

Issues Paper

Essential Energy

Electricity Distribution
Determination

1 July 2024 to 30 June 2029

March 2023

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1 Introduction

The Australian Energy Regulator (AER) exists to ensure energy consumers are better off, now and in the future. Consumers are at the heart of our work, and we focus on ensuring a secure, reliable and affordable energy future for Australia. We regulate electricity networks in all jurisdictions except Western Australia. Our primary role is in setting the maximum revenue that network businesses can recover from users of their networks. Our goal is to make decisions that ensure consumers pay no more than necessary for safe and reliable energy.

On 31 January 2023, we received a revenue proposal from Essential Energy (Essential) for the five-year regulatory period starting 1 July 2024 to 30 June 2029 (2024–29 period).¹ Our final decision on this proposal will set the revenue allowance that forms the major component of the revenue it proposes to recover from its customers. Essential is one of three electricity distribution network service providers in New South Wales (NSW). Essential operate and maintain one of Australia's largest electricity networks delivering essential electricity network services to more than 880,000 homes and businesses across 95% of NSW and parts of Southern Queensland. Our final decision on this proposal will set the revenue allowance that forms the major component of the revenue it proposes to recover from its customers.

However, over the 2024–29 period, there are several additional factors that may affect the total revenue that Essential will recover from its consumers, including:

- economic factors outside of Essential's control, such as inflation and interest rates
- Renewable Energy Zone (REZ) projects under the NSW Infrastructure roadmap
- Australian Energy Market Commission's ongoing metering competition review
- cost pass through events defined in the National Electricity Rules (NER) and our decision.

Early signal pathway assessment

Essential was selected to be part of the Better Resets Handbook (Handbook) early signal pathway. Under this process, AER staff have supported pre-lodgement engagement discussions with Essential, and its consumers. We have provided targeted feedback during this process to enable Essential to prepare a proposal that meets the expectations outlined in the Handbook in key topic areas such as consumer engagement, capital expenditure (capex), operating expenditure (opex), depreciation and tariff structure statements (TSS).

Essential has demonstrated a genuine commitment to the early signal pathway process and submitted a high-quality proposal, informed, and supported by its consumers and stakeholders.

We have undertaken an initial assessment of Essential's proposal and throughout this Issues paper have highlighted certain elements that have met our expectations as outlined in the Handbook. However, there are elements of the proposal, that since we last engaged on have changed or are new and emerging areas such as resilience, Distributed Energy Resources

¹ Essential Energy, *2024–29 Regulatory Proposal*, Jan23. Available at: [Essential's 2024–29 proposal](#).

(DER) and cyber security, where further assessment is required as part of our targeted review.

A summary of the elements being considered are outlined in this Issues paper and include:

- Key drivers of replacement expenditure (repex), augmentation capex (augex) and ICT representing about 50% of the total capex forecast (section 4.3)
- Essential's forecasting approach to base opex and the Future Networks step change (section 4.4)
- Essential's depreciation approach for the proposed new asset class for DER (section 4.2).
- a detailed consideration of proposed Two-way pricing and of the measures proposed to manage any customer impacts that may result from its proposed new tariffs (section 6.2).

1.1 How can you get involved?

Consumer engagement is a valuable input to our determination. We have set out a number of questions throughout this paper. Stakeholders can assist in our process by providing their views on these or any other aspects of the proposals.

When we receive stakeholder submissions that articulate consumer preferences, address issues in a revenue proposal, and provide evidence and analysis, our decision-making process is strengthened.

You can contribute to our assessment by:

- making a written submission on the Essential proposal to AERresets2024-29@aer.gov.au by **12 May 2023**.²
- joining us, the New South Wales distributors (Ausgrid, Endeavour Energy and Essential) and our Consumer Challenge Panel, sub-panel 26 (CCP26)³ at an online public forum on **5 April 2023**. Details of how to register for this forum are available on our website and through [Eventbrite](#) (external link).⁴

Table 1 sets out the key milestones planned for this review.

Table 1 Key dates for Essential’s 2024-29 revenue determination

Milestone	Date
AER publishes Issues Paper on Essential's proposal	28 March 2023
AER holds public forum on Issues Paper and Essential's proposal	5 April 2023
Submissions due on Essential's proposal and Issues paper	12 May 2023

² See Essential Submission for full details on making a submission. For further information regarding the AER's use and disclosure of information provided to it, see the [ACCC/ AER Information Policy](#).

³ The role of the Consumer Challenge Panel is to assess and advise the AER on the quality of engagement undertaken by network businesses and whether the interests of customers are adequately reflected in regulatory proposals

⁴ Register for the Ausgrid, Endeavour Energy, Essential Energy combined Public forum through [Eventbrite](#) (external link).

Milestone	Date
AER publishes draft decision	September 2023
AER holds public forum on draft decision (predetermination conference)	October 2023
Essential submits revised proposals to AER	December 2023
Submissions due on draft decision and Essential’s revised proposal	January 2024
AER publishes final decision	April 2024

Note: Timelines are indicative and subject to change.

2 Our initial observations

Essential's proposal would allow it to recover \$6,380.5 million (\$nominal, smoothed) from its customers over the 1 July 2024 to 30 June 2029 period. This is 25.4% higher than what we approved for the 2019–24 period.⁵

Essential's proposed charges are for the distribution network components of the electricity bill for its customers and determine the revenue allowance that Essential will use to calculate network charges each year in accordance with its approved pricing methodology. The cost of the network components of the electricity supply chain make-up about 38% of the average electricity bill for both household and small business customers in the network area and are ultimately recovered through electricity retail charges.⁶

Essential's proposal is the first step in a 15-month review process. Over the course of this process, as we move from proposal to draft decision, and then to revised proposal and final decision, components of forecast revenue are likely to change. These changes may result from our taking a different view on proposed revenue to Essential. In addition, a standard part of our process is to update the forecast revenue for movements in market variables such as interest rates, bond rates and inflation. Movements in these market variables can have a material impact on the final revenue and, therefore, consumer bills. Therefore, projected bill impacts at this stage should be treated as no more than potential impacts subject to changes in interest rates and inflation. For illustrative purposes Essential estimates that over the next regulatory period its proposal would result in:

- an average annual increase of \$41 (or 2.1%) for residential electricity consumers, and
- for small business customers, which use more electricity, an average annual increase of \$80 (or 1.7%).⁷

Essential notes in its 2024–29 proposal that⁸:

- its expenditure forecasts do not include costs of NSW REZ or the NSW electricity Infrastructure roadmap
- external market changes between preparation of draft proposal and regulatory proposal have resulted in higher proposed revenue and ultimately network charges for consumers
- the costs of projects have been presented to consumers noting uncertainty about the pace and scale of the transition)
- consumers will only pay for the projects if they are approved by the relevant regulator.

Essential submits that it prepared its proposals to achieve the lowest price outcome for its customers while establishing the foundation for the bi-directional energy network of the

⁵ In real terms (\$2023–24), the proposed total revenue is \$349.6 million (6.3%) higher than the approved revenue for the 2019–24 period.

⁶ Essential Energy, *2024-29 Regulatory Proposal Customer Overview*, January 2023, page 15.

⁷ Essential Energy, *15.05 2024-2029 - Reset RIN - Workbook 5 - Indicative Bill Impact*, Jan23.

⁸ Essential Energy, *2024-29 Regulatory Proposal Customer Overview*, January 2023, page 9, 16, 18

future. The investments Essential is making now are supported by consumers as they will deliver community wide benefits such as improved efficiency and lower overall energy costs.⁹

Essential's proposal claims to have taken account of risk appetite for natural/ climate related events, the key priority for its customers of improving network and community resilience, and proposed investments are in line with customers priorities of safety, reliability and combating bushfire and flood risk.¹⁰ Essential's customers expect them to invest for the future but make a clear case for any expenditure decisions that will increase prices.¹¹

Essential is proposing to provide tariffs that are fit for future users of the network by continuing a process of tariff reform to gradually move towards more cost reflective pricing. The proposal includes new tariffs designed to support 'two-way pricing' (charging for consumption and exports) and work towards balancing network demand. These tariffs will more accurately reflect the impact that customers' use of electricity has on the cost of running their rural, regional, and remote network.

Essential have outlined the customer and stakeholder engagement they have undertaken in the development of the proposal. For Essential's stakeholders, affordability and reliability and resilience of the network have emerged as key areas of concern. The ability of Essential to plan for the future (integration of renewables), whilst maintaining safety and security of supply, recognising energy equity (collective benefit) for all customers, was also important¹². Further details on how Essential has responded to these priorities is considered in section 3.

2.1 Drivers of revenue in the proposal

To compare revenue from one regulatory period to the next on a like-for-like basis, we make an adjustment for the impact of inflation. To do this, we use "real" values based on a common year (in this case, 2023–24) which have been adjusted to remove the impact of inflation.

In real terms, Essential's proposal, if accepted would allow it to recover \$5,912.8 million (\$2023–24, smoothed) from its consumers over the 2024–29 period, a \$349.6 million (6.3%) increase compared to the current regulatory period¹³ Essential proposes higher nominal revenue over the 2024–29 period compared to what we approved for the 2019–24 period, Figure 1 shows the increase in proposed real revenue for the 2024–29 period compared to the revenue we approved in our final decision for 2019–24 period.

⁹ Essential Energy, *2024-29 Regulatory Proposal*, January 2023, page 45.

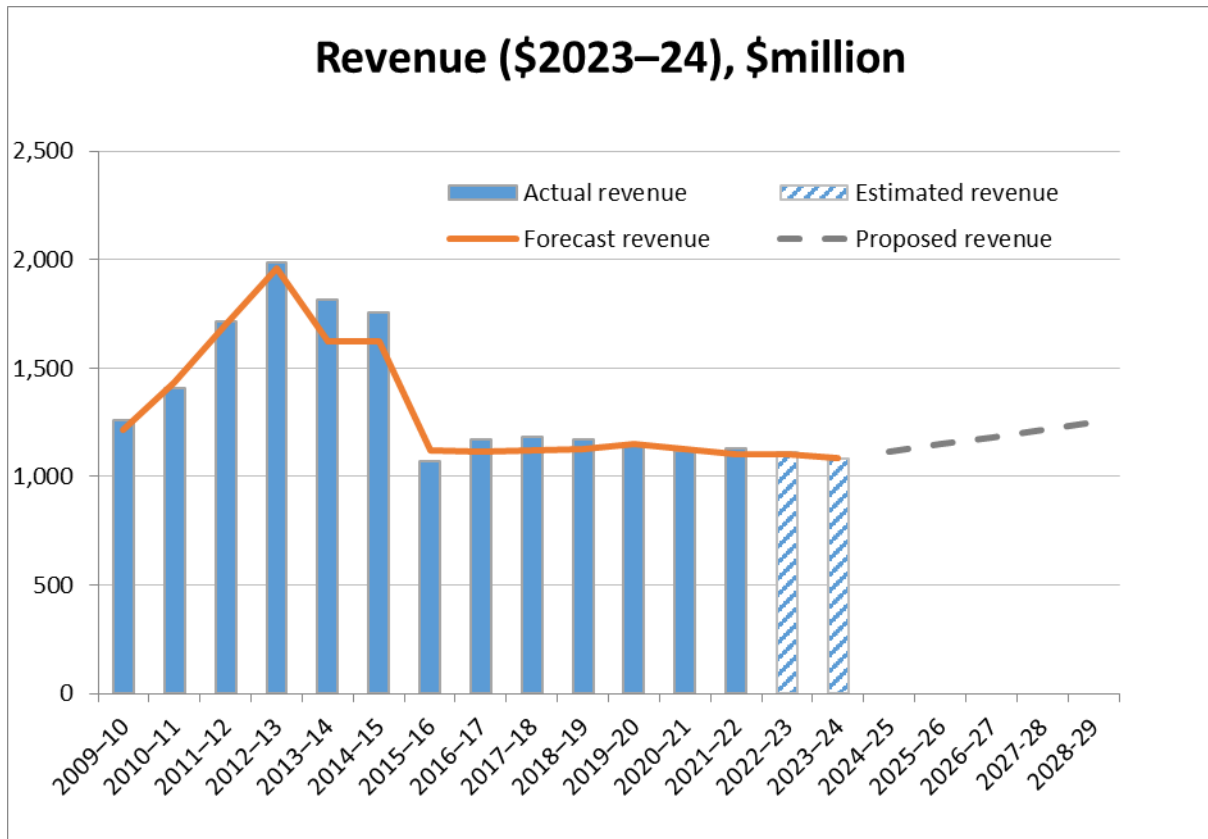
¹⁰ Essential Energy, *2024-29 Regulatory Proposal*, January 2023, page 39

¹¹ Essential Energy, *2024-29 Regulatory Proposal*- January 2023 page 45

¹² Essential Energy, *2024-29 Regulatory Proposal Customer Overview*, January 2023, page 21.

¹³ Essential Energy, *2024-29 Regulatory Proposal*, January 2023, page 36

Figure 1 Changes in regulated revenue over time (\$million, 2023–24)



Source: AER analysis.

