Final Decision

AusNet Services Transmission Determination 2022 to 2027 Overview

January 2022

AUSTRALIAN ENERGY REGULATOR

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Note

This overview forms part of the AER's final decision on AusNet Services' 2022–27 transmission determination. It should be read with all other parts of the final decision.

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

The final decision includes the following attachments:

Overview

Attachment 1 – Maximum allowed revenue

Attachment 2 – Regulatory asset base

Attachment 3 – Rate of return

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

Attachment 6 – Operating expenditure

Attachment 7 – Corporate income tax

Attachment 8 – Efficiency benefit sharing scheme

Attachment 9 – Capital expenditure sharing scheme

Attachment 10 – Service target performance incentive scheme

Attachment 12 – Pricing methodology

Attachment 13 – Pass through events

Executive summary

The Australian Energy Regulator (AER) regulates electricity transmission and distribution networks in all Australian jurisdictions except Western Australia. As part of this process, a regulated electricity network business must periodically apply to us to determine the maximum allowed revenue it can recover from consumers for using its network. The National Electricity Law and Rules (NEL and NER) provide the regulatory framework governing electricity networks. Our work under this framework is guided by the National Electricity Objective (NEO).

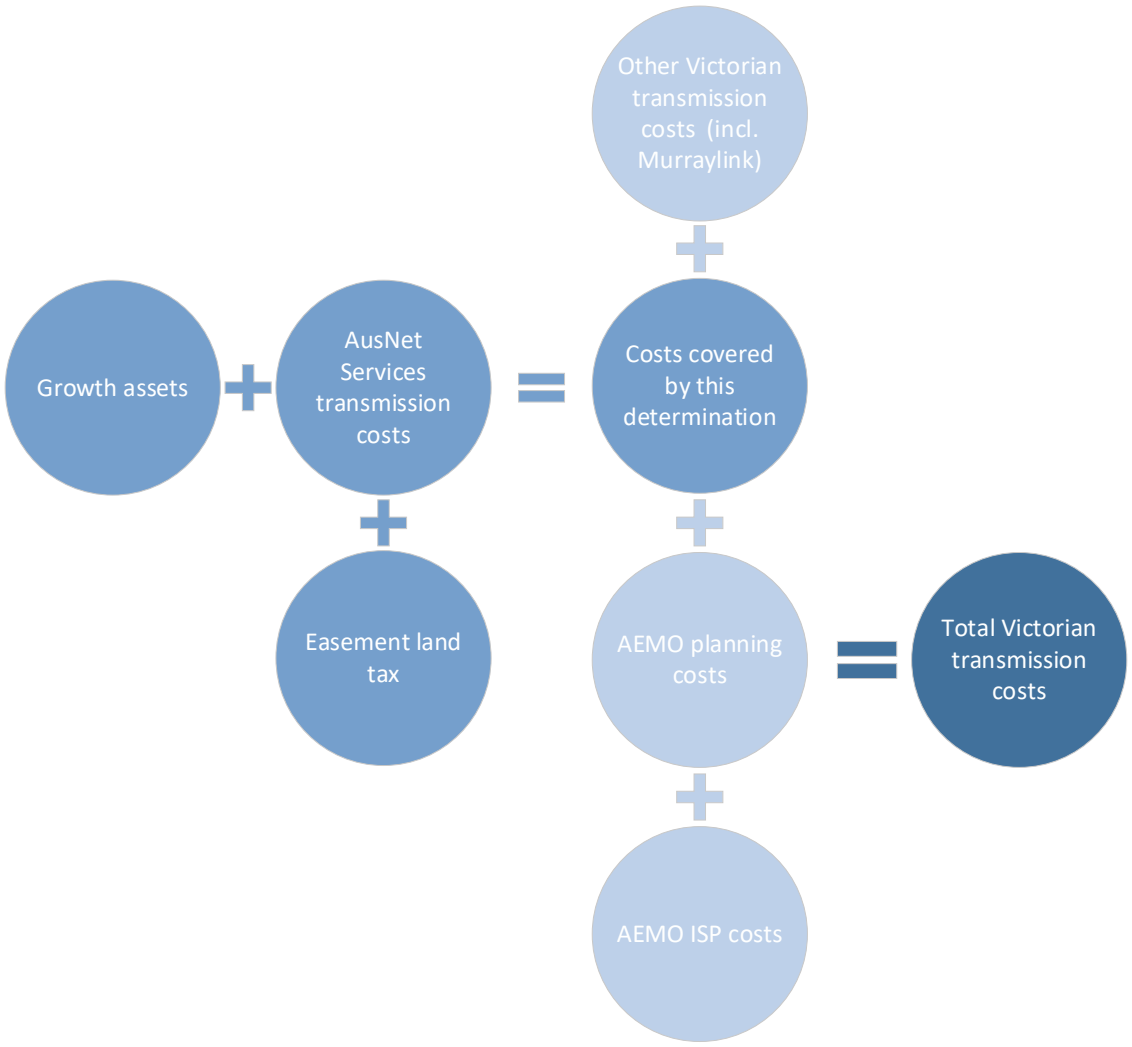
This is our final decision on the revenue Victorian electricity transmission network service provider AusNet Services can recover from its customers for the five years from 1 April 2022 to 31 March 2027. We have determined that AusNet Services can recover $2876.6 million ($nominal, smoothed) from its customers in the 2022–27 regulatory control period (2022–27 period).

