Final Decision

Essential Energy Electricity Distribution Determination 2024 to 2029

(1 July 2024 to 30 June 2029)

Attachment 1
Annual revenue requirement

April 2024

AUSTRALIAN ENERGY REGULATOR

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1	30 April 2024	15

List of attachments

This attachment forms part of the AER's final decision on the distribution determination that will apply to Essential Energy for the 2024–29 period. It should be read with all other parts of the final decision.

As a number of issues were settled at the draft decision stage or required only minor updates, we have not prepared all attachments. The final decision attachments have been numbered consistently with the equivalent attachments to our draft decision. In these circumstances, our draft decision reasons form part of this final decision.

The final decision includes the following documents:

Overview

Attachment 1 – Annual revenue requirement

Attachment 2 – Regulatory asset base

Attachment 4 – Regulatory depreciation

Attachment 7 – Corporate income tax

Attachment 13 – Classification of services

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Attachment 19 – Tariff structure statement

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Attachment A – Contingent projects

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1 Annual revenue requirement

This attachment sets out our final decision on Essential Energy's (Essential) annual revenue requirement (ARR) and expected revenues for the provision of standard control services (SCS) over the 2024–29 regulatory control period (period). Specifically, it sets out our final decision on:[1]

- the ARRs (unsmoothed), which are the sum of the annual building block costs
- the total revenue requirement, which is the sum of the ARRs
- the annual expected revenues (smoothed)
- the X factors.

We determine Essential's ARRs using a building block approach. We determine the X factors by smoothing the ARRs over the period. The X factor is used in the CPI–X methodology to determine the annual expected revenue (smoothed).

1.1 Final decision

We determine a total ARR for Essential of $6,313.6 million ($ nominal, unsmoothed) for the 2024–29 period. This is an increase of $105.5 million ($ nominal) or 1.7% to Essential's revised proposal. This is largely driven by our final decision approving a higher regulatory depreciation building block, which is $73.7 million higher than Essential's revised proposal. The regulatory depreciation amount is the net total of the straight-line depreciation, less the inflation indexation of the regulatory asset base (RAB). Our final decision straight-line depreciation and indexation component are both lower than the revised proposal by $9.9 million and $83.5 million respectively. The lower indexation has more than offset the reduction in straight-line depreciation due to a lower expected inflation rate applied in our final decision compared to the revised proposal. This results in a net impact of a higher regulatory depreciation amount compared to the revised proposal. See Attachment 4 for further details.

We determine the annual expected revenue (smoothed) and X factor for each regulatory year of the 2024–29 period by smoothing the ARRs. Our final decision is to approve total expected revenues of $6,309.9 million ($ nominal, smoothed) for Essential for the 2024–29 period. Our approved X factors are –1.00% for 2025–26, followed by –2.85% per annum for the remaining years of 2026–27 to 2028–29.[2]

Table 1.1 sets out our final decision on the building block costs, the ARR, annual expected revenue and X factors for Essential over the 2024–29 period.

1 NER, cll. 6.3.2(a)(1), 6.5.9(a) and 6.5.9(b)(1)–(2).

2 Essential is not required to apply an X factor for 2024–25 because we set the 2024–25 expected revenue in this decision.

Table 1.1 AER's final decision on Essential's ARR, annual expected revenue and X factor for the 2024–29 period ($ million, nominal)

	2024–25	2025–26	2026–27	2027–28	2028–29	Total
Return on capital	611.5	643.5	678.0	713.4	752.0	3,398.4
Regulatory depreciation[a]	105.4	127.0	148.7	142.7	152.0	675.7
Operating expenditure[b]	467.4	485.3	502.5	521.8	539.3	2,516.3
Revenue adjustments[c]	–69.6	–69.9	–55.0	–85.5	–47.2	–327.2
Cost of corporate income tax	2.7	6.2	11.5	14.6	15.5	50.5
Annual revenue requirement (unsmoothed)	1,117.5	1,192.0	1,285.7	1,306.9	1,411.5	6,313.6
Annual expected revenue (smoothed)	**1,145.6**	**1,187.8**	**1,254.2**	**1,324.2**	**1,398.1**	**6,309.9**
X factor[d]	n/a[e]	–1.00%	–2.85%	–2.85%	–2.85%	n/a

Source: AER analysis.