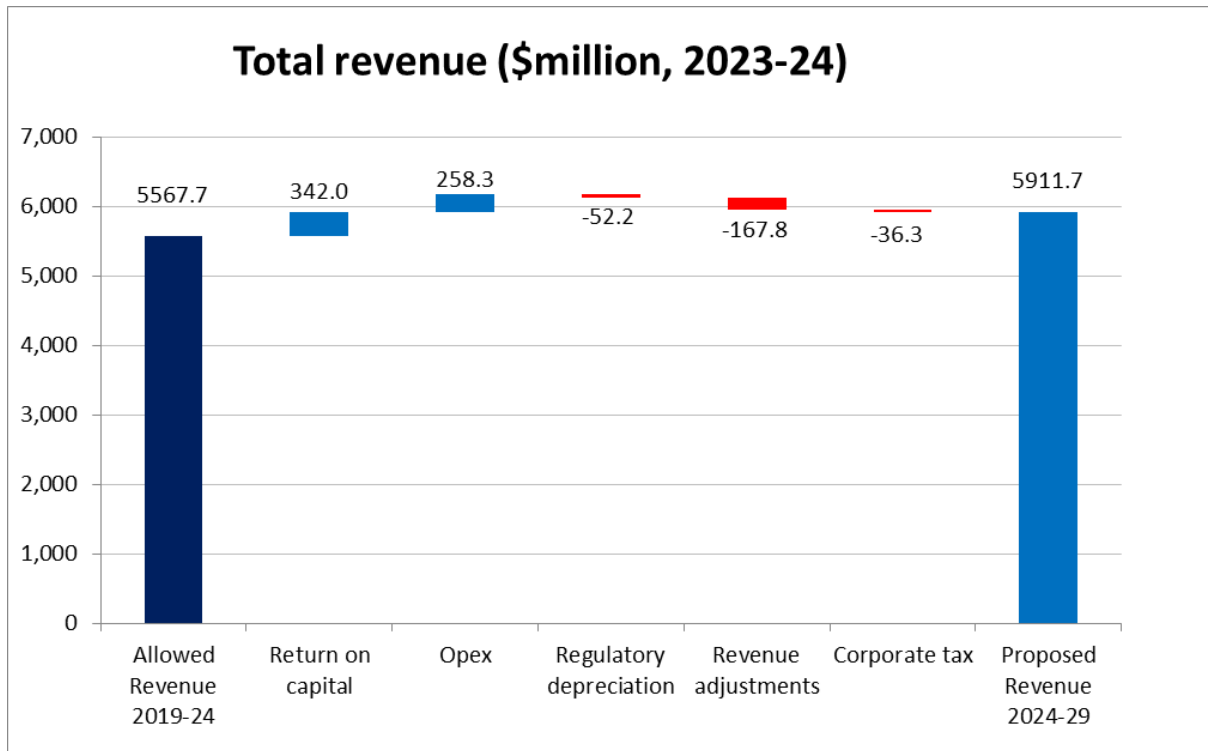
Figure 2 highlights changes in Essential’s proposal at the “building block” level to illustrate what is driving its proposed increase in real revenue from 2019–24 to 2024–29.

The overall trend in revenue is primarily driven by¹⁴:

- Increase in the return on capital; which is being driven by an increase in forecast rate of return and an increase in the regulatory asset base (RAB).
- Higher opex; driven by higher insurance costs, including an allowance for debt raising costs.
- Offsets to the above are delivered by revenue adjustment penalties for overspending in 2019-24 and lower returns of capital (depreciation) and a fall in Essential’s net tax allowance and regulatory depreciation.

¹⁴ Essential Energy, *2024-29 Regulatory Proposal*, January 2023, p. 37.

Figure 2 Changes in building blocks: Essential’s total revenue 2019–24 to forecast revenue 2024–29 (\$million, 2023–24)



Note: Allowed revenue and proposed revenue in the chart are unsmoothed total revenue for the regulatory period.

Source: AER analysis.

2.2 The Early Signal Pathway

The main objective of the Handbook is to encourage networks to develop high quality proposals through genuine engagement with consumers. The Handbook notes:

Networks that engage in genuine engagement with consumers are likely to result in better quality proposals being submitted to the AER. Proposals that reflect consumer preferences, and meet our expectations, are more likely to be largely or wholly accepted at the draft decision stage, creating a more effective and efficient regulatory process for all stakeholders.¹⁵

To facilitate this objective, the early signal pathway process was introduced to provide an opportunity for a business to receive formal feedback on aspects of its proposal during its pre-lodgement engagement. Through the earlier review of information, we can provide signals at the issues paper stage on whether we will undertake a targeted review of a proposal.

A targeted review means that the AER has been able to narrow the scope of issues to be assessed, based on the expectations on key topic areas in the Handbook being met. Where a business had satisfied the expectations for a topic area set out in the Handbook, a targeted review would focus on a select set of issues, cost categories or programs of work for assessment. A recent example of where the AER undertook a targeted review, was for the

¹⁵ AER, [Better Rests Handbook – Towards consumer-centric network proposals](#), December 2021, p. 3.

Powerlink 2022–27 draft determination. As a result of a high-quality proposal being submitted by Powerlink, we were able to focus on the key areas of concerns and at our draft decision were able to accept all major aspects of its proposal.¹⁶

AER assessment of Essential's proposal on the early signal pathway

Essential is one of the first two businesses selected to be part of the early signal pathway. As part of this process Essential provided AER staff with early access to data and information relevant to the expectations set out in the Handbook. In turn, the AER and CCP26 have provided feedback through a check-in in October 2022. At the check-in, feedback was given indicating where expectations were met or where more work was needed to be done to meet the expectations in the Handbook.

Throughout this issues paper we indicate where we believe a targeted review is suitable in relation to the topic areas of consumer engagement, capex, opex, depreciation, and tariff structures statements. We are seeking stakeholder feedback on Essential's proposal and the issues highlighted in our paper on whether we undertake a targeted review of the identified parts of Essential's proposal.

We have undertaken an initial assessment of Essential's proposal discussed in this Issues paper and identified several aspects where we wish to undertake further assessment as part of our targeted review, as outlined in section 1.

Overall, it is important to note that Essential has lodged a proposal that has demonstrated a very high standard of stakeholder engagement, with elements of its proposal supported by the customers it has consulted with. Given this high standard it is likely that more issues can be settled at the draft determination stage or potentially fully accepted.

Questions

1. What are your views on our assessment of Essential's proposal – are there any aspects of the proposal that require deeper or less review?
2. Do you consider that we should accept Essential's proposal at the draft determination stage?

¹⁶ AER, [Better Rests Handbook – Towards consumer-centric network proposals](#), December 2021, p. 5.

3 Essential's consumer engagement

Genuine, high quality consumer engagement by Essential is important to ensuring that its proposal is driven by consumer preferences, supports delivery of services that meet the needs of its consumers, and does so at a price that is affordable and efficient. We've seen through experience that a regulatory proposal developed through genuine engagement with consumers is more likely to be largely or wholly accepted in our decisions.

Our framework for considering consumer engagement in network revenue determinations is set out in the Handbook and looks at three elements – the nature, and breadth and depth of engagement and clearly evidenced impact from the engagement.¹⁷ Used in conjunction with our technical analysis, the framework for our regulatory decision-making allows us to place weight on the outcomes of the engagement activities undertaken by a business to assist in providing an overall assessment of a proposal.

As discussed in section 2.3, Essential was selected to participate in the Handbook's early signal pathway. Essential's engagement journey began prior to its selection on the early signal pathway, when it began its extensive engagement program to co-design with customers a proposal that reflected their priorities for the 2024–29 period.¹⁸ Essential has undertaken a comprehensive and significant engagement approach, guided by its vision of 'empowering communities to share and use energy for a better tomorrow'.¹⁹ It states it is confident that through its co-designed process the investments proposed not only meet business and regulatory requirements, but also reflect customer priorities.²⁰

Essential engaged independent experts, Woolcott Research & Engagement (Woolcott) to facilitate its approach to its proposal from the beginning.²¹ Essential also appointed an independent engagement consultant (Comacon) to assess whether as part of the Handbook process it is on track and this report has been submitted as part of the proposal submission.²²

The CCP26 and staff were able to observe and engage closely with Essential's engagement as part of the early signal pathway, including meetings with its Stakeholder Collaboration Collective (SCC) and attending in-person group sessions.

3.1 Nature of engagement

The nature of engagement is about how networks engage with their consumers. Our expectations are that network businesses will sincerely partner with consumers and equip them to effectively engage in the development of their proposals.

In planning its engagement for its proposal, Essential said its aim was to build on the industry-leading engagement it undertook for its 2019–24 proposal, with the ambition to have

¹⁷ AER, *Better Resets Handbook*, December 2021.

¹⁸ Essential Energy, *2024–29 Regulatory Proposal*, Jan23, p. 9.

¹⁹ Essential Energy, *4.01 Stakeholder engagement framework*, 2021, p. 1.

²⁰ Essential Energy, *2024–29 Regulatory Proposal*, Jan23, p.22.

²¹ Essential Energy, *2024–29 Regulatory Proposal*, Jan23, p. 23.

²² Essential Energy, *4.15 Independent Consumer Report – Comacon*, Dec22.

customers and stakeholders co-design the materials and options put forward.²³ It designed its engagement framework to reflect the International Association of Public Participation (IAP2) Spectrum. Essential's ambitions for growth from the 2019–24 period specifically outlined it wanted to achieve:

In seeking input from its stakeholders, a primary collaborator in Essential's co-design process was its SCC.²⁴ Its deeper consumer engagements included:

- fortnightly SCC meetings – used the knowledge of the group to inform details of what it engaged with its customers on and other regulatory aspects, including requirements for the Handbook
- co-designed stakeholder workshops – throughout its phased engagement stages, Woolcott conducted workshops and forums with a broad range of stakeholders
- Pricing Collaborative Collective – an additional reference group, established in February 2022 following a recommendation from the SCC, to engage on more specific pricing elements to design its tariff structure statement (TSS)
- TSS dive – on recommendation of the SCC, deeper engagement with a smaller group of customers on more complex aspects of the TSS. Participants engaged in an online information session, before attending a 6 hour in person session.²⁵

Essential outlines that the SCC provided 'guidance on its thinking, informed decisions, assisted in the development of engagement materials, directed us to form any dedicated sub-groups and identified when independent experts should present information to participants.'²⁶ Essential note that its SCC was highly complementary of its collaborative engagement approach, both with the group but also with our customers and stakeholders. It said:

They could see that we genuinely listened to feedback and altered our approach and proposal as required. This on-going dialogue and genuine engagement approach meant that when we published our Draft Proposal in September 2022, we received no major pushbacks.²⁷

3.2 Breadth and depth of engagement

The breadth and depth of engagement is about the scope of engagement with consumers and the level of detail at which network businesses engage on issues. The breadth and depth of engagement also covers the variety of avenues used to engage with consumers.

Essential has undertaken 417 hours of face-to-face engagement, which equates to more than 7,800 hours of customers' and stakeholders' time.²⁸ No single channel of engagement has been used and Essential undertook a wide variety of tools to obtain stakeholder

²³ Essential Energy, *2024–29 Regulatory Proposal*, Jan23, p. 23.

²⁴ Essential Energy, *2024–29 Regulatory Proposal*, Jan23, p. 113.

²⁵ Essential Energy, *2024–29 Regulatory Proposal*, Jan23, pp.27–30, 113.

²⁶ Essential Energy, *2024–29 Regulatory Proposal*, Jan23, p24.

²⁷ Essential Energy, *2024–29 Regulatory Proposal*, Jan23, p. 114.

²⁸ Essential Energy, *4.02 How engagement informed our proposal*, Jan23, p. 3.

feedback. Including, but not limited to virtual and in-person forums, deep dives, media and information presented on its online Engagement hub and Virtual room, radio, and print campaigns.²⁹

To broaden its stakeholder groups during its engagement phases Essential heard from new stakeholders including: a youth group (16 – 18 year-olds), Accredited Service Providers, aggregators, retailers, and councils (holding a series of dedicated public lighting workshops).³⁰ During its engagement process, Essential has identified a gap in its business-as-usual engagement and it acknowledges that despite having a Customer Advisory Group comprising customer and industry advocates, it is not hearing from everyday customers. It notes it is rectifying this gap and are in the process of recruiting its Peoples' Panel, which will meet quarterly from early 2023.³¹ We encourage Essential's commitment to ongoing engagement with its customers.

Essential have heard from customers on their priorities and have said that after safety, affordability and reliability remain their most important priorities. Recent bushfires and floods also saw customers showing an increased desire for new investment to build up resilience in its network.³² We welcome stakeholders views on the level of detail of the issues that Essential engaged with.

Essential undertook an incredibly significant multi-faceted engagement plan, and as a result we can only highlight key elements here.³³ We do note the detailed independent report produced by Comacon, and highlight the comments regarding Essential's engagement:

...if Comacon was benchmarking this engagement against community engagement standards, the quality of engagement would be considered outstanding. Essential have developed their engagement strategy through a genuine collaborative approach and have responded within the limitations of environmental factors outside their control.³⁴

3.3 Clearly evidenced impact

Essential's engagement approach has driven the outcomes of its 2024–29 proposal. It has had regard has to:

- identifying and understanding what is important to its customers and stakeholders and their feedback,
- the IAP2 Spectrum best practice engagement, and
- guidance from the AER and CCP26.

