges per meter, per year ($ June 2026, millions)

AMI meter charges (<160 MWh per annum per meter)	FY26	FY27	FY28	FY29	FY30	FY31
Single-phase non-off peak per meter per annum	64.50	66.52	68.60	70.75	72.96	75.25
Single-phase off-peak per meter per annum	64.50	66.52	68.60	70.75	72.96	75.25

AMI meter charges (<160 MWh per annum per meter)	FY26	FY27	FY28	FY29	FY30	FY31
Multi-phase direct connect per meter per annum	78.75	81.21	83.76	86.38	89.08	91.87
Multi-phase CT per meter per annum	87.71	90.46	93.29	96.21	99.22	102.32

Source: *JEN-RP-Att 10-02M ACS Metering PTRM – 20251201.*

These prices are indicative only, and actual prices may vary because of several factors, including under or over collection of revenue from year to year, or some tariff rebalancing. Prices will be submitted to the AER for its consideration and approval as a part of the annual pricing approval process.

1.2 Regulated asset base

The AER's draft decision accepted our RAB roll forward and calculation method which we have retained when calculating our revised proposal opening RAB as at 1 July 2026 and closing RAB as of 30 June 2031.

1.2.1 Opening RAB as at 1 July 2026

Our revised forecast opening RAB as at 1 July 2026 $54.5 million ($ nominal). This is $6.5 million ($ nominal) or 13.5% higher than our initial proposal due mostly to the costs of our approved legacy meter retirement plan or 12.3% higher than the AER's draft decision.

Table 1–3 details the outcomes of our MAB roll-forward calculation and the inputs we discussed below.

Table 1–3: Opening RAB as at 1 July 2026 ($ Nominal, millions)

	FY22	FY23	FY24	FY25	FY26
Opening MAB	60.6	57.7	53.7	51.3	43.8
Plus capex	5.1	3.5	3.9	1.7[5]	22.6
Plus indexation	0.5	2.0	4.2	2.1	1.3
Less straight-line depreciation	-8.0	-7.4	-6.3	-9.2	-10.6
Adjustment for difference in final year capex in the previous regulatory period	0.0	0.0	0.0	0.0	-1.3
Closing MAB	57.7	53.7	51.3	43.8	54.5
Opening MAB as at 1 July 2026					**54.5**

Source: *JEN – RP - Att 10-05M- ACS Metering RFM – 20251201.*

The components in Table 1–3 have been sourced and updated as follows:

- The opening value of the MAB for FY22 is based on the closing of the June 2021 value from the AER's final decision on the AMI transition charges application.
- The indexation is based on actual inflation
- The capital expenditure used in the roll forward model is our actual for FY22 to FY25, and our updated forecast for FY26 which includes the costs of:
  - delivering our legacy meter retirement plan between 1 December 2025 and 30 June 2026 as approved by the AER on 1 September 2025[6] $14.3m ($ June 2026)

[5] This value was deflated by $750k from FY24 mainly due to higher expenditure in AMI access points for the Volt-VAR Control (VVC) project. VVC is usually categorised as SCS. However, the refund of approximately $750k in FY25 was from the return of excess meter stock originally purchased in FY24 (which is classified under AMI Metering).

[6] AER, Approval of Legacy Meter Replacement Plan – Jemena Electricity Networks (Vic) Ltd, 1 September 2025

- delivering our IT capex project to comply with our new obligations from the Flexible Trading Arrangements (**FTA**) rule change $450,000 ($ June 2026)
- plus BAU capex comprising communication capex of $2.3 million ($ June 2026), BAU metering capex for growth and reactive replacements totalling $5.5 million ($ June 2026).

- The straight-line depreciation is based on our actual capital expenditure in the current regulatory period.

1.2.2 Forecast metering asset base to 30 June 2031

Our revised forecast closing RAB as at 30 June 2031 is $222.8 million ($ nominal). This is $103.8 million ($ nominal) or 87.2% higher than our initial proposal due mostly to the replacement of end-of-life AMI meters and communications equipment discussed below in section 2. It is also an increase of $91.5 million ($ nominal) or 69.7% from the AER's draft decision.

Table 1–4 details the calculation of our forecast closing RAB for the next regulatory period.

Table 1–4: Forecast RAB ($ Nominal, millions)

	FY27	FY28	FY29	FY30	FY31
Opening MAB	54.5	83.7	114.7	147.7	184.9
Inflation on opening MAB	1.4	2.2	3.0	3.9	4.9
plus capital expenditure	34.6	39.1	43.8	50.9	55.2
less straight-line depreciation	-6.8	-10.3	-13.7	-17.6	-22.4
Closing RAB	**83.7**	**114.7**	**147.7**	**184.9**	**222.7**

Source: *JEN-RP-Att 10-02M ACS Metering PTRM – 20251201.*

1.3 Rate of return

Our revised proposal approach to the rate of return of ACS metering services is the same as our approach for standard control services discussed in Att 08-10[7].

1.4 Regulatory depreciation

The AER's draft decision accepted JEN's proposed weighted average remaining life depreciation approach for its RAB, and year-on-year tracking depreciation approach for its tax asset base. Our revised proposal retains these accepted approaches.

[7] JEN-RP-Att 08-10 Annual revenue requirement-20251201- Public

2. Capital expenditure

Our revised proposal is for a total capex forecast for AMI metering services of $202.1 million ($ June 2026) over the 2026–31 period. This is an increase of $97.1 million ($ June 2026) or 92.3% above our initial proposal and is $71.07 million ($ June 2026) or 78.4% above the AER's draft decision.

Table 2–1 sets out our revised annual capital expenditure forecasts by category and year. The sections below explain the basis of the revised forecasts following the structure of the AER's draft decision reasons.

Table 2–1: Our annual revised proposal capital expenditure forecast by category ($ June 2026, millions)

Category	FY27	FY28	FY29	FY30	FY31	Total
Remotely read interval meters & transformers	22.3	28.4	32.7	35.9	40.3	159.6
IT	3.5	3.6	3.5	3.5	3.5	17.8
Communications	3.2	3.7	3.5	3.4	3.8	17.7
Other						0.0
Inhouse Software	2.9	0.7	0.0	2.2	0.0	5.7
Equity raising costs[8]	1.2	0.0	0.0	0.0	0.0	1.2
Total	**33.2**	**36.5**	**39.8**	**45.0**	**47.6**	**202.0**

Source: *JEN-RP-Att 10-02M ACS Metering PTRM – 20251201.*

2.1 Proactive meter replacement

We welcome the AER's draft decision that increasing our proactive end-of-life AMI meter replacement is preferable to our proposal of having a hybrid of age-based physical meter inspections and a smaller proactive replacement program. This pragmatic approach recognises that all first-generation AMI meters will eventually need to be replaced, and their failure rate increases over time. It also ensures more of our customers can access the enhanced benefits of the current generation of AMI meters, including 5-minute interval data capable of supporting both enhanced market participation options and Type 8 metering, and improved cyber security.

Our revised proposal accepts the AER's draft decision not to conduct any age-based physical inspections. Consequently, we have adjusted our scale and profile of end-of-life AMI meter replacements to avoid our physical inspection obligations, whilst ensuring a prudent program delivery profile that can be deployed across the next two regulatory periods. Our proposed profile:

- Avoids the costly physical inspection peak the AER's draft decision would have caused in the 2031-36 regulatory period
- Smooths the future end-of-life AMI replacement profile, and thereby efficiently helps overcome the cyclical asset management challenge created through the original mandated 4-year Victorian advanced interval meter rollout (**AIMRO**)
- Supports efficient minimisation of meter installation program and labour resources
- Allows a further 36,000 customers to access the benefits of enhanced market participation options, Type 8 metering, and improved cyber security.

[8] See Attachment 10-05M

2.1.1 Meter replacement volumes

2.1.1.1 Our revised proposal volumes smooth the replacement program

In JEN's initial proposal, we proposed:

- to deliver a targeted and co-optimised proactive aged meter replacement program for 22% of our AMI meters whilst our inspection crews are on site and can identify meters at risk of imminent failure, and
- efficiently meet our age-based AMI meter physical inspection obligations by conducting a site inspection of our AMI meters that exceed their 15-year design life.

In its draft decision, the AER considered a higher rate of meter replacement to be preferrable over any inspections being carried out during the regulatory period. However, at the replacement volumes provided for in the draft decision, this approach creates an imprudent and likely unachievable peak in required meter inspections during the next regulatory period.

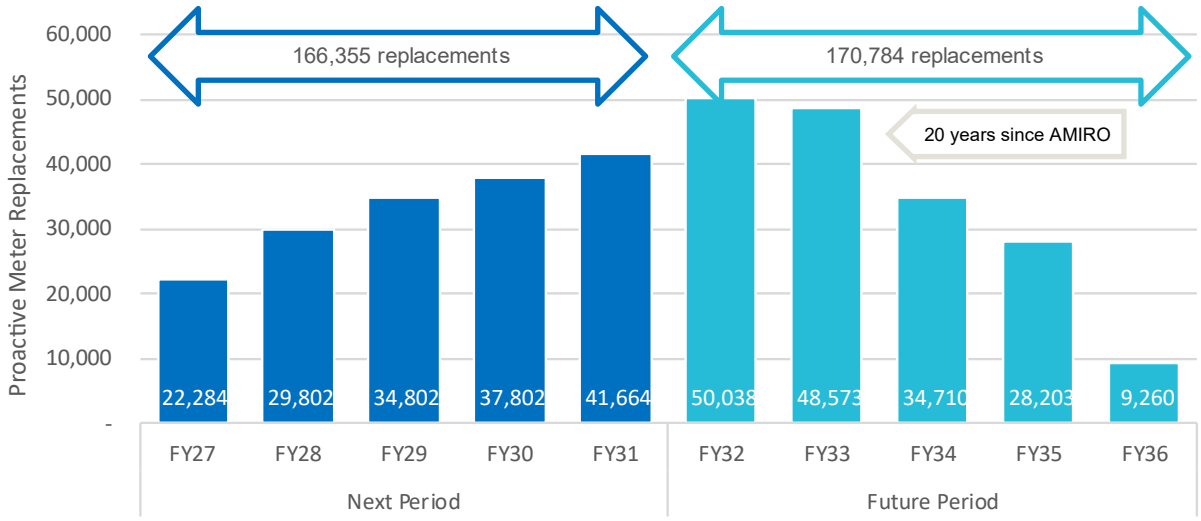
To allow JEN to replace the meters in a profile that avoids an inefficient peak in activities and avoids the need for the prescribed age-based physical inspections in line with the AER's draft decision logic, JEN proposes a total of 166,354 meters (43%[9]) are replaced in the next regulatory period (i.e. between 2026-27 and 2030-31). This profile involves a further 36,000 meter replacements than the AER's draft decision and provides for a more sustainable level of required inspections or proactive replacements in the 2031-36 regulatory period.