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

(b) Includes debt raising costs.

(c) Includes revenue adjustments from the efficiency benefit sharing scheme (EBSS), the capital expenditure sharing scheme (CESS), and the demand management innovation allowance mechanism (DMIAM).

(d) The X factors will be revised to reflect the annual return on debt update. Under the CPI–X framework, the X factor measures the real rate of change in annual expected revenue from one year to the next. A negative X factor represents a real increase in revenue. Conversely, a positive X factor represents a real decrease in revenue.

(e) Essential is not required to apply an X factor for 2024–25 because we set the 2024–25 expected revenue in this decision. The expected revenue for 2024–25 is around 1.0% higher than the approved total annual revenue for 2023–24 in real terms, or 3.7% higher in nominal terms.

1.2 Essential Energy's revised proposal

Essential's revised proposal included total expected revenues (smoothed) of $6,193.1 million ($ nominal) for the 2024–29 period.

Table 1.2 sets out Essential's revised proposed building block costs, the ARR, annual expected revenue and X factor for each year of the 2024–29 period.

Table 1.2 Essential's revised proposed ARR, annual expected revenue and X factor for the 2024–29 period ($ million, nominal)

	2024–25	2025–26	2026–27	2027–28	2028–29	Total
Return on capital	602.7	636.1	672.3	709.5	750.2	3,370.9
Regulatory depreciation[a]	91.5	112.7	134.0	127.5	136.4	602.1
Operating expenditure[b]	468.0	486.6	504.5	524.7	543.0	2,526.9
Revenue adjustments[c]	–69.0	–69.2	–54.2	–85.0	–46.4	–323.8
Cost of corporate income tax	0.0	1.7	7.8	10.8	11.7	32.1
Annual revenue requirement (unsmoothed)	1,093.2	1,168.0	1,264.5	1,287.5	1,394.9	6,208.1
Annual expected revenue (smoothed)	**1,147.2**	**1,191.2**	**1,236.9**	**1,284.3**	**1,333.5**	**6,193.1**
X factor	n/a[d]	–1.01%	–1.01%	–1.01%	–1.01%	n/a

Source: Essential Energy, *Revised Proposal – 3.04 Post Tax Revenue Model,* November 2023.
(a) Regulatory depreciation is straight-line depreciation net of the inflation indexation on the opening RAB.
(b) Includes debt raising costs.
(c) Includes revenue adjustments from EBSS, CESS and DMIAM.
(d) Essential is not required to apply an X factor for 2024–25 because we set the 2024–25 expected revenue in this decision.

1.3 Assessment approach

We did not change the building block approach we use to determine the expected revenue from our draft decision. Attachment 1 (section 1.3) of our draft decision details that approach.[3]

1.4 Reasons for final decision

For this final decision, we determine a total ARR of $6,313.6 million ($ nominal, unsmoothed) for Essential for the 2024–29 period. This is an increase of $105.5 million ($ nominal) or 1.7% to Essential's revised proposed total ARR of $6,208.1 million ($ nominal) for this period. This reflects the impact of our final decision on the various building block costs.

Figure 1.1 shows the building block components in this final determination that comprise the ARR for Essential, and the corresponding components from its revised proposal and our draft decision.

