

Essential Energy

5.01 Our revenue requirement components

January 2023



Attachment summary

- > Our proposed revenue requirement will enable us to deliver a safe, resilient and reliable network while meeting customers' expectations.
- > Using the Australian Energy Regulator's (AER's) draft 2022 Rate of Return Instrument with recent placeholder interest rates, we propose to increase revenue in real terms by 2.97 per cent a year over the 2024–29 regulatory period.

Our approach

We have used the AER's models to develop our building blocks and the associated revenue requirement. For additional information on the expenditure and revenue components, see:

- > Chapter 5 – Our revenue requirement
- > Chapter 9 – Operating expenditure
- > Chapter 10 – Capital expenditure.

Proposal revenue requirement

Building block components for our unsmoothed annual revenue requirement (\$m, real June 2024)

\$m, real June 2024	2024–25	2025–26	2026–27	2027–28	2028–29	Total 2024–29
Return on capital	566	577	590	602	615	2,951
Return of capital	116	135	144	151	161	707
Operating expenditure	456	469	474	464	461	2,324
Revenue adjustments	-32	-31	-16	-41	-0	-120
Tax allowance (net)	5-	7	10	14	14	50
Total proposed unsmoothed revenues	1,111	1,157	1,203	1,191	1,250	5,912

Numbers may not add up due to rounding

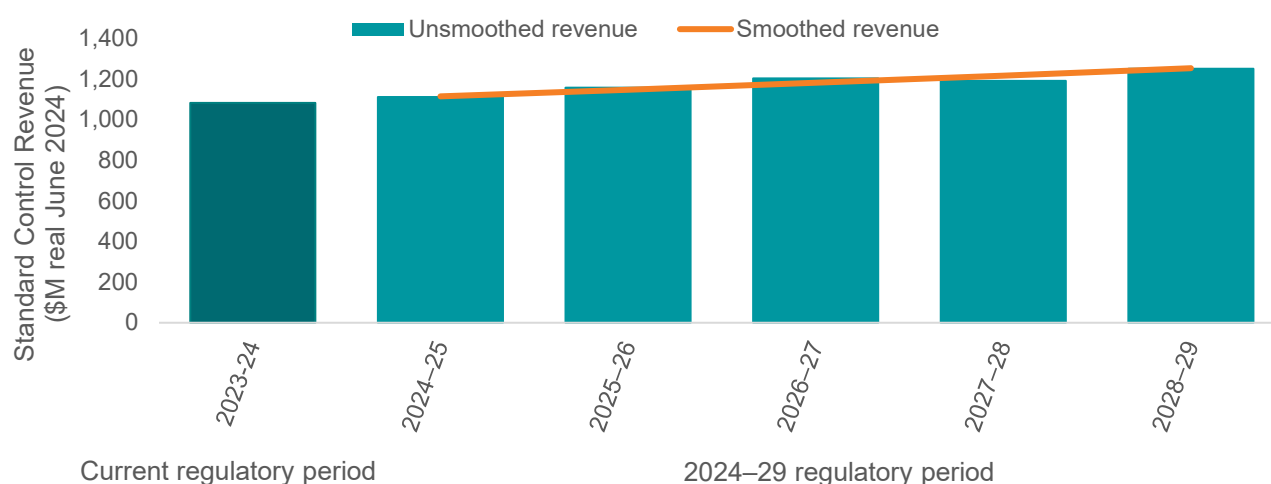
We will cover our revenue requirement for 2024–29 by charging customers for our standard control services.

To minimise pricing variations caused by fluctuations in our expenditure, we have smoothed our Regulatory Proposal (Proposal) revenue. The resulting revenue profile has been calculated using the AER's post-tax revenue model (PTRM). This ensures our smoothed revenue for 2024–29 is equal to the unsmoothed revenue for the same period in net present value terms.