The proactive replacement volumes must be considered over the two regulatory periods that span JEN's physical inspection obligations for the first-generation AMI meters

The profile for our proposed aged AMI meter replacement program is shown in Figure 2–1. This replacement profile is preferable to the draft decision because it maintains reasonable annual replacement numbers across two regulatory periods, without inspection or replacement peaks or breaching the 20-year in-service anniversary for meters without either an inspection or an actual (not just planned) replacement (see Figure 2-1).

This 20-year point is JEN's '*substituted 20-year replacement obligation*' as described below. Because the original AIMRO program was mandated from 2009 to 2013, with delayed sites completed in 2014, to avoid physical inspections JEN needs to replace most first-generation AMI meters by 2033 and all by 2034.

Figure 2–1: Aged AMI meter replacement volumes



Source: Attachment 10-13M

[9] Calculated as 166,000 over an AMI metering base of 386,000.

2.1.1.2 Clarifying how our physical inspection obligation applies

A summary of our physical inspection obligations is:

- *15-year inspection obligation* | Under our current MAMS, these physical inspections by a qualified technician fall due upon the 15-year anniversary of a meter's service life.
- *Substituted 20-year replacement obligation* | This inspection can be avoided *if* within the next 5 years the meter is planned to be replaced, creating a compliant replacement window of up to 20 years of a meter's service life.
- *Risk of MAMS change to shorter inspection obligation* | If AEMO were to require JEN to seek a new MAMS (e.g. due to its new Metrology Procedure Part C) JEN's required inspection window could drop to 10 years or remain at 15 years if it can satisfy remote inspection criteria.

This is explained below.

In its draft decision, the AER stated:

> *Jemena's cost-benefit analysis was developed to assess how it could fulfil 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). 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. We understand this MAMS requirement is unique among the Victorian distributors as other distributors are permitted to undertake meter inspections remotely.*[10]

In making this observation, the AER was reflecting on s. 4.2.5.1 of our MAMS for 'Time-based Inspection of Whole Current Meters' which says:

> *all current metering installations will be physically visited and technically inspected within the five years following the 15-year anniversary of their original installation (unless the meter is scheduled to be replaced in that 5-year period) and every 15 years thereafter.*

JEN notes that since submitting our initial proposal, AEMO has consulted on and established the Metrology Procedure Part C.[11] This was done in response to the Australian Energy Market Commission's (**AEMC's**) 'Accelerating smart meter deployment' (**ASMD**) final rule change.

While that procedure includes section 7, Alternative Inspection Practice Requirements, which come into effect from 1 December 2025, JEN notes 2 important factors:

1. JEN's present approved MAMS has up to 20 years to complete the inspections or replacements, compared to the 15 years permissible under the new Part C of the procedure – i.e. it is favourable to the scale of +5 years – explained further below; and
2. JEN does not presently have *all* the required capabilities for remote monitoring to gain the approval for the "Alternative inspections practice" under section 7.4 of Metrology Procedures Part C.[12] This, based on the Metrology Procedure Part C, could put JEN's obligation for physical inspection to as frequently as 10-yearly from the date of installation. If JEN were to gain approval for an alternative inspection practice under section 7.4, Part C, it will still obligate Jemena to conduct 15-yearly inspections, which is still more frequent than what is currently approved under JEN's MAMS via the combination of our 15-year inspection obligation and substituted 20-year replacement obligation.

10 AER, Attachment 15 – Metering services | Draft decision – Jemena distribution determination 2026-31, September 2025, p.12.

11 AEMO, Metrology Procedure Part C Testing and Inspection Guidelines for metering installations in the NEM version 1.0, 30 June 2025.

12 [redacted]

In this context, JEN's first-generation AMI meters installed under the original AIMRO program will hit 20 years in operation by 2033-34; hence, even under the existing MAMS, these 264,966 meters will need to be replaced to avoid physical inspection – i.e. all assets that will be 20 years or longer in service by that date. JEN's revised proposal seeks to smooth this replacement profile across two regulatory periods to minimise program costs and lessen future lifecycle replacement peaks.

Under the undated NER provisions for meter inspection and testing, it is JEN's AEMO-approved MAMS that creates our binding obligation for the maximum period between inspections. Specifically, NER Table S7.6.1.3 Period Between Inspections says Types 4, 4A, 5 & 6 require Metering installation equipment inspection '*When meter is tested.*' Table S7.6.1.2 Maximum Period Between Tests says that for a whole current meter '*The testing requirements must be in accordance with an asset management strategy. Guidelines for the development of the asset management strategy must be recorded in the metrology procedure.*'

JEN's existing approved MAMS has up to 20 years compared to the 15 years permissible in AEMO's Part C procedure for those with approved alternative inspection practices.

As noted above, JEN has up to 20 years under its current MAMS to deliver a replacement and avoid the 15-year physical inspection obligation. In contrast, the new procedure, effective 1 December 2025, would reduce this to up to 15 years if AEMO were to require JEN to submit a new MAMS and JEN could satisfy the requirements for alternative inspection.[13] To date, AEMO has not stated its intent to end-date the currently approved JEN MAMS.

The 15-year outcome is a function of the following aspects of Metrology Procedure Part C, section 6.2. Inspection Frequency:

(a)(iii) | Where the MC does not have an alternative inspection practice approved by AEMO as part of an asset management strategy, as outlined in Section 7 of this Procedure, the inspection frequency is: Whole Current metering installations, no later than every 10 years.

(b)(iii) | Where the MC does have an alternative inspection practice approved by AEMO as part of an asset management strategy, as outlined in Section 7 of this Procedure, the inspection frequency is: Whole Current metering installations, no later than every 15 years, unless otherwise agreed with AEMO.

AEMO has provided no discussion or commentary in its consultation process to suggest that it would permit a further 5-year extension to the already extended period under clause 6.2(b)(iii), which would represent a doubling of its default physical inspection requirement.

2.1.1.3 Comparing the replacement and inspection profiles with JEN's physical inspection obligation

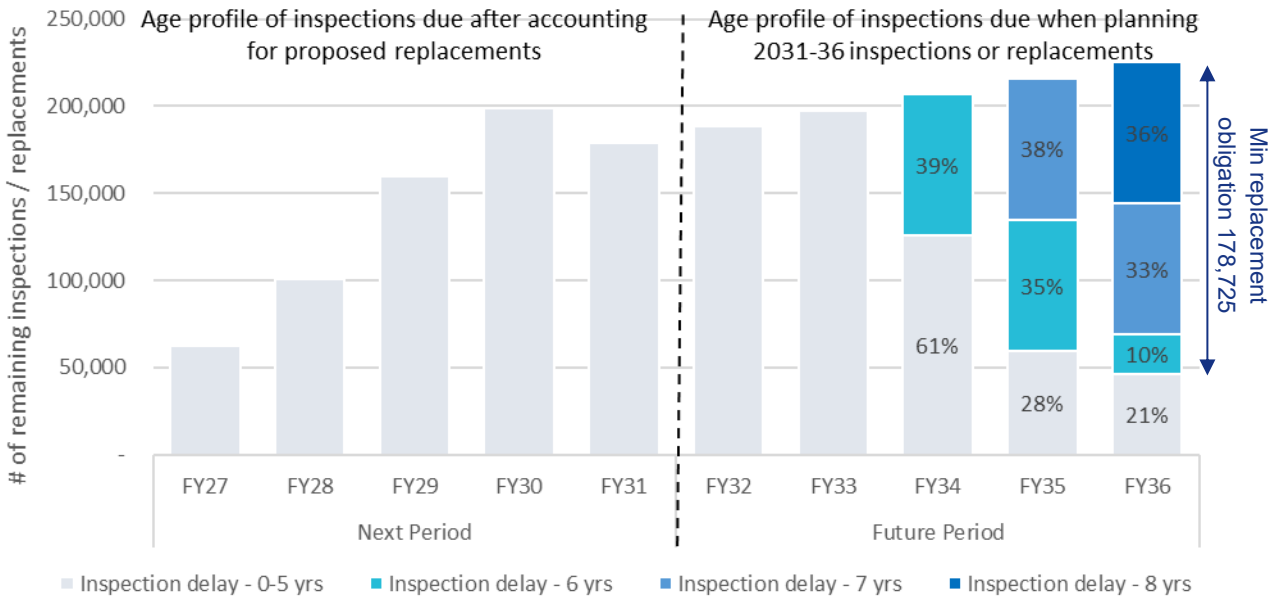
JEN has mapped the scale and age profile of its meter inspection obligations over the next two regulatory control periods in Figure 2–2 and Figure 2–3 based on the draft decision and our revised proposal respectively. The figures demonstrate how the 2026-31 period meter replacements affect JEN's inspection obligations for the 2031-36 period, and thus its *minimum* replacement obligations in that period if it is to avoid those inspections.

The two charts show:

- the volumes of meters that fall due for inspection (i.e. >15 years in service) by year—*the vertical bars*, and
- how these meter volumes age over the window of up to 5 years within which JEN must make a replacement to remain compliant using the approach of replacing rather than physically inspecting—*the colour coding*.

