Issues Paper

Endeavour Energy Electricity distribution determination

1 July 2024 to 30 June 2029

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AUSTRALIAN ENERGY REGULATOR

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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 Endeavour Energy (Endeavour) for the five-year regulatory period starting 1 July 2024 to 30 June 2029 (2024–29 period).[1] Endeavour is one of three electricity distribution network service providers in New South Wales (NSW). The Endeavour network serves customers in Sydney's greater west, the Blue Mountains, Southern Highlands, the Illawarra and South Coast.

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 Endeavour will recover from its consumers, including:

- economic factors outside of Endeavour'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.

Endeavour outlined that during its engagement activities customers became increasingly aware of cost-of-living pressures, expressing concern about increases in costs outside Endeavour's control. It has been a consideration that Endeavour stated was front of mind in its commitment to develop a proposal that 'constrains expenditure forecasts and promotes prudence and efficiency.'[2] We think it is important for stakeholders to continue to be aware of these additional factors when considering the proposal put forward by Endeavour.

Early signal pathway process

Endeavour was part of the Better Resets Handbook (Handbook) early signal pathway process. Under this process, AER staff have had regular pre-lodgement engagement discussions with Endeavour, and its consumers. We have provided targeted feedback during this process to enable Endeavour to prepare a proposal that meets the expectations outlined

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1 Endeavour Energy, *0.01 Regulatory Proposal*, January 2023. Available at: Endeavour's 2024–29 proposal.

2 Endeavour Energy, *0.01 Regulatory Proposal*, January 2023, p.51.

in the Handbook, in key topic areas such as consumer engagement, capital expenditure (capex), operating expenditure (opex), depreciation and tariff structure statements.

Endeavour has demonstrated a genuine commitment to the early signal pathway process, informed and supported by its consumers and stakeholders. Areas where Endeavour has met our expectations include, but are not limited to:

- a high-quality consumer engagement program, that has collaborated, listened, and incorporated consumer and stakeholder views (section 3)
- forecast total capital expenditure (capex) of $1882.2 million, which is below current period actual spend (section 4.3)
- replacement expenditure (repex) largely in line with its current spend and performance against our repex model (section 4.3)
- a depreciation approach consistent with our regulatory models (section 4.2)
- forecast operating expenditure (opex) consistent with the AER's base-step-trend approach (section 4.4)
- proposed step changes in opex supported by consumers, justified against the framework set in the Handbook, with and a "top-down" challenge applied to constrain the impact on electricity prices (section 4.4)
- a tariff strategy consistent with the network pricing objective and pricing principles and reflective of a step change in tariff reform (section 6.2).

Overall, Endeavour has lodged a high-quality proposal. Its proposed expenditures are modest when compared to past levels. Endeavour has shown restraint in proposing new expenditures. Its stakeholder engagement has been of a very high-standard and it has the support of the customers it has consulted with.

We have undertaken an initial assessment Endeavour's proposal and have only identified a few aspects where we wish to undertake further assessment as part of our targeted review.

Based on our initial assessment (and resolution of the few issues we have flagged) we are inclined to accept Endeavour's proposal at the draft determination stage in September. This paper provides a high-level overview of our assessment. We invite stakeholder comments on our assessment and whether there are any aspects of the proposal that require deeper review. In particular, we invite comments on whether we should accept Endeavour's proposal at the draft determination stage.

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 Endeavour's proposal to AERresets2024-29@aer.gov.au by **12 May 2023**[3]
- joining us, the New South Wales distributors (Ausgrid, Endeavour and Essential Energy) and our Consumer Challenge Panel (CCP26)[4] at an online public forum on **5 April 2023**[5]. Details of how to register for this forum are available on our website and through Eventbrite (external link).[6].

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

Table 1 Key dates for Endeavour's 2024-29 revenue determination

Milestone	Date
AER publishes Issues Paper on Endeavour's proposal	28 March 2023
AER holds public forum on Issues Paper and Endeavour's proposal	5 April 2023
Submissions due on Endeavour's proposal and Issues paper	12 May 2023
AER publishes draft decision	September 2023
AER holds public forum on draft decision (predetermination conference)	October 2023
Endeavour submits revised proposals to AER	December 2023
Submissions due on draft decision and Endeavour's revised proposal	January 2024
AER publishes final decision	April 2024

Note: Timelines are indicative and subject to change. NSW businesses refers to Ausgrid, Essential and Endeavour.

3 See Endeavour 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.

4 CCP26 comprises Mark Henley, Elissa Freeman and Robyn Robinson: https://www.aer.gov.au/about-us/stakeholder-engagement/consumer-challenge-panel.

5 COVID-19 continues to impact our stakeholder consultation approach and the ability of all market participants to engage. In line with our Statement of Expectations, the AER acknowledges the changing operating environment and the potential for this to impact on Endeavour's five-year forecasts. We propose to adopt a greater degree of flexibility in our approach to requesting and receiving information (from all stakeholders), as well as the way we consider the extenuating circumstances in our analysis.

6 Register for the Ausgrid, Endeavour Energy, Essential Energy Public forum through Eventbrite (external link).

2 Our initial observations

Endeavour proposes total revenue of $5,602.7 million ($nominal, smoothed) to be recovered from electricity customers over the 2024–29 period.[7] This is 33.6% higher than what we approved for the 2019–24 period.[8]

Endeavour's proposed charges are for the distribution network components of the electricity bill for their customers and determine the revenue allowance that Endeavour 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 makes up about 29% of the average electricity bill for household customers and 25% for small business customers in the Endeavour network and are ultimately recovered through electricity retail charges.[9]

Endeavour'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 Endeavour. 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, Endeavour estimates that over the next regulatory period its proposal would result in:

- an average annual increase of $24 for residential customers or a 1.4% increase
- for small-medium business customers, which use more electricity, an average annual increase of $43 or a 1.2% increase.[10]

Endeavour notes that these increases are largely driven by inflationary pressures and the increased cost of debt and equity.[11]

Endeavour's customers and stakeholders have said they want safe and reliable supply of electricity at an affordable price. Endeavour considers it has responded to these concerns by adopting a restrained approach to the investment it controls, keeping its contribution to customer bills as low as possible. [12]

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7 In this section we discuss proposed revenue in nominal dollar terms as these are the total revenues that Endeavour expects to recover from customers after taking into account forecast inflation over the period.

8 In real terms ($2023–24), the proposed total revenue is $538.8 million (11.7%) higher than the approved revenue for the 2019–24 period.

9 Endeavour Energy, *RIN0.05 Reset RIN Workbook 5 - Indicative Bill Impact*, January 2023.

10 Endeavour Energy, *RIN0.05 Reset RIN Workbook 5 - Indicative Bill Impact*, January 2023.

11 Endeavour Energy, *0.01 Regulatory Proposal*, January 2023, p.77.

12 Endeavour Energy, *0.01 Regulatory Proposal*, January 2023, p.77.

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, Endeavour's proposal, if accepted, would allow it to recover $ 5141.9 million ($2023-24, smoothed) from its consumers over the 2024–29 period or $538.8 million (11.7%) increase compared to the current regulatory period. Figure 1 shows a 9.7% increase in real terms for Endeavour's proposed revenue for 2024–29, compared to the revenue we approved in our final decision for 2019–24 period.