²⁹ Essential Energy, *2024–29 Regulatory Proposal*, Jan23, p. 30.

³⁰ Essential Energy, *4.02 How engagement informed our proposal*, Jan23, p. 26..

³¹ Essential Energy, *4.02 How engagement informed our proposal*, Jan23, p. 3.

³² Essential Energy, *4.02 How engagement informed our proposal*, Jan23, p. 3.

³³ Essential Energy's Proposal submission documents, Att. 4.01 – 4.15 provide significant information on its engagement strategy, outcomes of its engagement phases and independent consumer report.

³⁴ Essential Energy, *4.15 Independent Consumer Report – Comacon*, Dec22, p.14.

Essential acknowledges that its engagement journey has not ended, and it will continue to engage with stakeholders ahead of submitting its Revised Proposal.³⁵ Essential has developed a proposal that it considers reflects consumers preference and is capable of being accepted by the AER, which we applaud and encourage.

Question

3. Do you think Essential's consumer engagement meets the expectations set out in the Handbook in delivering a consumer-centric proposal? Please give examples.

³⁵ Essential Energy, *4.02 How engagement informed our proposal*, Jan23, p. 3.

4 Key elements of Essential's revenue proposal

The regulatory framework governing electricity networks and our assessment of Essential's proposal is set out in the National Electricity Law (NEL) and Rules (NER). Our work is guided by the National Electricity Objective (NEO) which promotes efficient investment in, and operation and use of, electricity services in the long-term interests of consumers³⁶.

The foundation of our regulatory approach is a benchmark incentive framework to setting maximum revenues: once regulated revenues are set for the five-year period, a network that keeps its actual costs below the regulatory forecast of costs retains part of the benefit. Service providers have an incentive to become more efficient over time, as they retain part of the financial benefit from improved efficiency. This delivers benefits to consumers as efficient costs are revealed over time and drive lower cost benchmarks in subsequent regulatory periods. By only allowing efficient costs in our approved revenues, we promote delivery of the NEO and ensure consumers pay no more than necessary for the safe and reliable delivery of electricity.

Essential's proposed revenue reflects its forecasts of the efficient cost of providing distribution network services over the 2024–29 period. Its proposal, and our assessment of it under the Law and Rules, are based on a “building block” approach which looks at five cost components:

- a return on the RAB (or return on capital, to compensate investors for the opportunity cost of funds invested in this business)
- depreciation of the RAB (or return of capital, to return the initial investment to investors over time)
- forecast opex – the operating, maintenance and other noncapital expenses, incurred in the provision of network services
- revenue increments/decrements – resulting from the application of incentive schemes and allowances, such as for opex, capex and demand management innovation
- the estimated cost of corporate income tax.³⁷

4.1 Rate of return

The return each business is to receive on its capital base (“return on capital”) is a key driver of proposed revenues. We calculate the regulated return on capital by applying a rate of return to the RAB value.

We estimate the rate of return by combining the returns of the two sources of funds for investment: equity and debt. The allowed rate of return provides the business with a return on capital to service the interest rate on its loans and give a return on equity to investors.

The approach that Essential, and we, must take to estimate the rate of return, including the return on debt and the return on equity, as well as the value of imputation credits, is set out in

³⁶ National Electricity Law (NEL or Law), s.7.

³⁷ See Figure 3.4 in AER, [State of the energy market](#), June 2022, p.65

our binding Rate of Return Instrument. We publish a new Rate of Return Instrument every four years. For the purpose of its proposal, Essential has applied our current, 2018 Rate of Return Instrument (2018 Instrument). Our final decision on Essential's proposal, which will be made in April 2024, will apply the new 2022 Rate of Return Instrument which we published in February 2023. Therefore, stakeholders should treat the rate of return estimates submitted by Essential as indicative pending the 2022 Rate of Return Instrument.

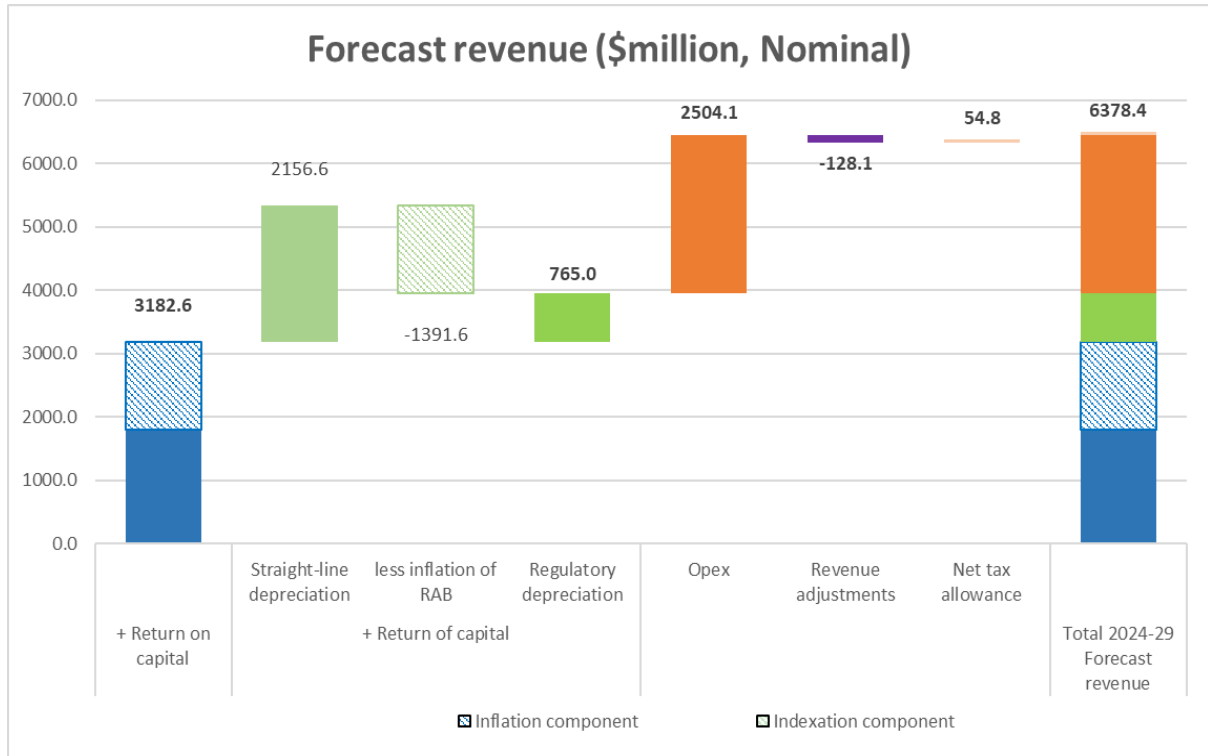
4.1.1 Inflation

In 2020, we concluded a review of our approach to estimating expected inflation. Essential has applied the approach established in the review, but once again, the estimates provided by Essential should be considered indicative because estimates of inflation may change as we move through the process.

An allowance for expected inflation provides compensation for the risk to investors for the prospect of inflation eroding the investor's purchasing power. Figure 3 shows the interaction of expected inflation on the forecast building block revenue.

- The return on capital building block applies a nominal rate of return to the RAB. As the nominal rate of return includes expected inflation, part of that building block compensates for expected inflation. Higher expected inflation increases the return on capital mainly due to RAB and capex.
- The return of capital building block removes expected inflation indexation of the RAB from forecast depreciation. This avoids compensation arising from the effects of inflation being double-counted by including it in the return on capital building block and also as a capital gain (through the indexation of the RAB). Higher expected inflation therefore reduces the regulatory depreciation allowance.
- Other building blocks (such as opex, and revenue adjustments) include an inflation component, as the costs forecast in real dollar terms are escalated to nominal dollars using expected inflation in determining the required nominal revenues. Higher expected inflation will increase opex and revenue adjustments.

Figure 3 Essential: Inflation components in proposal revenue building blocks (\$million, nominal)



Source: AER analysis

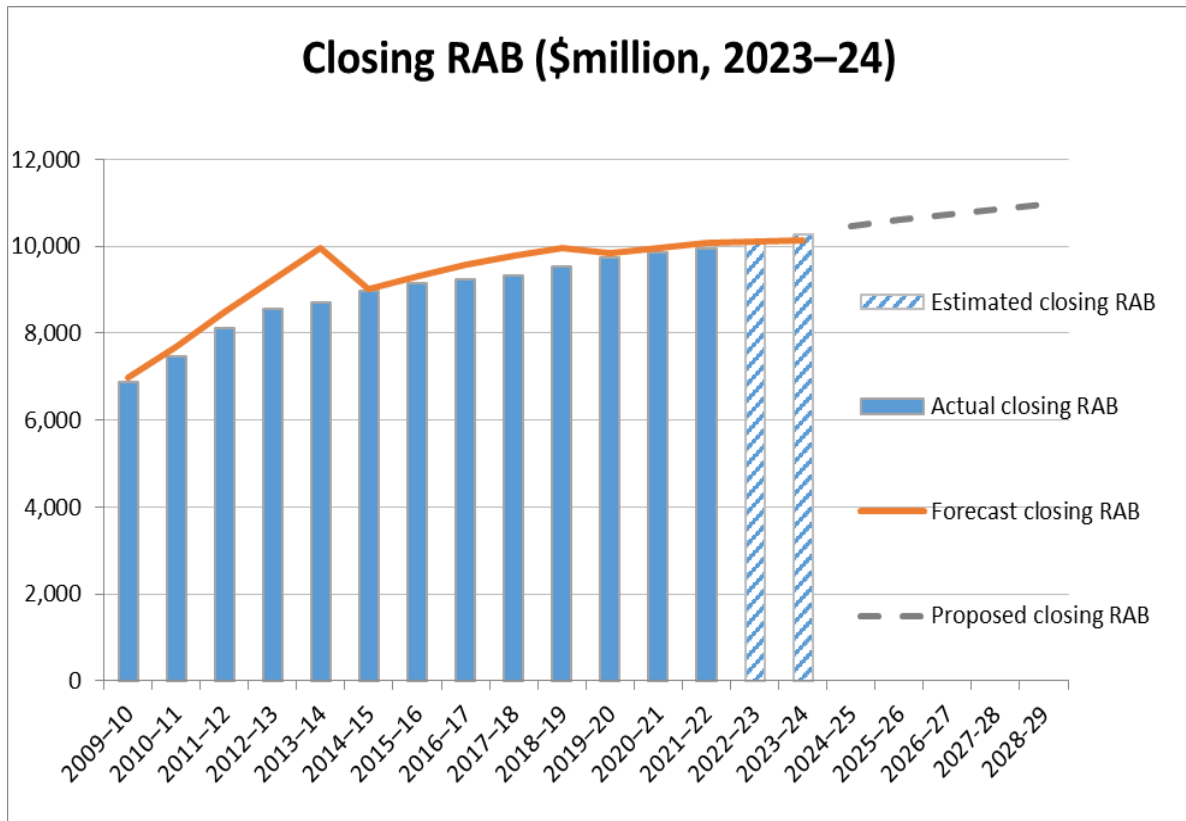
4.2 Regulatory asset base and depreciation

The RAB is the value of assets used by Essential to provide network services. The value of the RAB substantially impacts Essential’s revenue requirement, and the price consumers ultimately pay. Other things being equal, a higher RAB would increase both the return on capital and depreciation components of the revenue determination.

Essential proposes a forecast RAB of \$12,416.6 million (\$ nominal) by the end of the 2024–29 period, which is \$2,141.1 million higher than the estimated RAB at the end of the 2019–24 period. This follows an increase of \$2,170.5 million (\$ nominal) in the estimated RAB over the 2019–24 period.

The proposed RAB increase (in both nominal and real terms) for the 2024–29 period is primarily driven by a higher forecast capex for that period. Figure 4 shows the value of Essential’s RAB over time.

Figure 4 Essential's RAB value over time (\$million, 2023-24)



Source: AER analysis.

Regulatory depreciation is provided so investors recover their investment over the economic life of the asset (“return of capital”). Essential proposes regulatory depreciation of \$707.3 million (\$2023–24) for the 2024–29 period, which is \$52.2 million (6.9%) lower than for the 2019–24 period. The lower regulatory depreciation is driven by the higher RAB indexation, which more than offsets the increase in straight-line depreciation.

4.2.1 Assessment against the Handbook expectations for depreciation

A business under the early signal pathway that meets our expectations for depreciation will receive a targeted review.

In determining whether we will undertake a targeted review of a network business’ regulatory depreciation proposal, we would expect:

- that the business would use the AER’s post-tax revenue model (PTRM), roll forward model, and depreciation tracking module (where relevant) without amendments
- the asset classes would be unchanged from the last regulatory determination and the asset lives would also reflect those approved in previous decisions.

Essential used our standard regulatory models. It has not proposed any changes to standard asset lives for existing asset classes. Essential proposed to continue applying the weighted average remaining lives approach in determining its forecast straight-line depreciation of existing assets.