In Victoria, transmission network planning functions are separated from network ownership and operation. Two separate transmission network service providers are responsible for the electricity transmission network.

- AusNet Services, the subject of this decision, owns and operates Victoria's electricity transmission network. It is responsible for transporting electricity from generation sources into Victoria's five lower–voltage distribution networks. Its regulated revenues are driven by the ongoing replacement and maintenance of the network. In Victoria, the transmission component of customers' bills includes the recovery of the Victorian Government's Easement Tax, which is also recovered through AusNet Services' regulated transmission charges.
- The Australian Energy Market Operator (AEMO) is also a designated transmission network service provider in Victoria and is responsible for planning and procuring the augmentation of the Victorian shared transmission network. Because AEMO is responsible for augmentation investment and planning, AusNet Services does not include forecast expenditure for these 'growth assets' in its proposals. Instead, growth assets are managed under commercial contracts in the period in which they are commissioned and rolled into AusNet Services' regulatory asset base (RAB) at the end of each regulatory control period. The opening RAB in this decision includes growth assets commissioned in the current, 2017–21 period. Growth assets commissioned in 2022–27 will be rolled into the RAB as part of our next determination, for 2027–31.

In addition to AusNet Services and AEMO, the Murraylink interconnector also provides transmission services in Victoria. AEMO acts as the coordinating network service provider responsible for allocating all the AER-determined regulated revenue in Victoria, and calculates final Victorian transmission use of system charges. In addition to AusNet Services' and Murraylink's transmission charges, these will include costs from AEMO's Victorian planning responsibilities, and any future costs associated with AEMO's 2020 Integrated System Plan (ISP).

Figure 1 Components of Victorian transmission charges



[1] Nevertheless, we estimate that this decision will lead to an increase in the annual retail electricity bill for residential consumers in Victoria of $7 ($nominal), or 0.5%, by the end of the 2022–27 regulatory control period. For small business consumers, the corresponding increase will be $15 (0.5%) for low usage (12,000 kWh) consumers and $26 (0.5%) for high usage (20,000 kWh) consumers.

The modest impact we estimate for this decision reflects the relatively small component of consumers' annual electricity bills made up of AusNet Services' transmission charges.

