AER Determination

Essential Energy's bushfire risk reclassification contingent project application

June 2025



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1 Executive summary

This document sets out the Australian Energy Regulator's (AER) decision on Essential Energy's bushfire risk reclassification contingent project application (CPA).

Contingent projects are significant network projects that may arise during a regulatory control period but the need and or timing is uncertain. While the expenditures for such projects do not form part of the total forecast expenditure in a revenue determination, the project costs may ultimately be recovered from customers if the requirements of the National Electricity Rules (NER) are met.

Essential Energy's bushfire risk reclassification contingent project

Essential Energy submitted its bushfire risk reclassification CPA to us on 6 December 2024 and proposed \$98.7 million (real, \$2024–25) in total expenditure to complete the project. This includes \$90.0 million in capital expenditure (capex) and \$8.7 million in operating expenditure (opex) associated with works to:¹

- undertake clear-to-sky (CTS) treatment of vegetation corridors in newly identified high bushfire risk areas
- remove some bare overhead wires and install stand-alone power systems (SAPS) in locations where it is more cost efficient, and where customers agree to it.

Essential Energy anticipates the project will take 8 years to complete: it expects to complete 47% of the project in the current 2024–29 period and the remaining 53% in the next 2029–34 regulatory period.

On 12 December 2024, we invited interested stakeholders to make submissions on Essential Energy's CPA by 15 January 2025. We did not receive any submissions.

Our decision on Essential Energy's bushfire risk reclassification contingent project application

We are satisfied that the trigger event for Essential Energy's bushfire risk reclassification CPA has occurred, the project capex meets the threshold, and Essential Energy has complied with its obligations under clauses 5.17.4(z) and 5.17.4(z1) of the NER. As such, we must make a determination on Essential Energy's CPA for the:

- amount of capex and incremental opex for each remaining regulatory year of the 2024– 29 period
- total capex which we consider is reasonably required for the purpose of undertaking the contingent project
- likely commencement and completion dates for the project, and
- incremental revenue which is likely to be required for each remaining regulatory year of the 2024–29 period as a result of the contingent project being undertaken.

¹ Essential Energy, *Contingent Project - Bushfire Risk Reclassification*, 2 December 2024.

The AER has previously considered and approved investments proposed by Network Service Providers relating to bushfire mitigation. We acknowledge the importance of community safety by minimising bushfire risk on the network as far as reasonably practicable.

Overall, we found that Essential Energy's bushfire modelling and supporting information was of high quality. We acknowledge the considerable effort by Essential Energy in developing its CPA for a complex program of work. We are satisfied that Essential Energy has demonstrated the need for the proposed expenditure to address the bushfire risk in the newly identified high risk areas.

However, our analysis has led us to conclude the proposed project's costs are not efficient for several reasons, including that:

- the proposed expenditure includes contingency costs that are not efficient and in the long-term interests of consumers
- the cost escalation is overstated as it applies a different and higher escalation approach than what was applied in the 2024–29 final determination
- the additional labour costs are considerably more than the typical industry range
- the proposed costs did not account for a reduction in opex to reflect the reclassification to lower risk for some high-risk areas.

Based on our above findings, our decision is to not accept Essential Energy's proposed total capex of \$90.0 million. Instead, we include a substitute of \$63.8 million to ensure consumers pay no more than necessary for the delivery of the project.² We also do not accept Essential Energy's proposed incremental opex of \$1.2 million for the current 2024–29 period and include a substitute of \$0.1 million as we consider this is sufficient for it to address the identified bushfire risks.

For the purposes of this CPA, the applicable dates for the bushfire risk reclassification activities are a commencement date of January 2026 and anticipated date of completion by 2034. Essential Energy has done a considerable amount of work to identify the scope of works and we are satisfied the dates of commencement and completion of the contingent project are reasonable.

Table 1 sets out our decision on Essential Energy's proposed total capex. It also sets out our decision on the forecast capex, incremental opex and incremental revenue reasonably required for the purpose of undertaking the contingent project for each remaining regulatory year during the 2024–29 period. Additionally, it includes the estimated impact on the distribution component of customer electricity bills in New South Wales.

² NER, cl 6.6A.2(e)(1)(ii).

Table 1: Bushfire risk reclassification – Assessment of total capex, and forecast
expenditures, revenues and bill impact

	Essential Energy's application	AER's determination
Total capex (\$2024–25) to be commissioned for the bushfire risk reclassification project over the 8-year project	\$90.0 million	\$63.8 million
Total capex (\$2024–25) to be commissioned for the bushfire risk reclassification project in years 2026–27 to 2028–29	\$42.6 million	\$31.0 million
Total opex (\$2024–25) to be commissioned for the bushfire risk reclassification project in years 2026–27 to 2028–29	\$1.2 million	\$0.1 million
Total incremental revenue to be recovered from customers over 2026–27 to 2028–29 (\$ nominal, smoothed)	\$4.5 million ^A	\$2.5 million ^A
Bushfire risk reclassification project average annual increase in residential electricity bills over 2026–27 to 2028–29	\$1 p.a ^A	\$1 p.a ^A
Bushfire risk reclassification project average annual increase in small business electricity bills over 2026–27 to 2028–29	\$2 p.a ^A	\$1 p.a ^A

Source: Essential Energy's CPA and AER analysis. Note:

(A) Essential Energy's CPA proposed to recover the incremental revenue over the remaining 4 years of the current 2024–29 period. However, our decision is that the incremental revenues will be recovered for the last 3 years of the 2024–29 period. The reasons for our approach are discussed in section 6.