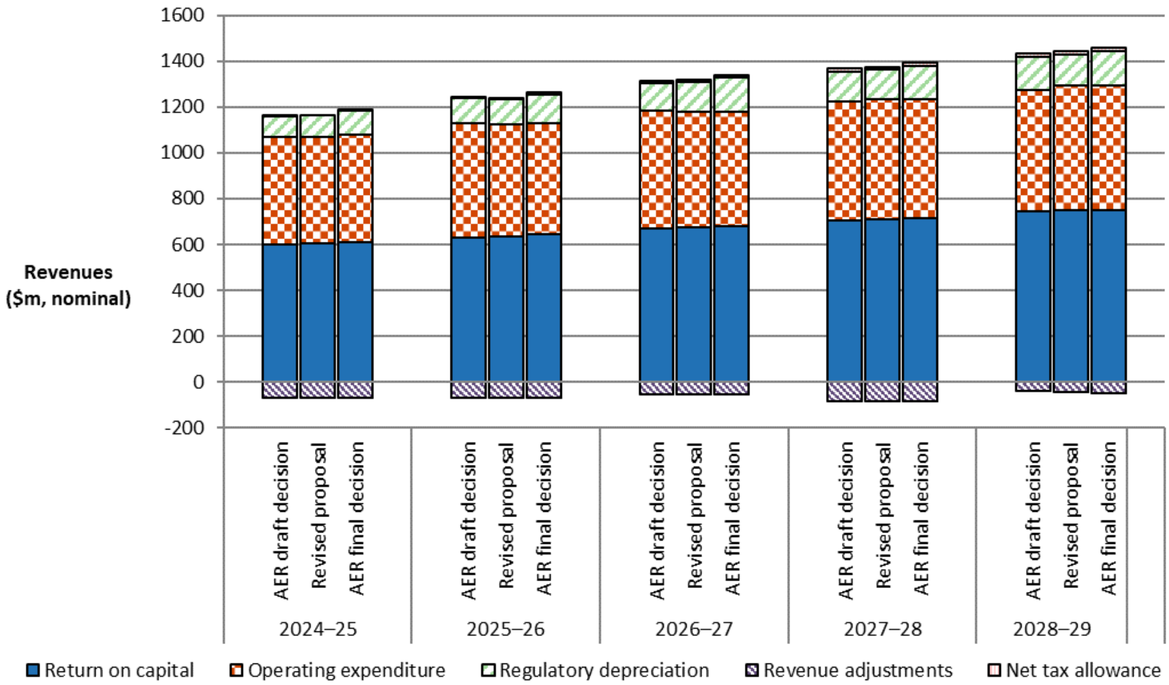
The changes we made to Essential's revised proposal are (in nominal terms):

- an increase in the return on capital of $27.5 million (0.8%) (Attachment 2, and sections 2.2 and 2.4 of the Overview), driven by a higher average rate of return over the 2024–29 period

3 AER, *Draft decision, Attachment 01 – Annual revenue requirement – Essential Energy – 2024 Distribution revenue proposal*, September 2023, pp. 3–6.

- an increase in the regulatory depreciation of $73.7 million (12.2%) (Attachment 4), driven primarily by the lower expected inflation rate in our final decision than at the time of Essential's revised proposal, which reduces the indexation adjustment to regulatory depreciation
- a reduction in the operating expenditure (opex) forecast of $10.6 million (0.4%). This is due to the lower expected inflation rate applied in this final decision compared to Essential's revised proposal. Our final decision has accepted Essential's revised proposed total opex in real 2023–24 dollar terms (section 2.5 of the Overview)
- a reduction in the revenue adjustments of $3.5 million (1.1%) (section 2.7 of the Overview), driven primarily by a higher EBSS penalty to reflect updates for a lower expected inflation applied in our final decision
- an increase in the cost of corporate income tax of $18.4 million (57.2%) (Attachment 7), driven by a higher regulatory depreciation amount and a higher return on equity amount.

Figure 1.1 AER's draft and final decisions, and Essential's revised proposed ARR ($ million, nominal)



Source: AER analysis; Essential Energy, *Revised Proposal – 3.04 Post Tax Revenue Model,* November 2023.
Note: Revenue adjustments include EBSS, CESS, and DMIAM amounts. Opex includes debt raising costs.