Smoothed annual revenue requirements (\$m, real June 2024)

\$m, real June 2024	2024–25	2025–26	2026–27	2027–28	2028–29	Total 2024–29
Proposed smoothed revenues	1,114	1,147	1,182	1,217	1,253	5,913

Smoothed and unsmoothed annual revenue requirement profile



The approved cost of debt will be updated annually during the 2024–29 regulatory period in accordance with the AER’s final 2022 Rate of Return Instrument (RORI). This means that for each year, the allowed rate of return – also known as the weighted average cost of capital (WACC) – will be different, depending on the annual cost of debt. We will apply any revenue adjustments using the AER’s approved revenue cap control mechanism formula.

Regulatory asset base

We use the regulatory asset base (RAB) to calculate the return on capital and return of capital components of our annual revenue requirement by:

- > multiplying the opening RAB for each year of the regulatory period by the approved WACC to determine the return on capital
- > offsetting straight-line depreciation against indexation of the opening RAB each year to determine the regulatory depreciation.

The estimated starting value of our RAB as at 1 July 2024 is \$10,275 million (in nominal terms). We have calculated this amount using the AER roll forward model (RFM) and in accordance with the National Electricity Rules (NER). It reflects the roll-forward of actual capital expenditure for three years (2019–22) and forecast capital expenditure for two years (2022–24).

Indicative opening regulatory asset base value as at 1 July 2024 (\$m, nominal)

\$m, nominal	2019–20	2020–21	2021–22	2022–23	2023–24
Opening RAB	8,105	8,450	8,610	9,004	9,815
Add: actual and estimated capital expenditure	480	412	444	502	514
Less: regulatory depreciation	-135	-252	-50	309	0
Less: adjustments for 2018–19 actual capital expenditure					-54
Closing RAB	8,450	8,610	9,004	9,815	10,275

Numbers may not add up due to rounding

Capital expenditure

More information about our capital expenditure plans can be found in the Chapter 10 – Capital expenditure.

Proposed capital expenditure (\$m, real June 2024)

\$m, real June 2024	2024–25	2025–26	2026–27	2027–28	2028–29	Total 2024–29
Capital expenditure	542	536	450	434	545	2,696

Numbers may not add up due to rounding

Regulatory depreciation

We have applied the AER's preferred approach to calculating regulatory depreciation, as shown in the RFM. The AER's approach applies a weighted average remaining life (WARL) calculation to all existing and forecast new assets in the RAB using the straight-line depreciation methodology. Within the AER's PTRM, the value of regulatory depreciation is calculated as WARL-based straight-line depreciation less the indexation of the RAB value for inflation. As required by the NER, we have developed this Proposal using the AER's preferred approach.

To calculate the RAB indexation values, we have used a forecast inflation rate of 2.50 per cent. This is a placeholder rate and is based on the AER's current inflation methodology, as we discuss below.

Proposed regulatory depreciation (\$m, real June 2024)

\$m, real June 2024	2024–25	2025–26	2026–27	2027–28	2028–29	Total 2024–29
Straight-line depreciation	366	390	403	413	426	1,998
RAB indexation	251	255	258	262	265	1,291
Regulatory depreciation	116	135	144	151	161	707

Regulatory asset base roll-forward

To calculate the return on capital building block component, we started with the forecast RAB value as at 1 July 2024 and rolled it forward over each year of the 2024–29 regulatory period using our proposed capital expenditure and regulatory depreciation values. In conjunction with the Capital Expenditure Sharing Scheme (CESS), the use of forecast depreciation will create an appropriate incentive for us to incur only efficient capital expenditure.

Forecast RAB roll-forward values for 2024–29 regulatory period (\$m, nominal)

\$m, nominal	2024–25	2025–26	2026–27	2027–28	2028–29
Opening RAB	10,275	10,713	11,134	11,560	11,982
Add: actual and estimated capital expenditure	556	563	581	589	617
Less: regulatory depreciation	119	142	156	167	182
Closing RAB	10,713	11,134	11,560	11,982	12,417

Numbers may not add up due to rounding

Allowed rate of return

Our placeholder rate of return (or WACC) of 5.65 per cent for 2024–25 was calculated in accordance with the AER's draft 2022 RORI. The AER will publish its final 2022 RORI in December 2022. However, due to timing issues, we will continue to use the draft 2022 RORI when we submit our final 2024–29 Regulatory Proposal in January 2023. We expect the AER to subsequently apply the final 2022 RORI in its draft determination for our business later in 2023. Attachment 5.03 provides more detail on our WACC estimate for the Proposal.