Essential has proposed a new asset class: Distributed Energy Resources (DER) for the 2024–29 period in its PTRM and calculated a standard asset life based on the weighted average cost for asset categories such as solar panels, batteries, and generators. We have not encountered a similar asset class in previous determinations. This is a matter that we will need to assess in further detail.

Overall, we consider Essential has performed well against the depreciation expectations. We will conduct a targeted review of the proposed new asset class for DER.

Question

- 4. Do you have views on Essential’s proposed new asset class for Distributed Energy Resources as set out in its 2024–29 proposal?
- 5. Do you have views on whether Essential’s proposed regulatory depreciation approach is capable of acceptance at the draft determination stage?

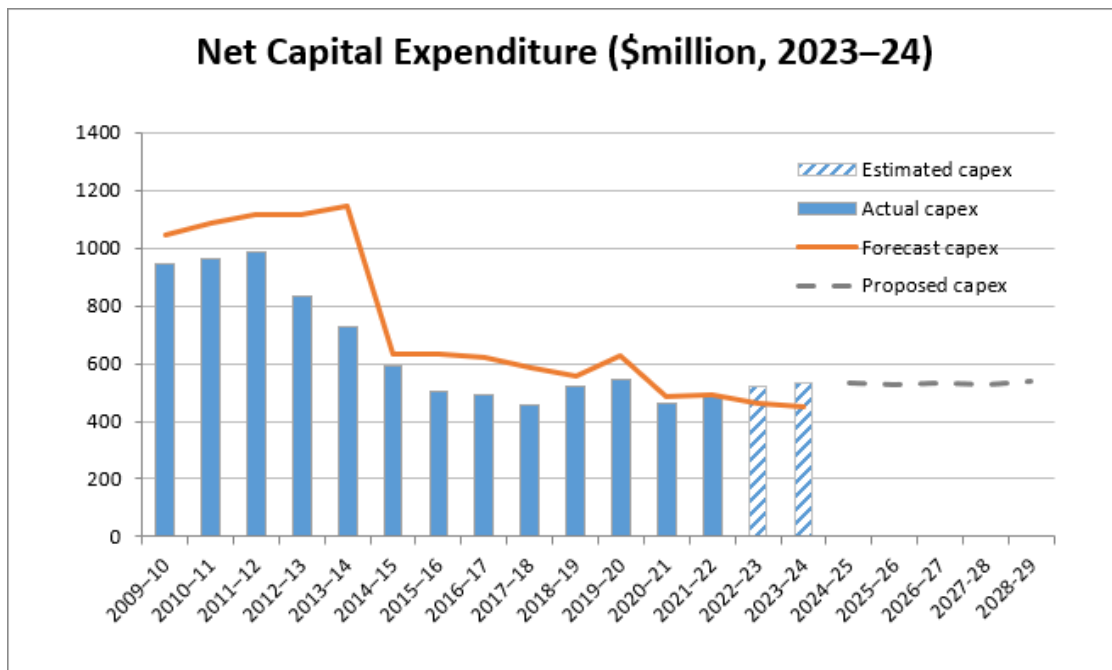
4.3 Capital Expenditure

Capex refers to the capital cost and expenditure incurred in the provision of Essential’s network services. Capex is added to the RAB, and so forms part of the capital costs of the building blocks used to determine total revenue.

4.3.1 Essential’s capex proposal

Essential has proposed a forecast net capex of \$2656 million.³⁸ Figure 5 compares Essential’s forecast to its actual spend and AER allowance overtime.

Figure 5 Comparison of Essential’s forecast with actual spend



³⁸ Forecast capex take account of \$32 million in provisions.

Source: AER analysis.

Essential's forecast is 5 % higher than actual spend in the 2020–24 period. Its current period spend tracks closely to the AER current period allowance, with Black Summer bushfires and major flooding events damaging assets between 2019–20 to 2021–22 contributing to expenditure in the current period.

Table 2 sets out the composition of Essential's total capex proposal for 2024-29.

Table 2 Essential's capex proposal for the 2024–29 period (\$ million, 2023–24)

Asset Category ^(b)	Total	% of Capex Total
Replacement ^(a)	1825	68%
Augmentation ^(a)	239	9%
Connections	108	4%
Export Services	88	3%
ICT	139	5%
Fleet ^(a)	184	7%
Property	84	3%
Capitalised Leases	15	1%
Other	14	1%
Total Capex (excluding capcons)	2696	
Disposal	9	
Provisions Movements	32	
Total Net Capex	2656	

Source: AER analysis

Notes: (a) includes resilience expenditure

(b) inclusive of capitalised overheads

As can be seen, the main drivers of its forecast are:

- Repex** of \$1825 million makes up 68% of the forecast. This appears to be 9% higher than its current period spend. This forecast includes \$168 million as part of its total resilience forecast of \$229 million. Essential submits that the drivers of its forecast are addressing higher risk asset classes such as power poles and pole top equipment, and keeping its investments for most asset classes broadly consistent with the current period. Proposed resilience investment includes proactive composite pole expenditure, undergrounding overhead powerlines in high-risk locations, and deployment of stand-alone power systems (SAPS) to address poor reliability in specific areas.³⁹

Essential submits that it is currently undergoing a RIT-D process for its Master-Subtractive Metering Rectification project which involves opex and capex in the current and future regulatory periods. It also anticipates undertaking RIT-D processes for its proactive pole replacement program and SAPS deployment.

³⁹ Essential Energy, *2024-29 regulatory proposal*, January 2023, p. 72.

- **Augex** of \$239 million of augex, which is 9% of the forecast. This is about 6% compared to current period spend. Essential's augex forecast includes \$60 million as part of its total resilience forecast of \$229 million. Proposed resilience-related expenditure includes investment in microgrids at sites susceptible to extended outages due to fire and storms and investment in solutions to support communities during extended outages, including portable lighting solar PV, batteries, switchboards and generators.⁴⁰

Similar to the other NSPs, Essential has proposed investment in new and emerging areas of capex; notably:

- **Export Services** capex of \$88 million. This includes investments for upgrading powerlines to increase thermal capacity, replacing selected distribution transformers and adding on-load tap changers, investing in real time network monitoring, enabling flexible export limits to allow more renewable energy to be exported into the network, and installing battery energy.⁴¹ The proposed investments are detailed further in Essential's "Future Network" business case. In this business case, Essential proposes a basic dynamic operating envelope implementation, ahead of an advanced trial and implementation in 2030-35. It submits that this approach will increase customer export connection limits and has the highest overall net present value. However, Essential's analysis has assumed its own customer export curtailment values, rather than our published values.
- **ICT** capex of \$139 million. Essential submits that its forecast recurrent ICT is broadly in line with its current period spend and that its non-recurrent ICT is materially below current period spend.⁴² At this preliminary stage, our analysis indicates that Essential's forecast recurrent ICT is actually materially above current period spend. Essential proposes \$65 million for non-recurrent ICT which includes expenditure to address cyber risks.
- **Fleet** capex of \$184 million. Its forecast is 3 % lower compared to current period spend. Essential submits that key investments in fleet include continued investment in alternate propulsion technologies, continued investment to manage asset age profile, targeted investment in heavy fleet and continued enhancement of its mobile asset management systems.⁴³
- **Connections** capex of \$108 million. This is a material step up from the current period, indicating potential change or a renew interpretation of its connection policy. Essential submits that a key driver of its forecast is the number of customer connections in the 2024-29 period.⁴⁴
- **Property** capex of \$84 million. Essential proposes a number of investments including a new investment in FY25 to relocate the Lismore depot due to FY22 flood damage and to mitigate the potential for this asset to be impacted in the future.⁴⁵

⁴⁰ Essential Energy, *2024–29 regulatory proposal*, January 2023, p. 72.

⁴¹ Essential Energy, *2024–29 regulatory proposal*, January 2023, p. 73.

⁴² Essential Energy, *2024–29 regulatory proposal*, January 2023, p. 73.

⁴³ Essential Energy, *2024–29 regulatory proposal*, January 2023, p. 74.

⁴⁴ Essential Energy, *2024–29 regulatory proposal*, January 2023, p. 73.

⁴⁵ Essential Energy, *2024–29 regulatory proposal*, January 2023, p. 74.

4.3.2 Assessment against the Handbook capex expectations

4.3.2.1 Top-down testing of the total capital expenditure forecast and at the category level

Top-down testing is a starting point when assessing the overall reasonableness of a business' capex proposal. Where a business is responding to the incentives created by the capital efficiency sharing scheme, we consider current period spend is a good initial basis to test the reasonableness of capex required to maintain the network in the forecast period. This is particularly the case for recurrent types of expenditure such as repex and recurrent ICT.

We consider that Essential has partly satisfied Handbook capex expectation 1. Essential performs well in some areas of top-down testing of its capex proposal:

- Essential performs well against the AER's repex model which is a top-down check of the repex forecast. In particular, Essential's modelled forecast repex to be about 14.4% below the repex model threshold, which suggests that overall its forecast modelled repex performs comparatively well against the other DNSPs. Its modelled repex represents about 60% of the total repex forecast.

However, we also note the following issues:

- Forecast total capital expenditure of \$2696 million is 5% higher than current period spend.
- Revisions of its forecasts on a number of key capex categories from the draft proposal to its regulatory proposal, where there have been increases but also offsetting decreases across different categories; and
- For recurrent capex categories, our preliminary review indicates that for repex, its forecast of \$1825 million appears to be 9 % higher than its current period spend and its recurrent ICT expenditure is 16 % higher than its current period spend.

4.3.2.2 Evidence of prudent and efficient decision making on key projects and programs

For capital expenditure categories that are a material proportion of the total forecast, we expect businesses to demonstrate prudence and efficiency in its decision-making by providing a number of pieces of evidence; for key recurrent and non-recurrent projects and programs these being:

- that the expenditure is needed to achieve the capex objectives
- that the business has explained to the AER and to customer groups the effect of the proposed expenditure on the service level outcomes
- quantitative cost benefit analysis assessing all feasible options to show that the preferred option maximises net benefits
- fully accounted for trade-offs between capex and opex to show that the preferred option is prudent and efficient.

At this stage, it is unclear whether Essential has satisfied this capex expectation.

At the pre-lodgement phase, Essential provided some information on projects and programs in its capex proposal but there was insufficient information for us to assess whether its decision-making was prudent and efficient. We consider that having only one check-in which was later in the pre-lodgement phase, is likely to have hampered Essential's ability to respond to AER preliminary feedback.

Evidence of alignment with risk management standards

Alignment with industry standards on good asset and risk management demonstrates prudent and efficient decision-making. Our review of Essential's asset management plan and associated documentation indicates that these are consistent with well-established relevant Australian industry standards. We will review whether these asset management practices have been applied to its new and emerging capex categories like network resilience and export services.

Genuine consumer engagement on capital expenditure proposals

We expect evidence of genuine customer engagement on the business' capex proposal. We expect businesses to engage with consumers on why the expenditure is required over the forecast period and outline to consumers what other options are available.

It is unclear whether Essential has satisfied capex expectation 4.

We acknowledge Essential's considerable efforts to engage with consumers on its capex proposal. However, it is unclear how informed its stakeholders were in making its preferences and whether they had sufficient time and opportunity for its consumers to engage with the material. For instance, we consider it unclear how much Essential's resilience proposal incorporates stakeholder preferences when the climate impact assessment including the benefits of resilience was not available to them until much later in the pre-lodgement process. We also note the revision of capex category forecasts since the draft proposal. Some of these revisions in its forecast at the capex category level with reductions in some categories like resilience offset by increases in export services and fleet. It is unclear how Essential has engaged with consumers about these revisions.

4.3.3 Overall assessment against the capex expectations

Based on the available information, we consider Essential has only partially satisfied the capex expectations.

Given the lack of information for us to assess prudence and efficiency of its key projects and programs at the pre-lodgement phase, as well as a revision of some of its capex category forecasts from draft proposal to submitted regulatory proposal, we intend to undertake a targeted review on several elements of Essential's capex proposal - representing about 50% of Essential's total capex forecast.

Our targeted review will include proposed capex for new areas of capex; these being DER, resilience and cyber ICT. These are emerging areas for all NSPs as reflected in these new categories being included in almost all regulatory proposals submitted in 2023. These new areas of capex are also topical issues to consumers, as well as having precedent setting effects/impacts for future resets.

We will also undertake a targeted review in the following areas:

- Repex - based on the information currently before us, Essential's repex forecast will require close review to assess its relationship with proposed resilience expenditure. Its resilience-related expenditure is the largest proposed amount compared to the other NSW businesses;
- ICT recurrent – our preliminary review suggests a material step-up in its forecast relative to actual spend;
- ICT non-recurrent - as with all other NSP proposals, we will also review Essential's total non-recurrent ICT forecast because it is lumpier, one-off type of expenditure;
- Augex – we note that resilience-related expenditure is embedded in augex, and limited information was provided at the pre-lodgement stage to us about its forecast;
- Connections – there appears to be a major step-up from current period spend which will require assessment;
- Fleet capex – Essential revised its forecast for fleet capex up by \$40 million since its draft proposal. The reason for this step-up is unclear at this stage.