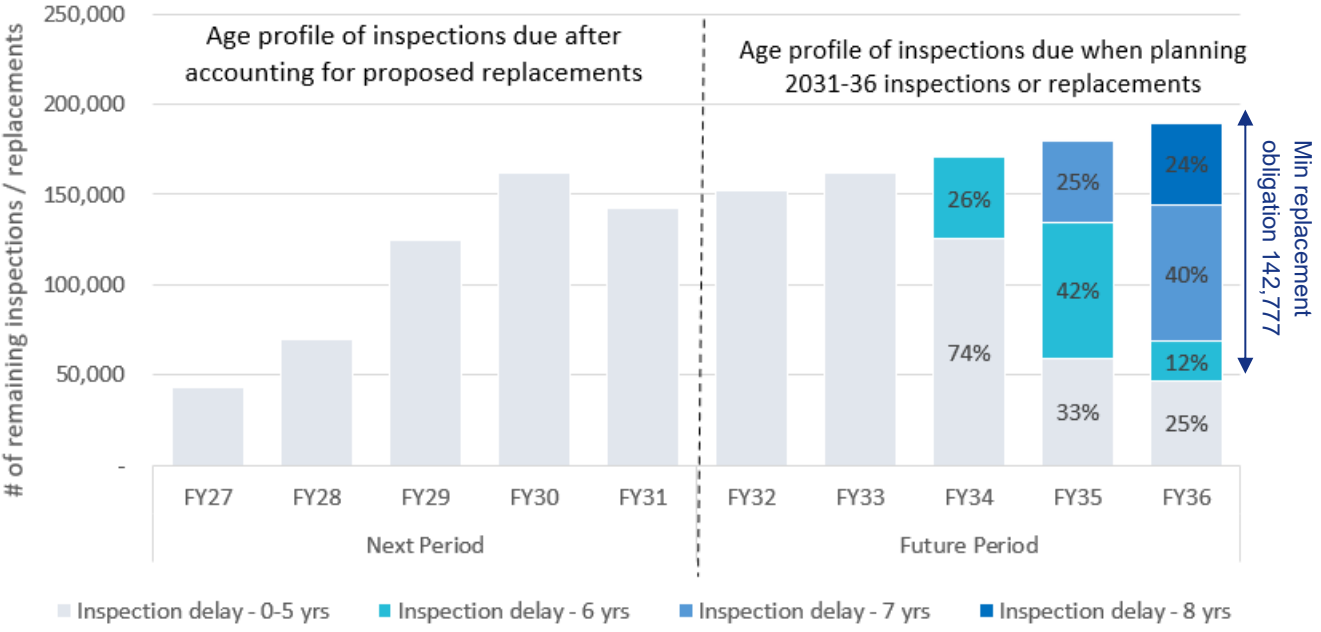
[13] As per Part C, to gain AEMO's approval of alternative inspection practice (with a reduced physical inspection) AEMO expects (at a minimum) remote condition monitoring capabilities with a number of listed attributes; otherwise, the 10-year inspection period is required, as per Section 6.2 (a)(iii) of the procedure.

Figure 2–2: Annual balance of aged AMI meter inspection obligation volumes – impact of the AER draft decision on JEN's FY32-36 inspection obligations



Source: Attachment 10-13M

Figure 2–3: Annual balance of aged AMI meter inspection obligation volumes – impact of JEN's revised proposal on JEN's FY32-36 inspection obligations



Source: Attachment 10--13M

These show that compared to the 130,407 proactive replacements in the draft decision, JEN's revised proposal for replacing 166,354 meters in the next regulatory period significantly enhances the deliverability of replacements required to meet the 2031-36 period inspection obligations.

Even under JEN's revised proposal, its *minimum replacements* for the 2031-36 period (i.e. those for meters >20 years old) would be 142,777, which increases to a minimum of 178,725 under the AER's draft decision replacement volumes.

Further, JEN notes that this analysis is predicated on the assumption that AEMO permits grandfathering of our existing approved MAMS. If that assumption does not hold and JEN needs to seek approval of a new MAMS under the new Metrology Procedure Part C, for the reasons outlined above, JEN's inspection obligations could be brought forward by up to 10 years. This risk further reinforces the prudence of JEN's proposal to replace 43% of its meter fleet by 2031.

2.1.1.4 This volume and timing of replacements was foreseen by the Victorian government

The need for a significant replacement program after 2024 was expected by policymakers. The Victorian government mandated a 15-year depreciation life for AMI meters in the AMI Cost Recovery Order In Council. And when assessing the costs and benefits of the original AIMRO program, this was cited by the Victorian Auditor General's report into Realising the Benefits of Smart Meters in which it observed:

> *While costs are expected to drop until 2023, the 2011 CBA anticipated costs to increase substantially again from 2024 to account for the replacement of smart meters and related communications equipment. This cost is assumed in the CBA to mirror the initial AMI rollout.*[14]

2.1.1.5 What have our customers said?

In our October–November 2025 meetings with the Energy Reference Group (**ERG**), we presented the AER's draft decision on metering and our revised regulatory proposal.

- At our 15 October 2025 ERG meeting, Jemena staff presented on the meter inspection and replacement profiles from our initial proposal, draft decision and revised proposal. This gained some interest, with some acknowledgement of the reasoning behind favouring replacement over inspection. However, there were no strong views presented at the meeting by ERG members.
- At our 11 November 2025 ERG meeting, inquiries were raised around the potential role of Distributed Analysis (**DA**) and Distributed Intelligence (**DI**) metering in the future. These different types of meters undertake analysis–including obtaining insights into grid performance, enabling management and optimised power delivery by treating individual meters as sensors, etc.—at the meter rather than centrally.
- JEN staff advised that these were not in scope of the current Victorian smart meter services as we can only operate within the Victorian Meter Specification.

The ERG identified metering services as a key area for its submission to the AER.

2.1.2 Running our replacement program

JEN welcomes the draft decision confirming our ability to source meters and scale up to deliver the replacement program. We will prudently leverage and scale up from the program we are presently establishing to deliver our ~4,000 legacy meter retirement plan program by 30 June 2026.

In anticipation of both the LMRP and the upcoming proactive program of first-generation AMI meter replacements, JEN has an established panel of contractors and recently undertook a process to add additional contractors to perform meter inspection and replacement activities. Therefore, we have sufficient and diversified resources to perform the meter replacement activities. We note that section 2.4.1 explains how our market-based labour rates are higher than our original estimates.

Our initial proposal proposed a co-optimised program of mandatory age-based physical inspections of first-generation AMI meters complemented by a proactive replacement of 82,133 of these aged meters. In Appendix C to the business case underpinning that proposal JEN outlined its approach and planning process it had and would undertake to ensure we can deliver that program.[15]

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[14] Victorian Auditor-General, Victorian Auditor-General's Report Realising the Benefits of Smart Meters, September 2015, p.30.

[15] JEN – RIN – 4.6.1 – Inspection of Metering Installations – Business Case – 20250131 – Public.

The program scope has changed to a replacement program, focusing only on a higher volume of replacements. We have also progressed our program planning. As a result of these changes and program planning progress, to deliver the meter replacement program JEN now forecasts 12 full-time equivalents (FTEs) to administer the required consumer engagement and program planning. These comprise project managers, engineers, and IT support resources.

Appendix A Replacement program delivery resourcing explains these resource needs, how they have been costed, and how they reconcile to our initial proposal which included only 3 of these FTE but foreshadowed the other roles that would be required once JEN's detailed program planning progressed. JEN's additional project planning materials also provided in Attachments 10-07 to 10-11.

2.1.2.1 Engaging our customers and affected communities

Effective customer engagement and minimisation of customer impact are key focuses of the proposed end-of-life meter replacement program. The customer engagement strategy is based on four distinct stages: advance pre-notification, effective planning, coordination of customer power supply outages (including management of life support customers, pre-work notifications and checks) and post-installation support.

The scope of customer engagement includes all customer-facing communications associated with planned works, from early awareness through to post-installation follow-up, as well as internal and contractor communication protocols. All the procedures and processes will be aligned with the Department of Energy, Environment and Climate Action's (**DEECA**'s) community and stakeholder engagement expectations and hard-learned lessons from the original AIMRO ensuring messaging and timing are consistent with state-wide policy objectives and customer experience standards. A copy of JEN's customer management plan for the proactive replacement is provided in Attachment 10-07

Lessons from the 2009-2013 AIMRO program must be considered

It is widely acknowledged in Victoria that the original AIMRO program required a non-trivial scale and expense of customer engagement, communication and coordination activities and still incurs public opposition from some communities. This is evidenced in both the DEECA correspondence provided in [confidential attachment 10-12] and the Victorian Auditor General's report above in section 2.1.1.4.

For these reasons, JEN notes that failure to suitably resource these crucial activities and plan for a prudent level of customer revisits and remediations would risk again damaging the reputations of DNSPs, the Victorian government and energy market bodies like the AER with the Victorian public. In JEN's experience, individual community member opposition to meter replacements does not delineate the respective roles of these organisations in service delivery, policy setting and price setting. That experience is clearly echoed in DEECA's stated concerns in confidential Attachment 10-12.

2.1.2.2 Benchmarking JEN's program

JEN notes that the AER's draft decision has relied on benchmarking in a deterministic fashion that does not accord with its own Expenditure Forecast Assessment Guideline. Benchmarking may rightly inform deeper assessment of costs, not unquestioning substitution of another DNSP's activities, compliance obligations (by scope or scale) and/or resulting costs.

JEN notes that taking simple observation from activity scopes and costing model inputs and assumptions from another DNSP is not an assessment of expenditure efficiency, and certainly not in the context of the JEN business operations. We appreciate that benchmarking and data comparisons play a role in the AER's efficiency assessment, however, these are "first pass assessments"[16] and only "to determine relative efficiency and target areas for further review."[17]

[16] AER, Expenditure Forecast Assessment Guideline for Electricity Distribution October 2024, Pg. 10.

[17] Ibid, Pg. 10.

In the current context, we recognise that proactive program replacement scale, costed activities and assumptions about site access challenges will be between JEN and other DNSPs and therefore, per the Expenditure Forecast Assessment Guideline, require further investigation.

JEN's assumptions, as evidenced in this revised proposal, reflect further detailed program planning. JEN cautions any determinative use of benchmarking to substitute JEN's assumptions with those of other DNSPs where the AER has not first satisfied itself that: a) their proactive replacement program planning is as mature as JEN's and b) the benchmarking is valid in JEN's operating circumstances including network scale.

The appropriateness of such a network-specific approach is codified in the rules for standard control services, whereby in determining the prudency or efficiency of capital expenditure under clause S6.2.1(d)(2), the AER must have regard to the following:

> *(1) the need to provide a reasonable opportunity for the relevant Distribution Network Service Provider to recover the efficient costs of complying with all applicable regulatory obligations or requirements associated with the provision of standard control services*

2.2 Meter growth

The AER's draft decision accepted JEN's proposed volume of new meter installations. Our revised proposal retains this accepted approach and includes updates for 2024-25 actual new connections and for Blunomy's updated customer forecasts. This gives a forecast annual growth rate of 1.2%. Details of these updated connection forecasts can be found in JEN's revised proposal Att 06-01[18].

The AER's draft decision accepted JEN's proposed volume of reactive replacement of failed meters. Our revised proposal retains this accepted approach, updated with the actual 2024-25 data and the approved trend from then.

2.3 Meter installation – unit costs

The AER's draft decision accepted JEN's proposed meter unit costs. It found these:

- were broadly consistent with those approved in the 2021–26 period, other than the multi-phase CT meter, which has increased by 25%
- benchmarked favourably with our Victorian network peers, including our multi-phase CT meter cost.
- Our revised proposal retains these unit rates.