Next steps

Following this determination, the AER amends Essential Energy's revenue determination for the current 2024–29 period such that the incremental revenues we have determined will be added to Essential Energy's annual expected revenues (smoothed) for the 2024–29 period from the commencement of the next regulatory year (1 July 2026). This follows the process set out in clause 6.6A.2 of the NER.

The increase in annual expected revenues will be reflected in customer bills over the remaining 3 years of the 2024–29 period (2026–27 to 2028–29).

2 Essential Energy's bushfire risk reclassification contingent project

This section provides background on Essential Energy's CPA and describes the works set out in the contingent project.

2.1 NSW Bushfires Coronial Inquiry

A Coronial Inquiry into the 2019/2020 New South Wales (NSW) bushfires began in 2021 (NSW Bushfires Coronial Inquiry), where hearings were held until August 2023. During the Inquiry, questions were raised regarding the adequacy of Essential Energy's bushfire risk management, which prompted Essential Energy to begin revising its bushfire risk modelling.

On 27 March 2024, the NSW State Coroner released her findings and recommendations from the NSW Bushfires Coronial Inquiry. The Inquiry found that:³

- The Failford Road, Darawank Fire was caused by branches falling on Essential Energy powerlines and resulted in arcing which ignited the vegetation beneath the powerlines; and
- There were limitations in the modelling that underpinned Essential Energy's bushfire risk classification system at the time of the Darawank bushfire. Essential Energy's bushfire risk classification system was therefore not appropriate or fit for purpose in the lead up to the 2019/2020 bushfire season.

The NSW State Coroner acknowledged that Essential Energy was revising its bushfire risk modelling and therefore recommended that the re-modelling addresses the shortfalls identified by the Inquiry.⁴

2.2 Bushfire risk modelling revision

In March 2024, Essential Energy proposed a bushfire risk reclassification contingent project as part of its revised proposal for the 2024–29 revenue determination. Essential Energy submitted that its preliminary bushfire risk modelling revision indicated a significant shift in where the areas of highest bushfire risk exist on its network. The costs to address the shift in high bushfire risk areas formed the basis of its proposed contingent project.

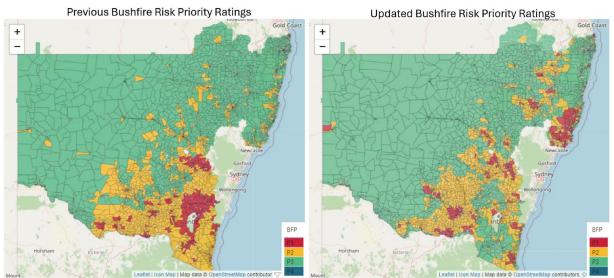
In April 2024, our final decision accepted Essential Energy's bushfire risk reclassification contingent project for the 2024–29 period. We noted in our final decision that the findings of the Coronial Inquiry had not been released yet, however we were satisfied that Essential

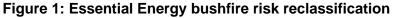
³ NSW State Coroner, <u>Inquests and Inquiries into the 2019/2020 NSW Bushfire Season - Findings and</u> <u>Recommendations - Volume 2 [PDF 6, 169KB]</u>, March 2024, pp. 63–71.

⁴ NSW State Coroner, <u>Inquests and Inquiries into the 2019/2020 NSW Bushfire Season - Findings and</u> <u>Recommendations - Volume 2 [PDF 6, 169KB]</u>, March 2024, pp. 71–72.

Energy's contingent project may be reasonably required to be undertaken during the 2024–29 period.⁵

Essential Energy has since completed the revision of its bushfire risk modelling using the University of Melbourne's *Phoenix RapidFire* fire consequence model. Essential Energy's application of the revised model reclassified many vegetation management areas (VMAs). Figure 1 shows the change in priority ratings. The reclassification resulted in some existing P2 and P3 VMAs changing to P1 and some existing P1 VMAs changing to P2 and P3.⁶





Source: Essential Energy, Addressing bushfire risk reclassification - Final Project Assessment Report, 22 October 2024, p 7.

2.3 Bushfire risk reclassification contingent project

On 6 December 2024, Essential Energy submitted its bushfire risk reclassification CPA to the AER. It proposes additional costs of \$98.7 million (real, \$2024–25), comprising of \$90.0 million in capex and \$8.7 million in opex, to address the newly identified shift in high bushfire risk VMAs.

Table 2 outlines Essential Energy's proposed expenditure and revenue requirements for the current 2024–29 period. Essential Energy's proposal would result in an increase of \$1 per annum for a typical residential customer's electricity bill, and \$2 per annual for a small business customer's electricity bill in Essential Energy's network over 2026–27 to 2028–29.

Note: These maps show each vegetation management area in Essential Energy's network and their before and after priority (risk) ratings.

⁵ AER, *Final Decision Attachment A - Contingent project - Essential Energy - 2024–29 Distribution revenue* proposal - April 2024, pp. 1–8.

⁶ Priority ratings represent the relative bushfire risk across Essential Energy's network. The highest risk VMAs are designated P1, medium risk as P2, low risk as P3 and urban areas are P4.