We used several key parameter values to calculate our WACC estimate for the first year of the 2024–29 regulatory period, based on the methodology in the AER’s draft 2022 RORI. These will be updated in line with the final published 2022 RORI and will be used in the AER’s draft and final determinations.

Rate of return parameters	Year 1 value based on recent placeholder rates (%)
Cost of equity (nominal post-tax)	7.38
Cost of debt (nominal pre-tax)	4.49
Gearing	60.00
Nominal vanilla WACC estimate	5.65
Gamma	58.50
Inflation	2.50

In accordance with the PTRM, the placeholder rate of return estimate was multiplied by each year’s opening RAB value to estimate the return on capital building block component. Chapter 5 provides further information.

Debt-raising and equity-raising costs

The process of raising debt finance and equity finance incurs transaction costs that should be recognised in regulated revenue allowances over the 2024–29 regulatory period. We included debt-raising costs of \$27 million (real June 2024) in this Proposal using the methodology in the AER’s PTRM. We propose no allowance for equity raising costs over the 2024–29 regulatory period, in line with the standard calculations performed by the AER’s PTRM.

Value of forecast inflation

We have used the estimated average annual rate of expected inflation over a five-year period to align with the AER’s forecast inflation methodology.

This calculation uses the latest Reserve Bank of Australia (RBA) forecasts of inflation for the first two years of the 2024–29 regulatory period, the mid-point of the RBA’s inflation target band for year five, and for years three and four, an interpolated glide-path between years two to five.

The placeholder estimate for this Proposal is 2.50 per cent a year, which will be updated closer to the beginning of the 2024–29 regulatory period.

Operating expenditure

This table shows the proposed operating expenditure relating to the provision of standard control services. There is more detail about our operating expenditure plans in Chapter 9 – Operating expenditure.

Proposed operating expenditure (\$m, real June 2024)

\$m, real June 2024	2024–25	2025–26	2026–27	2027–28	2028–29	Total 2024–29
Controllable operating expenditure	451	463	468	459	455	2,296
Debt-raising costs	5	5	6	6	6	27
Total operating expenditure	456	469	474	464	461	2,324

Numbers may not add up due to rounding

Corporate tax

To estimate the cost of corporate tax, we have used the current corporate tax rate of 30 per cent and a value for imputation credits of 58.5 cents per dollar of tax paid in accordance with the draft 2022 RORI. We calculated our estimates using the PTRM.

For more detail, see Chapter 5 – Our revenue requirements.

Proposed corporate tax allowance (\$m, real June 2024)

\$m, real June 2024	2024–25	2025–26	2026–27	2027–28	2028–29	Total 2024–29
Corporate tax	5	7	10	14	14	50

Revenue adjustments

The NER allows Essential Energy to adjust the proposed annual revenue requirement for revenue increments or decrements arising from the impact of:

- > incentive schemes that apply during the current regulatory period
- > residual under-recovered or over-recovered revenues associated with applying the revenue cap mechanism in the current regulatory period
- > using shared assets to provide unregulated services in the 2024–29 regulatory period.

Efficiency Benefit Sharing Scheme

As part of its determination for the 2019–24 regulatory period, the AER applied the Efficiency Benefit Sharing Scheme (EBSS) to Essential Energy's operating expenditure for the first time.

Proposed Efficiency Benefit Sharing Scheme revenue decrement (\$m, real June 2024)

\$m, real June 2024	2024–25	2025–26	2026–27	2027–28	2028–29	Total 2024–29
EBSS penalty	-31	-31	-15	-41	0	-118

Essential Energy is aware that there are different versions of the EBSS model, with different circumstances indicating their relevant application. Essential Energy overspent its opex allowances in the last few years of 2019–24. Technically, Essential Energy considers Option 1 to be the correct version to be applied in this instance, which would result in an EBSS penalty of \$94 million. However, in the interests of customer affordability, we have applied Option 2. This results in a more favourable outcome for customers in 2024–29, delivering a \$118 million penalty for Essential Energy.