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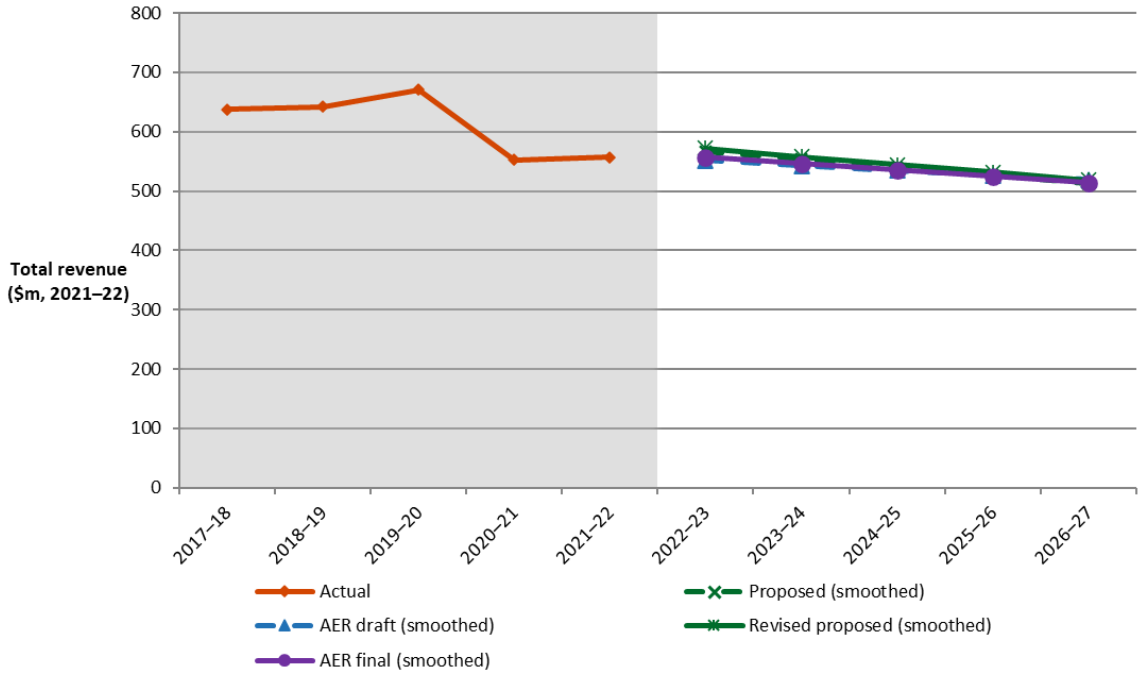
1 https://www.esc.vic.gov.au/electricity-and-gas/prices-tariffs-and-benchmarks/victorian-default-offer

Ensuring consumers pay no more than necessary for safe, secure and reliable services

Over time, inflation impacts the spending power of money. To compare revenue from one period to the next on a like-for-like basis, we use 'real' values based on a common year (2021–22) that have been adjusted for the impact of inflation rather than the nominal values above.

Figure 2 shows the change in AusNet Services' regulated revenue over time, in real terms (allowing for the impact of inflation). The total revenue approved in this decision is about 3.9% lower than AusNet Services' expected revenue for the current, 2017–22 period.

Figure 2 Changes in transmission revenue over time ($million, 2021-22)



At a component level, key drivers of the reduction in revenue from the current period to that approved in this decision are:

- The return on capital, which is based on capital expenditure and financing costs, which is $191.5 million (19.7%) lower than 2017–22, driven largely by the lower rate of return applied in the 2022–27 regulatory control period.

- Regulatory depreciation, which is $70.1 million (or 13.6%) lower than 2017–22, driven by a higher inflation indexation of the regulatory asset base (RAB)[2] and a lower level of investment in shorter life assets such as IT and vehicles in the 2022–27 regulatory control period.[3]
- The net tax allowance, which is $60.0 million (98.7%) lower than 2017–22, predominately because of lower return on equity, higher gamma, and a change to the regulatory tax approach since our last determination for AusNet Services following our 2018 tax review.