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

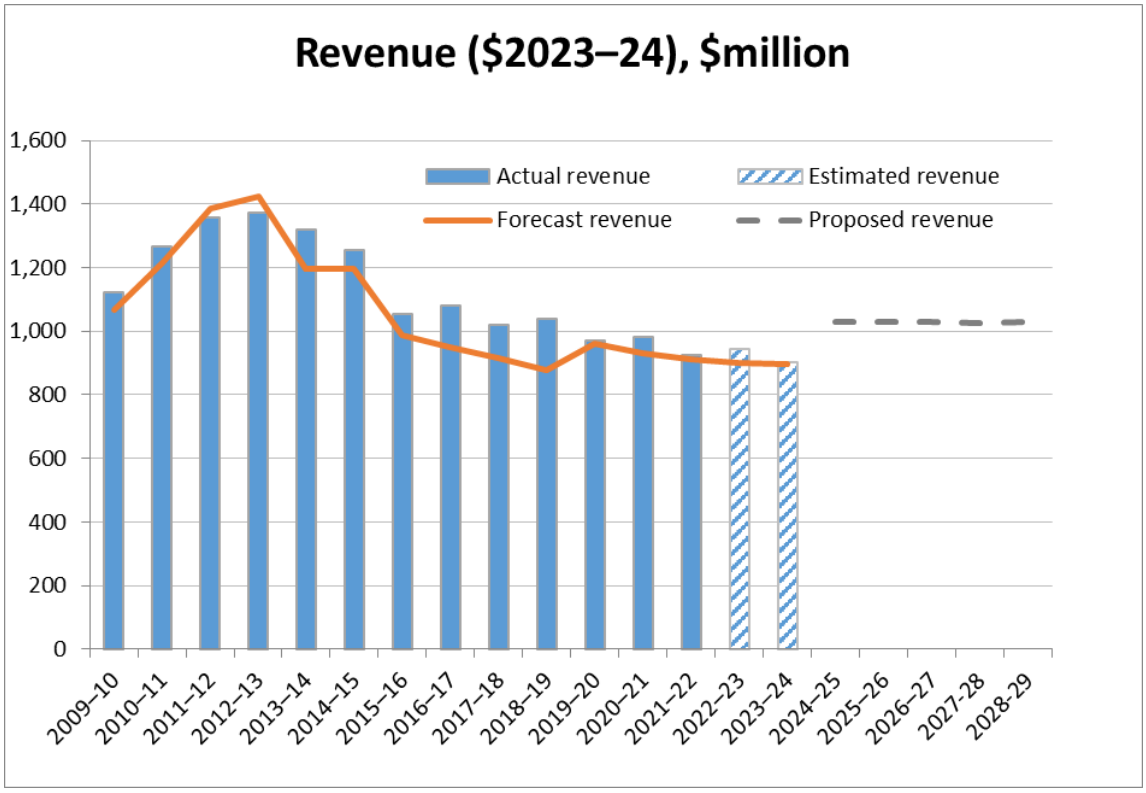
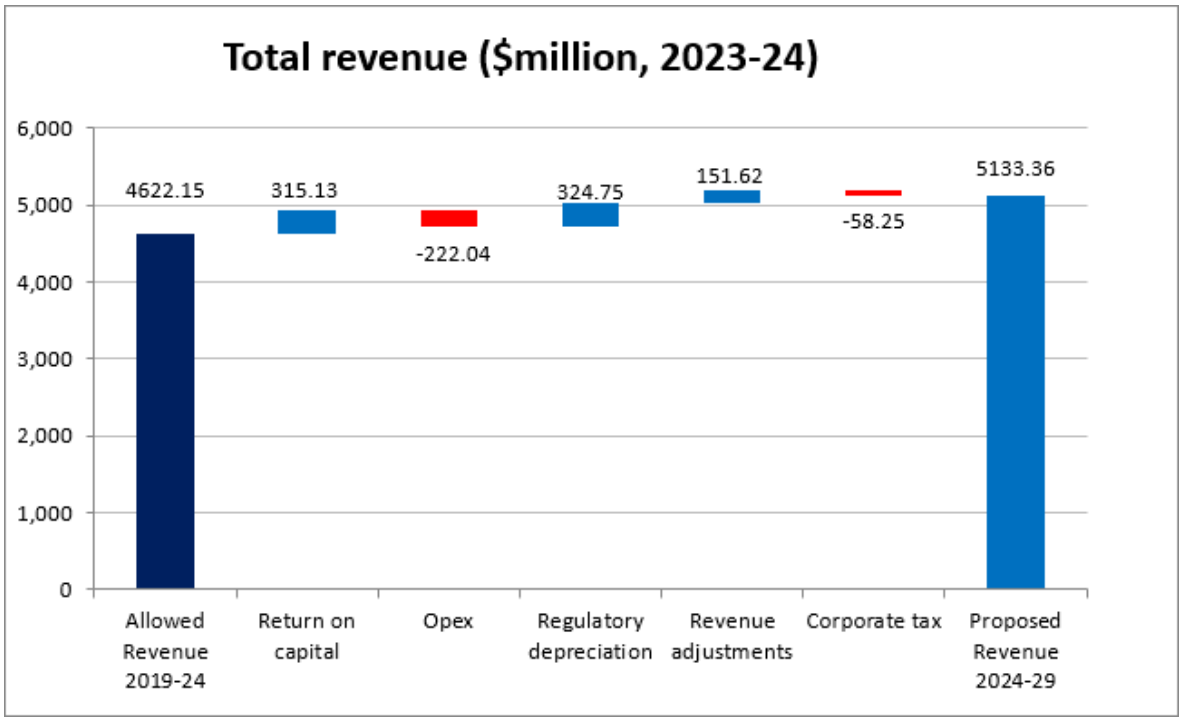


Figure 2 highlights changes in Endeavour's proposal at the "building block" level to illustrate what is driving its proposed increase in real revenue from 2019–24 to 2024–29. Endeavour states that that the increase in its proposed revenue is primarily being driven by its return on capital, which is affected by economic factors outside its control, including rising interest rates, which are increasing the financing costs of its investments.

Figure 2 Changes in building blocks: Endeavour'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.

The overall trend in revenue is primarily driven by external factors, being:

- Increase in 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 regulatory depreciation; driven by an increase in capex on short lived assets and a higher RAB value.
- Higher revenue adjustment reflecting increased Efficiency benefit sharing scheme (EBSS) and Capital expenditure sharing scheme (CESS) increments
- Offsets to the above are delivered by a fall in opex and corporate tax amounts.

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.[13]

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 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.[14]

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.

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

Endeavour is one of the first two businesses selected to be part of the early signal pathway. As part of this process Endeavour provided AER staff with early access to data and information relevant to the expectations set out in the Handbook. In turn, the AER and Consumer Challenge Panel have provided feedback through check-ins in July and September 2022. At the check-ins, 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. We are seeking stakeholder feedback on Endeavour's proposal and the issues highlighted in our paper on whether we undertake a targeted review of the identified parts of Endeavour's proposal.

Endeavour has lodged a high-quality proposal. We have undertaken an initial assessment of Endeavour's proposal and have only identified a few aspects where we wish to undertake further assessment as part of our targeted review.

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13 AER, *Better Resets Handbook*, December 2021, p. 3.

14 AER, *Better Rests Handbook – Towards consumer-centric network proposals*, December 2021, p. 5.

Its proposed expenditures are modest when compared to past levels. Endeavour has shown restraint in proposing new expenditures. Its stakeholder engagement has been of a very high standard and it has the support of the customers it has consulted.

Based on our initial assessment (and resolution of the few issues we have flagged) we are inclined to accept Endeavour's proposal at the draft determination stage in September.

Questions

1. What are your views on our assessment of Endeavour's proposal on the early signal pathway? Are there any aspects of the proposal that require deeper review?
2. Do you consider that we should accept Endeavour's proposal at the draft determination stage?

3 Endeavour's consumer engagement

Genuine, high quality consumer engagement by Endeavour is essential 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.[15] 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.

Endeavour invited members of its established Peak Customer and Stakeholder Committee (PCSC) to create a Regulatory Reference Group (RRG) for the development of the proposal. It states that the RRG was 'established on a principle of co-design, in which independent members of the RRG and representatives of Endeavour have worked collaboratively'.[16] Endeavour met regularly with the RRG, but also facilitated engagement across extensive multiples channels, including focus groups/panels, workshops, deep dives, one-on-one engagements, quantitative surveys and social media.

Endeavour also commissioned a third-party independent report undertaken by Clare Petre Consulting (Independent Report) to review its consumer engagement program supporting the development of its 2024–29 proposal.[17]

AER staff and the AER's Consumer Challenge Panel, sub-panel 26 (CCP26), were able to observe and engage closely with Endeavour's engagement as part of the early signal pathway, including meetings with the RRG, as well as attending diverse in-person sessions.

Based on our initial considerations of the significant work that Endeavour has undertaken through its consumer and stakeholder engagement, we believe that its proposal, reflects the diverse and detailed feedback it has received from customers and stakeholders and delivers a quality proposal. The engagement undertaken meets the expectations set out in the Handbook, and we believe is capable of acceptance at the draft determination stage, following a targeted review. We welcome stakeholder feedback as to whether they agree on this assessment.

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

16 Endeavour Energy, *5.01 Engagement summary report*, October 2022, p. 23.

17 Endeavour Energy, *Clare Petre Consulting - 5.17 Independent assessment of consumer engagement*, November 2022, p. 2.

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.

Endeavour's stated engagement goal for its program was to 'strengthen business-as-usual engagement and amplify our customer-centric culture, reflecting the changing needs of our customers and our evolving industry'.[18] It designed its engagement framework to reflect the International Association of Public Participation (IAP2) Spectrum and was guided by 8 key principles in development of its engagement activities to ensure it built consistent, open, and trusted relationships with its stakeholders. The principles included: being purposeful with its engagement and clear on what Endeavour wanted to achieve and linking that back to its strategy being; inclusive; timely; transparent; responsive; aiming for best practice; collaboratively; and measurable.[19]

Endeavour's engagement program initially comprised four key phases, each with distinct deliverables – discovery of preferences, exploration of key issues, prioritisation through broad and deep engagement and refinement of its Final Proposal.[20] A fifth phase was added following feedback from the RRG, which was called 'Confirm'. This phase will operate from February to July 2023 with the purpose of testing customers priorities in the context of the changing economic environment.[21] We would welcome consumers views and examples on how the RRG have collaborated and partnered with Endeavour.

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.

The development of Endeavour's engagement plan began in April 2021, which the RRG note afforded sufficient time for it to co-design the engagement plan, as well as allowing for sufficient time for Endeavour to implement an ambitious range of engagement activities.[22] The scope of issues engaged on was mapped against their impact on the proposal and the ability of consumers to influence outcomes, and this was assessed against the IAP2 Spectrum of participation.[23]

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18 Endeavour Energy, *5.04 Engagement plan (plain language)*, April 2022, p. 8.

19 Endeavour Energy, *0.01 Regulatory Proposal*, January 2023, pp.64-65.

20 Endeavour Energy, *0.01 Regulatory Proposal*, January 2023, p.68. See Figure 5-3 for a full list of the activities that occurred under each phase.