For all other categories not subject to targeted review, we intend to undertake a broad high-level review of the main business cases driving the forecast to determine whether there are any issues that might lead to over-forecasting. For instance, we may focus on inputs and assumptions that materially affect the forecast.

Question

6. What do you think about the proposed scope of the targeted review?

4.4 Operating expenditure

Opex refers to the operating, maintenance and other non-capital expenditure incurred in the provision of network services. It includes labour costs and other non-capital costs that a prudent service provider is likely to require for the efficient operation of its network.

4.4.1 Essential's opex proposal

Essential proposed total opex of \$2,323.8 million (\$2023–24) for the 2024–29 period,⁴⁶ which is:⁴⁷

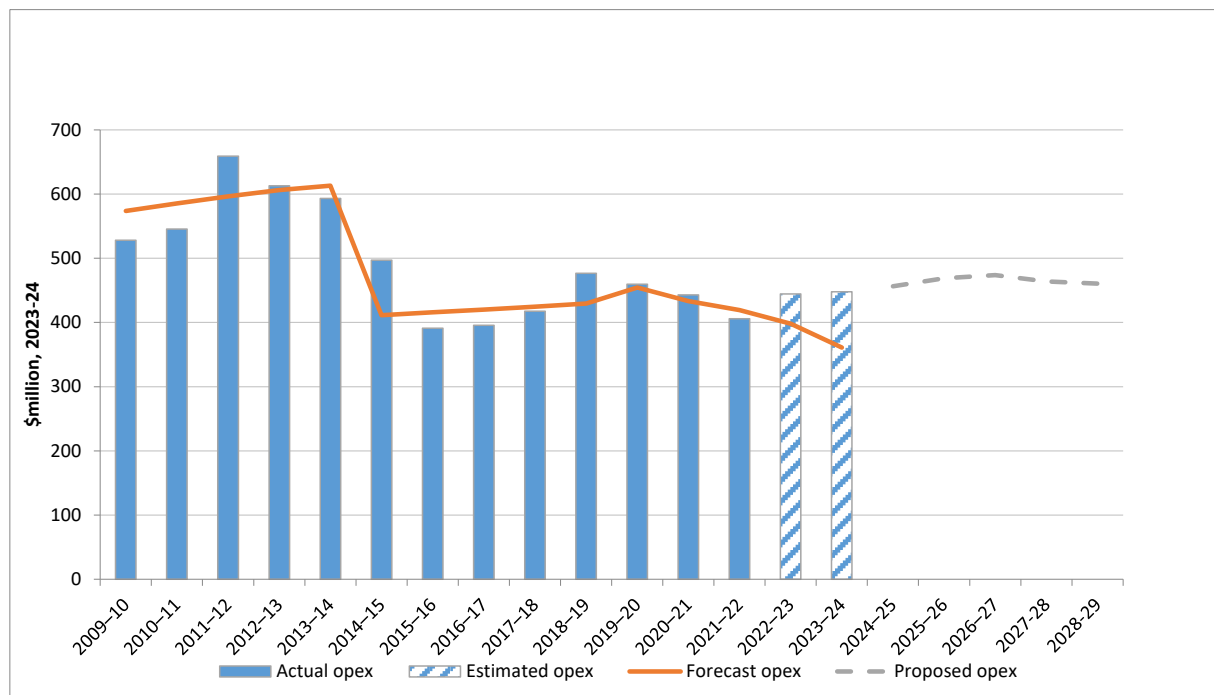
- \$86.4 million (3.9%) more than Essential's actual/estimated opex for the 2019–24 period
- \$200.4 million (9.4%) more than the opex forecast we approved for the 2019–24 period.

Figure 6 shows the trend in Essential's opex over time. Essential has reduced its opex since 2014–15. By the end of the current period, Essential expects to have reduced its annual opex by \$60.8 million (\$2023–24), or 11.9%, compared to its opex in 2014–15.

⁴⁶ Including debt raising costs.

⁴⁷ Essential Energy, *2024–29 Regulatory Proposal, Essential Energy - 9.03.07 Standard Control Operating Expenditure Model - Public*, 31 January 2023. Total opex figures include debt raising costs.

Figure 6 Comparison of Essential's past and forecast opex



Source: Essential Energy, *Economic benchmarking – Regulatory Information Notice response 2009–22*; AER, *Final decision PTRM 2009–14*; AER, *Final decision 2014–19 PTRM*; AER, *Final decision 2019–24 PTRM and Opex model*; Essential Energy, *2024–29 Regulatory proposal - Essential Energy - 9.03.07 Standard Control Operating Expenditure Model - Public*, January 2023; AER analysis.

4.4.2 Key drivers of the opex proposal

Essential used a base-step-trend approach to forecast opex for the 2024–29 period. This is broadly consistent with our approach to assessing opex, as outlined in our Expenditure Forecast Assessment Guideline.⁴⁸ Essential used an estimate of opex in 2022–23 as the base to forecast, \$438.2 million (\$2023–24) (or \$2190.7 million over five years). It chose 2022–23 as the proposed base year stating that this year will be the most recent year with audited actual data by the time of our final decision.⁴⁹ Essential then:

- added \$4.3 million to reflect the change in opex between the base year (2022–23) and final year (2023–24), using the approach outlined in the Expenditure Forecast Assessment Guideline
- removed \$13.4 million of category specific opex for DMIA/DMIS
- applied a rate of change comprised of:⁵⁰
 - forecast growth in the real price of inputs, averaging 0.6% per year (\$45.9 million, \$2023–24)
 - forecast output growth, averaging 0.7% per year (\$44.4 million, \$2023–24)

⁴⁸ AER, *Expenditure Forecast Assessment Guideline*, November 2013.

⁴⁹ Essential Energy, *2024–29 Regulatory Proposal, Essential Energy - 9.03.07 Standard Control Operating Expenditure Model – Public*, 31 January 2023.

⁵⁰ Essential Energy, *2024–29 Regulatory Proposal, Essential Energy - 9.03.07 Standard Control Operating Expenditure Model – Public*, 31 January 2023.

- forecast productivity growth, averaging 0.5% per year (-\$32.5 million, \$2023–24).
- added five step changes totalling \$57.3 million (\$2023–24):⁵¹
 - \$12.3 million to reflect an accounting change which means some cloud computing costs that were previously in capital expenditure are now treated as opex (**Cloud computing**)⁵²
 - \$14.7 million to address increasing insurance premiums and tightening conditions in the insurance market (**Insurance**)⁵³
 - \$31.7 million related to enabling distributed energy resources (DER) as part of Essential's Future Networks program (**Future networks**)⁵⁴
 - \$6.5 million for Guaranteed Service Level (**GSL**) payments to reflect an expected uplift in GSL payments following changes to the GSL scheme in New South Wales⁵⁵
 - -\$8.0 million to reflect savings in electricity and petrol costs due to adopting solar panels at 20 of its depot sites and moving a portion of its light and heavy fleet to electric vehicles (**Property and fleet**)⁵⁶
- added \$27.5 million (\$2022–24) for debt raising costs.⁵⁷

Figure 7 shows how each of these components contributes to Essential's total opex forecast.

⁵¹ Essential Energy, *2024–29 Regulatory Proposal, Essential Energy - 9.03.07 Standard Control Operating Expenditure Model*, January 2023.

⁵² Essential Energy, *2024–29 Regulatory Proposal, Essential Energy - 9.03 Opex approach*, January 2023, p. 6.

⁵³ Essential Energy, *2024–29 Regulatory Proposal, Essential Energy - 9.03 Opex approach*, January 2023, p. 7-8.

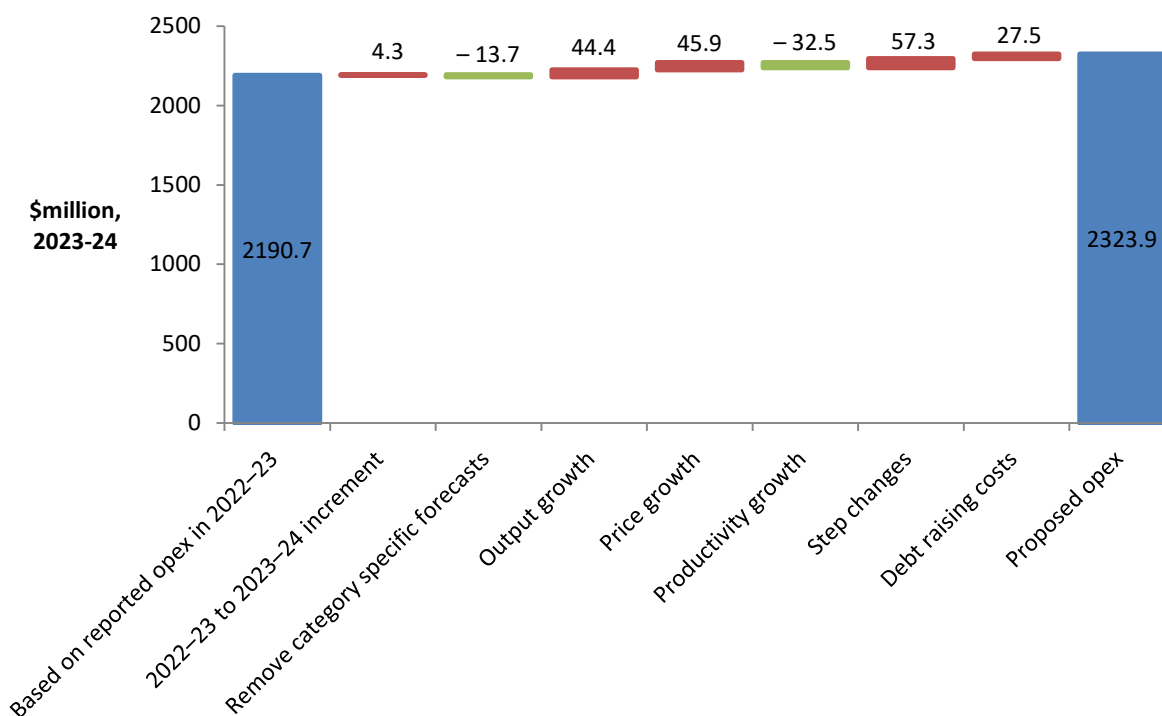
⁵⁴ Essential Energy, *2024–29 Regulatory Proposal, Essential Energy - 9.03 Opex approach*, 31 January 2023, p. 6-7.

⁵⁵ Essential Energy, *2024–29 Regulatory Proposal, Essential Energy - 9.03 Opex approach*, 31 January 2023, p. 8.

⁵⁶ Essential Energy, *2024–29 Regulatory Proposal, Essential Energy - 9.03 Opex approach - 31 January 2023*, p. 9.

⁵⁷ Essential Energy, *2024–29 Regulatory Proposal, Essential Energy - 9.03.07 Standard Control Operating Expenditure Model*, January 2023.

Figure 7 Breakdown of Essential's opex forecast (\$million, \$2023–24)



Source: AER analysis.
 Note: Including debt raising costs.

4.4.3 Assessment against the Handbook expectations for opex

4.4.3.1 Opex forecasting approach and base opex

As stated in the Handbook, our first expectations for a business's operating expenditure proposal relate to its opex forecasting approach, and estimation of base opex. We expect that opex is forecast using the 'base-trend-step' approach set out in the Expenditure Forecast Assessment Guideline, and the inputs and assumptions used to forecast opex to be consistent with those used to calculate opex incentive scheme (Efficiency benefit sharing scheme ((EBSS)) carryover amounts. We also expect that a network business would use the equation in the AER's Expenditure Forecast Assessment Guideline to estimate opex in the final year of the current control period.⁵⁸

Essential proposed estimated opex for 2022–23 as the forecast starting point (base opex). It stated that the full year audited financials for 2022–23 will be available for our final decision.⁵⁹ Essential also stated that its assessment of the efficiency of 2022–23 opex using our standard benchmarking approach indicates 2022–23 forecast opex is efficient.⁶⁰

Essential did not adopt our standard approach to estimate opex for the final year of the current regulatory control period (2023–24); that is, it did not use the final year equation.

⁵⁸ AER, *Better Resets Handbook – Towards consumer centric network proposals*, December 2021, pp. 25–26.

⁵⁹ Essential Energy, *2024–29 Regulatory Proposal, Essential Energy - 9.03 Opex approach - Jan23 - Public*, 31 January 2023, p. 4.

⁶⁰ Essential Energy, *2024–29 Regulatory Proposal Essential Energy - 9.03 Opex approach - Jan23 - Public*, 31 January 2023, p. 4.

Instead, it estimated final year opex by applying its forecast rate of change directly to base year opex (2022–23).⁶¹ However, it used a different (lower) estimate of opex for 2023–24 in calculating its EBSS carryover amounts. Essential's proposed approach does not meet our first opex expectation, as outlined in the Handbook.⁶²

Essential's proposed approach implies that it will incur an efficiency loss in the final year of the current regulatory period (2023–24), compared to the approved forecast. However, it assumed it would make a relatively smaller efficiency loss in 2022–23 when it calculated its EBSS carryover – this has the effect of significantly reducing the EBSS penalty that Essential is to incur.⁶³

By estimating higher opex for 2022–23 in its opex forecast than in the EBSS, Essential has proposed EBSS rewards for relative efficiency gains that it would not pass on to consumers through lower opex forecasts.