2.4 Meter installation – labour costs

The AER's draft decision did not accept JEN's proposed labour costs for meter replacement installations. In its draft decision it:

Accepted JEN's labour rate which was benchmarked using Hays data[19] and found to be:

- the lowest of the Victorian distribution networks, and
- lower than the maximum efficient labour rate for a field worker that the AER draft decision approved for ancillary network services

Substituted a lower time for JEN's meter replacement activities.

[18] JEN-RP-Att 06-01 Operating Expenditure and step changes – 20251201

[19] Hays 2022-23 salary guide for field worker and technical specialist and Hays 2024-25 salary guide for administration officer.

2.4.1 Our revised installation labour time estimates

Our revised proposal accepts the AER's reduced labour time estimates. Our initial proposal reflected an activity-based estimate of the time required for a proactive replacement and presented an activity-based view of the relative efficiencies compared to a reactive replacement.[20] Notwithstanding this, we accept the AER's logic that the higher volumes of proactive replacements may drive further incremental efficiencies in the time taken for each proactive replacement.

2.4.2 Our revised labour rate

Our revised labour rate has been increased to reflect current market conditions. JEN has been unable to secure labour at the benchmarked rate included in its initial proposal. Our revised labour rate for a field worker is based on the AER's maximum labour rate of $222.05 for ancillary network services (adjusted to remove overheads. This is lower than JEN's updated labour rate of $224.9. In JEN – RP – Att 11-01 Alternative control service, we explained in detail the rational for our proposed labour rates for the revised regulatory proposal.

2.4.2.1 Our initial proposal

The installation labour unit rates in our initial proposal were based on independent benchmark rates using the Marsden Jacob's approach to setting the labour rates for ancillary network services as part of its report to the AER in June 2020.[21] The base salary used in that labour rate calculation for administrative officer, engineer and senior engineer were based on Hays 2024-25 published salary guide (except for field worker and technical specialist which is based on Hays 2022-23 published salary guide as discussed below) and the escalator used for wages were based on Bis Oxford Economics' forecasts as at October 2024.

2.4.2.2 AER draft decision

In its draft decision, the AER accepted that our benchmark-derived labour rates for a field worker which were lower than the maximum efficient labour rate for a field worker that it applied in its Victorian draft decision for ancillary network services.

However, in making that decision, the AER acknowledged that Hays' 2025–26 salary data no longer includes data for field workers or technical specialists. Consequently, the AER attempted to convert the 2022-23 data both for the number of working hours in the week and to escalate to a 2025-26 labour rate. The resulting rates are shown in Table 2–2 below with shading indicating which JEN rates were accepted and which were substituted for the AER's maximum benchmark.

Table 2–2: AER maximum benchmark and Jemena's proposed hourly labour rates for 2026–27 (business hours, including on-costs and overheads ($2026–27)

Jemena labour category	AER Benchmark category	Jemena initial proposal labour rate	AER maximum labour rate	AER draft decision
Administrative Officer	Admin	121.40	120.34	120.34
Field Worker	Field Worker	210.89	222.05	210.89
Technical Specialist	Technical Specialist	225.06	236.86	225.06
Engineer	Engineer	271.83	253.35	253.35
Senior Engineer	Senior Engineer	326.19	304.02	304.02

[20] See JEN - Att 10-01 Advanced Metering Infrastructure - 20250131- Public, Table B1-1.

[21] *JEN - Att 11-03M 2024-25 ACS Labour rate model.*

2.4.2.3 Our revised proposal

Hay's past and now ceased field worker and technical specialist benchmarking is below current market rates which must meet the Electrical Trade Union's current Enterprise Bargaining Agreement

As JEN has progressed its proactive replacement program development and market testing, it has uncovered that it cannot source labour (inclusive of relevant oncosts) at the rates implicit in its original Hay's benchmarking or the more recent estimates derived by the AER since Hay's stopped publishing field workers or technical specialists.

Understanding the underlying market drivers of labour rates makes this unsurprising. All labour vendors of the scale capable of meeting JEN's needs will be subject to the Electrical Trade Union's (**ETU's**) current Enterprise Bargaining Agreement (**EBA**).

JEN's work delivery partner, who also provides equivalent services to Ausnet and United Energy has confirmed this and provided EBA evidence to JEN's satisfaction.

Consequently, while JEN expects its actual labour rate to be higher, JEN has adopted the AER's draft decision maximum labour rate for field worker (as relevant to the task) in its revised proposal forecast. To do so, JEN has backed out 40 per cent of corporate overheads in our revised proposal labour rate model[22] from the AER's maximum labour rate to achieve an equivalent labour rate that complies with JEN's approved cost allocation methodology. We explain this further below.

Determining our revised labour rate

As part of JEN's ongoing development and market testing of its proactive replacement program costs, we have revised our labour rates for metering services to align with the updated Field Worker labour rates applied to fee-based and quoted services.

In Section 3.2 of *JEN – RP - Attachment 11-01 Alternative Control Services*, we have outlined our updated Field Worker labour rates. These rates were derived using the Hay's Salary Guide 2022–23, consistent with the AER's methodology. Specifically, we adopted the base salary of a Glove & Barrier lines worker, which corresponds to the highest equivalent Hays labour category for Field Worker. This approach aligns with the methodology used by Marsden Jacob, which the AER accepted during the previous price reset for Victorian DNSPs.

We further adjusted the Field Worker labour rate using real inflation (CPI) and labour escalation rates consistent with those applied by the AER in its draft decision. This resulted in a revised Field Worker labour rate of **$224.22**, slightly above the AER's maximum rate of **$222.05**. Both rates incorporate base salary, on-costs, overheads, wage measure stickiness, and vehicle allowance.[23]

Despite the higher calculated rate, JEN has adopted the AER's draft decision maximum labour rate of **$222.05** for Field Worker tasks in its revised proposal forecast. For metering services specifically, we excluded corporate overheads from the labour rate, consistent with JEN's approved cost allocation methodology. This adjustment involved removing 40%[24] from the AER's maximum labour rate, resulting in a metering-specific Field Worker labour rate of **$158.50**.

This revised rate is also generally consistent with the weighted average cost of Field Worker labour for CY 2025, calculated at **$157.87**, which includes base labour rates, on-costs, and allowances. The modelling supporting this figure was provided to the AER in JEN's response to Information Request 31 on public lighting (June 2025).

2.4.3 Our revised installation unit rates

Drawing on our updated time estimates and labour rates, Table 2–3 summarises the unit rates for each of the metering activities used in our operating and capital expenditure forecasts for ACS metering services.

[22] *JEN - RP - Att 11-03M 2024-25 ACS Labour rate model - 20251201*

[23] Our on cost is slightly higher than the AER's given an additional allowance for safety related trainings each year.

[24] *JEN - RP - Att 11-03M 2024-25 ACS Labour rate model - 20251201*

Table 2–3: Revised unit rates ($ June 2026, per activity conducted)

Meter Type	Proactive lifecycle meter replacement	Faults and Failures	Abolishments/service removed
AMI - Single Phase, single element	229.97	383.28	383.28
AMI - Single Phase, two elements with 31.5A load control	229.97	383.28	383.28
AMI - 3 Phase with no load control	245.30	408.83	485.48
AMI - Single Phase, single element, with 31.5A load control	229.97	383.28	383.28
AMI - 3 Phase with 31.5A and 2A load control	260.63	434.38	485.48
AMI - 3 Phase CT connect	436.94	485.48	587.69
AMI - 3 Phase CT & VT connect	528.92	587.69	894.31

Source: *JEN – RP-Att 10-03M ACS Metering expenditure model - 20251201*

2.5 Meter installation – wasted visits

JEN has updated its revised forecasts to include the anticipated rate of wasted site visits that occur when attempting to access a customer's meter for replacement. Drawing on recent experience with site access for annual meter sample testing, our forecast predicts 20% of sites will encounter issues (e.g. access, customer refusal) preventing a successful meter replacement on the initial visit, requiring a revisit. A further 10% is expected to require a second revisit to complete the installation successfully.

Figure 2–4 sets out JEN's most recent actual data for wasted visits by reason, as observed during execution of the annual program of in-field testing of a sample of installed meters. Noting that for the in-field testing, not all of the meters in the generated sample need to be tested, and the testers have an option to skip not re-attending the difficult sites (e.g. sites with specific access issues, sites where customer issues repeat requests to come back at another time/denying access).

The figure shows that just 79.6% of visits resulted in a completed test (green areas of the pie chart), that 38 of 176 wasted visits involved multiple attempts with no access (21.6%), and that a range of factors cause wasted site visits. Because this was a meter sample testing, the field technician had the option to skip difficult-to-access sites and test alternative sites instead. In contrast, during the AMI meter replacement program, installers will not have this option and will need to attempt to gain access to all sites, even if it means multiple wasted visits. Hence, for the AMI replacement program, we estimate that in addition to 20% of wasted visits on the initial attempt, we will observe a further 10% of sites where installers will encounter two wasted visits before access is granted.[25]

[25] JEN notes that the procedurally appropriate use of benchmarking under the AER's Expenditure Assessment Guideline is discussed above in section 2.1.2.2.

Figure 2–4: [redacted]

2.6 Meter installation – panel and wiring remediation works

JEN has updated its revised forecasts to include the anticipated volume of meter panel remediation work. It is forecast that 10% of sites will require additional meter panel work over and above a standard meter installation activity. This incurs additional work estimated to be 8 hours of labour, comprising 2 resources for 4 hours to administer JEN's Step 4: Defect Handling & Rectification as set out in our Meter Replacement Delivery Step-by-Step Standard Operating Procedure (**SOP**) provided as [Attachment 10-10].

JEN expects that such required works will be identified when applying the photographic document and site non-compliance identification steps set out in sections 1.3 and 1.5 respectively of our SOP.

Remediation works (prior to meter replacements) will be required to address safety concerns associated with:

- poor or non-compliant works carried out by customers since the initial smart meter was installed
- vegetation that has since deteriorated and encroached onto the meter panel
- exposure to weather, salt air, or heat has damaged the insulation of the wiring, conduits, boards and panels
- meter panels that have been left open exposing them to the elements
- animal inflicted damage to the meter boards and enclosures.

In the absence of a physical inspection program, these issues would only be identified when arriving on site for the exchange.

Our assumption of 10% of sites requiring additional remediation is informed by JEN's recent experience identifying customer site defects & non-compliances during fault attendance, as outlined in Figure 2–5.

Figure 2–5: FY25 data on customer premise defects and a share of fault site attendances

Source: Data from JEN's Network Outage Management System.