21 Endeavour Energy, *0.01 Regulatory Proposal*, January 2023, p.68.

22 Endeavour Energy, *Regulatory Reference Group – 5.15 RRG Report on Draft Proposal*, Nov 2022, p. 10.

23 Endeavour Energy, *0.01 Regulatory Proposal*, January 2023, pp. 65-66.

The RRG noted that this approach was immensely useful, as it allowed engagement to focus on areas where consumers can have the greatest influence.[24]

3.3 Clearly evidenced impact

To give weight to consumer engagement, we assess whether Endeavour's engagement approach has driven the outcomes of its 2024–29 proposal and that due consideration has been given to:

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

Endeavour undertook an incredibly significant multi-faceted engagement plan, and as a result we can only highlight key elements here.[25]It has faithfully listened to customers priorities and its priority has been to develop its Proposal to deliver the outcomes that customers want and value in the most affordable manner and has done this in collaboration with customers and stakeholder.[26]

Questions

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

[24] Endeavour Energy, *Regulatory Reference Group – 5.15 RRG Report on Draft Proposal*, Nov 2022, p.11.

[25] See Endeavour Energy's Proposal submission documents, Attachments 5.01 – 5.19 provide significant information on its engagement strategy, outcomes of its engagement phases and independent consumer report.

[26] Endeavour Energy, *0.01 Regulatory Proposal*, January 2023, pp. 6-7.

4 Key elements of Endeavour's revenue proposal

The regulatory framework governing electricity networks and our assessment of Endeavour's proposal is set out in the National Electricity Law (NEL) and 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 consumers[27].

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.

Endeavour's proposed revenue reflects its forecast 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:

- 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 operating expenditure (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
- estimated cost of corporate income tax[28].

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.

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

28 See Figure 3.4 in AER, *State of the energy market*, June 2022, p.65.

We estimate the rate of return by combining the returns of 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 Endeavour, 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 our binding Rate of Return Instrument. We publish a new Rate of Return Instrument every four years. For its proposal, Endeavour has applied our current, 2018 Rate of Return Instrument (2018 Instrument). For our final decision on Endeavour's proposal, which will be made in April 2024, we 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 Endeavour as indicative pending application of the 2022 Rate of Return Instrument.

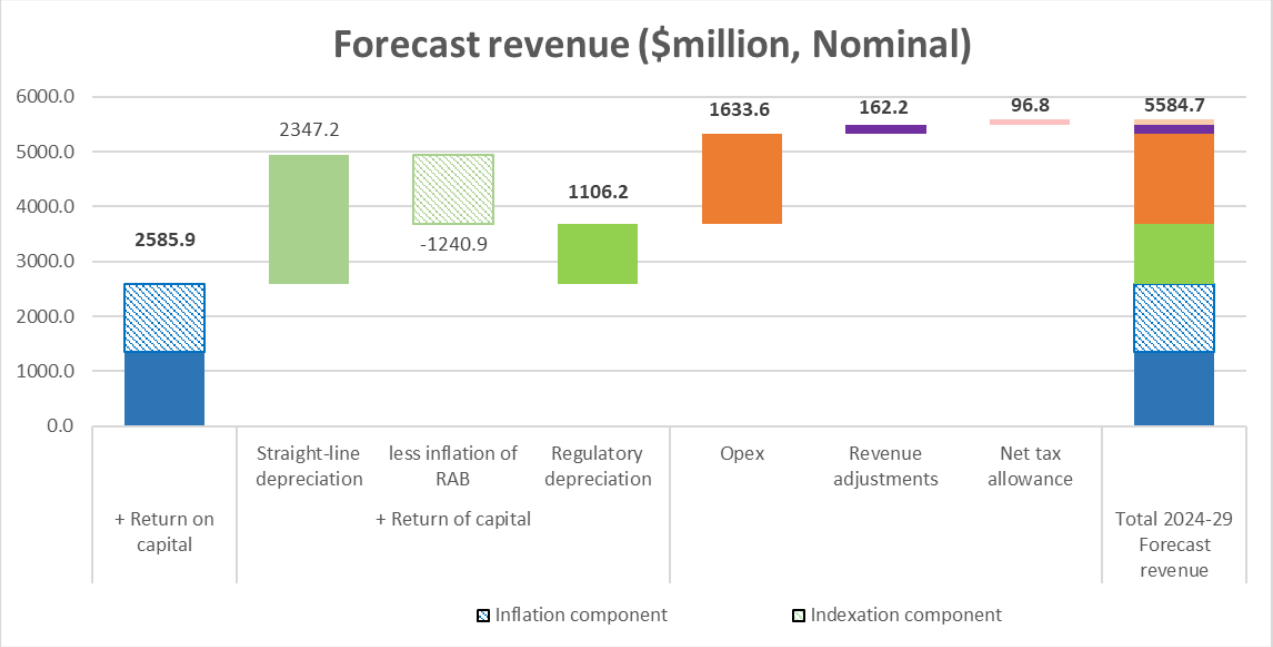
4.1.1 Inflation

In 2020, we concluded a review of our approach to estimating expected inflation. Endeavour has applied the approach established in the review, but once again, the estimates provided by Endeavour 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 Endeavour: Inflation components in proposal revenue building blocks ($million, nominal)



Source: AER analysis.

4.2 Regulatory asset base and depreciation

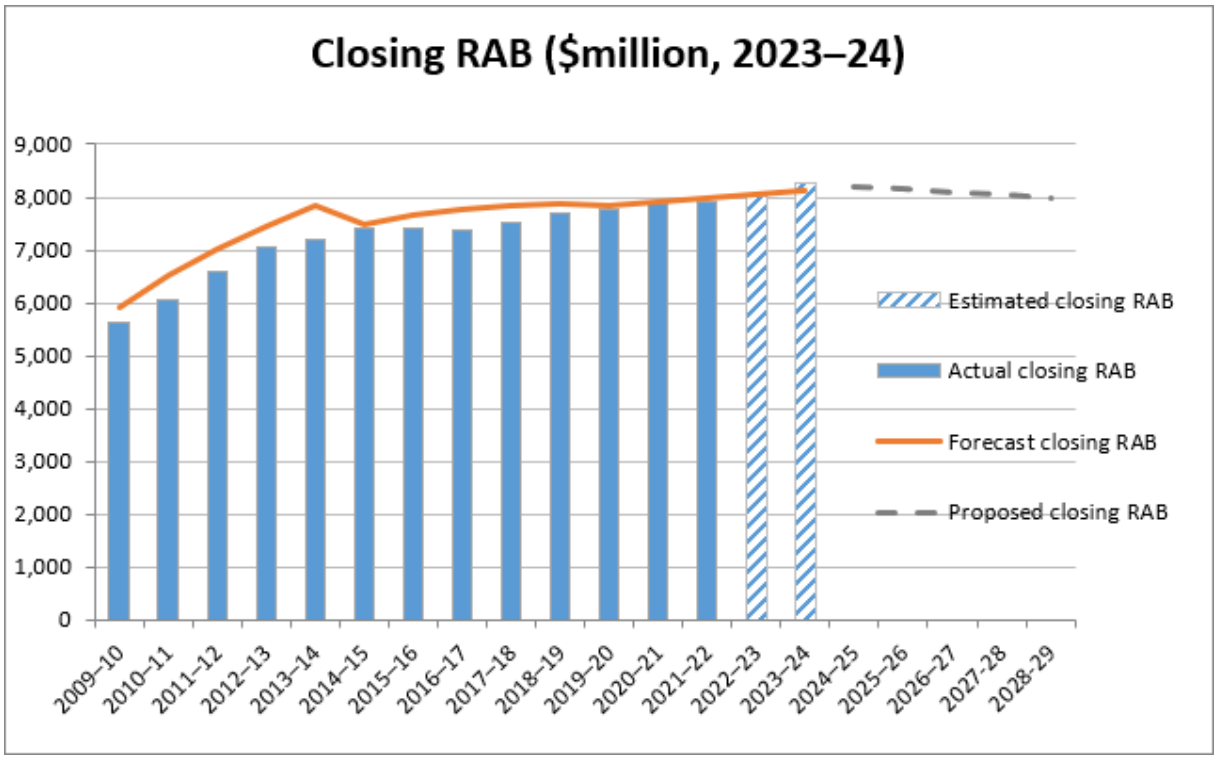
The RAB is the value of assets used by Endeavour to provide network services. The value of the RAB substantially impacts Endeavour revenue requirement, and the price consumers ultimately pay. Other things being equal, a higher RAB would increase both the return on capital and depreciation components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

Endeavour proposes a forecast RAB of $9193.9 million ($ nominal) by the end of the 2024–29 period, which is $931.7 million higher than the estimated RAB at the end of the 2019–24 period. This follows an increase of $1736.1 million ($ nominal) in the estimated RAB over the 2019–24 period.

In real terms ($2023–24), Endeavour's proposed RAB will be $283.0 million lower by the end of the 2024–29 period, driven by lower forecast capex and higher depreciation. Figure 4 shows the value of Endeavour's RAB over time.

To allow for a change to accounting standards for the treatment of leases, Endeavour added a total of $44.8 million to the RAB which reflects the present value of its leases as at 30 June 2024.

Figure 4 Endeavour'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"). Endeavour proposes regulatory depreciation of $1022.4 million ($2023–24) for the 2024–29 period, which is $324.8 million (46.6%) higher than for the 2019–24 period. The higher regulatory depreciation is primarily driven by:

- a significant increase in capex spent on assets which have relatively shorter asset lives over the 2019–24 period (compared to the forecast capex we approved for that period) and further increases in forecast spending on such assets in the 2024–29 period.
- a higher opening RAB as at 1 July 2024 compared to the value we determined in the 2019–24 determination. This is caused by the higher actual/estimated inflation rates over the later years of the 2019–24 period than was expected at the time of the 2019–24 determination.