Essential's proposal states that our standard approach is unlikely to produce a realistic estimate of actual opex for 2023–24.⁶⁴ It also states that using a base-step-trend approach to estimate expenditure in the final year of the current regulatory period will ensure a consistent, AER approved methodology is used to forecast operating expenditure for the last year of the 2019–24 regulatory period and over the 2024–29 regulatory period.⁶⁵

Essential's proposed approach to base opex has a significant implication for total opex forecast and the calculation of EBSS carryover amounts. Our initial view is that this matter should be addressed in line with our Expenditure Forecast Assessment Guideline approach.⁶⁶

There are two options to addressing the issue identified in Essential's opex forecasting approach.

Option 1: Reject Essential's forecasting approach and apply our standard final year equation to forecast opex, using consistent final year opex in both our EBSS carryover calculation and our alternative opex estimate. This option would result in forecast opex decreasing significantly, by approximately \$200.4 million over five years relative to Essential's proposal, all things being equal.

Option 2: Accept Essential's opex forecasting approach (i.e., apply the trend from base year onward) but apply a non-recurrent base opex adjustment to both our

⁶¹ Essential Energy, *2024–29 Regulatory Proposal, Essential Energy - 9.03 Opex approach - Jan23*, 31 January 2023, p. 4.

⁶² AER, *Better Resets Handbook – Towards consumer centric network proposals*, December 2021, p. 25.

⁶³ As noted in section 5.1 of this paper, Essential Energy has proposed -\$118 million (\$2023-24) of EBSS carryover amount from the application of the EBSS in the 2019-24 regulatory control period. This number would have been significantly larger (approximately -\$169 million) had Essential Energy correctly applied the final year equation to estimate opex in 2023-24 and ensured that the value of 2023-24 opex in its calculation of EBSS carryover amounts is the same as that applied to forecast opex.

⁶⁴ Essential Energy, *2024–29 Regulatory Proposal, Essential Energy - 9.03 Opex approach - Jan23*, 31 January 2023, p. 4.

⁶⁵ Essential Energy, *2024–29 Regulatory Proposal, Essential Energy - 9.03 Opex approach - Jan23*, 31 January 2023, p. 4.

⁶⁶ AER, *Expenditure Forecast Assessment Guideline for electricity distribution*, November 2013, p. 22-23.

alternative opex estimate and our EBSS carryover calculation to ensure consistency between opex and EBSS models. This option would result in a higher EBSS penalty applying relative to Essential's proposal, increasing from \$117.8 million to \$313.0 million (\$195.2 million).

4.4.3.2 Trend

Essential applied our standard approach for forecasting the opex rate of change. It applied inputs consistent with our expectations for inflation, output, price growth, and productivity. We will update these inputs as necessary, for example to reflect the latest inflation data and our labour price (wage price index) growth forecasts and output growth forecasts that are consistent with our draft decision forecast demand.

4.4.3.3 Step changes

Our expectation in the Handbook is that step changes be limited to a few well justified ones, or none at all, and be explored with consumers.

As stated earlier, Essential proposed five step changes totalling \$57.3 million (\$2023–24), representing 2.5% of total forecast opex. The Future Networks step change for DER enablement related expenditure, worth \$31.7 million, accounts for 1.4% of total forecast opex and more than 50% of total proposed step changes. We note that this step change has increased by \$12.7 million from Essential's draft plan.

We intend to prioritise the Future Networks step change for targeted review due to:- it being an emerging area of expenditure and the associated precedent value of our decision; interactions with the targeted review of related capex; the relative materiality of the expenditure; and the material increase in value of the step change compared to Essential's draft plan.

4.4.3.4 Category specific forecasts

Essential has proposed one category specific forecast for debt raising costs and has adopted our standard approach for forecasting these costs. We therefore consider that Essential's regulatory proposal is consistent with this expectation.

4.4.3.5 Genuine consumer engagement

Through the pre-lodgement engagement and early signal pathway process, the AER has observed aspects of Essential's engagement with consumers on its opex proposal.

Essential presented its base-step-trend approach to consumers at a high-level, and engaged further on particular issues relevant to the opex proposal such as the Future Networks strategy. We did not observe a high level of engagement from consumers on opex matters, possibly reflecting a level of comfort with the information provided by Essential.

Overall, we consider Essential has demonstrated a genuine approach to consumer engagement in relation to its opex proposal. We are interested in the views of stakeholders on the extent to which Essential's opex proposal addresses the concerns identified by electricity consumers during its engagement process.

4.4.3.6 Overall assessment against the opex expectations

As explained above, we propose to undertake a targeted review of Essential's forecasting approach relating to aspects of its base opex, and the Future Networks step change.

The Future Networks step change for expenditure relating to DER enablement accounts for more than 50% of Essential's total proposed step changes, and relates to new proposed capex which will also be subject to targeted review.

For the reasons set out above, we also consider that Essential's opex forecasting approach relating to base opex warrants a targeted review as it is inconsistent with our expectations set out in the Handbook, and materially affects calculations of forecast opex and EBSS carryover amounts.

We propose undertaking a high-level review for all the other opex matters that are not subject to a targeted review. This will involve confirming modelling approaches, and updating inputs where necessary.

Questions

7. What do you think about the proposed scope of targeted review?
8. Do you consider Essential's proposed step changes are required to produce an opex forecast that reasonably reflects the efficient costs of a prudent operator?
9. Do you consider Essential's proposed approach to estimating opex in the final year of the current period appropriate to forecast total opex for the 2024–29 period?
10. How do you consider the AER should address the inconsistency between Essential's opex and EBSS models?

4.5 Corporate income tax

The building block approach to calculating the annual revenue includes an amount for the estimated cost of corporate income tax payable by the business. We forecast tax in accordance with the requirements of the Rules.⁶⁷

Using the approach set out in the post-tax revenue model, Essential proposes a forecast corporate income tax amount of \$50.2 million (\$2023–24) for the 2024–29 period. We note that Essential has:

- Proposed zero forecast immediate expensing of capex for the 2024–29 period using an approach consistent with its current tax policy.
- Adopted the diminishing value method for tax depreciation to all future capex, except for a limited number of assets which must be depreciated using the straight-line depreciation method under the tax law.

We will assess the appropriateness of the proposed amounts of immediate expensing and capex allocated for straight-line depreciation, based on the approach we have taken in recent revenue determinations.

Question

11. Do you have views on the approach to corporate income tax in Essential's 2024–29 proposal?

⁶⁷ NER, cl. 6.5.3.

5 Incentive schemes

Incentive schemes are a component of incentive-based regulation and complement our approach to assessing efficient costs. They provide important balancing incentives under network determinations, encouraging businesses to pursue expenditures efficiencies while maintaining the reliability and overall performance of its network.

Our final Framework and Approach (F&A) for Ausgrid, Endeavour Energy and Essential noted our intention to apply the five incentive schemes and allowances in the 2024–29 period that are set out below⁶⁸. Essential agreed with this approach in its 2024–29 proposal.

- **Efficiency benefit sharing scheme (EBSS):** This provides Essential with a continuous incentive for distributors to pursue efficiency improvements in opex, and to fairly share these between itself and consumers. Consumers benefit from improved efficiencies through lower network tariffs in future regulatory control periods.

The EBSS applies to Essential for the 2019–24 period. Essential proposed EBSS carryover amounts totalling –\$117.8 million (\$2023–24) from the application of the EBSS in the 2019–24 period.⁶⁹

As we noted earlier, Essential's calculation of EBSS carryover amounts relied on a final year (2023–24) opex estimate that is different from that than used as the starting point to forecast opex. The level of final year opex estimate needs to be the same in both the opex and EBSS models. We will consider adjusting Essential's proposal to reflect consistency between the opex forecast and the calculation of EBSS carryover amounts as discussed in the opex section of this paper.

- **Capital expenditure sharing scheme (CESS):** This incentivises businesses to undertake efficient capex throughout the regulatory control period by rewarding efficiency gains and penalising efficiency losses, each measured by reference to the difference between forecast and actual capex. For the 2020–24 period, Essential is proposing the application of a \$8 million CESS penalty.
- **Customer service incentive scheme (CSIS):** This creates an incentive for distributors to maintain and improve customer services not covered by the STPIS, or other mechanisms.⁷⁰ The CSIS is a flexible 'principles based' scheme that can be tailored to the specific preferences and priorities of a distributor's customers—as informed through consumer engagement.
- **Service target performance incentive scheme (STPIS):** This provides a financial incentive to Essential to maintain and improve service reliability performance.⁷¹ The STPIS is intended to ensure that distributors' service levels do not deteriorate due to

⁶⁸ AER, *Final framework and approach for Ausgrid, Endeavour Energy and Essential Energy for the 2024-29 regulatory control period*, July 2022

⁶⁹ Essential Energy, *2024–29 Regulatory Proposal, Essential Energy - 15.03 2024-2029 - Reset RIN - Workbook 3 - Efficiency Benefit Sharing Scheme - Jan23 -Public – unlocked*, 31 January 2023.

⁷⁰ AER, *Explanatory Statement Customer Service Incentive Scheme*, July 2020, p. 4.

⁷¹ AER, *Electricity distribution network service providers - service target performance incentive scheme v2*, November 2018.

distributors' effort to achieve efficiency gains under our expenditure schemes, which are typically associated with a reduction in expenditure.

- **Demand management incentive scheme (DMIS) and innovation allowance mechanism (DMIAM):** These fund Essential for research and development in demand management projects that have the potential to reduce long-term network costs. Projects to be funded under the DMIAM and DMIS must meet the approval criteria in both schemes.⁷²

Question

12. Do you have any views on the proposed application of any of the above incentive mechanisms?

⁷² AER, *Demand Management Incentive Scheme for Electricity distribution network service providers*, December 2017, clause 2. AER, *Demand Management Innovation Allowance Mechanism Electricity distribution network service providers*, December 2017, clause 2.

6 Network pricing

In the final F&A, we set out our intended classification of the services Essential provide to their customers.⁷³

Our classification of services determines which services we regulate and how distributors will recover the cost of providing those services.

Standard control services are those that can only be provided by the relevant distributor, and are common to most, if not all, of a distributor's customers. The costs of providing these services are captured in the building block revenue determination we've discussed in the previous sections of this paper and shared between all customers. Essential has proposed updates to its tariffs in its new tariff structure statement (TSS), which sets out the tariff structure through which it will recover its regulated revenue for standard control services. We discuss the TSS proposal in section 6.2, below.

Alternative control services are either:

- services that can only be provided by the relevant distributor, but will only be required by some of its customers, some of the time; or
- services that can be purchased from the relevant distributor, but which can also—or have the potential to be—purchased from a competing provider.

The cost of providing alternative control services is recovered from users of those services only, through a capped price on the individual service.⁷⁴

We discuss the alternative control services proposals in section 6.3.

Essential has accepted the service classifications in our final F&A in full.

6.1 Control mechanisms

A distribution determination must impose controls over the prices and/or revenues of direct control services (standard and alternative control services). The form and formulae of the control mechanisms in our distribution determination are set out in the relevant F&A, which was accepted by Essential. There are only limited circumstances in which the AER can depart from this.

In our distribution determinations, we provide further definition for elements of these control mechanisms. We also define other mechanisms that are not required to be incorporated in the F&A, such as the side constraint and unders/overs mechanisms. In November 2022, we published our final decision on the side constraint mechanism that will be applied in our draft decisions, following stakeholder engagement.⁷⁵

⁷³ AER, *Final framework and approach for Ausgrid, Endeavour Energy and Essential Energy for the 2024-29 regulatory control period*, July 2022

⁷⁴ AER, *Framework & Approach for Ausgrid, Endeavour Energy and Essential Energy 2019-24*, July 2017, p. 41.

⁷⁵ <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/annual-pricing-process-review>

We are interested in stakeholder's feedback in relation to the aspects detailed below.

Quoted services price cap control formula

As set out in section 6.6, quoted services prices are determined at the time of a customer's enquiry and reflect each customer's individual requirements. They are subject to a price cap form of control based on a build-up of inputs such as labour, contactor costs, materials.

In our F&A paper, we identified the quoted services price cap control formulae was inconsistently applied across jurisdictions. As such, we proposed the inclusion of margin and tax components to reflect the desirability of consistency between regulatory arrangements for similar services, as well as cost reflectivity. However, we did not define the margin and tax components. This will be done in our distribution determinations.

The distributors have proposed various definitions for the margin and tax components.

Some distributors proposed the margin to be the nominal weighted average cost of capital (WACC) either for a particular year or an average of the forecast nominal WACC over the 2024–29 period (at present, these values are around 6%). Others have proposed a fixed value margin set close to the forecast nominal WACC, such as 6%.

For the tax component, a pragmatic approach would be to set the rate at the corporate tax rate of 30%. However, some distributors have proposed the tax rate could be set at a rate that better reflects the actual tax payable, which may differ from the corporate tax rate.

We are interested in stakeholder views on the appropriate definitions for these components.