1.4.1 X factor and annual expected revenue

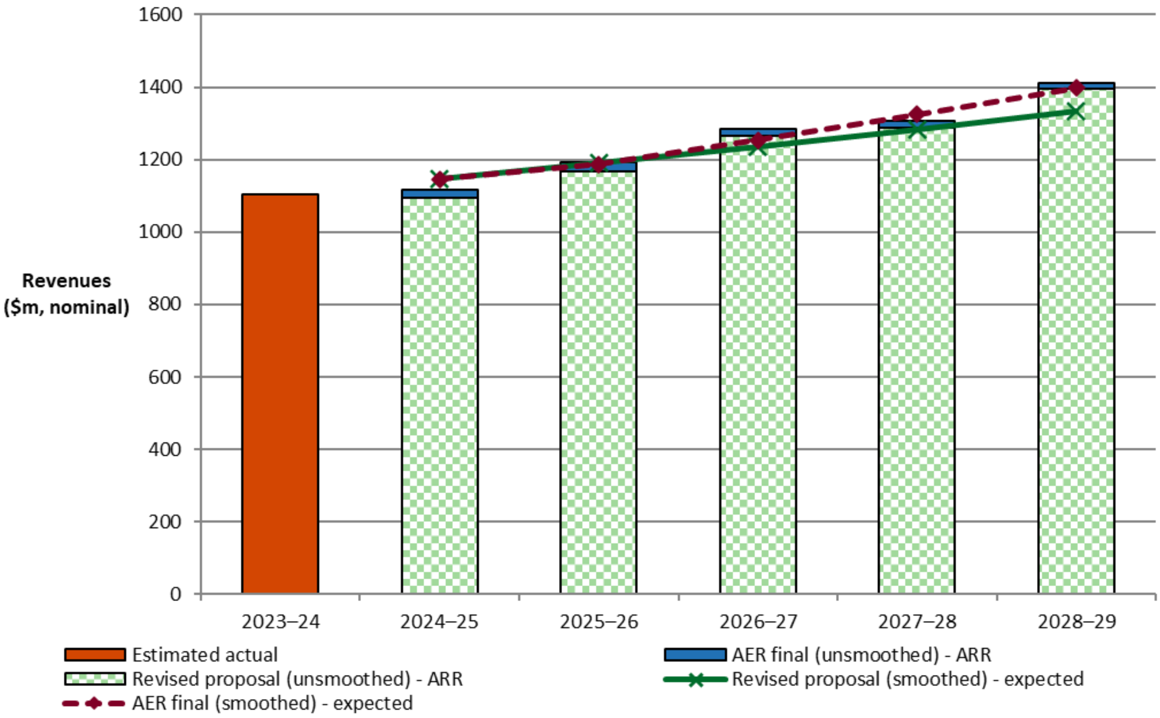
For this final decision, we determine an X factor for Essential of –1.00% for 2025–26 followed by an X factor of -2.85% per annum over the remaining years of 2026–27 to 2028–29.[4] The net present value (NPV) of the ARRs is $5,284.3 million ($2023–24) as at 1 July 2024. Based on this NPV and applying the CPI–X method, we determine that the annual expected revenue (smoothed) for Essential is $1,145.6 million in 2024–25 increasing to $1,398.1

4 Essential is not required to apply an X factor for 2024–25 because we set the 2024–25 expected revenue in this decision.

million in 2028–29 ($ nominal). The resulting total expected revenue for Essential is $6,309.9 million for the 2024–29 period.

Figure 1.2 shows our final decision on Essential's annual expected revenue (smoothed revenue) and the ARR (unsmoothed revenue) for the 2024–29 period.

Figure 1.2 AER's final decision on Essential's revenue for the 2024–29 period ($ million, nominal)



Source: AER analysis; Essential Energy, *Revised Proposal – 3.04 Post Tax Revenue Model,* November 2023.

To determine the profile of expected revenue for Essential over the 2024–29 period, we have set the expected revenue for the first regulatory year at $1,145.6 million ($ nominal) which is $28.1 million higher than the ARR for that year. We then apply an expected inflation rate of 2.66% per annum and a profile of X factors to determine the expected revenue in subsequent years.[5] We consider that our profile of X factors results in an expected revenue in the last year of the 2024–29 period that is as close as reasonably possible to the ARR for that year.[6] We did not receive any stakeholder submissions on revenue smoothing.