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, 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.

Endeavour used our standard regulatory models. It has not proposed any changes to standard asset lives for existing asset classes. Endeavour proposed a change from period-

by-period tracking to year-by-year tracking for implementing straight-line depreciation. This change has a minimal impact on forecast revenue in the 2024–29 period. It used the AER's depreciation module for the year-by-year tracking calculation. We consider this change as capable of acceptance at the draft determination stage because it is consistent with the requirements of the Rules.

Endeavour proposed two new asset classes for allocating expenditures associated with capitalised leases due to a change to accounting standards for the treatment of leases. The new asset classes are in relation to leases of offices and motor vehicles. The proposed new asset classes and the standard asset lives are:

- Short term leases (5 years standard asset life) – This asset class covers leases pertaining to Endeavour's motor vehicle fleet and Sydney CBD office.
- Long term leases (10 years standard asset life) – This asset class covers Endeavour's Parramatta head office lease.

Endeavour also assigned a remaining asset class as at 30 June 2024 of 3.6 years and 9 years to the short term leases and long term leases asset classes, respectively. These asset lives are used for the depreciation of existing leases which are to be capitalised in the RAB as at 30 June 2024.

Based on our initial review, we consider Endeavour's proposed standard asset lives for the new capitalised leases asset classes is appropriate as they are largely consistent with the terms of motor vehicle and office leases. We have also assessed the proposed remaining asset lives for existing leases and consider them to be reasonable as they reflect the weighted average remaining terms of existing leases as at 30 June 2024.

Overall, we consider Endeavour has performed very well against the depreciation expectations. Therefore, we consider that Endeavour's proposed regulatory depreciation approach, including the new asset class for capitalised leases, is capable of acceptance at the draft determination stage.

Questions

4. Do you have views on whether Endeavour's proposed asset lives for its leases asset classes as set out in its 2024–29 proposal is capable of acceptance at the draft determination stage?
5. Do you have views on whether Endeavour's proposed regulatory deprecation approach is capable of acceptance at the draft determination stage?

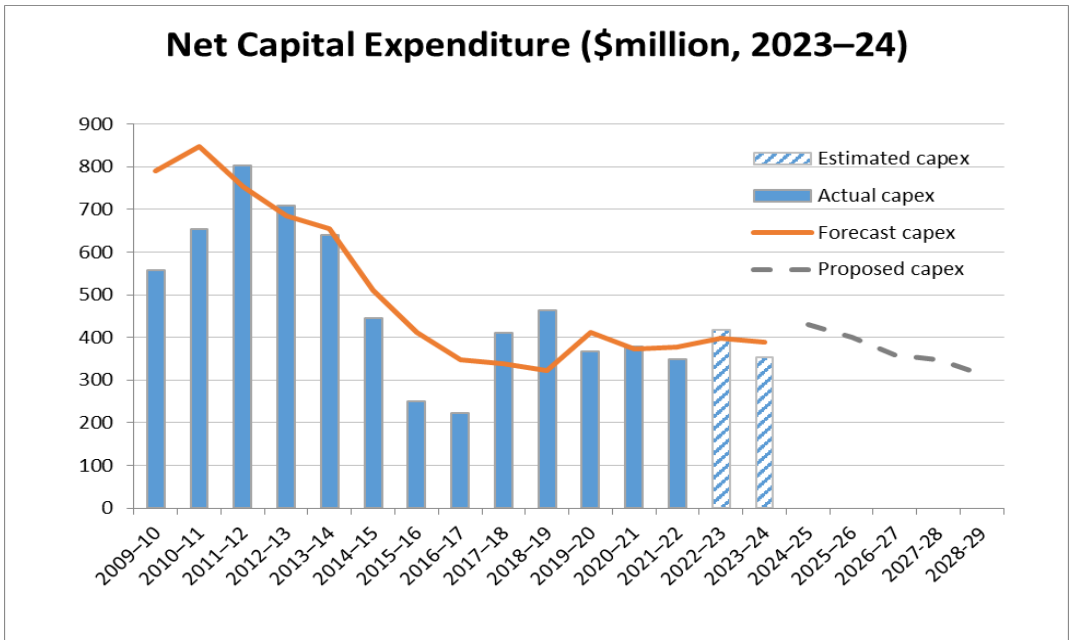
4.3 Capital expenditure

Capital expenditure (capex) refers to the capital cost and expenditure incurred in the provision of Endeavour'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 Endeavour's capex proposal

Endeavour has proposed a forecast net capex of $1850.9 million. Figure 5 compares it's forecast to its actual spend and AER allowance over time.

Figure 5: Comparison of Endeavour's forecast with actual spend



Source: AER analysis

Its forecast compares well against its current period spend, being 2% below current period spend. Its current period spend also tracks closely to the AER current period allowance. In the current period, Endeavour has underspent in some categories, notably repex and augmentation expenditure (augex), which has been offset by overspends in other categories; in particular, in Information Communication Technology (ICT) capex. We note that Endeavour has engaged with its stakeholders about its current period spending patterns. Table 2 sets out the composition of Endeavour's total capex proposal for 2024-29.

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

Capex Category	Total $ million	% of total capex
Connections	119.0	6%
Augmentation	412.6	22%
Replacement	574.5	31%
Resilience	28.0	2%
CER Integration	45.0	2%
Capitalised Overheads	452.4	24%
Non-System Assets(a)	230.7	12%
Innovation Fund	20.0	1%
Total Capex (excluding capital contributions)	**1882.2**	
Disposals	**31.3**	
Total Net Capex	**1850.9**	

Source: AER analysis
Notes: (a) includes ICT ($129m), Motor Vehicles ($29.1m), Capitalised leases ($18.1m), Building and Property ($33.2m) and Other Non-system ($21.3m)

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

- **Repex** of $574.5 million which is 31 % of the forecast and is in line with current period spend. Major investments are proposed in poles, high voltage distribution switchgear replacement, oil cable replacement and circuit breaker and switchboard replacement.

  Endeavour submits that it has actioned one of the key learnings from the last review by undertaking a significant transformation of its asset replacement framework, processes and tools. It submits that its asset replacement decisions are focused on a data-driven, quantified benefits approach.[29] Endeavour considers that its investment in ICT, digital platforms, system overhauls and capability uplifts have allowed it to develop robust cost-benefit analysis at an asset level that aligns with best industry standards of practice.[30]

- **Augex** of $412.6 million which is 22 % of the forecast, and in line with its current period spend. Its forecast augex is driven by mostly expanding the network to new areas to cater for customer growth (greenfields investment) and also increasing the capacity of the existing network to cater for demand growth from existing customers (brownfields investment). Major investments include those for the Western Sydney Aerotropolis, an industrial/commercial hub around the Western Sydney Airport and to support growth in North West Sydney and the South West and Greater Macarthur region.

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

- **resilience capex** of $28 million for targeted investments to address the most significant climate change risks in the short term. This investment includes proactive replacement of timber poles with non-combustible poles in bushfire prone areas, conductor and feeder replacement to address flooding risk and potential investment in feeders for extreme hot days[31]
- **an Innovation Fund** of $20 million ($5 million of opex) to trial and invest in innovative solutions and technologies to support the energy transition and community resilience. This would involve collaborating on local emergency management plans, reviewing communication protocols and resources, developing education programs and developing local resilience hubs[32]
- **Customer Energy Resources (CER) Integration** $45 million which relates to investing in smart-meter data monitoring to develop a common analytics platform, enhancing DER hosting capacity, and trialling and then potentially implementing technologies to meet the energy transition
- **ICT** to address cyber risks and new capabilities, which forms a part of the $70 million for non-recurrent ICT.

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29 Endeavour Energy Regulatory Proposal 2024-29, January 2023, p. 193.

30 Endeavour Energy Regulatory Proposal 2024-29, January 2023, p. 193.

31 Endeavour Energy regulatory proposal 2024-29, January 2023, pp. 203-4.

32 Endeavour Energy regulatory proposal 2024-29, January 2023, p. 204.

4.3.2 Assessment against the Handbook expectations for capex

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 Endeavour has satisfied this capex expectation. It performs well against a top-down testing of its capex proposal because:

- forecast total capex of $1882.2 million is not materially above current period actual spend, with its forecast being 2 % below current period spend
- for repex, which makes up the majority of its total forecast, the forecast of $574.5 million is in line with its current period spend.
- Endeavour performs well against our repex model which is a top-down check of the repex forecast. In particular, Endeavour's modelled forecast repex to be about 5 % below the repex model threshold, which suggests that overall its forecast modelled repex performs comparatively well against the other DNSPs.
- Endeavour has applied credible and stakeholder-driven top-down challenges to its forecast. It states that it has constrained its proposal in several ways, most notably:
  - not passing through to consumers capitalised overheads of $70 million and real cost escalation of $32 million
  - reducing its connections capex to $119 million from $133.8 million in response to customer and stakeholder feedback
  - not claiming a CESS benefit from a $54 million deferral of its 132kV supply for the Aerotropolis in line with its RRG and broader feedback from stakeholders that the scheme outcomes should reflect genuine efficiency improvements
  - while it has identified $55.3 million of resilience projects, it has limited its proposal to $28 million as part of its commitment to a value for money proposal for its customers.

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

The results of our top-down testing informs us as to the key projects and programs on which to focus our review of the business' proposal against this capex expectation. At the pre-lodgement phase, Endeavour was very responsive to the AER's requests for information and data on a large sample of business cases we requested to assess against this capex expectations. There were also a number of constructive meetings where the AER provided preliminary feedback on these business cases. Our initial review of Endeavour's proposal indicates that it has incorporated this feedback.