Metering form of control

The AEMC is currently undertaking a review of the regulatory framework for metering services which includes an indicative timeline to retire legacy meters by 2030. The AEMC's final report is due prior to our draft decision on Essential's 2024–29 determination.

We consider that if the AEMC's metering review constitutes a material change in circumstances, it may allow us to depart from the form of control set in the F&A. An alternative form of control might be warranted if it provides better consumer outcomes.

We address metering issues further in section 6.5 of this paper.

Questions

13. What do you consider to be an appropriate rate for a margin recovered on quoted services? Should this be set at the average nominal WACC for the period, or some fixed value (e.g., 6%)?
14. Do you consider the tax component of the quoted services price control formulae should be set at the corporate tax rate of 30%, or an alternative rate?
15. Do you consider the AER should review the current price cap form of control for legacy metering services following the AEMC's decision?
16. More generally, do you have any comments on Essential's proposed control mechanisms?

6.2 Tariff structure statement

As part of their regulatory proposal, distributors are required to submit to us a tariff structure statement (TSS)⁷⁶. The TSS will apply for the 5-year regulatory control period. A TSS must set out a distributor's:

- proposed network tariffs
- network tariff structures
- charging parameters
- policies and procedures the distributor will use to assign customers to network tariffs or reassign customers from one network tariff to another.

The tariff structures provide the charging framework through which distributor's collect their annual allowed revenue. Once approved, a TSS becomes a compliance document against which the AER assesses the distributor's annual pricing proposals.

TSSs are also how distributors progressively reform their network tariffs for standard control services to better signal to customers the cost of providing network services. As customers ultimately pay for upgrades to network services, tariff reform that encourages more efficient use of the network will lead to lower network costs for all customers.

We note that network tariffs are targeted at retailers who package them with other costs, such as the cost of wholesale energy, in their service offerings to electricity customers. As such, the retail electricity tariff may not directly reflect the network tariff.

This is the third regulatory period for which Essential has submitted a TSS and it continues the process of incremental tariff reform.

6.2.1 Assessment against the Handbook expectation for tariff structure statements

The Handbook sets out our expectations for TSSs:

- Demonstrate progression of tariff reform consistent with the network pricing objective and pricing principles set out in the National Electricity Rules
 - Essential proposed an assignment policy designed to move more customers to cost reflective tariffs and proposed new cost reflective tariffs to address emerging demands on its network (sun soaker two-way tariffs and battery tariffs).
- Demonstrate incorporation of its tariff strategy in its overall business plan
 - Essential explained how its tariff strategy is integrated with its network planning, demand management and distributed energy resources integration strategy.
- Demonstrate significant stakeholder engagement and broad stakeholder support
 - Essential has undertaken significant engagement on tariffs and responded to customer feedback in developing its proposed TSS.
- Demonstrate insight into and management of any adverse customer impacts

⁷⁶ This requirement came out of the AEMC 2014 rule change for distribution pricing.

- Essential did not propose transitional tariffs or a grace period for moving customers to the new sun soaker two-way tariffs, as it considers customers will be better off on the new tariffs.

Based on our initial review we consider Essential's TSS is in line with our expectations. Two-way pricing is a new feature of this round of TSSs so we intend to closely examine Essential's two-way pricing proposal, along with all distributors' two-way pricing proposals. We will also review in detail the measures Essential proposed to manage any customer impacts that may result from its proposed new tariffs. Our early view is that Essential could have undertaken more customer impact modelling than has been submitted to us. We seek feedback on what changes to Essential's proposal we ought to require in view of its customer impact modelling and assignment policies.

Question

17. Do you consider that Essential's proposal provides reasonable balance between progressing tariff reform against customer impacts?

6.2.2 Progress on tariff reform

The biggest change in Essential's TSS is the introduction of its new default two-way sun soaker tariffs for residential and small business customers. Further key reforms include:

- an assignment policy to move all customers with smart meters from its current time of use (TOU) tariff to the new sun soaker two-way tariff by 2028 (or earlier, depending on when Essential updates its billing systems)
- introducing two-way tariffs for large customers and batteries connected to its low voltage and high voltage network
- introducing export charges and rewards to its demand tariffs
- a contingent trigger for adapting its TOU charging windows to changing demand profiles that emerge on the network, if data shows it is required before 1 July 2027.

Contingent tariff adjustments are a new feature of this round of TSSs. The rapid pace of change makes it difficult for distributors to accurately forecast the rate of uptake of consumer energy resources over the regulatory period, particularly electric vehicles. To be flexible in response to potential step changes in load that may result from rapid but unpredictable uptake, some distributors, including Essential, are proposing tariff adjustments they would only introduce if load profiles shift in ways that could induce network constraints (i.e. contingent tariff adjustments). We consider the incorporation of a contingent adjustment to tariff parameters is, when well defined and its trigger is made clear, a reasonable way of balancing certainty and flexibility.

6.2.3 Electric Vehicles

The uptake of electric vehicles poses opportunities but also challenges for electricity networks. Essential did not propose any new tariffs specifically targeting at-home electric vehicle charging. Rather, it considers its proposed two-way tariff would encourage electric vehicle owners to charge so as not to encourage a new network peak or increase the current network peak. Essential did not include any changes to tariffs for electric vehicle fast charging stations.

6.2.4 Export reward tariffs

Essential proposed to introduce two-way pricing (providing rewards and charges for customers who export electricity to the grid) as allowed for under the AEMC’s Access, pricing and incentive arrangements for distributed energy resources rule change.⁷⁷ Essential included customer protections as required by the NER, including:

- a basic export level (the amount of electricity a customer may export no cost)
- an export tariff transition strategy
- not assigning existing customers to a two-way tariff before 1 July 2025.

Table 3 Essential’s proposed two-way pricing

Proposed tariff(s)	Assignment	Basic Export Level	Export charge and rewards (NUoS)
Residential and small business sun-soaker, two-way tariff	Opt-in for existing customers from July 2024, opt-out for new/upgrading customers from 2025. From 1 July [year] following new billing capabilities or 1 July 2028 (whichever comes sooner), all customers assigned to two-way tariff	1.5kW	Residential Export reward 5pm-8pm: 13.6740c/kWh. Small business export reward 5pm-8pm: 14.2822 c/kWh. Export charge: monthly demand charge based on maximum kW exported in a half hour period between 10am -3pm (Band 1, 1.5kW – 3kW): 0.8145 \$/kW; Band 2, exporting over 3kW): 0.9365 \$/kW. ⁷⁸

Source: AER analysis

Our Export Tariff Guidelines published in May 2022 set out considerations distributors should have regard to in proposing two-way tariffs.⁷⁹ In the context of the updated rules and our guidelines Essential proposed two-way tariffs incorporating a generous export reward.

Essential submitted that residential and small business customers who move to the new sun soaker export reward tariff, from the flat tariff, will see bill savings. Essential noted that customers would be even better off if they respond to the price signals of the export reward tariff.⁸⁰

6.3 Alternative control services

Alternative control services are services provided by Essential to specific customers. The costs of providing these services are not included in the revenue proposals we discussed in sections 4, 5 and this section 6. They are recovered separately in accordance with an approved pricing mechanism, with most charged on a ‘user pays’ basis.

⁷⁷ On 12 August 2021 the AEMC made a new rule change, Access, pricing and incentive arrangements for distributed energy resources, to integrate distributed energy resources such as small-scale solar and batteries more efficiently into the electricity grid and to allow two-way pricing.

⁷⁸ Essential Energy, *12.03 Network Use of System (NUoS) Pricing Schedule*, January 2023.

⁷⁹ Individual network circumstances to warrant the introduction of two-way pricing, including the network’s intrinsic hosting capacity, how customers may be impacted if two-way pricing is not introduced, evidence of current or estimates of future DER penetration on the network (including rooftop solar and electric vehicles) and how this impacts network costs, feedback from stakeholders, including customers.

⁸⁰ Essential Energy, *12.02 - Tariff Structure Explanatory Statement*, January 2023, p. 46.

There are three broad categories of alternative control services in these proposals:

- public lighting
- metering
- ancillary (or miscellaneous) network services.

6.4 Public lighting

Public lighting services include the provision, construction and maintenance of public lighting assets. Customers of public lighting services primarily are local government councils and jurisdictional main roads departments.

There are a number of different tariff classes and prices for public lights. The factors influencing prices for a particular installation include which party is responsible for capital provision, and which party is responsible for maintaining and/or replacing installations. In NSW, the date of installation also influences public lighting prices.

Public lighting prices comprise of capital and operating expenditure (opex) prices.⁸¹

For the 2024–29 period, Essential proposes to continue to determine capital prices using an annuity approach.

For opex prices, important drivers include asset failures rates, spot and bulk maintenance cycles, labour rates and traffic controller assumptions.

Corporate overheads are also a material driver of public lighting prices.

As we describe below, our initial analysis indicates Essential is proposing increases in prices for public lighting services in the 2024–29 period. We therefore consider Essential's proposal for public lighting services warrants a targeted review to inform our draft decision.

NSW Public Lighting Code

The NSW Public Lighting Code (Code) informs the relationship between Public Lighting Service Providers (including Essential) and their customers. The Code details the obligations Service Providers must adhere to in providing public lighting services.

An amended Code, version 1.3, will come into effect from 1 July 2023 with some substantive items coming into force from 1 July 2024. Version 1.3 offers a number of improvements including more transparent compliance with service standards and additional incentives to encourage adherence.

Essential noted that the Code is under review and submitted that its public lighting forecasts reflect its adherence to the minimum standards and guaranteed service levels set out in version 1.2 of the Code.⁸²

⁸¹ Unlike the other NSW electricity distributors (Ausgrid and Endeavour Energy), Essential Energy's public lighting prices do not distinguish between assets installed pre 2009 and post 2009. This is because Essential Energy's pre 2009 public lighting assets have been fully depreciated.

⁸² Essential Energy, *13.03 Public lighting explanatory document 2024–2029*, January 2023, p.5.

Essential's pre-lodgement engagement

Stakeholder engagement is important to better tailor service offerings to customers. This is pertinent as customers are the ones who request these services. For example, stakeholders may request simplification of service offerings for greater ease of understanding of the services and/or request new services not currently provided.

Essential held a series of online forums and meetings specifically to prepare this proposal. Essential completed four phases of engagement to date and planned a fifth phase to facilitate further review and discussion. In phase one and two Essential asked councils to consider which public lighting principles should be adopted for our 2024–29 proposal. The agreed public lighting principles are:

- Collaboration and co design
- Effective delivery of public lighting services
- Embrace new technologies and smart communities
- Fair and transparent recovery of costs

Essential's service and price offerings

Essential introduced a new component-based schedule of prices in the 2019–24 period. Essential will continue with this component-based pricing approach in the 2024–29 period.

The model breaks the charge into three components – luminaire, bracket and pole – and displays the maintenance and capital cost for each component.

Our initial analysis indicates Essential proposes price increases for public lighting services. For example, 2024–25 prices for category P and V LED's are proposed to increase by around 6 to 7 % compared to 2022–23 prices. The opex charge for Category V LED's is proposed to increase by up to 15%.

The public lighting pricing model⁸³ and indicative pricing schedule⁸⁴ contain Essential's proposed suite of public lighting services and prices for the 2024–29 period. Essential's regulatory proposal describes the inputs and assumptions in the public lighting model.⁸⁵

LED and other new technologies

As of 1 July 2022, LED-based luminaires accounted for around 80% of Essential's public lighting installations. This is expected to increase to 95% by 30 June 2023.

Essential stated it is committed to collaborating with its customers to investigate and implement new technologies that are commercially and technically viable, including:

- changes in LED technology that offer more efficient and more reliable luminaires as they come onto the market

⁸³ Essential Energy, *13.03.02 Public lighting model 2024–2029*, January 2023, p.5

⁸⁴ Essential Energy, *12.04 Public lighting pricing schedule 2024–2029*, January 2023.

⁸⁵ Essential Energy, *13.03 Public lighting explanatory document 2024–2029*, January 2023, pp. 10-15.

- multi-function or smart poles
- asset management systems that monitor, report and track asset details and maintenance activities.

Essential also proposed to continue working with councils on smart controls. These include devices that can control and/or monitor the luminaire, as well as transmit monitoring data from third party equipment and sensors.

Minor Capital Works

In line with the NSW Public Lighting Code, Essential introduced a minor capital works offering where councils can request service providers to construct new public lighting infrastructure. These requests typically involve constructing a new luminaire, bracket and associated wiring to an existing network pole where Low Voltage (LV) power is currently available.

Essential propose the introduction of new fee-based minor capital works rates.⁸⁶ These rates are calculated using weighted averages for the required labour, materials, electrical design effort, planning effort and traffic controls.⁸⁷

Questions

18. Do you consider Essential's public lighting proposal generally incorporates stakeholder inputs from this pre-lodgement engagement? If not, did Essential communicate these potential departure points to stakeholders and provide adequate explanation during pre-lodgement engagement?
19. Do you support Essential's proposed suite of public lighting services and prices?
20. Do you support Essential's proposed framework for minor public lighting capital works and the pricing that has been proposed?
21. Do you have any other comments on Essential's public lighting proposal and pre-lodgement engagement?