	2024–25	2025–26	2026–27	2027–28	2028–29	Total
Forecast capex (\$ million, \$2024–25)	4.1	4.7	9.5	11.3	13.1	42.6
Incremental opex (\$ million, \$2024–25)	0.0	0.0	0.1	0.3	0.7	1.2
Incremental revenue requirement (\$ million, nominal, smoothed)	0.0	0.0	1.4	1.5	1.6	4.5

Table 2Summary of proposed expenditure and revenue requirements for the current
2024–29 period

Source: Essential Energy's CPA.

Note: To present a like for like comparison of the revenue outcomes from our decision and Essential Energy's application, we have re-calculated the revenue impacts of Essential Energy's application using the latest version of the PTRM with updated return on debt updated WACC for 2025–26. Essential Energy's proposed incremental revenue is \$4.4 million, which reflects a placeholder WACC for 2025–26 and revenue smoothing starting from 2025–26.

Essential Energy's bushfire risk reclassification contingent project proposes to undertake CTS cutting of existing vegetation corridors in the newly identified P1 VMAs. The project also proposes to remove 66 kilometres of powerlines and install 64 SAPS where it is more cost efficient, and where customers agree to it. However, Essential Energy has not included these costs in the proposed expenditure as it will instead be funded from its existing SAPS program, which is already included in its 2024–29 revenue determination.

Essential Energy expects the project to take 8 years, with 47% completed in the current 2024–29 period and the remaining 53% in the 2029–34 period.

Essential Energy completed a Regulatory Investment Test for Distribution (RIT-D) in its development of options to address newly identified areas of higher levels of bushfire risk within its network. It did not receive submissions on its RIT-D during the consultation period.

3 Summary of NER requirements

Under clause 6.6A.2 of the NER, a Distribution Network Service Provider (Provider) may apply to the AER to amend its distribution determination where a trigger event for a contingent project has occurred. The information that a Provider is required to include in its application to amend a revenue determination is set out under clause 6.6A.2(b).

Essential Energy submitted its CPA on 6 December 2024. As soon as practicable following receipt of the application, we must publish the application and invite submissions on the application.⁷ We must consider any written submissions on the application in making our determination and make our decision within 40 business days from the later of the date we receive the application and the date we receive any information required by us under clause 6.6A.2(i).⁸

- We published Essential Energy's CPA on 12 December 2024 and sought submissions until 15 January 2025. We did not receive any submissions from stakeholders.
- We issued 3 notices to Essential Energy under clause 6.6A.2(i) of the NER and received Essential Energy's final response on 2 May 2025.

Clause 6.6A.2(e)(1B) also requires that the Provider's proposed contingent capex to meet the threshold referred to in clause 6.6A.1(b)(2)(iii), that is, it exceeds either \$30 million or 5% of the annual revenue requirement for the first year of the regulatory control period, whichever is the larger amount.

If we are satisfied the trigger event has occurred, the forecast total capex for the project exceeds the materiality threshold and Essential Energy has complied with its obligations under clause 5.17.4(z) and 5.17.4(z1) of the NER, we must then:

- Determine the capex and incremental opex for each remaining regulatory year which is reasonably required for the purpose of undertaking the contingent project.⁹
- Determine the total capex reasonably required for the purpose of undertaking the project.¹⁰
- Determine the likely commencement and completion dates for the project (as applicable).¹¹
- Determine the incremental revenue likely to be required in each remaining regulatory year as a result of the contingent project being undertaken.¹²
- Amend the relevant revenue determination in accordance with clause 6.6A.2(h).¹³

⁷ NER, cl 6.6A.2(c).

⁸ NER, cl 6.6A.2(d).

⁹ NER, cl 6.6A.2(e)(1)(i).

¹⁰ NER, cl 6.6A.2(e)(1)(ii).

¹¹ NER, cl 6.6A.2(e)(1)(iii).

¹² NER, cl 6.6A.2(e)(1)(iv).

¹³ NER, cl 6.6A.2(e)(3).

In making the determinations required under clause 6.6A.2(e)(1), we must accept the relevant amounts and dates in the application if we are satisfied that:

- the forecast of the total capex for the project meets the threshold in clause 6.6A.1(b)(2)(iii) and complies with 6.6A.2(b1)¹⁴
- the forecast capex and incremental opex in the CPA reasonably reflect the capex and opex criteria required to achieve the capex and opex objectives, taking into account the capex and opex factors¹⁵
- the estimates of incremental revenue and the dates are reasonable.¹⁶

In making the determinations under 6.6A.2(e)(1) and (f), we must have regard to the matters under clause 6.6A.2(g). If we have had regard to matters under clause 6.6A.2(g) and are then satisfied of the matters in clause 6.6A.2(f), we must accept the amounts and dates proposed in the application. If we are not satisfied, then we must determine the amounts and dates.¹⁷

Our assessment of Essential Energy's:

- eligibility to submit a CPA and the dates proposed in the CPA are set out in section 4
- proposed capex and incremental opex in section 5
- the corresponding incremental revenue in section 6.

¹⁴ NER, cl 6.6A.2(f)(1).

¹⁵ NER, cl 6.6A.2(f)(2).

¹⁶ NER, cl 6.6A.2(f)(3)-(4).