Capital Expenditure Sharing Scheme

As part of its determination for the 2019–24 regulatory period, the AER applied the Capital Efficiency Sharing Scheme (CESS) to Essential Energy's capital expenditure.

Proposed Capital Expenditure Sharing Scheme revenue increment (\$m, real June 2024)

\$m, real June 2024	2024–25	2025–26	2026–27	2027–28	2028–29	Total 2024–29
CESS penalty	-2	-2	-2	-2	-2	-8

Essential Energy is forecasting an unfavourable outcome in actual capital expenditure (capex) compared to the forecast allowance. We had included a billing system in our 2019–24 capex forecasts that has been delayed until 2024–29. Essential Energy has therefore reflected this capex deferral in the calculations undertaken for the CESS. This results in a CESS penalty over 2024–29 of \$8 million.

Demand Management Innovation Allowance

The AER's Demand Management Innovation Allowance (DMIA) allowance encourages the trial of innovative demand management projects. Essential Energy plans to undertake research to identify, develop, refine and implement lower cost solutions (both technology and non-technology based). This research relates to network capacity that meets the demand and energy needs of customers whilst maintaining acceptable safety, reliability, security and power-quality standards of the network, compared to both traditional augmentation and replacement solutions. For the current regulatory period, the AER approved an annual DMIA of \$1 million (real June 2019) for small-scale innovative demand management projects. We must return to customers any cumulative underspend of this allowance as well as any expenditure that is not deemed appropriate by the AER. At this stage, we are forecasting to use the whole DMIA allowance over the 2019–24 regulatory period for our work on tariff trials, network islanding, renewable hosting maximisation and electric vehicle (EV) integration.

During 2024–29, access to this additional allowance will encourage Essential Energy to continue working on understanding and integrating new ways of reducing the costs of electricity supply as well as support the sustainability of the industry.

The forecast DMIA included in our revenue calculation is shown below.

Proposed Demand Management Innovation Allowance increment (\$m, real June 2024)

\$m, real June 2024	2024–25	2025–26	2026–27	2027–28	2028–29	Total 2024–29
DMIA	1	1	1	1	1	6

Proposed shared asset revenue reduction

Shared assets are regulated network assets that we use to provide regulated and unregulated services. The AER may reduce Essential Energy's forecast annual revenue requirement in any regulatory year to reflect the forecast costs of using shared assets that are being recovered from unregulated revenues. In making this decision, the AER must have regard to its shared asset principles and guideline.

According to the shared asset guideline, the use of shared assets is material when a distributor's annual unregulated revenue from shared assets is expected to be greater than 1 per cent of its total smoothed revenue requirement in any year of the relevant regulatory period.¹ If the materiality threshold is met, the AER determines cost reductions based on forecast revenues from the unregulated services the distributor is expected to provide. If the materiality threshold is not met, no shared asset cost reduction applies.²

We have applied the AER's shared asset guideline and calculated the materiality of our expected use of shared assets to earn unregulated revenue over the 2019–24 regulatory period. The guideline states: "If the total unregulated revenue is expected to be greater than 1 per cent of the regulated revenue, we will apply a cost reduction."

The table below indicates that our forecast unregulated revenue from shared assets does not exceed the 1 per cent materiality threshold of our proposed regulated revenue. Therefore, it is not necessary to apply any shared asset cost reduction to our proposed annual revenue requirement for any year in the 2024–29 regulatory period.

Materiality of shared asset use (\$m, real June 2024)

\$m, real June 2024	2024–25	2025–26	2026–27	2027–28	2028–29	Total 2024–29
Proposed annual revenue (smoothed)	1,114	1,147	1,182	1,217	1,253	5,913
Materiality threshold (1%)	11	11	12	12	13	59
Forecast unregulated revenue from shared assets	4	4	4	4	4	21

¹ Australian Energy Regulator, *Better Regulation, Shared Asset Guideline*, November 2013, p. 8.

² *ibid.* p. 6.