Our review of the business cases indicates that there is a significant improvement in Endeavour's material in support of its expenditure, compared to the previous review. There is

evidence of an overall good standard in needs analysis, cost benefit approach, option analysis, and transparency in documentation.

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 Endeavour's asset management plan and associated documentation indicates that these are consistent with well-established relevant Australian industry standards.

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.

We consider Endeavour has satisfied this capex expectation. This is because we have observed Endeavour's efforts to engage with its consumer groups on key capex aspects of its proposal, informing but also genuinely seeking stakeholder feedback from its RRG, as well as circling back to respond to specific feedback raised at forums.

We note that Endeavour also attempted to unpack and explain more complex capex projects and programs, encouraging open dialogue on several topical capex issues. We also consider that its draft proposal set out the capex issues transparently and requested feedback on those issues that consumers could influence.

4.3.3 Overall assessment against the capex expectations

Overall, we consider Endeavour has performed very well against the capex expectations.

We propose to undertake a targeted review on a small proportion of capex - representing about 15 % of Endeavour's total capex forecast. This will comprise:

- examining the investment timing and demand forecasts related to the Endeavour's proposed projects and programs for the Western Sydney Aerotropolis, as well as a couple of major projects in other growth areas that might be sensitive to demand
- a high-level assessment of DER-related and resilience-related capex and cyber ICT. These are new and emerging areas relevant to a number of current regulatory proposals. In the case of Endeavour, we acknowledge that the proposed capex associated with these categories is less than 10% of its forecast. We also note Endeavour's efforts to apply a top-down challenge to these forecasts.

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 material or systematic issues that might lead to over-forecasting.

At an overall level, our view is that Endeavour's capex forecast may be capable of acceptance at the draft determination stage. This would be subject to the outcome of our targeted review and views expressed in stakeholder submissions.

Questions

6. What do you think about the proposed scope of targeted review?
7. At an overall level, is Endeavour's capex forecast capable of acceptance at the draft determination stage?

4.4 Operating expenditure

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 Endeavour's opex proposal

Endeavour proposed total opex of $1,497.6 million ($2023–24) for the 2024–29 period,[33] is:[34]

- $112.1 million (8.1%) more than Endeavour's actual/estimated opex for the 2019–24 period
- $267.1 million (15.1%) less than the opex forecast we approved for the 2019–24 period.

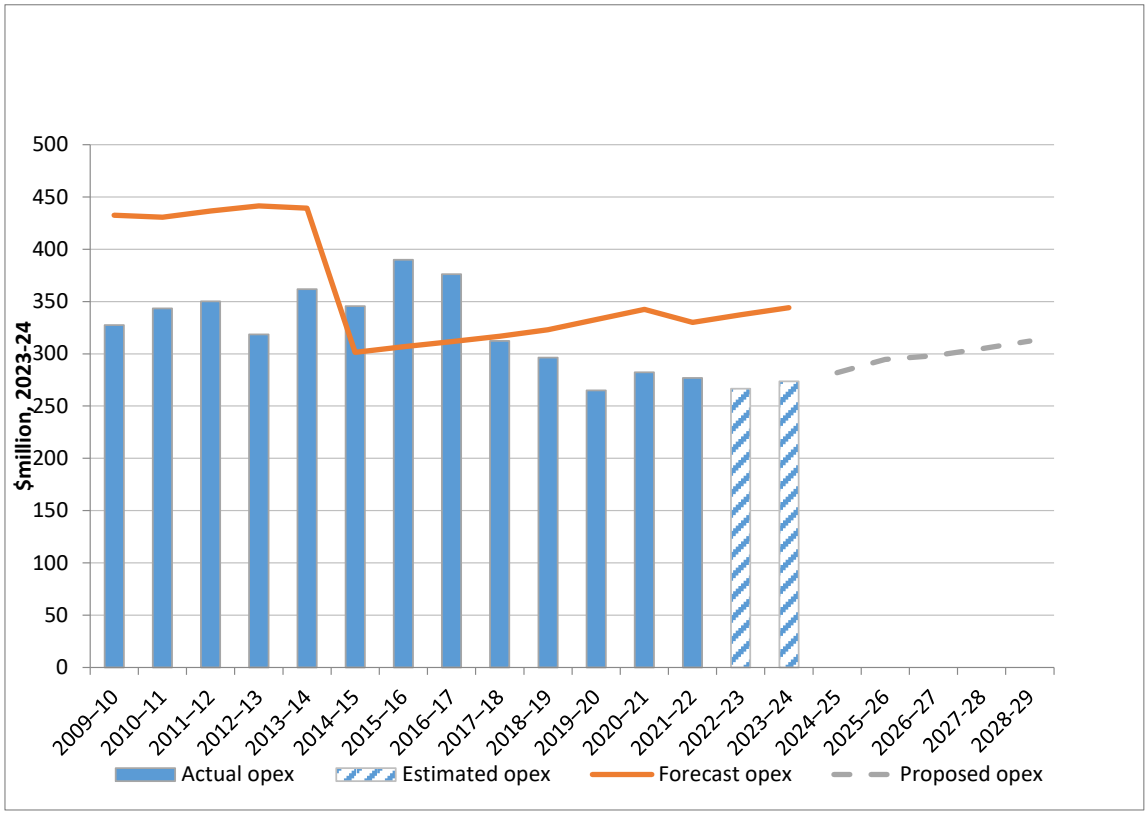
Endeavour has reduced its opex since 2014–15. By the end of the current period, Endeavour expects to have reduced its annual opex by $79.2 million ($2023–24), or 22.4%, compared to its opex in 2014–15. Endeavour's benchmarking analysis shows its efficiency in terms of opex multilateral partial factor productivity ranking having improved from 10th in 2016 to 4th in 2022.[35] Figure 6 shows the trend in Endeavour's opex over time.

33 Including debt raising costs.

34 Endeavour Energy, *2024–29 Regulatory Proposal*, 31 January 2023, p. 224.

35 Endeavour Energy, *2024–29 Regulatory Proposal*, 31 January 2023, p. 224.

Figure 6 Comparison of Endeavour's past and forecast opex



Source: Endeavour 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*; Endeavour Energy, *2024–29 Regulatory proposa*l - *Endeavour Energy - 11.01 Opex Model - January 2023 - Public*, January 2023; AER analysis.

4.4.2 Key drivers of the opex proposal

Endeavour used a base-step-trend approach to forecast opex for the 2024–29 period. This is consistent with our approach to assessing opex, as outlined in our *Expenditure Forecast Assessment Guideline*.[36] Endeavour used an estimate of opex in 2022–23 as the base to forecast ($266.5 million ($2023–24) or $1332.6 million over five years). It chose 2022–23 as the proposed base year, stating that a network's most recent actual expenditure best reflects the efficient expenditure required to achieve the operating objectives.[37] This year will be the most recent year with audited actual data by the time of our final decision. Endeavour then [38]

- removed $24.7 million ($2023–24) to reflect adjustments to base year opex, including:

[36] AER, *Expenditure Forecast Assessment Guideline*, November 2013.

[37] Endeavour Energy, *2024-29 Expenditure Forecast Methodology Statement,* June 2022, p. 56.

[38] Endeavour Energy, *2024–29 Regulatory Proposal - Endeavour Energy - 11.01 Opex Model - January 2023 - Public*, 31 January 2023.

  - –$5.9 million (or -$29.3 million over five years) for a change in accounting of leases which are now required to be capitalised[39]
  - $0.9 million (or $4.6 million over five years) to clarify the treatment of Software as a Service costs as opex rather than capex, capturing these costs within its opex allowance as they no longer form part of its ICT capex forecast[40]
- added $35.7 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 $0.2 million of opex category specific to debt raising costs
- applied a rate of change consistent with our standard approaches, comprised of:
  - forecast growth in the real price of inputs, averaging 1.6% per year ($28.8 million, $2023–24)
  - forecast output growth, averaging 0.6% per year ($65.7 million, $2023–24)
  - forecast productivity growth, averaging 0.5% per year (-$20.3 million, $2023–24).
- added four step changes totalling $60.0 million ($2023–24):[41]
  - $36.6 million to address increasing insurance premiums and the tightening of the insurance market (**Insurance**)
  - $14.2 million for acquiring meter data to improve CER visibility in order to support efficient levels of export hosting investment as part of Endeavour's CER Integration Strategy - (**Network visibility**)[42]
  - $5.8 million for costs related to Endeavour's Off Peak Plus pilot project for accelerating the roll-out of smart metering to improve hosting capacity and defer network capex (**Solar Soak/Off-peak conversion**)[43]
  - $3.4 million for expected demand management solutions to defer Augmentation capex – Endeavour noted that based on its initial assessment of augex projects it has identified five projects that are likely to be candidates for non-network solutions (**Demand Management**)[44]
- added $20.0 million ($2022–24) for debt raising costs.[45]

Endeavour has also signalled potential, additional step changes that it has not included in its opex forecast at this stage:

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39 Endeavour Energy, *2024–29 Regulatory Proposal*, 31 January 2023, p. 224.