¹⁷ NER, cl 6.6A.2(e)(1).

4 Project trigger, expenditure threshold, and RIT-D obligations

Under clause 6.6A.2(e)(1) of the NER, we are required to determine the total capex reasonably required to deliver the contingent project and the capex, incremental opex and incremental revenues for each remaining regulatory year. We are only required to make these determinations if we are satisfied that the trigger event for the contingent project has occurred, the project exceeds a cost threshold, and Essential Energy has complied with its RIT-D obligations under clauses 5.17.4(z) and 5.17.4(z1) of the NER.

4.1 Assessment of trigger event

In our April 2024 final decision on Essential Energy's 2024–29 revenue determination, we accepted Essential Energy's proposed 5 elements of an event that would trigger the bushfire risk reclassification contingent project.¹⁸ The trigger event is the completion of all 5 elements.

We are satisfied that the trigger event has occurred as each element of the trigger event has been met. Table 3 sets out the elements of the bushfire risk reclassification contingent project trigger event and our assessment against each of these elements.

Description of trigger e	event element	AER assessment
Phoenix model, Esse a review of its Bushf Plan (CEOP8022) th more bushfire areas P2, P3, or P4 areas) compared to the bus the 2023 fire risk pric contained in CEOP8 identifies works requ	hfire areas defined in pritisation zones map 022, and therefore ired to comply with a for the Management of	We met with Essential Energy where it described how the updated Phoenix model reclassified its bushfire areas and how it identifies the scope of works required to address the new P1 areas. Figure 1 shows how this review has reclassified bushfire areas in its Bushfire Risk Management Plan.
	I plan in its Energy agement System nce with the	Essential Energy submitted 2 versions of CEOP8022 to the AER to demonstrate its current version of bushfire risk management is based on the updated modelling in trigger element 1. Essential Energy also published its 2023-24 ENSMS which includes its plan to implement the

Table 3 Bushfire risk reclassification contingent project trigger event

¹⁸ AER, Final Decision, Essential Energy Electricity Distribution Determination 2024 to 2029: Attachment A – Contingent projects, April 2024, p 7.

De	scription of trigger event element	AER assessment
	(Safety and Network Management) Regulation 2014	bushfire risk reclassification project to manage bushfire risk in the high bushfire risk areas in its network.
(3)	The AER has not approved a cost pass through application for a regulatory change event or service standard event related to Essential Energy being required to amend its Bushfire Risk Management Plan (CEOP8022) prior to Essential Energy lodging an application with the AER to amend its distribution determination for the Bushfire Risk Reclassification contingent project	The AER has not approved a cost pass through application for Essential Energy relating to its bushfire risk reclassification project.
(4)	The AER is satisfied that Essential Energy has successfully completed a RIT-D, including an assessment of credible options, that complies with the RIT-D framework under the National Electricity Rules (NER)	Essential Energy published a draft RIT-D in July 2024 and a finalised RIT-D in October 2024 for the bushfire risk reclassification works that meets the requirements of NER clause 5.17.3.
(5)	Essential Energy provides the AER with written confirmation from a senior manager that the Essential Energy Board has committed to proceed with and complete the Bushfire Risk Reclassification project	The AER received written confirmation dated 2 December 2024 from the Chief Executive Officer of Essential Energy that the Essential Energy Board has committed to proceed with and complete this project.

Source: AER analysis, Essential Energy's CPA.

4.2 Assessment of expenditure threshold

We are satisfied that Essential Energy's bushfire risk reclassification contingent project cost estimates exceeds the applicable materiality threshold. The applicable threshold for Essential Energy is \$57.3 million (nominal), which represents 5% of Essential Energy's annual expected revenue for the first year of the 2024–29 period. As Essential Energy's proposed nominal forecast capex is \$101.8 million (nominal), it meets this threshold.

4.3 RIT-D obligations under clause 5.17.4 of the NER

Clause 6.6A.2(e)(1C) of the NER requires Essential Energy to comply with clauses 5.17.4(z) and 5.17.4(z1) relating to its RIT-D. Clause 5.17.4(z) requires it to provide the AER with a statement as to whether or not its circumstances have materially changed since publishing its final assessment report in respect of its RIT-D. Essential Energy confirmed there has been no material change in its circumstances and published this statement on its website in accordance with 5.17.4(z1).

5 Prudent and efficient project expenditure

This section outlines our assessment of Essential Energy's proposed capex and opex for its bushfire risk reclassification, our determination on the prudent and efficient expenditure reasonably necessary to undertake this project, and our determination on the likely commencement and completion dates.

In making our decision in response to a contingent project application, we are required to determine the total capex for the contingent project and the capex and incremental opex for each remaining year of the current regulatory control period that we consider is reasonably required.¹⁹ In forming our view, we have considered the capex and opex criteria,²⁰ and the specific matters under clause 6.6A.2(g) of the NER including:

- the expenditure that would be incurred in respect of a contingent project by an efficient and prudent operator in the circumstances of Essential Energy
- the actual and expected capex of Essential Energy for contingent projects during any preceding regulatory control periods
- the relative prices of operating and capital inputs
- the substitution possibilities between opex and capex in relation to the contingent project.