JEN's recent experience aligns with the expectations of the AEMC when it assessed the expected costs of the NEM's accelerated smart meter rollout during its review of the regulatory framework for metering services. In its final report, it stated:

> *Overall, we expect approximately 10–15 per cent of sites will be higher cost or difficult to install smart meters due to meter board remediation, site access and customer refusal issues. This estimate is based on evidence provided in submissions*[26]

JEN has already accounted for the site revisits needed for these defective panel instances; however, the costs of the additional site time are included in this assumption.

2.7 Meter installation – customer notifications

JEN has updated its revised forecasts to include the anticipated costs of administering required customer notifications. These activities were not accounted for in our initial proposal or in the AER's draft decision.[27]

Every site visit and revisit to replace a meter will require notification (as mandated under the EDCoP[28]) prior to the outage. This includes confirming the site's details and meter NMI, placing a physical card in the customer's mailbox, collecting evidence of carding, and adding to the electronic notifications system if selected by the customer.

This is estimated to be 25% of the hourly labour rate per visit (i.e. a 15-minute activity[29]) includes:

26 AEMC, Final report | Review of the regulatory framework for metering services, 30 August 2023, p.32.

27 JEN – RIN – 4.6.1 – Inspection of Metering Installations – Business Case – 20250131 – Public, p.C-1.

28 Clause 11.5 of the EDCoP

29 These activities are set out in JEN's Operational Management Plan or SOP for the proactive replacement program provided at [Attachment 10-10].

Travel time

- Verification of site details
- Physical carding and recording of the evidence that the customer has received a notification of carding in the system
- Addition of the customer site details to the electronic notification system for on-the-day electronic reminders
- Call centre support for card-related questions.

2.8 Other meter-related capex

2.8.1 Customer-initiated replacements

The AER's draft decision accepted JEN's proposed capex related to customer-initiated replacements. Our revised proposal retains this forecast.

2.8.2 Legacy meter replacement program

The AER's draft decision accepted JEN's proposal to not forecast 2026-31 legacy meter replacement costs, with these being incurred by 30 June 2026. As discussed in section 1.2.1 JEN has accepted the draft decision and reflected JEN's costs of delivering its approved legacy meter retirement plan by 30 June 2026 in the opening RAB as at 1 July 2026.

2.9 Communications capex

The AER's draft decision accepted JEN's proposed equipment and installation costs which JEN has retained in our revised proposal forecasts. The draft decision then took different approaches to our communications capex drivers as between growth driven capex and replacement driven capex. We explain each of these below.

2.9.1 Growth capex

The AER's draft decision accepted JEN's proposed growth rates of access points and antennas, which JEN has retained in its revised proposal.

The draft decision did not accept JEN's proposed growth in communications poles citing inadequate justification and such poles not being proposed by other Victorian distributors.[30]

Our revised forecast retains our dedicated communications asset poles due to JEN's current experience of seeking suitable infrastructure to mount AMI communications assets on in new housing estates that have underground power and decorative council-owned streetlighting that JEN cannot access to attach its necessary communications infrastructure.

Why communications poles are required

The RF mesh network elements (access points and relays) must be installed at elevated heights to ensure optimal performance and avoid damage and the risk of vandalism. Most of the growth areas where communication network elements will be installed are newly developed suburbs that have underground power lines; hence, the availability of suitable existing JEN infrastructure to mount the network elements is limited. For this reason, JEN must erect new poles to mount network elements where existing infrastructure (e.g. streetlight poles) is not suitable.

[30] JEN notes that the procedurally appropriate use of benchmarking under the AER's Expenditure Assessment Guideline is discussed above in section 2.1.2.2.

JEN's network footprint encompasses 3 of 4 Melbourne growth corridors.[31] While the draft decision cites benchmarking to other Victorian distributors' dedicated communication poles as a reason for disallowing our expenditure, JEN notes:

- Our relative exposure to growth corridors can be expected to affect our need for such poles, and
- It is unclear to JEN (and not demonstrated in the draft decision) that all distributors are adopting like reporting of their dedicated pole assets.

Housing estates in these three growth corridors involve underground power and decorative council-owned street lighting. JEN does not have an access right to mount its equipment on council assets. Further, even where such access could be negotiated, in JEN's experience, the decorative poles do not lend themselves to the affixing of pole-mounted equipment.

In the last 3 years, JEN installed 12 dedicated poles for this purpose.[32] These were in newly developed areas (greenfield sites) where there were no overhead powerline poles available to install communications equipment necessary for AMI.

2.9.2 Replacement capex

The AER's draft decision reduces end-of-life replacement rates as follows:

- micro access points (33.3% annually, reflecting an estimated 2 to 5-year life)
- access points and relays (5% annually)
- antennas (5% annually).

These draft decision 5% rates for access points, relays and antennas imply an asset design life of 20 years.

JEN's revised proposal does not accept the AER's reduced lifecycle replacement rates for several important reasons:

- The draft decision replacement rates do not reflect the physical asset lives of these assets
- The draft decision replacement rates ignore the original AIMRO installation profile and the resulting age of our fleet of connection assets
- The draft decision replacement rate and implied service life do not account for relay technology obsolescence driven by updates to cyber security standards changes and the need to carry six times the amount of data introduced by the 5-minute settlement rule change requirements.

Lifecyle replacements must align with asset lives

Firstly, JEN's communications equipment has a standard life of 7 years as reflected in our Communications Asset Class Strategy[33] approved by the AER in its draft decision metering roll forward model.

For access points, relays and antennas, the 20-year asset life inherently presumed in the AER's draft decision adjustments cannot be considered a prudent replacement profile for an asset of 7-year design life.

31 See North Growth Corridor Plan, West Growth Corridor Plan, and Sunbury Growth Corridor Plan.

32 Installed on 15/07/2022, 22/09/2023, 25/09/2023, 11/10/2023, 11/10/2023, 26/10/2023, 26/10/2023, 27/10/2023, 2/06/2025, 3/06/2025, 5/06/2025, 6/06/2025.

33 JEN-RIN-Support- Electricity Measurement Communications Asset Class Strategy-20250131.

Technological and Security Advancements in Relays

There are many technological and security enhancements in the latest generation of relays compared to the current relays deployed in the field, as outlined in Table 2-4.

Table 2–44: Advancement in security of current versus first-generation replays

	Gen 1.5 Relay	Gen 5 Relay
Network Interface Card (NIC)	[redacted]	
Hardware Architecture	[redacted]	[redacted]
Data Rate		
Latency		
Security		
Memory		

The increased data rate and memory, with lower latency in the latest generation relays will be required to handle high data traffic due to the increase in 5-minute interval meters across the network.

[redacted]

2.9.2.1 Relays

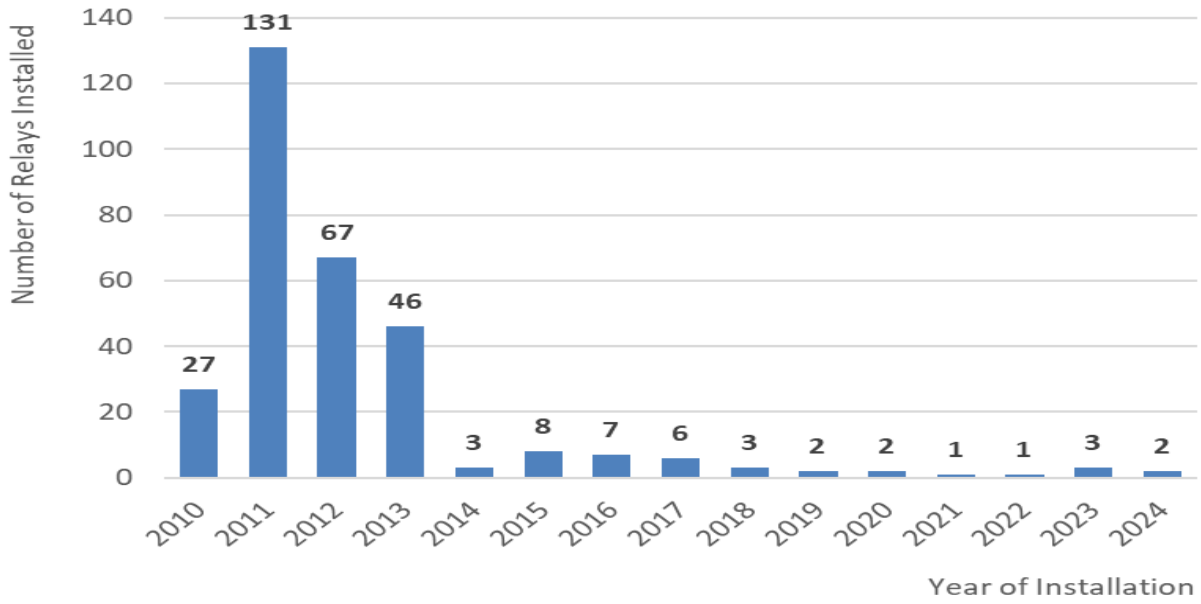
JEN's initial proposal had already sought to extend the service life beyond 7 years

Through discussions with OEMs and field testing, JEN has already extended the service life of most of our installed relay fleet to 15 years, which is double their standard life, as discussed further below.