40 Endeavour Energy, *2024–29 Regulatory Proposal*, 31 January 2023, p. 224.

41 Endeavour Energy, *2024–29 Regulatory Proposal*, , 31 January 2023, pp. 234-235.

42 Endeavour Energy, *2024–29 Regulatory Proposal*, 31 January 2023, pp. 238-239.

43 Endeavour Energy, *2024–29 Regulatory Proposal*, 31 January 2023, p. 240.

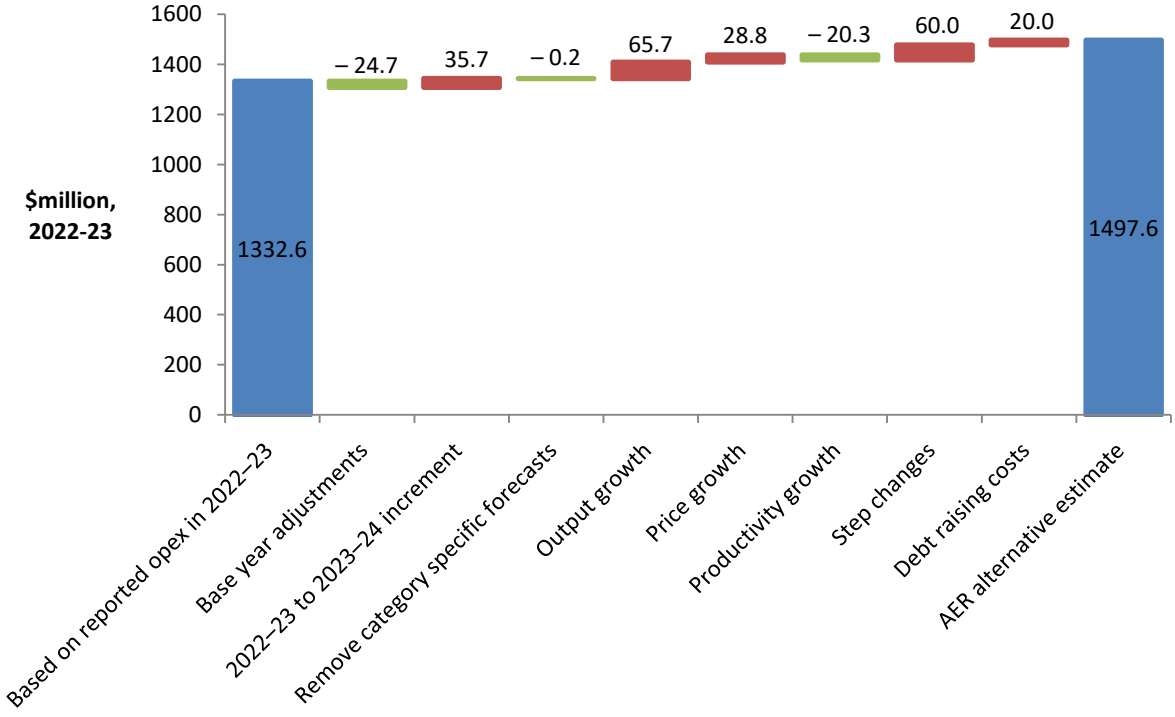
44 Endeavour Energy, *2024–29 Regulatory Proposal,* 31 January 2023, pp. 240-241.

45 Essential Energy, *2024–29 Regulatory Proposal*, *Endeavour Energy - 11.01 Opex Model - January 2023 - Public*, 31 January 2023.

- Security of Critical Infrastructure (SoCI) – Endeavour stated that there remains a degree of uncertainty of the costs and timing associated with SoCI compliance, making the step change unquantifiable at this stage of the determination process. It noted ongoing work to clarify and confirm the cost of compliance.[46]
- Guaranteed Service Level (GSL) payments – Endeavour stated that the NSW Government will introduce a new customer GSL to apply from 1 July 2025. As result, the scheme is likely to see a material increase in the number of claims for compensation made by residential and small business customers. However, as the costs are subject to a degree of uncertainty, Endeavour decided not to propose a step change amount for the 2024-29 period at this stage.[47]

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

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



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

46 Endeavour Energy, *2024–29 Regulatory Proposal,* 31 January 2023, pp. 237-238.

47 Endeavour Energy, *2024–29 Regulatory Proposal,* 31 January 2023, pp. 241-242.

4.4.3 Assessment against the Handbook expectations for opex

4.4.3.1 Opex forecasting approach

As stated in our Handbook our first expectation for a business's operating expenditure proposal relates to its opex forecasting approach. 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 are consistent with those used to calculate opex incentive scheme (EBSS) carryover amounts.[48]

We consider that Endeavour has applied our standard base-trend-step forecasting approach and Endeavour's opex forecast is consistent with the opex forecast used in the EBSS.

4.4.3.2 Base opex

We expect that forecast opex uses a base year for which audited actual opex is available and that a network business can demonstrate is not materially inefficient.

Endeavour used 2022–23 as the base year, the fourth year of the current regulatory control period. While Endeavour's audited actual opex for this year is not yet available, it will be by the time we make our final regulatory determination. For the final decision, we will update the base year opex estimate used in the draft decision.

Endeavour has provided analysis to demonstrate its base opex is not materially inefficient, with reference to the latest available annual benchmarking report.

4.4.3.3 Trend

Endeavour applied our standard approach to forecast the opex rate of change or trend growth forecast. It applied inputs consistent with our expectations for inflation, output growth, price growth, and productivity.

4.4.3.4 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, Endeavour proposed four step changes totalling $60.0 million ($2023–24), representing 4% of total forecast opex.[49] We consider this does not meet our expectation of few or no proposed step changes, however we recognise that Endeavour has:

- applied a 'top-down' constraint to step change costs in order to constrain the impact on electricity prices
- sought to justify the proposed step changes in accordance with the framework set out in the *Better Resets Handbook*

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

49 We note that Endeavour Energy's draft plan included $65 million of step changes.

- undertaken detailed engagement with consumers on individual step changes.

We intend to undertake a targeted review of the two step changes related to Endeavour's Consumer Energy Resources (CER) integration strategy: the 'Network visibility' step change ($14.2 million) and 'Solar Soak / Off-Peak conversion' step change ($5.8 million). These step changes represent 0.9% and 0.4% of total forecast opex, respectively.

We propose to prioritise these step changes for targeted review due to:

- the novelty of the relevant issues, and the strategic significance and potential precedent value of our decision,
- interactions with an area of capex targeted review (the CER integration strategy)
- the commonality of issues with similar step changes proposed by the other NSW network service providers.

We have also considered whether we should undertake a targeted review of Endeavour's other two proposed step changes, which account for further 2.7% of total forecast opex:

- Insurance – $36.6 million ($2023–24)
- Demand management – $3.4 million ($2023–24).

We do not intend to include these step changes as part of the targeted review because:

- Step changes in insurance premium costs are common across most current and recent reset processes due to prevailing market conditions. While this step change is material, the information provided suggests Endeavour has taken a robust approach in attempting to limit these costs, including by constraining proposed costs materially below the range advised by its market expert.
- the demand management step change is relatively immaterial and appears reasonably justified as an efficient capex/opex trade-off.

We also note that Endeavour did not include a step change for SoCI costs due to the uncertainty of costs and timing.[50] We appreciate that due to factors beyond Endeavour's control, elements of proposals may change however we would encourage Endeavour to consult and seek support from stakeholders for any changes to its proposal. If Endeavour were to propose an additional step change, we would likely prioritise that step change for targeted review.

4.4.3.5 Category specific forecasts

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

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[50] Endeavour Energy, *2024–29 Regulatory Proposal,* 31 January 2023, pp. 238-239.

4.4.3.6 Genuine consumer engagement

Through the pre-lodgement engagement and early signal pathway process, the AER has observed aspects of Endeavour's engagement with consumers on its opex proposal. This included detailed engagement with consumers on individual step changes, such as the insurance and CER related step changes. Endeavour has applied a top down constraint to its step change proposal in response to consumer concerns that Endeavour seek to constrain its contribution to customers' electricity bills.

Overall, we consider Endeavour 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 Endeavour's opex proposal addresses the concerns identified by electricity consumers during its engagement process.

4.4.3.7 Overall assessment against the opex expectations

Overall, based on the issues discussed above, Endeavour's opex forecast may be capable of acceptance at the draft determination, subject to our proposal to undertake a targeted review of Endeavour's two CER related step changes. We propose undertaking 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.

We note that our task is to accept or not accept the opex forecast at an aggregate level. Given that the two CER related step changes together constitute only 1.3% of the total forecast opex, it is possible that our targeted review may not result in a material adjustment to the total opex forecast. That is, our alternative estimate of total forecast opex may not be materially different to Endeavour's forecast. We therefore consider there is a high likelihood that Endeavour's opex forecast may be capable of acceptance at the Draft Determination stage. This would be subject to the views of stakeholders.

Questions

8. What do you think about the proposed scope of targeted review?
9. At an overall level, is Endeavour's opex forecast capable of acceptance at the draft determination stage?

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.[51]

Using the approach set out in the post-tax revenue model, Endeavour proposes a forecast corporate income tax amount of $89.5 million ($2023–24) for the 2024–29 period. We note that Endeavour has:

- Proposed $2.6 million forecast for immediate expensing of capex for the 2024–29 period consistent with its current tax policy. The proposed amount reflects the reported average amount expensed immediately over the period 2018–19 to 2021–22.
- 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.

Based on our initial review, we assess that Endeavour's approach to forecast immediate expensing of capex and its proposed capex allocated for straight-line depreciation is generally consistent with the approach we have taken in recent revenue determinations. Overall, we consider that Endeavour's proposed approach for estimating its corporate income tax is capable of acceptance at the draft determination stage.