In assessing the prudency and efficiency of Essential Energy's bushfire risk reclassification project, we had regard to various information to analyse the scope and nature of the project's activities and costs. In addition to Essential Energy's CPA and supporting material, including consultant reports, we requested further information from Essential Energy about the proposed project and activities, such as how cost estimates were determined and how assumptions were derived.

We discuss our analysis in greater detail throughout this section.

5.1 Forecast expenditure

We have not accepted Essential Energy's proposed forecast total capex of \$90.0 million (real, \$2024–25). Our decision is to include \$63.8 million in forecast total capex.

After reviewing Essential Energy's CPA in detail, we came to our decision on Essential Energy's proposed expenditure due to the following findings:

• Essential Energy's proposed expenditure is prudent. Its proposed expenditure directly addresses the need to maintain the safety of its network by managing bushfire risk.

¹⁹ NER, cl 6.6A.2(e)(1)(i) and (ii).

²⁰ NER, cl 6.6A.2(f)(2).

- Its forecast of risk costs (or contingencies) is not appropriate. This is because the proposed contingencies are general allowances for project estimating error, rather than specific project risks.
- **Its cost escalation is overstated.** Its proposed cost escalation is different and higher than that applied in our 2024–29 revenue determination.
- Additional labour costs are considerably more than the typical industry range. Its proposed additional labour costs for management of the project are 22% of total costs, which is greater than the typical industry range of 8–15%.
- **Its forecast opex is not efficient.** This is because it does not reflect the bushfire risk reclassification to lower risk for some existing P1 areas on its network.

Table 4 sets out our determination on the total capex reasonably required for the project compared to Essential Energy's proposed forecast.

Table 4 AER's determination on the total capex for the bushfire risk reclassification project (\$ million, \$2024–25)

Cost item	Essential Energy's proposed forecast	AER's determination	Difference
Vegetation transition cutting (creating CTS corridors)	58.4	42.6	- 15.9
Avoided capex due to SAPS installations	- 2.2	- 2.5	- 0.3
Network outage costs	9.3	7.1	- 2.1
Additional aerial and ground-based inspection assurance	1.6	1.6	0
Additional digital data acquisition	6.4	5.3	- 1.1
Internal labour (Vegetation delivery staff, Environmental approvals & Community consultation)	13.7	7.0	- 6.7
Environmental assessments	2.3	2.3	0
Other third-party costs	0.5	0.5	0
Total capex	90.0	63.8	- 26.1

Source: AER analysis; Essential Energy's RIT-D Final Project Assessment Report p 18.

Note: Essential Energy's proposed forecast capex includes contingencies. Essential Energy has not included the SAPS installation costs in its CPA as it is funding this from its SAPS program already included in the 2024–29 determination. Numbers may not add up due to rounding.

We note our main findings below, including issues we identified for some cost categories.

5.1.1 Essential Energy's proposed investment is prudent

While we found some issues with the bushfire risks included in its cost benefit model, we still found that Essential Energy's proposed contingent project is prudent following a positive net benefit test.

Essential Energy's cost benefit analysis forms the basis of its proposed scope of works and expenditure. We acknowledge the considerable effort by Essential Energy in producing a high-quality cost benefit analysis and supporting modelling for a complex program of work. We also acknowledge the importance of Essential Energy in managing its bushfire risk and maintaining the safety of its network.

In Essential Energy's cost-benefit analysis model, bushfire risk mitigation represents most of the benefits from the CTS cutting of new P1 VMAs. Hence, bushfire risk mitigation is the main component that the cost benefit ratio relies upon. We calculated Essential Energy's total annual expected bushfire risk and do not consider it to be plausible when considering historical bushfire damage caused by Essential Energy's network.

In response to an information request, Essential Energy provided an independent bushfire liability report. This report included an estimate of expected annual bushfire risk. While we consider this to be on the low end, it is a more plausible estimate of expected annual bushfire risk. We used this estimate, in conjunction with the reliability risk, to the compare the annual benefits of undertaking the proposed works against the annual incremental revenue once the project is completed. Our analysis showed that the proposed project still resulted in a positive net benefit.

We note that although we found issues with the magnitude of bushfire risk of each VMA, we accept Essential Energy's modelling of the relative risk between each VMA that determined reclassification of new P1 VMAs.

Based on the above, we are satisfied that Essential Energy's proposed contingent project is prudent.

5.1.2 Essential Energy's proposal includes contingency costs that are not efficient

Essential Energy includes contingencies in its proposed project costs for vegetation transition cutting, network outage costs, avoided SAPS costs, and additional data acquisition.²¹ It submitted that its contingencies are based on an industry cost estimation guideline and only apply to cost items where the risks are outside of its control.²²

When assessing contingencies, or project risk costs, we maintain consistency with our guidance note on the regulation of actionable Integrated System Plan projects.²³ That is, we typically allow probabilistic risk costs that are transparently defined with reasonable

²¹ Essential Energy, Attachment G - Detailed basis of estimates - Public, 6 December 2024, p. 2.

²² Essential Energy, Addressing bushfire risk reclassification: Final Project Assessment Report, 22 October 2024, p 14.

²³ AER, <u>Guidance note - Regulation of actionable ISP projects</u>, March 2021.

probabilities and consequence costs.²⁴ We do not typically allow general contingencies to account for cost estimating error.