Our final decision results in an average increase of 4.8% per annum ($ nominal) in the expected revenue over the 2024–29 period.[7] This consists of initial increases of 3.7% per

5 NER, cl. 6.5.9(a).

6 NER, cl. 6.5.9(b)(2). We consider a divergence of up to 3% between the expected revenue and ARR for the last year of the 2024–29 period is appropriate, if this can promote smoother price changes for users across the period. In the present circumstances, based on the X factors we have determined for Essential, this divergence is around 1.0%.

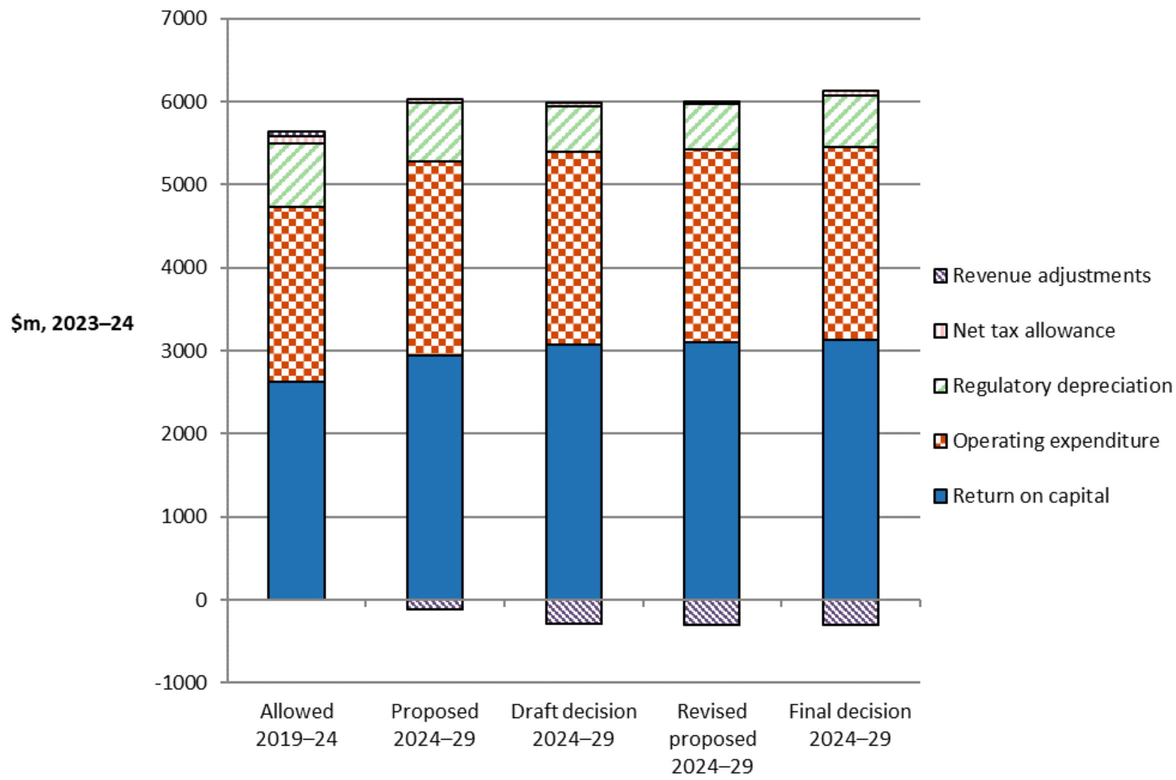
7 In real 2023–24 dollar terms, our approved expected revenue for Essential results in an average increase of 2.1% per annum over the 2024–29 period.

annum in 2024–25 and 2025–26, followed by average annual increases of 5.6% during the remainder of the 2024–29 period.[8]

Our final decision also results in the total ARR to be 3.3% higher than that allowed in the 2019–24 period, in real terms ($2023–24). This is largely due to increases in return on capital and opex in this final decision for the 2024–29 period than those approved in the 2019–24 determination.

Figure 1.3 compares our final and draft decision building blocks for Essential's 2024–29 period with its proposed and revised proposed revenue requirements for the same period, and the approved unsmoothed revenue for the 2019–24 period.