[51] 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 expenditure efficiencies while maintaining the reliability and overall performance of its network.

Our final Framework and Approach (F&A) for Ausgrid, Endeavour and Essential Energy noted our intention to apply the five incentive schemes and allowances in the 2024–29 period that are set out below[52]. Endeavour agreed with this approach in its 2024–29 proposal.

- **Efficiency benefit sharing scheme (EBSS):** This provides Endeavour 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 Endeavour for the 2019–24 period. Endeavour proposed EBSS carryover amounts totalling $133.1 million ($2023–24) from the application of the EBSS in the current, 2019–24, period.[53] Endeavour proposed that we apply the EBSS again in the 2024–29 regulatory period, subject to some costs being excluded.[54]

  Based on our initial review, we assess that Endeavour's approach to EBSS is generally consistent with the approach we have taken in recent revenue determinations.

- **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 2019–24 period, Endeavour is proposing to incur a CESS benefit of $ 13.8 million.

  Endeavour's approach to not claim a CESS benefit from a $54 million deferral of its 132kV supply for the Aerotropolis is in line with its RRG and broader feedback from stakeholders that the scheme outcomes should reflect genuine efficiency improvements.[55]

- **Customer service incentive scheme (CSIS):** This creates an incentive for distributors to maintain and improve customer services not covered by the STPIS, or other

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

53 Endeavour Energy, *2024–29 Regulatory proposal*, 31 January 2023, p. 128.

54 These are debt raising costs, non-network alternatives costs (DMIA) and Innovation Fund costs, movements in provisions, and any changes in capitalisation policies and/or accounting standards that occur over the 2024-29 period (if any).

55 Endeavour Energy, *2024–29 Regulatory proposal*, 31 January 2023, p. 178.

mechanisms.[56] 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.

To apply the CSIS, Endeavour must demonstrate to us that its customer engagement has been genuine and that its customers support the proposed customer service parameters and incentives. This differs from a prescriptive scheme (like the STPIS) that specifies precisely what is incentivised as well as how penalties and rewards are calculated.[57] Endeavour should note that robust data oversight is a vital component of the CSIS.

Endeavour has engaged with its stakeholders on its intention to apply a CSIS for the 2024–29 period in place of the telephone answering measures in the STPIS.[58] Its CSIS proposes to address customer priorities, as identified through its consumer engagement. We welcome stakeholder views on the proposed metrics for its CSIS.

- **Service target performance incentive scheme (STPIS):** This provides a financial incentive to Endeavour to maintain and improve service reliability performance.[59] The STPIS is intended to ensure that distributors' service levels do not deteriorate due to 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 Endeavour for research and development of 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.[60]

Question

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

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

57 AER, *Explanatory Statement Customer Service Incentive Scheme*, July 2020, pp. 5–9.

58 Endeavour Energy, *2024–29 Regulatory Proposal,* 31 January 2023, p. 137.

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

60 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 the Ausgrid, Endeavour and Essential provide to their customers.

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. Endeavour has proposed updates to its tariffs in its structure statement (TSS), which sets out the tariff structure through which they will recover their regulated revenue for standard control services. We discuss Endeavour's 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.[61]

We discuss the alternative control services proposals in section 6.3.

Endeavour 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. There are only limited circumstances in which the AER can depart from this.

Endeavour accepted the form and formulae of the control mechanisms as set out in the Framework and Approach.

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 Framework and Approach, such as the side constraint and unders/overs mechanisms. In

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

November 2022, we published our final decision on the side constraint mechanism that will be applied in our draft decisions, following stakeholder engagement.[62]

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 customers' 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 framework and approach 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 Endeavour'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 Framework and Approach. 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.

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62 AER, *Annual pricing proposal review*. See https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/annual-pricing-process-review

Questions

11. 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%)?
12. 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?
13. Do you consider the AER should review the current price cap form of control for legacy metering services following the AEMC's decision?
14. More generally, do you have any comments on Endeavour'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).[63] 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 Endeavour has submitted a TSS and it continues the process of incremental tariff reform.

6.2.1 Assessment against the Handbook expectations for tariff structure statements

The Handbook sets out our expectations for TSSs:

[63] This requirement came out of the AEMC 2014 rule change for distribution pricing.

- Demonstrate progression of tariff reform consistent with the network pricing objective and pricing principles set out in the Electricity Rules
  - By the end of the 2024-29 regulatory period Endeavour anticipates **70.6%** of its **residential customers** will have their retailer assigned to a cost reflective network tariff, a significant improvement on 2022 data when it sat at **6.8%**
- Demonstrate incorporation of its tariff strategy in its overall business plan
  - Endeavour included a section in its tariff structure explanatory statement explaining its tariff strategy against its network planning.
- Demonstrate significant stakeholder engagement and broad stakeholder support
  - Endeavour 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
  - Endeavour's modelling showed more than 70% of non-solar residential customers on its flat tariff would benefit from reassignment to its default seasonal time of use (TOU) tariff.
  - It proposed to manage adverse impacts by imposing tariff changes gradually through its assignment policy, a 12-month lag on reassignment followed by a further 12-months on a transitional tariff.

Based on the AER's high-level review we think the TSS that Endeavour proposed is among the best that we have seen. It provides for a transition to tariffs that support efficient use of its network while including appropriate measures to manage adverse impacts to consumers. Two-way pricing is a new feature of this round of TSSs so we intend to closely examine Endeavour's two-way tariff proposal, along with all distributors' two-way pricing proposals. Based on our initial assessment, we think the TSS satisfies the NER requirements, and is capable of acceptance at the draft determination stage. We are seeking stakeholder views on whether there are any aspects of Endeavour's proposed TSS they think require adjustment before our acceptance.

Question

15. Do you consider there are any aspects of Endeavour's proposed TSS that requires adjustment before our acceptance?

6.2.2 Progress on tariff reform

Endeavour made a step change in progressing tariff reform by proposing to remove the ability of retailers to opt a customer out of cost reflective network tariffs following installation of a smart meter at the customer's premises. Further key reforms include:

- introducing a secondary two-way tariff for residential and small business tariff classes
- introducing two grid scale battery tariffs:
  - a low-voltage grid connected battery tariff that includes export rewards and charges
  - a high-voltage and a sub-transmission grid connected battery tariff with a variable export reward that would apply at all times with no export charges

- introducing a low-voltage embedded network tariff
- a tariff contingency, introduced only if a system peak demand occurred after 8pm, to extend the evening peak period of its seasonal TOU tariff for residential and small business customers (to conclude at 9pm rather than 8pm).

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 Endeavour, 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. Endeavour submitted that retailers for all customers with a smart meter would be assigned to a cost-reflective tariff over the 2024–29 regulatory period, which would include customers with electric vehicles where they also have a smart meter.[64]

6.2.4 Export reward tariffs

Endeavour 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.[65] Endeavour included customer protections as required by the NER, including:

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

64 Endeavour Energy, *0.15 Tariff Structure Explanatory Statement*, January 2023, p 47.

65 In 2021 the AEMC made a new rule change, Access, pricing and incentive arrangements for distributed energy resources, to integrate distributed energy resources more efficiently into grid and allow two-way pricing.

Table 2 Endeavour's two-way pricing

Proposed tariff(s)	Assignment	Basic Export Level	Export charge and rewards (NUoS)
Residential and small business 'prosumer' secondary two-way tariff.	Opt-in for existing customers, opt-out for new/upgrading customers from 2025. Opt-out provision to be removed in 2029-2034 period.	2kW	Export charge from 10am – 2pm, 3.6000c/kW applied to the monthly maximum export above 2KW Export reward from 4pm - 8pm (high season): 11.0357c/kWh Export reward from 4pm – 8pm (low season): 3.3366c/kWh[66]

Source: AER analysis

Our Export Tariff Guidelines published in May 2022 set out considerations distributors should have regard to in proposing two-way tariffs.[67] In the context of the updated rules and our guidelines, Endeavour proposed two-way tariffs incorporating a generous export reward. Endeavour identified $76 million required expenditure during the 2024-29 regulatory period to address its forecast increase in exports on its low voltage network[68] and submitted documents to support its proposal.

Overall Endeavour estimated that ~50% of solar exporting customers who do not change their behaviour would be better off assigned to its two-way tariff. It also found that the two-way tariff would cost the average residential and small business solar exporting customer $7 and $51 per annum respectively.[69]

6.3 Alternative control services

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

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

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

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66 Endeavour Energy, *0.18 SCS Indicative Price Schedule,* January 2023.

67 These include: 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 and its impact on network costs and stakeholder feedback. Source: AER, *Export tariff guidelines*, May 2022, p.5.

68 Endeavour Energy, *0.15 Tariff Structure Explanatory Statement*, January 2023, p. 45.

69 Endeavour Energy, *0.14 Tariff Structure Statement*, January 2023, p. 39.

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 for assets installed either pre or post 2009.

For the 2024–29 period, Endeavour proposes to determine capital prices using an annuity approach for both pre and post 2009 assets.[70] In previous regulatory control periods, Endeavour developed capital prices for the pre 2009 asset base using a building block approach, and an annuity approach for post 2009 assets.[71]

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.

We understand stakeholders support Endeavour's public lighting proposal. On this basis and based on our initial review, we consider Endeavour's public lighting proposal is capable of acceptance at the draft determination stage.[72].