Essential Energy's contingency calculation methodology aligns with an industry cost estimate system using estimate variances based on the uncertainty of a project.²⁵ It split its relevant cost items into different levels of uncertainty, then applied a contingency variation to that cost estimate based on its level of uncertainty.

While we accept Essential Energy's proposed contingent project has inherent uncertainty, we consider its contingency calculations represent general risk allowances for cost estimating error. The proposed risk allowances are also asymmetric, with no proposed contingencies to account for any actual costs that are less than the estimate.

While there is risk to Essential Energy of an overspend, there is also risk to consumers if the costs are lower than estimated. In this case, consumers would incur more than the prudent and efficient expenditure required to manage the safety of the network.

We do not typically allow such contingencies given we would expect a Provider to balance over and under-budget projects within its larger project portfolio. Therefore, we do not accept the Essential Energy's proposed contingency costs.

5.1.3 Essential Energy's cost escalation is overstated

Essential Energy engaged an external consultant to assess future vegetation management costs across the life of the project.²⁶ It submitted a report which states it expects the costs of contracting vegetation management services to increase above CPI for each year of the project. The report cited inflation, rising labour costs, energy prices, climate change, and variations in cost based on geographic region.²⁷

Essential Energy subsequently applied an escalation factor to its vegetation costs in addition to CPI. It applied this escalation factor to both CTS cutting of new P1 VMAs (as part of its capex proposal) and the ongoing vegetation maintenance of those new P1 VMAs (part of opex).

While we accept that the cost of vegetation management services will likely increase by more than CPI over the coming years, we do not find Essential Energy's approach to cost escalation to be efficient. We consider it more appropriate to apply a cost escalation to these types of services that is consistent with our approach during a revenue determination. That is, during a revenue determination, the opex model indirectly applies CPI, real wage growth, output growth and a productivity factor to vegetation management services. Therefore, we have substituted Essential Energy's escalation factor with the real wage growth and productivity factor used in Essential Energy's 2024–29 determination.

²⁴ AER, <u>Determination - Transgrid HumeLink Stage 2 Contingent Project</u>, August 2024, p 36.

²⁵ Association for Advancement of Cost Engineering international classification system (AACE, 2020).

²⁶ Essential Energy, Addressing bushfire risk reclassification: Final Project Assessment Report, 22 October 2024, p 14.

²⁷ Essential Energy, Attachment G - Detailed Basis of Estimates - Public, 12 May 2025, p.2.

Adjusting escalation leads to a \$4.7 million reduction in total project capex and \$0.7 million reduction in total project opex.²⁸

5.1.4 Essential Energy's additional labour costs are considerably more than the typical industry range

Essential Energy proposed \$13.7 million in additional labour costs to manage the CTS cutting of new P1 VMAs. It submitted the proposed 10 new FTEs are required as the nature of this work is complex due to the greater extent of tree removal involved. It also stated its existing vegetation management resources are fully committed to managing the existing maintenance program. Essential Energy noted that these additional FTEs will replace existing FTEs through natural attrition after the completion of the contingent project.

The proposed additional labour costs represent 22% of total vegetation costs associated with managing CTS cutting of new P1 areas. Once we remove the relevant contingency costs, this increases to 27%.

We consider a reasonable industry range for project management costs is approximately 8– 15% of total project costs. This depends on the complexity of the project and how labour intensive it is. For example, ElectraNet's project management costs for its Project EnergyConnect contingent project represented 7.2% of project costs.²⁹ As part of our assessment on ElectraNet's CPA, Energy Market Consulting associates (EMCa) provided expert technical advice on aspects of its CPA. This included EMCa's discussion on project benchmarks which were typically between 7–15% depending on their complexity.³⁰

While we accept that CTS cutting of existing vegetation corridors is somewhat more complex than vegetation maintenance works, we consider Essential Energy's proposed work is still business-as-usual in nature. This is because it involves an incremental change to existing corridors, rather than the establishment of new corridors. Over time we would also expect Essential Energy to find efficiencies from the integration of this project into its broader vegetation works program and resources.

Based on our analysis, we consider a more reasonable level of project management costs would be within the typical industry observed range of 8–15%. We consider that applying the high end of the range of 15% may be reasonable in Essential Energy's circumstances, given the overall importance of addressing bushfire risk. As such, we do not accept Essential Energy's proposed additional labour costs of \$13.7 million and include a substitute of \$7.0 million.³¹

Determination on forecast capex for each remaining regulatory year

Given our above analysis, we do not accept Essential Energy's proposed forecast capex of \$42.6 million for each remaining regulatory year of the current 2024–29 period. Table 5

²⁸ These reductions are based on the proposed forecast after removing contingencies.

²⁹ ElectraNet, *Project EnergyConnect Contingent Project Application*, 30 September 2020, p 21.

³⁰ EMCa (prepared for the AER), *Review of aspects of ElectraNet's contingent project application*, December 2020, p 33.

³¹ Our substitute accounts for the removal of contingencies and adjusted cost escalation for other cost items.

shows our determination forecast capex of \$31.0 million, which is \$11.6 million (or 27.3%) lower than Essential Energy's proposal.

Table 5 AER's determination on forecast capex for each remaining regulatory year (\$ million, \$2024–25)

	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Essential Energy's proposal	4.1	4.7	9.5	11.3	13.1	42.6
AER's determination	2.9	3.3	7.0	8.2	9.5	31.0
Difference	-1.2	-1.4	-2.4	-3.1	-3.6	-11.6

Source: AER analysis, Essential Energy's CPA.