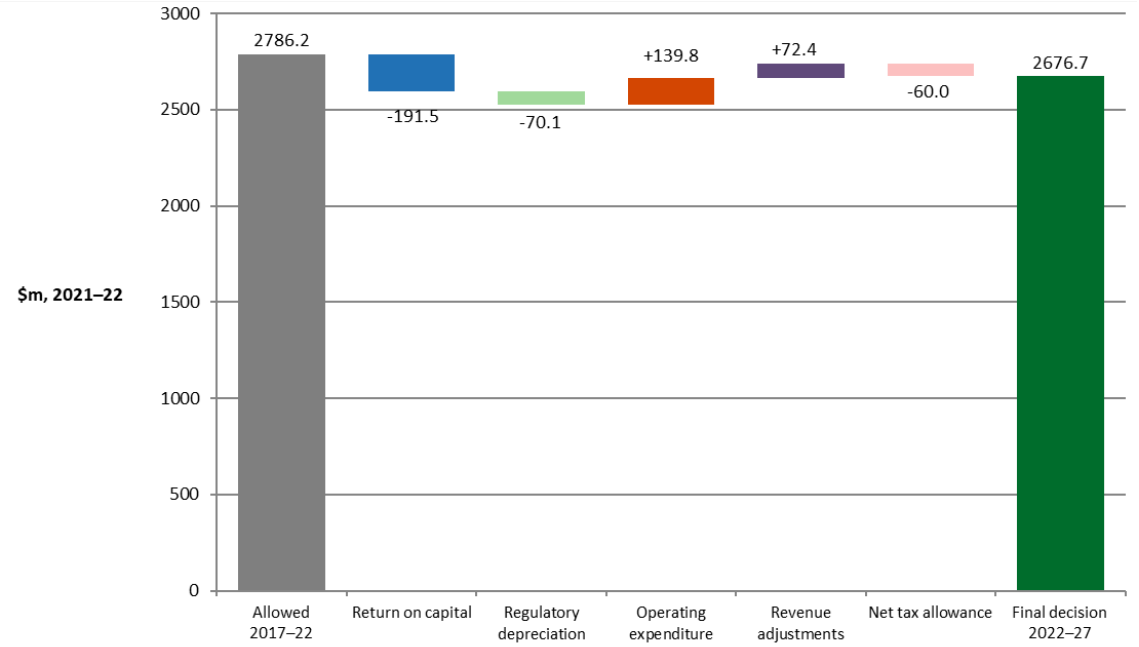
Figure 3 highlights these and the offsetting changes to other components of our decision, again in real terms:

- A $139.8 million (11.2%) increase to forecast operating expenditure (opex) relative to our final decision for the 2017–22 period, driven largely by additional obligations AusNet Services is facing and a higher forecast of the Victorian Government's easement land tax recovered through AusNet Services' revenue.
- Revenue adjustments under expenditure incentive schemes, which are $72.4 million higher than in 2017–22, following the introduction of a capital expenditure sharing scheme to the existing efficiency benefit sharing scheme in the current period, and a demand management innovation allowance mechanism (DMIAM) introduced in this decision.

[2] Our final decision forecast inflation of 2.45% per annum is higher than the forecast inflation of 2.4% per annum approved for the 2017–22 regulatory control period. Regulatory depreciation equals straight-line depreciation less inflation indexation of the RAB. All else being equal, a higher forecast inflation means a higher inflation indexation of the RAB, which in turn reduces the regulatory depreciation.

[3] Shorter life assets have higher depreciation rate over a regulatory control period compared to longer life assets. For example, IT assets will fully depreciate over 5 years, while longer life assets such as transformers will depreciate over 45 years.

Figure 3 Change in transmission revenue from 2017–22 to 2022–27 ($2021–22, million, unsmoothed)



Our final decision accepts the key components of AusNet Services' revised proposal, including its revised forecasts of total capital and operating expenditure. In making this final decision we have had the benefit of updated and additional information that addressed gaps our draft decision identified in the information AusNet Services provided in support of its original expenditure forecasts. We have also had regard to consumer and stakeholder views sought and addressed by AusNet Services in its engagement on its revised proposal, and submissions made directly to us by stakeholders and the AER's Consumer Challenge Panel (CCP23) on both the revised proposal and our draft decision.