Lifecyle replacements must reflect the year of installation

The majority of the relays deployed in the JEN network are currently 13-15 years old. This reflects the mass deployment of these assets during the early stages of the mandated AIMRO program – see Figure 2–6. These early relays are considered high-risk due to their age and require replacement in the next period. [redacted]

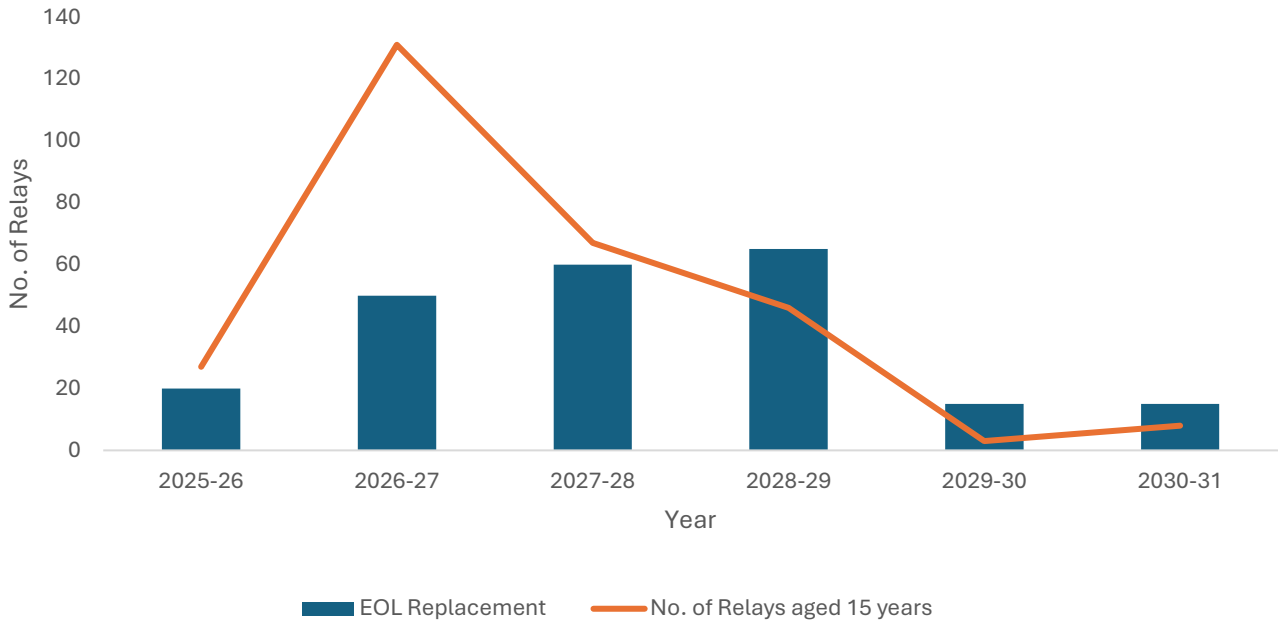
Figure 2–6: Volumes of relays by year of installation



Source JEN – RIN-Support-Electricity Measurement Communications Asset Class Strategy - 20250131

As with our revised profile for our first-generation AMI meter replacement program, JEN has worked to prudently smooth the replacements of original AIMRO relays to improve the future asset management cycles for these assets. The proposed end-of-life replacement volumes per year are provided in Figure 2–7, which shows that JEN will efficiently manage the risk of relays that exceed 15 years in service.

Figure 2–7: End-of-Life Relay Replacement Plan



Source: JEN – RP-Att 10-03M ACS Metering expenditure model - 20251201

2.9.2.2 Access points

The AMI meter replacement program will significantly increase the meter data traffic and storage requirements for JEN IT/OT compared to current levels. This is because JEN's first-generation AMI meter population is still on 30-minute interval data, while any new meter installed will deliver 5-minute interval data.

The forecasted access points numbers must be adequate to cater for the additional expected 5-minute interval data traffic. A total of 430 access points have been approved by AER in the draft decision which JEN considers is adequate for these higher data volumes. JEN has used this number in its revised forecasts. JEN notes however, that additional meter data storage is required to service the growing 5-minute data traffic as discussed in section 2.10 below.

2.10 Information technology capex

2.10.1 Lifecycle upgrades

JEN accepts the AER's decision to remove the SCS allocation expenditure for IT capex for lifecycle upgrades. JEN notes that its initial proposal had done this in the modelled costs by adjusting the model inputs down by the value of the SCS allocation. JEN has therefore adopted the draft decision forecast for lifecycle upgrades of management systems as set out in the AER's metering expenditure draft decision model.

2.10.2 Capacity enhancements to support replacement program

The AER's draft decision accepted JEN's proposed capex related to IT systems capacity enhancement for meter replacements. Our revised proposal retains this forecast.

2.10.3 Meter replacement and inspection program

The AER's draft decision did not accept JEN's proposed expenditure for the meter replacement and inspection program. Instead, it was considered that JEN had not sufficiently justified how this expenditure is not already captured in the proposed expenditure noted above for capacity enhancements to support the replacement program.

JEN's revised forecast includes updated replacement program costs totalling $17.42 million ($ June 2026) over 5 years, as these are labour-related and differ from the IT systems enhancements in the above capex category.

These costs comprise a program of 12 FTE performing the replacement program delivery roles discussed in Appendix A.

2.10.4 Access points and relays

The AER's draft decision did not accept JEN's proposed IT capex expenditure for access points and relays, citing that these had not been adequately distinguished from the communications capex category. JEN accepts that the communications capex category forecast is the appropriate place to forecast these assets.

2.10.5 Other IT categories

The following explains the additional IT capex costs that JEN has included in its revised forecast.

Network design and assurance studies

As noted above, most of our AMI meter fleet is currently configured for 30-minute interval data as these meters were installed prior to the introduction of 5-minute settlements. As JEN replaces these first-generation AMI meters there will be a significant increase in the 5-minute interval data traffic through our mesh network and IT systems.

JEN has forecast [redacted] for network data traffic analysis and optimisation to be carried out by our vendor (Itron), which will be required to ensure the data delivery from meters into our backend systems continues to meet the required timeframes for market delivery. Network optimisation was last done in May 2024, and the quote from Itron is attached [redacted] at the time). The [redacted] estimate is to account for any increases in vendors' handling charges due to the increased data volume, CPI adjustments, and JEN's internal costs to support this activity.

Incremental data storage

To support higher volumes of 5-minute read-interval meters, JEN has updated its forecast to include costs for additional backend storage. The affected systems include Itron UIQ/SIQ, IEE/MTS, and HANA. These total $257,500 ($ June 2026)

IT flexible trading arrangement

JEN's updated project costs for IT include additional digital costs related to the Flexible Trading Arrangement rule change. These total $29,000 ($ June 2026) for 2026-27, with $481,000 forecasted to be incurred in the last year of the current regulatory period.

3. Operating expenditure

Our revised proposal is for a total operating expenditure forecast for AMI metering services of $64.6 million ($June 2026) over the 2026–31 period. This is a decrease of $12.58 million ($ June 2026) or 16% below our initial proposal and is $8.5 million ($ June 2026) or 15% above the AER's draft decision.

Table 3–1 summarises our revised forecast operating expenditure for smart metering services over the next regulatory period. The calculations of these costs are detailed in the metering capital and operating expenditure model, Attachment 10-03M, and explained below.

Table 3–1: Revised forecast operating expenditure for metering services ($ June 2026, millions)

	FY27	FY28	FY29	FY30	FY31	Total
Initial proposal						
Base year total operating expenditure (excluding debt raising costs)	9.6	9.6	9.6	9.6	9.6	47.9
Price growth	0.1	0.2	0.2	0.3	0.3	1.2
Output growth	0.3	0.5	0.7	0.9	1.0	3.4
Step changes	4.0	4.1	5.7	5.9	4.9	24.5
Debt raising costs	0.0	0.0	0.0	0.0	0.0	0.2
Operating expenditure	**14.0**	**14.4**	**16.3**	**16.6**	**15.9**	**77.2**
Draft decision						
Base year total operating expenditure (excluding debt raising costs)	9.5	9.5	9.5	9.5	9.5	47.6
Price growth	0.2	0.3	0.4	0.5	0.6	2.1
Output growth	0.3	0.5	0.7	0.9	1.1	3.4
Step changes	0.1	0.4	0.7	0.8	0.9	2.9
Debt raising costs	0.0	0.0	0.0	0.0	0.1	0.2
Operating expenditure	**10.2**	**10.7**	**11.3**	**11.7**	**12.2**	**56.2**
Revised proposal						
Base year total operating expenditure (excluding debt raising costs)	10.8	10.8	10.8	10.8	10.8	54.0
Price growth	0.2	0.3	0.5	0.6	0.7	2.3
Output growth	0.3	0.4	0.6	0.7	0.9	2.9
Step changes	0.7	0.9	1.1	1.2	1.3	5.1
Debt raising costs	0.0	0.0	0.1	0.1	0.1	0.3
Operating expenditure	**12.0**	**12.5**	**12.9**	**13.4**	**13.8**	**64.6**

Source: *JEN – RP-Att 10-03M ACS Metering expenditure model - 20251201*

3.1 Base opex

The AER's draft decision accepted JEN's proposed base year of 2024-25 and stated that it expected us to update the base year opex for 2024–25 actuals in our revised proposal.

JEN welcomes the AER's acceptance of our efficient base year opex costs and has updated its revised forecast for 2024–25 actuals. Table 3–1 shows our revised forecast operating expenditure for the base year opex.

JEN's actual base year opex for 2024-25 is $10.8 million ($June 2026), which is 7% lower than our 2023-24 opex of $11.1 million ($June 2026). While marginally higher than our initial proposal estimates, it remains 12% below the AER's approved allowance for 2024-25. It reflects JEN's continued focus on achieving efficiencies and commitment to delivering services at lower cost where possible.

3.2 Rate of change (trend)

JEN has adopted the same customer growth forecasts and labour escalation forecasts for ACS AMI metering as it has for its SCS opex revised proposal. This is explained in Attachment 6-01.[34]

3.3 Step changes

3.3.1 Removed the rejected step change for meter inspection obligations

The AER's draft decision rejected JEN's proposed step change for meter inspection obligations, considering it inefficient and substituting increased replacements in the capital expenditure forecast instead.

As discussed in section 2.1, JEN has accepted the AER's logic for rejecting this step change and adjusted its forecast volume of first-generation AMI meter replacement to fully avoid any age-based physical inspections of the qualifying meter fleet during the next regulatory period. The volume of meter replacement provided for in the AER's draft decision was insufficient to fully avoid JEN's physical inspection obligations.

3.3.2 Updated the approved step change for meter disposals to reflect the updated replacement volumes

The AER's draft decision accepted JEN's proposed step change for meter disposals as it considered that an increase in costs related to meter disposals is justified, considering the increased volume of replacements required as meters fail or reach the end-of-life.

As explained in *Appendix A2 of Attachment 10-01 Advanced Metering Infrastructure* and JEN - IR022 - Initial Proposal Q & A Response - Metering replacement - 20250602 – Public, JEN's metering and communications asset disposal process relies on specialist accredited recycling agents.

This ensures JEN can:

- Meet our obligations under the Essential Services Commission's Electricity Distribution Code Of Practice (**EDCoP**) (2023) and the Environment Protection Act 2017/2021 (the Act) provisions for the Management of Priority Industrial Waste and General Environmental Duty
- Administer monitoring, auditing, and reporting processes to ensure the traceability and compliance are demonstrable to the relevant enforcing agency (i.e., the ESC or EPA).

JEN has updated its approved step change for the updated volume of meters requiring disposal. JEN's revised meter disposal step change retains our initial proposal approach calculated by multiplying the sum of meter abolishments and lifecycle replacement volumes with the disposal unit rate. Unit rates are sourced from JEN's contract with its metering manufacturer. Our revised forecast step change is set out in Table 3–2.