5.1.5 Essential Energy's proposed operating expenditure is not efficient

We do not accept Essential Energy's incremental forecast opex of \$1.2 million (real, \$2024–25) during the 2024–29 regulatory period and have applied a substitute estimate in our determination.

In forming this view, we have had regard to the matters at clause 6.6A.2(f)(2) of the NER and are not satisfied that Essential Energy's forecast expenditure reasonably reflects the opex criteria. Table 6 sets out Essential Energy's proposal for the incremental opex reasonably required for the bushfire risk reclassification project for each remaining regulatory year of the current 2024–29 period.

Table 6 Essential Energy's proposed incremental opex forecast for each remaining regulatory year (\$ million, \$2024–25)

Project opex cost	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Maintaining CTS in vegetation corridors	0.0	0.0	0.2	0.4	0.7	1.3
Avoided opex due to SAPS installations	0.0	0.0	0.0	0.0	-0.1	-0.1
Total	0.0	0.0	0.1	0.3	0.7	1.2

Source: Essential Energy's CPA.

Note: Numbers may not add up due to rounding.

Essential Energy proposed forecast opex of \$8.7 million across the 8-year project.³² This includes \$9.4 million for the incremental ongoing maintenance costs of new P1 areas and

³² This includes \$1.2 million for the current 2024–29 period as per table 6. Essential Energy's proposed forecast opex to complete the project has a higher proportion in the following 2029–34 period as its maintenance schedule for the new P1 VMAs increases.

-\$0.7 million in avoided opex due to the installation of SAPS.

The incremental ongoing maintenance costs reflect the increase in vegetation maintenance costs of new P1 VMAs.³³ These new P1 VMAs have an existing cyclical maintenance program,³⁴ and the proposed costs under the CPA only include the incremental costs of maintaining the larger vegetation clearance.

We found that Essential Energy did not include a reduction in opex to reflect the VMAs that have been reclassified from P1 to P2 and P3. P2 and P3 VMAs do not require the same CTS clearance as P1 VMAs and would have a lower maintenance cost. Essential Energy stated that it will continue to maintain these old P1 VMAs with CTS clearances despite the lower bushfire risk classification. It noted there may be future revisions of its bushfire risk modelling such that these old P1 VMAs may be reclassified back to P1. It reasoned that the capital cost to return these VMAs back to P1 clearances would outweigh any opex savings from maintaining them at a lesser clearance.

While we acknowledge there may be future revisions to Essential Energy's bushfire risk modelling such that some old P1 areas may be reclassified back to P1, the timing and outcome of any revision is speculative. We consider it is speculative that any savings would be realised by consumers, and this must be recognised against the certainty of the additional opex to maintain these old P1 VMAs. Further, consistently adopting this strategy each time there is a modelling revision would ultimately lead to all VMAs becoming P1 areas despite risk reductions, and hence no cost savings could ever be achieved.

Given our above analysis, we do not accept Essential Energy's proposed \$8.7 million across the 8-year project. After adjusting incremental opex to include only the net change in P1 VMAs, this leads to an alternative total incremental opex of \$0.8 million.³⁵ Our resulting determination of incremental opex for the current 2024–29 period is \$0.1 million.

Essential Energy noted that it will continue to engage with stakeholders on this project.³⁶ Should it receive stakeholder support for maintaining old P1 VMAs at CTS clearances, it can re-prioritise its opex portfolio to cover these costs for the remainder of the 2024–29 period. To the extent that these costs are not included in the base year, it can also propose an opex step change in its 2029–34 revenue proposal. We would assess the proposed step change and stakeholder consultation in accordance with the NER, the Expenditure Forecast Assessment Guideline, and the Better Resets Handbook.³⁷

Table 7 sets out our determination on incremental opex for each remaining regulatory year of the 2024–29 period.

³³ Essential Energy, Addressing bushfire risk reclassification: Final Project Assessment Report, 22 October 2024, pp. 7–8.

³⁴ Essential Energy, Addressing bushfire risk reclassification: Final Project Assessment Report, 22 October 2024, p 16.

³⁵ This includes a reduction of \$0.1 million and \$0.4 million for our determination on contingencies and cost escalation respectively.

³⁶ Essential Energy, *Contingent Project - Bushfire Risk Reclassification*, 2 December 2024, p 6.

³⁷ AER, Better Resets Handbook – Towards Consumer Centric Network Proposals, July 2024.

 Table 7
 AER's determination on forecast incremental opex for each remaining regulatory year (\$ million, \$2024–25)

Project opex cost	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Essential Energy's proposal	0.0	0.0	0.1	0.3	0.7	1.2
AER's determination	0.0	0.0	0.0	0.0	0.1	0.1
Difference	0.0	0.0	-0.1	-0.3	-0.6	-1.1

Source: AER analysis, Essential Energy's CPA.

5.2 Likely commencement and completion dates

Essential Energy has been undertaking preparatory activities since July 2023; however, it intends on commencing work to begin addressing the increased risk of bushfires in January 2026. For the purposes of this CPA, the applicable dates for the bushfire risk reclassification activities are a commencement date of January 2026 (commencement of costs included in this CPA) and anticipated date of completion by 2034.