NSW Public Lighting Code

The NSW Public Lighting Code (Code) informs the relationship between Public Lighting Service Providers (including Endeavour) 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.

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70 Endeavour Energy, *Regulatory proposal 2024–2029*, January 2023, p. 262.

71 AER, *Draft decision: Endeavour Energy distribution determination 2019 to 2024: Attachment 15 – Alternative control services*, November 2018, p. 15.

72 We may also make adjustments to Endeavour's modelling as a consequence of our general analysis. For example, we may adjust the labour inputs into the public lighting model as a consequence of our analysis of labour inputs into Endeavour's proposal for ancillary network services.

Endeavour submitted that its public lighting forecasts reflect its adherence to the minimum standards and guaranteed service levels set out in version 1.3 of the Code.[73]

Endeavour'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 the services and/or request new services not currently provided.

Endeavour conducted a number of online and in-person workshops with councils in their distribution area when developing its public lighting proposal (pre-lodgement engagement).[74] At a workshop on 10 October 2022, Endeavour updated councils on its public lighting program including:[75]

- an overview of the proposed new public lighting tariff model
- insight into how Endeavour plan to advance pricing for smart technologies, and
- advice about the next steps in Endeavour's engagement with Councils, with the offer to meet individually to look at their specific cases.

Endeavour's regulatory reference group stated it believed Endeavour has responded to council preferences to have simpler tariffs, cost reductions and quicker uptake of new technologies.[76]

Endeavour's service and price offerings

In Endeavour's pre-lodgement consultation, councils stated cost was the most important consideration for public lighting. Councils further supported simplifying and rationalising prices and the underlying models to make it easier to forecast costs and improve the transparency of the model.[77]

In response, Endeavour adopted a new public lighting pricing model with simplified network charging schedules and reduced number of tariffs. These simplifications include merging the Tariff Class 2 (TC2) and Tariff Class 4 (TC4) maintenance tariffs, reducing price points of

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73 Endeavour Energy, *Regulatory proposal 2024–2029*, January 2023, p. 259.

74 Endeavour Energy, *Regulatory proposal 2024–2029: 5.15 RRG report on draft proposal*, November 2022, p. 26.

75 Endeavour Energy, *Regulatory proposal 2024–2029: 5.15 RRG report on draft proposal*, November 2022, p. 27.

76 Endeavour Energy, *Regulatory proposal 2024–2029: 5.15 RRG report on draft proposal*, November 2022, p. 27.

77 Endeavour Energy, *Regulatory proposal 2024–2029: SEC Newgate – 5.07 2022 Local government workshop*, July 2022, pp. 11 and 19; Endeavour Energy, *Regulatory proposal 2024–2029*, January 2023, p. 260.

LED maintenance to two and replacing the cost recovery for tariff class 1 (TC1) with a capital annuity tariff.[78]

Endeavour focused on offering and promoting energy efficient lighting options such as LED to customers to reduce public lighting costs. Endeavour stated it incorporated the potential long term cost savings from energy efficient lighting into its proposed public lighting prices.[79]

The public lighting pricing model[80] and indicative pricing schedule[81] contain Endeavour's proposed suite of public lighting services and prices for the 2024–29 period. Endeavour's regulatory proposal describes the inputs and assumptions in the public lighting model.[82]

LED and other new technologies

During pre-lodgement engagement, Endeavour stated councils "remain committed to and expect our support of their rapid transition to more energy-efficient public lighting technology and creating value for their communities through associated 'smart' services."[83]

Endeavour stated it updated its approach to its public lighting modelling, which generally reduced its LED charges relative to old luminaire technologies, which in turn would help councils transition to new technologies such as LED.[84]

Questions

16. Do you consider Endeavour's public lighting proposal generally incorporates stakeholder inputs from this pre-lodgement engagement? If not, did Endeavour communicate these potential departure points to stakeholders and provide adequate explanation during pre-lodgement engagement?
17. Do you support Endeavour's proposed suite of public lighting services and prices?
18. Do you have any other comments on Endeavour's public lighting proposal and their 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

78 Endeavour Energy, *Regulatory proposal 2024–2029*, January 2023, p. 260 and 262–263.

79 Endeavour Energy, *Regulatory proposal 2024–2029*, January 2023, p. 261.

80 Endeavour Energy, *Regulatory proposal 2024–2029: 14.06 Public lighting pricing model*, January 2023

81 Endeavour Energy, *Regulatory proposal 2024–2029: 0.19 7 ACS indicative price schedule*, January 2023.

82 Endeavour Energy, *Regulatory proposal 2024–2029*, January 2023, pp. 259–262.

83 Endeavour Energy, *5.14 Draft proposal*, October 2022, p. 20; Endeavour Energy, *Regulatory proposal 2024–2029: SEC Newgate – 5.07 2022 Local government workshop*, July 2022, p. 11.

84 Endeavour Energy, *Regulatory proposal 2024–2029*, January 2023, p. 10, 79 and 260–261; Endeavour Energy, *5.14 Draft proposal*, October 2022, p. 20.

been responsible for the installation and replacement of meters, with smart meters now being the meters installed. Endeavour 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 Endeavour's 2024–29 determination.

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 Endeavour-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 new 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 Framework and Approach. 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 customers 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 $1.34 per year.

Questions

19. Do you consider legacy metering cost recovery should be socialised at the network level, or be left to retailers?
20. Do you consider accelerated depreciation of the legacy metering asset bases to be preferable to wind-up legacy metering charges?
21. More generally, do you have any comments on Endeavour'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 customers' 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.

We understand there is stakeholder support for Endeavour's ancillary network services proposal. On this basis and based on our initial review, we consider that Endeavour's proposal is likely capable of acceptance at the draft determination stage, subject to our draft decision on efficient labour rates and our review of a sub-set of fee-based services.

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.

Endeavour's Regulatory Reference Group (RRG) conducted a regular workshop with its key customer advocates and was satisfied that its business-as-usual engagement with its accredited service providers (ASPs) was sufficient.[85]

Endeavour consolidated its services by refining service descriptions to combine previous services. In doing so, it reduced the number of fee-based services it offered from 237 to 168. It also amended the descriptions of its disconnection and reconnection services to clarify that separate fees are now charged. Previously it was just one for both services.

Endeavour proposed new services relating to network tariff change requests, preliminary studies to support transport companies with high loads, pole holds and a data request fee (the last three services are quoted). For quoted services, Endeavour consolidated its 18 labour rate categories down to 8, also adding a new engineering manager category.

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)[86].

The benchmark rates include increases to the superannuation allowance and the vehicle allowance because of the changes in the superannuation guarantee and inflation. The

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85 Endeavour Energy, response to information request #001, 24 February 2023

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

'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.[87] 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. Endeavour has not applied this assumption in its proposed labour rates, instead, it has applied the 40 hours consistent with our methodology.

Endeavour'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 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 Endeavour'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.

Endeavour reviewed its assumptions for fee-based services as part of this proposal. In terms of price impacts, it proposed modest reductions in prices for most of its fee-based services. Endeavour did not include travel time in its cost build up to keep its alternative network services (ANS) prices low.

However, we note there are some substantive increases in proposed prices for a sub-set of service categories, such as network safety services and reconnection and disconnection services. We will review this sub-set of services for our draft decision.

Questions

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

[87] CutlerMerz, *Ausgrid Att. 9.3.b, NSW ANS labour rates review*, 4 August 2022.

Summary of questions

Better Resets Handbook

1. What are your views on our assessment of Endeavour's proposal on the early signal pathway? Are there any aspects of the proposal that require deeper review?
2. Do you consider that we should accept Endeavour's proposal at the draft determination stage?

Consumer engagement

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

Regulatory asset base

4. Do you have views on whether Endeavour's proposed asset lives for its leases asset classes as set out in its 2024–29 proposal is capable of acceptance at the draft determination stage?
5. Do you have views on whether Endeavour's proposed regulatory deprecation approach is capable of acceptance at the draft determination stage?

Capital expenditure

6. What do you think about the proposed scope of targeted review?
7. At an overall level, is Endeavour's capex forecast capable of acceptance at the draft determination stage?

Operational expenditure

8. What do you think about the proposed scope of targeted review?
9. At an overall level, is Endeavour's opex forecast capable of acceptance at the draft determination stage?

Incentive Schemes

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

Pricing

11. 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%)?
12. 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?
13. Do you consider the AER should review the current price cap form of control for legacy metering services following the AEMC's decision?
14. More generally, do you have any comments on Endeavour's proposed control mechanisms?

Tariff structure statement

15. Do you consider there are any aspects of Endeavour's proposed TSS that requires adjustment before our acceptance?

Public lighting

16. Do you consider Endeavour's public lighting proposal generally incorporates stakeholder inputs from this pre-lodgement engagement? If not, did Endeavour communicate these potential departure points to stakeholders and provide adequate explanation during pre-lodgement engagement?
17. Do you support Endeavour's proposed suite of public lighting services and prices?
18. Do you have any other comments on Endeavour's public lighting proposal and their pre-lodgement engagement?

Metering

19. Do you consider legacy metering cost recovery should be socialised at the network level, or be left to retailers?
20. Do you consider accelerated depreciation of the legacy metering asset bases to be preferable to wind-up legacy metering charges?
21. More generally, do you have any comments on Endeavour's proposed cost recovery for legacy metering services?

Ancillary network services

22. Do you consider that sufficient justification has been provided in the provision of new services?
23. 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
WACC	Weighted average cost of capital