6.5 Metering

Metering services are currently provided by electricity distributors, retailers and other third parties. Since the AEMC's Power of Choice reform, retailers and/or other third parties have been responsible for the installation and replacement of meters, with smart meters now being the meters installed. Essential is responsible for providing services, including operation and maintenance, for the accumulation meters it historically installed (legacy meters).

The AEMC is currently undertaking a review of the regulatory framework for metering services which includes an indicative timeline to retire legacy meters by 2030. The AEMC's final report is due prior to our draft decision on Essential's 2024–29 determination.

⁸⁶ Essential Energy, *12.06 Ancillary network services pricing schedule*, January 2023.

⁸⁷ Essential Energy, *13.03 Public lighting explanatory document*, January 2023, p. 15.

Due to the retirement of legacy meters, we are interested in stakeholder's feedback in relation to the aspects detailed below. Our consideration of these aspects will also be influenced by the AEMC's final report.

Cost recovery

The current framework for the cost recovery of legacy meters involves a separation of metering charges into capital and non-capital charges. These are charged to individual customers (user pays) and are regulated under a price cap.

Capital charges relate to the recovery of costs associated with installation and management of the legacy metering asset base. All customers who had a legacy meter prior to 30 June 2015 incur capital charges, regardless of whether they still have a legacy meter or not. Non-capital charges relate to the recovery of costs associated with the operation of the remaining legacy meters and are charged to customers who still have Essential-owned legacy meters installed at their premises.

As legacy meters are replaced by smart meters, the per unit cost of operating and maintaining legacy meters increases. Greater distances are required to be travelled to do manual meter reads, testing or maintenance of legacy meters. Other operational costs required to meet minimum standards are spread over a lower number of customers. As more legacy meters are retired, customers with legacy meters could face material increases in their charges.

Additionally, customers who have had smart meters installed will experience costs related to the smart meters, as well as ongoing capital costs related to their historical legacy meter.

We are interested in stakeholder views on whether the current cost recovery framework (user-pays approach) is appropriate. An alternative approach could include the socialisation of operating expenditure (spread across all customers) to ensure customers who are last to transition to smart meters do not incur substantive prices for these services, particularly if they are vulnerable customers. The socialisation of these costs may occur through removing the capital/non-capital split for cost recovery, or by reconsidering the service classification for legacy metering services and shifting them to standard control services.

Our initial view is that we see merit in moving legacy meter charges into standard control services by revising the service classification. This would allow costs to be spread across the entire customer base. We consider that the expected accelerated rollout of smart meters from the AEMC metering review will constitute a material change in circumstances required to depart from the F&A. We propose to make this change in our draft decision and would like stakeholder views before we lock-in the change.

We are aware that retailers generally socialise both network metering charges (for legacy meters) and their own metering charges (for smart meters) across their customer base. We note this approach is not mandated for retailers and therefore socialisation of these costs may be better suited at the network level which would create a universal and more equitable approach.

Accelerated depreciation

The ongoing cost recovery of the historical legacy metering asset base is expected to continue for some networks until the 2034–39 regulatory control period. Some DNSPs have

engaged with stakeholders on the accelerated depreciation of these remaining asset bases to ensure cost recovery is finalised within the upcoming 2024–29 regulatory control period.

We are interested in stakeholder views on whether accelerated depreciation of these asset bases is appropriate. The benefits of this include the avoided regulatory and administrative burden of the recovery of those asset bases in future regulatory control periods. We note that accelerated depreciation will increase costs in the short term. Increases may be accentuated by other expected short-term cost increases resulting from the increasing per-unit cost of operating expenditure, and any accelerated retirement of legacy meters.

We see merit in accelerating depreciation because it means that customer will not continue to pay for assets that are no longer in service. If we were to accelerate the depreciation of these meters, the impact would be to increase network charges for all customers by an estimated \$6.08 per year.

Questions

22. Do you consider legacy metering cost recovery should be socialised at the network level, or be left to retailers?
23. Do you consider accelerated depreciation of the legacy metering asset bases to be preferable to phase out legacy metering charges?
24. More generally, do you have any comments on Essential's proposed cost recovery for legacy metering services?

6.6 Ancillary network services

Ancillary network services are non-routine services provided to individual customers on request. These services are either charged on a fee or quotation basis.

Fee-based services tend to be homogeneous in nature and can be costed in advance of supply with reasonable certainty. Quoted service prices are determined at the time of a customer's enquiry and reflect each customer's individual requirements.

Prices for these services are developed using a cost build up. In March 2022, we published a standardised model for use by electricity distributors to develop their prices. The standardised model streamlines our assessment, increases consistency, and provides stakeholders greater scope to engage in our distribution determinations.

Labour costs make a large proportion of ancillary network service costs. Another significant cost element is the time taken to perform the service, including travel time. Our assessment includes review of these elements for the most requested ancillary network services. We also benchmark proposed labour rates and prices for fee-based services across distribution networks as well as with prices from the current regulatory period.

Ancillary network services are regulated by price cap. Our distribution determination sets first year price caps for fee-based services, labour escalators used to escalate prices for the remaining years of the regulatory period, and capped labour rates used in quoted services.

As we describe below, our initial analysis indicates Essential is proposing material increases in prices for ancillary network services. We therefore consider Essential's proposal warrants a targeted review to inform our draft decision.

6.6.1 Distributors' engagement and service offering

Stakeholder engagement is important to better tailor service offerings to customers. This is pertinent as customers are the ones who request these services. For example, stakeholders may request simplification of service offerings for greater ease of understanding of the services and/or request new services not currently provided.

Essential's stakeholder engagement consists of regular, business-as-usual engagement with its accredited service providers (ASPs) and retailers. In response to the feedback, it consolidated services to reduce the number of fee-based services it offered from 192 to 157. It also changed some fee-based services into quoted services noting this was to pass on process efficiency savings.⁸⁸ We note that other networks have changed some quoted services to become fee-based to provide stakeholders with price certainty.

Essential has introduced new services in its existing service groupings such as field inspections and high-load permit requests. Other new services include large scale complex connections, connection point management services and provider of last resort services. It is also proposing to add minor capital works associated with customer-requested lighting services as a quoted service.

Essential proposed two additional labour categories for quoted services: senior engineer and engineering manager.

6.6.2 Benchmarking labour rates

Labour rates are a key cost input for ancillary network service prices. The distributors proposed labour rates are assessed against benchmark efficient maximum labour rates developed using a bottom-up cost build up across six categories (administration, field worker, technical specialist, engineer, senior engineer, and engineering manager)⁸⁹.

The benchmark rates include increases to the superannuation allowance and the vehicle allowance because of the changes in the superannuation guarantee and inflation. The 'transmission line design engineer' has been removed from the engineer benchmark category as this occupation is not an appropriate benchmark for distributors' engineers.

The NSW distributors engaged consultant CutlerMerz to review their proposed labour rates.⁹⁰ The report assumed a 36-hour workweek in its benchmarking, reflecting NSW distributors' enterprise agreements instead of 40 hours used in our methodology. This results in higher labour rates per hour, keeping all other factors constant.

Half of Essential's proposed labour rates are higher than our preliminary maximum efficient benchmark rates (these preliminary rates are based on inputs which will be updated for our

⁸⁸ Essential Energy, *13.01 – Ancillary network services explanatory document*, January 2023, p. 6.

⁸⁹ Marsden Jacob Associates, *Review of ancillary network services: Advice to the Australian Energy Regulator*, September 2018.

⁹⁰ CutlerMerz, *Ausgrid Att. 9.3.b -- NSW ANS labour rates review*, 4 August 2022.

draft decision) and its current approved rates (we escalate the current rates to compare them on a like-for-like basis).

Our draft decision on Essential's labour rates will be dependent on the updated maximum efficient benchmark rates we determine after applying the most recent inputs.

6.6.3 Benchmarking fee-based services prices

Proposed fee-based services are also benchmarked against prices from the current regulatory control period as well as similar services supplied by other distributors. Cost inputs may also be benchmarked.

Essential reviewed its assumptions for fee-based services as part of this proposal. The review included vehicles, materials, and contractor costs as well as travel times, which make up a significant proportion of the time required to perform on-premises tasks.

In terms of price impacts, it proposed higher increases to fee-based services relative to the other NSW distributors. When benchmarking Essential's most requested fee-based services, its proposed prices were consistent with other NSW distributors. Drivers of the increased prices include forecast inflation, and margin and tax allowances. In response to our information request, Essential stated that the application of a fixed 61% overhead rate for ancillary network services in the current determination eroded its ability to recover a margin above cost in the current period.⁹¹

Questions

25. Do you consider that sufficient justification has been provided in the provision of new services?
26. Do you consider the proposed labour rates and fee-based prices to be reasonable?

⁹¹ Essential Energy, response to information request #001, 24 February 2023

Summary of questions

<p>Early signal pathway</p> <ol style="list-style-type: none"> 1. What are your views on our assessment of Essential's proposal – are there any aspects of the proposal that require deeper or less review? 2. Do you consider that we should accept Essential's proposal at the draft determination stage?
<p>Consumer engagement</p> <ol style="list-style-type: none"> 3. Do you think Essential's consumer engagement meets the expectations set out in the Handbook in delivering a consumer-centric proposal? Please give examples.
<p>Regulatory asset base</p> <ol style="list-style-type: none"> 4. Do you have views on Essential's proposed new asset class for Distributed Energy Resources as set out in its 2024–29 proposal? 5. Do you have views on whether Essential's proposed regulatory depreciation approach is capable of acceptance at the draft determination stage?
<p>Capital expenditure</p> <ol style="list-style-type: none"> 6. What do you think about the proposed scope of the targeted review?
<p>Operating expenditure</p> <ol style="list-style-type: none"> 7. What do you think about the proposed scope of targeted review? 8. Do you consider Essential's proposed step changes are required to produce an opex forecast that reasonably reflects the efficient costs of a prudent operator? 9. Do you consider Essential's proposed approach to estimating opex in the final year of the current period appropriate to forecast total opex for the 2024–29 period? 10. How do you consider the AER should address the inconsistency between Essential's opex and EBSS models?
<p>Corporate income tax</p> <ol style="list-style-type: none"> 11. Do you have views on the approach to corporate income tax in Essential's 2024–29 proposal?
<p>Incentive Schemes</p> <ol style="list-style-type: none"> 12. Do you have any views on the proposed application of any of the above incentive mechanisms?
<p>Network pricing</p> <ol style="list-style-type: none"> 13. What do you consider to be an appropriate rate for a margin recovered on quoted services? Should this be set at the average nominal WACC for the period, or some fixed value (e.g., 6%)?

14. Do you consider the tax component of the quoted services price control formulae should be set at the corporate tax rate of 30%, or an alternative rate?
15. Do you consider the AER should review the current price cap form of control for legacy metering services following the AEMC's decision?
16. More generally, do you have any comments on Essential's proposed control mechanisms?

Tariff structure statement

17. Do you consider that Essential's proposal provides reasonable balance between progressing tariff reform against customer impacts?

Public lighting

18. Do you consider Essential's public lighting proposal generally incorporates stakeholder inputs from this pre-lodgement engagement? If not, did Essential communicate these potential departure points to stakeholders and provide adequate explanation during pre-lodgement engagement?
19. Do you support Essential's proposed suite of public lighting services and prices?
20. Do you support Essential's proposed framework for minor public lighting capital works and the pricing that has been proposed?
21. Do you have any other comments on Essential's public lighting proposal and pre-lodgement engagement?

Metering

22. Do you consider legacy metering cost recovery should be socialised at the network level, or be left to retailers?
23. Do you consider accelerated depreciation of the legacy metering asset bases to be preferable to phase out legacy metering charges?
24. More generally, do you have any comments on Essential's proposed cost recovery for legacy metering services?

Ancillary network services

25. Do you consider that sufficient justification has been provided in the provision of new services?
26. Do you consider the proposed labour rates and fee-based prices to be reasonable?

Shortened forms

Terms	Definition
ACS	alternative control services
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulatory
ASP	Accredited Service Provider
capex	capital expenditure
CCP26	Consumer Challenge Panel, sub-panel 26
CESS	capital expenditure sharing scheme
CSIS	customer service incentive scheme
DER	Distributed Energy Resources
DMIAM	demand management innovation allowance mechanism
DMIS	demand management incentive scheme
DNSP or distributor	Distribution Network Service Provider
DUoS	Distribution Use of System Charges
EBSS	efficiency benefit sharing scheme
ECA	Energy Consumers Australia
ENA	Energy Networks Australia
ESB	Energy Security Board
F&A	framework and approach
GSL	guaranteed service level
ICT	information and communication technologies
NEL	National Electricity Laws
NEM	National Electricity Market
NEO	National Electricity Objectives
NER	National Electricity Rules
opex	operating expenditure
PIAC	Public Interest Advocacy Centre
RAB	regulated asset base
repex	replacement expenditure
SAIDI	system average interruption duration index
SAIFI	system average interruption frequency index
SAPS	stand-alone power systems
SCS	standard control service
Service classification guideline	Electricity distribution service classification guideline 2018
STPIS	service target performance incentive scheme
VCR	value of customer reliability
WACC	weighted average cost of capital