Figure 1.3 Total revenue by building block components ($ million, 2023−24)



Source: AER analysis.

1.4.2 Shared assets

Our final decision is not to apply a shared asset revenue adjustment to Essential's total expected revenue for the 2024–29 period.

In our draft decision, we did not apply a shared asset revenue adjustment to Essential's revenues because we estimated that the unregulated revenues were less than 1% of its expected revenues in each year of the 2024–29 period. Therefore, the materiality threshold

8 In real 2023–24 dollar terms, this consists of initial increases of 1.0% per annum in 2024–25 and 2025–26, followed by average annual increases of 2.8% in during the remainder of the 2024–29 period.

was not met in any year of the 2024–29 period.[9] Using the same assessment approach as the draft decision, we consider that this materiality threshold is also not met in any year of the 2024–29 period for this final decision, and therefore we do not apply a shared asset revenue adjustment.

1.4.3 Indicative average distribution price impact

Our final decision on Essential's expected revenues ultimately affects the prices customers pay for electricity. There are several steps required in translating our revenue decision into indicative distribution price impacts.

We regulate Essential's SCS under a revenue cap form of control. This means our final decision on Essential's expected revenues does not directly translate to price impacts. This is because Essential's revenue is fixed under the revenue cap form of control, so changes in the consumption of electricity will affect the prices ultimately charged to customers.

For these reasons, we are not required to establish the distribution prices for Essential as part of this determination. However, we will assess Essential's annual pricing proposals before the commencement of each regulatory year within the 2024–29 period. In each assessment we will administer the pricing requirements set in this distribution determination.

For this final decision, we have estimated some indicative average distribution price impacts flowing from our final determination on the expected revenues for Essential over the 2024–29 period. In this section, our estimates only relate to the core SCS (that is, the core electricity distribution charges),[10] not alternative control services (such as public lighting). These indicative price impacts assume that actual energy consumption across the 2024–29 period matches Essential's forecast energy consumption, which we have adopted for this final decision. We also have not factored in any changes arising from incentive scheme amounts, cost pass throughs or unders/overs reconciliation that usually occur in the annual pricing process to come up with the total allowed revenue.

Figure 1.4 shows Essential's indicative average price path over the period 2019–20 to 2028–29 in real 2023–24 dollar terms based on the expected revenues established in our final decision, compared to Essential's revised proposed revenue requirement. The indicative price path is estimated using the approved expected revenue and dividing by forecast energy consumption for each year of the 2024–29 period.

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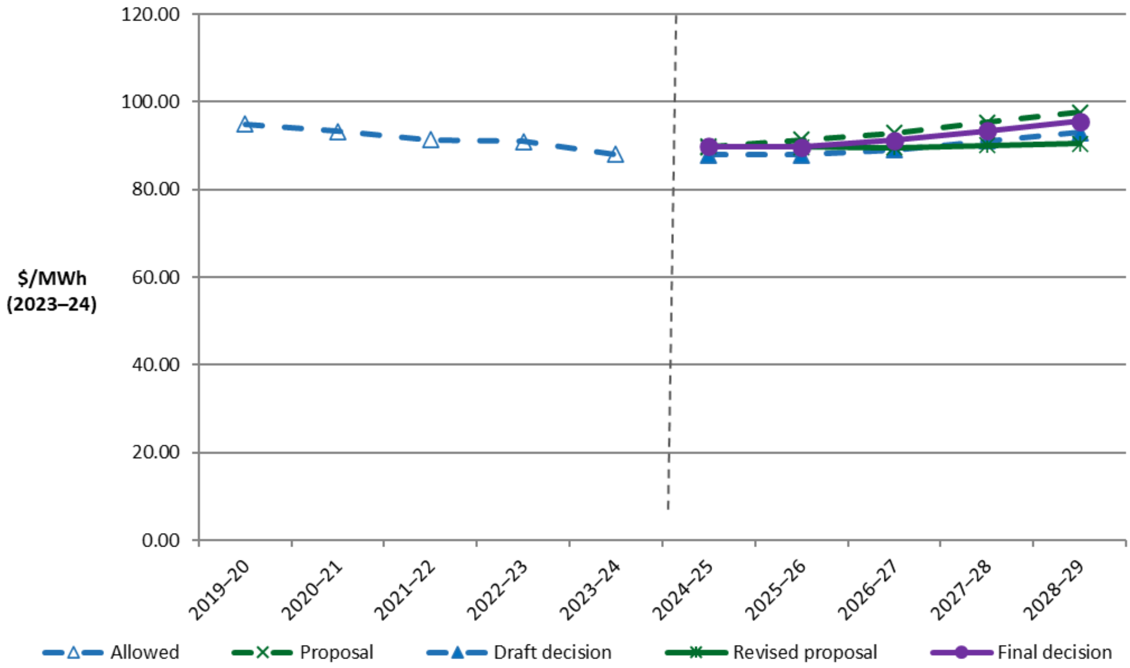
[9] AER, *Draft decision, Attachment 01 – Annual revenue requirement – Essential Energy – 2024 Distribution revenue proposal*, September 2023, pp. 9–10.