Table 3–2: Meter disposal step change ($ June 2026, millions)

	FY27	FY28	FY29	FY30	FY31	Total
Meter disposals	0.68	0.89	1.03	1.14	1.28	5.02

Source: *JEN – RP-Att 10-03M ACS Metering expenditure model – 20251201*

[34] JEN - RP - Att 06-01 Operating expenditure - 20251201

As outlined in response to IR022 Q11.b, JEN does not expect the unit rates in its meter disposal contract with its metering manufacturer to vary with the scale of the meters being disposed of. However, being a unit price agreement, the total disposal costs will necessarily increase with the higher disposal volumes.

3.3.3 Retained the approved step change for enhancements to the capacity of IT systems

The AER's draft decision accepted JEN's proposed step change for enhancements to the capacity of IT systems. The AER considered some operating costs related to enhancements to the capacity of IT systems to be in line with its considerations of IT capex.

Our revised proposal retains this step change at the approved amount of $0.1 ($ June 2026, millions).

4. Other matters

4.1 Expenditure allocated to SCS

The AER's draft decision accepted JEN's proposal to continue not to allocate any metering expenditure to SCS. Our revised proposal retains the approach approved in the draft decision.

4.2 Metering exit fees

The AER's draft decision accepted JEN's proposed approach to setting these price-capped fees. Our revised proposal retains the approach approved in the draft decision.

4.3 Cost pass through mechanism

The AER's draft decision acknowledged the higher likelihood of regulatory changes affecting ACS metering services in the next regulatory period and sought to clarify future operation of the existing pass through mechanism for ACS metering services. For example, if the new AEMO Metrology Procedure Part C[35] were to trigger a need for JEN to seek approval or a new MAMS that varied JEN's meter inspection obligations, or if the Victorian Government were to vary the AMI meter functional specification.

JEN welcomes the intent to bring clarity here and provides the following feedback on the draft proposal:

- *Threshold* | We support applying a 1% materiality threshold to ACS metering services revenues. This is consistent with the role and intent for allowing pass throughs on direct control services and aligns to the precedent established for SCS direct control services.
- *Pass through timing* | We support the pragmatic approach of including ACS metering service pass throughs as part of the annual pricing process in recognition of the savings in administrative effort from applying pass throughs through the existing annual process. This is consistent with other small scale pass throughs applied in Victoria like those 4 licence fee recoveries.
- *Information provision* | We consider the information provision guidance provided in the draft decision to be a helpful elaboration on the AER's expectations. While we will always engage our stakeholders on matters affecting the pricing of our services and provide evidence thereof to the AER, we note that their support for or opposition to the cost implications of changed regulatory obligations should not be a binding informant of the AER's decision making on pass through applications.

[35] AEMO, Metrology Procedure Part C Testing and Inspection Guidelines for metering installations in the NEM version 1.0, 30 June 2025.

Appendix A
Replacement program delivery resourcing

Jemena
bringing energy to life

A1. About this appendix

A1.1 Purpose

This appendix explains how JEN has updated its AMI meter replacement program resourcing to reflect:

- The changed scope and scale on JEN's AMI meter replacement and formerly inspection program
- Maturing of JEN's program planning.

A1.1.1 Why are these resourcing updates required?

JEN's initial proposal explained that further program planning would occur during 2025

Our initial proposal proposed a co-optimised program of mandatory age-based physical inspections of first-generation AMI meters complemented by a proactive replacement of 82,133 of these aged meters.

In Appendix C to the business case underpinning that proposal JEN outlined its approach and planning process it had and would undertake to ensure we can deliver our planned AMI metering installations inspections and meter replacement program.[36] It stated:

> *Note: We anticipate that the large-scale program (impacting 78% of Jemena's small customers over the next regulatory period) will require additional program resources for customer engagement and smooth delivery at a large scale. Separate plans for these activities will be developed in consultation with DEECA, the ESC and our DNSP peers, as this business case currently excludes these costs. The exclusion of these costs, however, would not affect the recommendation (and option analysis) of this business case since these activities are equally applicable under all three options outlined in this business case.*[37]

The program scope has changed to now be a replacement program only

As we outline in section 2.1, in response to the AER's draft decision, we are now proposing a replacement-only program that has been set at a sufficient scale to avoid any physical inspections and prudently smooth the overall program over two regulatory control periods. This requirement replacement of 166,354 meters first-generation AMI meters.

Our program planning has matured

JEN has advanced our replacement program planning and, more specifically, identified and costed the scale and scope of resources needed for customer engagement and program coordination.

Our meter replacement program management is now estimated to require a total of twelve FTEs, which is nine more than our initial proposal. The remainder of this appendix explains these required resources.

These resources have been included in JEN's IT capex forecast under the capex category 'Meter replacement and inspection program' discussed in section 2.10.3.

A1.2 Supporting materials

This appendix should be read in conjunction with the following supporting materials:

- Customer Management Plan
- Quality Management Plan

[36] JEN – RIN – 4.6.1 – Inspection of Metering Installations – Business Case – 20250131 – Public.

[37] JEN – RIN – 4.6.1 – Inspection of Metering Installations – Business Case – 20250131 – Public, p.C-1.

- Environmental Management Plan
- Operational Management Plan or 'standard operating procedures'
- Business Continuity Plan
- Sections 1 and 2 of 2026-31 Electricity Distribution Price Review Regulatory Proposal Attachment 08-03 Managing Risk and Uncertainty[38]

A2. Our replacement program delivery approach

A2.1 Our initial proposal

JEN's initial approach to inspection and replacement program management was set out in Appendix C to the business case underpinning that proposal.[39]

A2.2 Our revised proposal

As foreshadowed, we have progressed our planning and have new identified the relevant headcount for a range of activities that had been foreshadowed but not costed in that original program delivery plan.

A2.3 Reconciling our updated program delivery resources

Table A-1 sets out the roles previously foreshadowed and whether they had been costed in the initial proposal. It then provides a reconciliation to the completed program delivery resourcing now included in JEN's revised proposal.

Table A - 1 Headcount reconciliation

Roles	Initial proposal	Roles	Revised proposal
Customer Communications & Management	The inspections and replacement program will require site visits and brief power interruptions, supported by a clear communications plan, dedicated call line, and extra resources across customer-facing and operational teams. 1 FTE	Customer Communications & Management	The higher proactive replacement volume increases the risk of aborted visits and follow-up communications. At the same time, new AEMO and Vic Gov EDCoP obligations add further customer contact and validation requirements to ensure compliance. 2FTE, see section A2.4.1
Data & Revenue Management	The large-scale inspection and replacement program will increase data and billing transactions, requiring extra resources and system upgrades for compliance and revenue management.	Meter Data & Revenue Management	The proactive replacement program will significantly increase data and compliance workloads, requiring extra resources for meter data validation and revenue assurance. 2 FTE, see section A2.4.4.

38 https://www.aer.gov.au/system/files/2025-02/JEN%20-%20Att%2008-03%20Managing%20Risk%20and%20uncertainty%20-%2020250131.pdf

39 JEN – RIN – 4.6.1 – Inspection of Metering Installations – Business Case – 20250131 – Public.

Roles	Initial proposal	Roles	Revised proposal
	No FTE costed, but role requirement noted		
Asset Management	The large-scale program will increase customer queries on technical, safety, and compliance matters, requiring additional asset management resources. 1 FTE	Asset Management & Program Management	The proactive replacement program increases governance complexity and customer interaction, requiring stronger coordination, compliance monitoring, and assurance under new AEMO and AER obligations. 5 FTE, see section A2.4.3
Delivery Program Management	A structured governance framework with dedicated committees will oversee the program, supported by detailed management plans covering customer, financial, quality, environmental, logistical, operational, continuity, and risk aspects. 1 FTE		
Procurement and Logistics Management	The large-scale program will require contract revisions, new tenders, and additional resources for procurement and logistics management. No FTE costed, but role requirement noted	Procurement and Logistics Management	The AER-directed proactive replacement program will require contract revisions, new tenders, and additional procurement and logistics resources to manage increased meter volumes. 1 FTE, see section A2.4.4
AMI Communications Field services	The program will leverage existing AMI communications field services, requiring additional resources for field technicians, compliance, and backend system support. No FTE costed, but role requirement noted	AMI Communications Field services	The proactive replacement program increases AMI field service complexity, requiring full communication verification and fault resolution before commissioning, supported by enhanced scheduling, customer coordination, and compliance processes. 1 FTE, see section A2.4.5
Fault Dispatch Management	The large-scale program will increase fault and maintenance activities, requiring additional fault technicians to manage safety, compliance, and revenue-related issues.		

Roles	Initial proposal	Roles	Revised proposal
	No FTE costed, but role requirement noted		
IT Support Services & Management	The program will require significant IT system upgrades and capacity enhancements, necessitating additional technical, security, and infrastructure resources to support increased data and transaction volumes. No FTE costed, but role requirement noted	IT Support Services & Management	The proactive replacement program increases system complexity and transaction volumes, requiring IT enhancements and vendor collaboration to ensure compliant, scalable, and automated meter commissioning and validation processes. 1 FTE, see section A2.4.6

A2.4 Program role descriptions

A2.4.1 Customer Communications & Management – 2 FTE

The scale of the proposed replacement program, impacting approximately 43%[40] of small customers, introduces a substantial risk of aborted or delayed visits due to customer refusal, restricted site access, or other on-site complications. These scenarios necessitate follow-up communications, including re-notifications and confirmation calls, which significantly increase the workload on customer-facing teams.

In line with advice received from DEECA[41], JEN is implementing measures to minimise customer impacts during commissioning and verification by improving scheduling coordination, targeted communication, and efficient fault rectification.

Program FTEs are required to:

- Manage pre- and post-outage customer notifications, ensuring compliance with Jemena's obligations under the Metrology Procedures for meter installation and data validation.
- Maintain a dedicated program communications line within the call centre to manage high volumes of customer enquiries related to planned outages, replacements, and installation outcomes.
- Coordinate re-notifications and reschedules for customers impacted by aborted visits, access challenges, or multi-visit scenarios.
- Undertake follow-up confirmation calls to validate supply restoration and completion of work, consistent with new AEMO data validation and assurance obligations.
- Manage claims, complaints, and escalations arising from aborted or delayed visits, ensuring accurate market records and customer experience outcomes.
- Support call centre teams across multiple functions (Program Communications, Network Connections, Service Desk, Faults & Emergency, and Claims Management) to handle higher enquiry volumes efficiently.

This approach ensures Jemena meets the expanded requirements introduced under the Metrology Procedures while maintaining clear, proactive, and compliant customer engagement throughout the program lifecycle.