We are satisfied the dates of commencement and completion of the bushfire risk reclassification are reasonable. Essential Energy has done a considerable amount of work to identify the scope of works. We acknowledge the complexity of work, substantial geographical footprint of Essential Energy's network, and resource constraints contribute to the length of the project.

6 Calculation of incremental allowed revenues

This section outlines our calculation of the incremental revenue that Essential Energy would recover from customers over the 2024–29 period to account for our determination of efficient project costs. We have applied an annual building block revenue approach in accordance with clause 6.6A.2(h) of the NER. Essential Energy's application is based on this approach.

We do not accept Essential Energy's estimates of incremental revenue as we consider the estimates are not reasonable. Instead, we determine that the incremental revenue likely to be required in each remaining regulatory year is \$0.8 million for 2026–27 and 2027–28, and \$0.9 million for 2028–29. The incremental revenues are calculated based on the capex and opex we determined and a smoothing profile that recovers the incremental revenue over the remaining 3 years of the 2024–29 period (2026–27 to 2028–29).

Table 8 shows Essential Energy is to recover \$2.5 million (\$ nominal, smoothed) in additional revenues for the bushfire risk reclassification works from its customers over the 2024–29 period.

As a result of recovering these revenues, we estimate that the distribution component of an indicative residential electricity bill in Essential Energy's network would increase by approximately \$1 per annum over the remaining 3 years of the 2024–29 period (2026–27 to 2028–29). Similarly, we also estimate the distribution component of an indicative small business electricity bill in Essential Energy's network would increase by approximately \$1 per annum over the same period.

Essential Energy's CPA calculated the total incremental revenue to be recovered from customers based on a placeholder WACC for 2025–26. It also proposed to recover the incremental revenue by adjusting the X-factor for 2025–26.

We have updated the 2025–26 WACC to reflect the annual return on debt for 2025–26, which occurred after Essential Energy submitted its CPA. In addition, due to the timing of our decision, we cannot implement any revenue adjustment for this contingent project as part of the 2025–26 pricing process. Instead, we determine that the incremental revenue will be recovered over the last 3 years of the 2024–29 period (2026–27 to 2028–29). Given this, we have calculated our approved total incremental revenue to be recovered from customers by resmoothing the X-factor for 2026–27, so that the incremental revenue will be recovered over 2026–27 to 2028–29.

	2024–25	2025–26	2026–27	2027–28	2028–29	Total
Return on capital	-	0.2	0.4	0.9	1.4	2.9
Return of capital ^A	_	0.0	0.0	-0.1	-0.2	-0.3
Straight-line depreciation	-	0.1	0.1	0.3	0.4	0.9

Table 8 Incremental revenue calculation (\$ million, nominal)

	2024–25	2025–26	2026–27	2027–28	2028–29	Total
Less: inflation indexation on opening RAB	_	0.1	0.2	0.4	0.6	1.2
Operating expenditure	_	0.0	0.0	0.0	0.1	0.1
Revenue adjustments	_	0.0	0.0	0.0	0.0	0.0
Net tax amount ^B	_	0.0	0.0	0.0	-0.1	-0.1
Annual revenue requirement (unsmoothed)	_	0.2	0.3	0.7	1.3	2.5
Annual expected revenue (smoothed)	_	0.0	0.8	0.8	0.9	2.5
Increase to annual expected revenue (smoothed, %)	_	0.0%	0.1%	0.1%	0.1%	0.0%

Source: AER analysis.

A) Regulatory depreciation (return of capital) consists of straight-line depreciation net of indexation of the RAB. The negative incremental regulatory depreciation is a result of a higher growth in the RAB and the consequent increase in the indexation of the RAB exceeding the increase in the straight-line depreciation.

B) The negative incremental net tax amount is due to the incremental increase in tax expenses (driven by tax depreciation) being higher than the incremental increase in taxable income.

Table 9 provides the effect of the resultant incremental increase in revenues on Essential Energy's total annual building block revenue requirement (unsmoothed), expected revenues, and the X-factors over the 2024–29 period.

Table 9	Indicative annual building block revenue requirement, expected revenue a			
	X-factors (\$ million, nominal)			

	2024–25	2025–26	2026–27	2027–28	2028–29	Total
Annual building block revenue requirement (unsmoothed)	1,117.5	1,189.2	1,286.0	1,307.6	1,412.8	6,313.1
Annual expected revenue (smoothed)	1,145.6	1,187.1	1,254.1	1,324.1	1,398.1	6,309.0
X-factors	n/a	-0.93%	-2.91%	-2.85%	-2.85%	n/a

Source: AER analysis.

Glossary

Term	Definition
AER	Australian Energy Regulator
СРА	contingent project application
capex	capital expenditure
EMCa	Energy Market Consulting associates
FTE	full-time equivalent
ISSC3:2016	Industry Safety Steering Committee Guide for the Management of Vegetation in the Vicinity of Electricity Assets (2016)
MAR	maximum allowed revenue
NER	National Electricity Rules
opex	operating expenditure
Provider	Distribution Network Service Provider
PTRM	post-tax revenue model
RAB	regulatory asset base
RIT-D	Regulatory Investment Test for Distribution
SAPS	stand-alone power systems
VMA	vegetation management area
WACC	weighted average cost of capital