[10] Essential has reclassified its legacy metering services from alternative control services (ACS) to SCS in its revised proposal based on the AEMC's review of the regulatory framework for metering services in August 2023 and our guidance on metering issued in November 2023.

Essential Energy, 2024–29 *Revised Regulatory Proposal,* 30 November 2023, p. 15;

Our final decision on metering services is discussed in Attachment 20.

Figure 1.4 Indicative distribution price path for Essential ($/MWh, 2023–24)



Source: AER analysis.

We estimate that our final decision on Essential's annual expected revenue will result in an increase to average distribution charges by about 1.3% per annum over the 2024–29 period in real 2023–24 dollar terms.[11] Essential's revised proposal provided for an average real increase of approximately 0.2% per annum over the 2024–29 period for its distribution charges.[12] These high-level estimates reflect the aggregate change across the entire network and do not reflect the particular tariff components for specific end users.

Table 1.3 displays in nominal terms the comparison of the revenue and price impacts of Essential's revised proposal and our final decision.

11 In nominal terms, we estimate average distribution charges to increase by 4.0% per annum. This amount reflects an expected inflation rate of 2.66% per annum as determined in this final decision.

12 In nominal terms, Essential's revised proposal would increase distribution charges by 3.1% per annum. This amount reflects an expected inflation rate of 2.80% per annum as proposed by Essential in its revised proposal.

Table 1.3 Comparison of revenue and price impacts of Essential's revised proposal and the AER's final decision ($ nominal)

	2023–24	2024–25	2025–26	2026–27	2027–28	2028–29
AER final decision						
Revenue ($ million)	1,104.9	1,145.6	1,187.8	1,254.2	1,324.2	1,398.1
Price path ($/MWh)[a]	89.39	92.17	94.58	98.63	103.73	108.92
Revenue (change %)	–	3.7%	3.7%	5.6%	5.6%	5.6%
Price path (change %)	–	3.1%	2.6%	4.3%	5.2%	5.0%
Essential revised proposal						
Revenue ($ million)	1,104.9	1,147.2	1,191.2	1,236.9	1,284.3	1,333.5
Price path ($/MWh)[a]	89.39	92.31	94.84	97.27	100.60	103.89
Revenue (change %)	–	3.8%	3.8%	3.8%	3.8%	3.8%
Price path (change %)	–	3.3%	2.8%	2.6%	3.4%	3.3%

Source: AER analysis; Essential Energy, *Revised Proposal – 3.04 Post Tax Revenue Model,* November 2023.