40 Calculated as 166,000 over an AMI metering base of 386,000.

41 [Attachment 10-12] and DNSP verbal briefings from DEECA associated with the program.

Costing approach

JEN has costed these resources using the engineer labour type. The labour unit rate used is sourced from JEN's revised proposal labour rate model[42] that is based on the AER's approved draft decision (and backing out 40 per cent corporate overheads). See section A2.4.7 for discussion of this.

A2.4.2 Meter Data & Revenue Management – 2 FTE

The proposed large-scale proactive replacement program will generate a significant increase in the number and complexity of meter data updates and transactions across Jemena's internal systems and AEMO market systems. Under the AEMO Metrology Procedures, Jemena must ensure that every newly installed or replaced meter is correctly commissioned, validated, and registered in market systems, and that interval data is verified for completeness and accuracy before billing.

These expanded obligations introduce additional compliance and operational workload for both meter data management and revenue assurance functions. Jemena's network connections compliance and revenue management teams will require additional resources to manage data validation, reconciliation, and exception handling processes across the replacement program.

Program FTEs are required to:

- Ensure all commissioning data, configuration details, and interval energy data from new and replacement meters are captured, validated, and reconciled against both AEMO and internal systems in accordance with Metrology Procedures.
- Monitor and confirm the integrity and reliability of advanced smart meter data streams, including expanded data sets such as voltage quality, power factor, phase angle, and communications performance metrics.
- Support enhanced billing and revenue management processes to ensure accuracy and compliance with new metrology and market data validation requirements.
- Undertake detailed investigation and resolution of anomalies, incomplete reads, or commissioning errors identified during initial data capture or ongoing validation cycles.
- Provide analytical oversight and performance reporting to ensure data quality, compliance traceability, and end-to-end revenue integrity across the proactive replacement program.

This additional resourcing ensures Jemena maintains full compliance with AEMO Metrology Procedures, supports the integrity of customer billing and market settlements, and delivers accurate, validated data from every new meter installation from the first day of operation.

Costing approach

JEN has costed these resources using the Engineer labour type. The labour unit rate used is sourced from JEN's revised proposal labour rate model[43] that is based on the AER's approved draft decision (and backing out 40 per cent corporate overheads). See section A2.4.7 for discussion of this.

A2.4.3 Asset Management & Program Management – 5 FTE

JEN's Asset Management team is responsible for the technical, financial, and program delivery oversight of the proactive replacement program. The introduction of the AEMO Metrology Procedures significantly increases the complexity of program governance, with new obligations for meter commissioning verification, data validation, and performance reporting.

42 *JEN - RP - Att 11-03M 2024-25 ACS Labour rate model - 20251201*

43 *JEN - RP - Att 11-03M 2024-25 ACS Labour rate model - 20251201*

In line with advice received from DEECA, the program has been structured to minimise customer impacts wherever possible through improved planning, communication, and scheduling practices. The large-scale proactive replacement program, as directed by the AER, will generate higher levels of customer interaction, technical coordination, and assurance activity. Repeated site visits, aborted jobs, and customer refusals amplify the need for robust scheduling, compliance monitoring, and coordination across field, systems, and customer teams.

Program FTEs are justified to:

- Oversee program governance and delivery assurance, ensuring all installations meet the commissioning and validation requirements under Metrology Procedures and VIC safety regulations.
- Manage operational scheduling, route optimisation, and escalation processes for delayed or failed site visits while maintaining program milestones.
- Coordinate between field services, IT systems, and customer-facing teams to minimise interruptions and ensure commissioning data and market transactions are processed accurately and on time.
- Ensure technical compliance, OH&S, and metering standards throughout repeated or aborted visits, ensuring consistent adherence to regulatory obligations.
- Support program teams in investigating and resolving site-specific or data-related issues, including remediation of installation defects or data inconsistencies and or unique installation challenges.
- Track asset performance and lifecycle outcomes, update technical records, and produce compliance and performance reporting to meet AER and AEMO audit requirements.
- Optimise field routes to reduce travel time and improve efficiency for repeat or follow-up visits.
- Conduct on-site commissioning tests and data verification, ensuring installations meet Procedures validation requirements before site closure.
- Support compliance audits and reporting, including the recording of commissioning outcomes, test results, and validation artefacts for AEMO and internal assurance reviews.
- Address on-site customer interactions and conflicts, ensuring customer safety and staff wellbeing during potentially sensitive or repeated engagements (including situations requiring police presence).
- Coordinate with program management and IT teams to promptly resolve field data exceptions and ensure validation of all commissioning data in accordance with AEMO Part C obligations.

This resourcing ensures Jemena maintains effective oversight of program delivery, price efficiency, compliance with all technical and data validation under Metrology Procedures and jurisdictional requirements, achieving the proactive replacement objectives established by the AER.

Costing approach

JEN has costed these resources using the Engineer labour type. The labour unit rate used is sourced from JEN's revised proposal labour rate model[44] that is based on the AER's approved draft decision (and backing out 40 per cent corporate overheads). See section A2.4.7 for discussion of this.

A2.4.4 Procurement and Logistics Management – 1 FTE

JEN currently has contracts in place for the BAU supply of meters and ancillary equipment required to provide metering services. As the program envisages replacing large quantities of meters and related ancillary equipment, these contracts would need to be revised and put out to tender again.

The following functions will likely require additional resourcing to support large metering replacement program:

[44] *JEN - RP - Att 11-03M 2024-25 ACS Labour rate model - 20251201*

Program FTE is required to:

- Tender preparation and assessments (technical and commercial views)
- Logistics management at the store and distribution

Costing approach

JEN has costed these resources using the Engineer labour type. The labour unit rate used is sourced from JEN's revised proposal labour rate model[45] that is based on the AER's approved draft decision (and backing out 40 per cent corporate overheads). See section A2.4.7 for discussion of this.

A2.4.5 AMI Communications Field Services – 1 FTE

JEN will utilise its existing AMI Communications Field Services team to deliver the communications commissioning, testing, and maintenance required under the proactive replacement program. Each new or replacement meter must be verified to ensure its communication channel is active, secure, and correctly transmitting data to the AMI head-end and market systems prior to commissioning completion.

These requirements substantially increase both the complexity and workload for AMI field resources, as technicians must now verify correct meter commissioning, confirm end-to-end data integrity, and rectify any failed communications before market registration can occur, in accordance with the new obligations introduced under the AEMO Metrology Procedures. This enhanced validation process also increases the need for accurate customer contact, confirmation of completed works, and post-installation assurance to ensure meters are communicating correctly and providing valid data into market systems and to support compliance.

Consultation with JEN's AMI service provider has taken place, and planning is underway to establish detailed operational processes, verification protocols, and escalation frameworks to meet the expanded obligations.

Program FTE are required to:

- Facilitate on-site communication, commissioning, and signal validation for every new meter, ensuring connectivity to the AMI mesh network.
- Support backend diagnostics and data validation for meters with incomplete or failed communications post-installation.
- Coordinate with ICT and Meter Data Management (**MDM**) teams to resolve communications-related validation exceptions and maintain full compliance with AEMO Procedures data integrity requirements.
- Maintain reporting and audit records to demonstrate compliance with VIC AMI minimum service specification.

This additional resourcing ensures Jemena maintains a reliable, compliant AMI communications infrastructure across all newly installed meters.

Costing approach

JEN has costed these resources using the Engineer labour type. The labour unit rate used is sourced from JEN's revised proposal labour rate model[46] that is based on the AER's approved draft decision (and backing out 40 per cent corporate overheads). See section A2.4.7 for discussion of this.

[45] *JEN - RP - Att 11-03M 2024-25 ACS Labour rate model - 20251201*

[46] *JEN - RP - Att 11-03M 2024-25 ACS Labour rate model - 20251201*

A2.4.6 IT Support Services & Management – 1 FTE

JEN will utilise its existing IT Support Services and Management team to perform the required system enhancements, integration updates, and performance improvements needed to support the large volume of meter commissioning, validation, and market data transactions associated with the proactive replacement program.

Under the AEMO Metrology Procedures, JEN must ensure that all new or replacement meter installations are accurately registered, commissioned, and validated in AEMO's market systems, with complete interval data available for billing and settlements. These requirements have significantly increased the complexity and performance expectations placed on JEN's enterprise systems — including SAP, MSI, Asset Management (**AM**), and MDM platforms.

Discussions and planning are underway with system vendors and application providers to ensure scalability, interoperability, and automation across meter commissioning, validation, and transaction workflows.

Additional FTE are justified to:

- System and Security architecture oversight to support additional resources and system impacts.
- Support Field mobility solutions and processes.
- Support testing and integration of new meters.
- Support high-volume meter commissioning, validation, and transaction processing.
- Monitor and resolve data flow and integration exceptions between field, MDM, and AEMO systems to ensure commissioning and validation records are complete and traceable.

This additional resourcing ensures Jemena's IT systems remain resilient, secure, and compliant with all technical, data validation, and reporting requirements under the AEMO Metrology Procedures, supporting efficient, accurate, and transparent delivery of the proactive replacement program.

Costing approach

JEN has costed these resources using the Engineer labour type. The labour unit rate used is sourced from JEN's revised proposal labour rate model[47] that is based on the AER's approved draft decision (and backing out 40 per cent corporate overheads). See section A2.4.7 for discussion of this.

A2.4.7 Our revised labour rate for Engineer/Project Manager labour type

In our revised proposal, JEN accepts the AER's draft decision on labour rates for the following categories:

- Administrative Officer (business hours)
- Engineer (business hours)
- Senior Engineer (business hours).

Section 2.4.3 explains our revised proposal approach for the Field Worker and Technical Specialist labour categories.

Table A – 3 provides a summary of our revised proposal labour rates and how these compare to the AER's draft decision.

47 *JEN - RP - Att 11-03M 2024-25 ACS Labour rate model - 20251201*

Table A - 3 AER maximum benchmark and Jemena's proposed hourly labour rates for 2026–27 (business hours, including on-costs and overheads ($2026–27)

Jemena labour category	AER Benchmark category	Jemena's initial proposal labour rate	AER maximum labour rate	AER draft decision	Jemena's revised proposal labour rate[48]
Administrative Officer	Admin	121.40	120.34	120.34	120.41
Field Worker	Field Worker	210.89	222.05	210.89	224.22
Technical Specialist	Technical Specialist	225.06	236.86	225.06	221.59
Engineer	Engineer	271.83	253.35	253.35	253.10
Senior Engineer	Senior Engineer	326.19	304.02	304.02	303.72

[48] Difference due to updated labour - real wage price growth escalation percentages from the AER's draft decision.