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

1.4.4 Expected impact of final decision on electricity bills

The annual electricity bill for customers in Essential's network reflects the combined costs of all the electricity supply chain components—wholesale energy generation, transmission, distribution, metering, and retail costs. This final decision primarily relates to the distribution charges for Essential's core SCS, which represent approximately 35% on average for residential customers' and 33% on average for small business customers' annual electricity bills in Essential's network area.[13]

We estimate the expected bill impact by varying the distribution charges in accordance with our final decision in this attachment, while holding all other components constant—including the metering component.[14] This approach isolates the effect of our final decision on the core distribution charges only for Essential. However, this does not imply that other components will remain unchanged across the period.[15]

13 AER analysis; Essential Energy, *2023–24 – Pricing model*, 28 April 2023;
AER, *Default Market Offer Prices 2023–24: Final Determination*, May 2023, p. 6.

14 We also have not factored in any changes arising from incentive scheme amounts, cost pass throughs or unders/overs reconciliation that usually occur in the annual pricing process to come up with the total allowed revenue.

15 It also assumes that actual energy consumption will equal the forecast adopted in our final decision. Since Essential operates under a revenue cap, changes in energy consumption will also affect annual electricity bills across the 2024–29 period.

Based on this approach, we expect that our final decision on the distribution component will increase the average annual residential electricity bill in 2028–29 by about $39 ($ nominal) or 1.5% from the 2023–24 total bill level.

Similarly, we expect that our final decision will result in the distribution component of the average annual electricity bill for a small business customer in 2028–29 to increase by about $83 ($ nominal) or 1.4% from the 2023–24 total bill level.

Our estimated bill impact is based on the typical annual electricity usage of 4,613 kWh and 10,027 kWh for residential and small business customers in Essential's network, respectively.[16] Therefore, customers with different usage will experience different changes in their bills. We also note that there are other factors which we have not considered here, such as metering, wholesale and retail costs, which affect electricity bills.

Table 1.4 shows our estimated impact of our final decision and Essential's revised proposal on the average annual electricity bills for residential and small business customers in its network over the 2024–29 period.

Table 1.4 Estimated impact of Essential's revised proposal and AER's final decision on annual electricity bills for the 2024–29 period ($ nominal)

	2023–24	2024–25	2025–26	2026–27	2027–28	2028–29
AER final decision						
Residential annual electricity bill	2,527	2,555	2,579	2,619	2,670	2,721
Annual change[b]	–	28 (1.1%)	24 (0.9%)	40 (1.6%)	51 (1.9%)	52 (1.9%)
Small business annual electricity bill	5,761	5,820	5,872	5,958	6,068	6,178
Annual change[b]	–	59 (1.0%)	51 (0.9%)	87 (1.5%)	109 (1.8%)	111 (1.8%)
Essential revised proposal						
Residential annual electricity bill	2,527	2,556	2,581	2,605	2,639	2,671
Annual change[b]	–	29 (1.1%)	25 (1.0%)	24 (0.9%)	33 (1.3%)	33 (1.2%)
Small business annual electricity bill	5,761	5,823	5,878	5,929	6,001	6,071
Annual change[b]	–	62 (1.1%)	54 (0.9%)	52(0.9%)	71 (1.2%)	70 (1.2%)

Source: AER analysis; AER, *Default market offer prices 2023–24: Final determination*, May 2023, p. 6; Essential Energy, *Revised Proposal – 3.04 Post Tax Revenue Model,* November 2023.

(a) AER, *Default market offer prices 2023–24: Final determination*, May 2023, p. 6.

(b) Annual change amounts and percentages are indicative. They are derived by varying the distribution component of the 2023–24 bill amounts in proportion to yearly expected revenue divided by forecast energy as provided by Essential. Actual bill impacts will vary depending on electricity consumption and tariff class.

16 AER, *Default market offer prices 2023–24: Final determination*, May 2023, p. 6.

Shortened forms

Term	Definition
ACS	alternative control services
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
ARR	annual revenue requirement
capex	capital expenditure
CESS	capital expenditure sharing scheme
CPI	consumer price index
DMIAM	demand management innovation allowance mechanism
EBSS	efficiency benefit sharing scheme
kWh	kilowatt hour
MWh	megawatt hour
NER	National Electricity Rules
NPV	net present value
opex	operating expenditure
PTRM	post-tax revenue model
RAB	regulatory asset base
SCS	standard control services