An evolving operating environment in Victoria

The Victorian energy market is undergoing a number of changes, impacting different levels of the supply chain. Most of the impacts of the changing environment are outside the scope of this decision. The changing environment is most directly impacting augmentation of the transmission system which is managed by AEMO rather than AusNet Services. Nevertheless, this changing environment has had some impact on our decision. For example:

- In this decision we have clarified the operation of the Market Impact Component of our Service Target Performance Incentive Scheme, and how exclusion criteria should be interpreted and applied going forward. This is to ensure incentives under the scheme continue to target intervals where AusNet Services can influence the impact of occurrence and/or duration of outages and the potential price effect on consumers.

- AEMO has identified declining system strength in Victoria due to the impact of falling minimum demand and growing PV on system voltage. As a result, AusNet Services has made adjustments to how it manages outages. This has impacted the cost and timing of some elements of AusNet Services' capex forecast, including some deferral of major station projects.
- Victorian Government Renewable Energy Zone announcements have led to the removal of expected works at the Horsham Terminal from AusNet Services' revised proposal, as this project is now in the stage 1 Victorian Renewable Development Plan. The South West Communications Loop, which was not included in the Victorian government plan, has been accounted for in capex forecasts in this final decision.
- EnergyAustralia announced in March 2021 that the closure of the 1480MW Yallourn Power Station would be brought forward from 2032 to 2028. AusNet Services' revised proposal, and our approved capex forecast, now makes allowance for additional capex to address the resultant change in risk profile for assets at the nearby Yallourn Terminal Station, and for a contingent project that will allow AusNet Services to progress replacement of additional transformers at Hazelwood Terminal Station if required in the 2022–27 period.
- Electricity transmission networks rely on sophisticated control and operation systems to ensure the continued supply of electricity. Safeguarding the security of electricity supply to consumers as the use of technology becomes more prevalent makes cyber security an important consideration for critical infrastructure. Our final decision includes a step change in AusNet Services' forecast opex reflecting expected strengthening of regulatory obligations in this area.

AusNet Services' proposed treatment of these issues was a key area of focus in its consumer engagement after the submission of its initial proposal.

AusNet Services’ engagement with customers

AusNet Services is a natural monopoly supplying an essential service. High quality consumer engagement is essential for ensuring that it provides the services that meet the needs of its consumers, at a price that is affordable and efficient. In our decision-making processes, and most recently through our Better Resets Handbook, we encourage AusNet Services and other businesses networks to develop high quality proposals through genuine engagement with consumers. This engagement has several benefits, including regulatory outcomes that better reflect consumer preferences.

This determination process has demonstrated that consumer engagement has an important, and ongoing, part to play in a network business's progress through the regulatory process. It should not stop with the submission of an initial proposal nor our final decision. It is fundamental to the ongoing operation of the business so that consumers remain central to its activities.

AusNet Services’ consumer engagement prior to and in the months following the submission of its initial proposal in October 2020 was not as comprehensive or

effective as we would have expected. However, we observed in our draft decision that it had picked up momentum at the end of April 2021, with a series of workshops allowing stakeholders to consider how new information might affect AusNet Services' revised proposal and gave stakeholders the opportunity to influence potential changes in AusNet Services' revised proposal.

The improvements we observed have continued, and AusNet's engagement on key elements of its revised proposal were well received. In lending its support to many elements of AusNet Services' revised proposal, CCP23 observed that while there was a lack of engagement from AusNet Services in early 2021, the engagement following April 2021 was of a high quality. The process observed "was excellent, with high quality, open and respectful engagement, focused on collaborative workshops". The Energy Users Association of Australia (EUAA) also commended the development of AusNet Services' consumer engagement over the course of this process. It expressed confidence that stakeholder feedback had been considered in the revised proposal.

Contents

1 Our final decision

In the sections below we briefly outline what is driving AusNet Services' revenue, and the key differences between our final decision revenue of $2876.6 million ($nominal, smoothed) compared to its revised proposal of $2911.1 million and our draft decision of $2837.8 million, and the estimated consumer bill impacts.

1.1 What's driving revenue?

Over time, inflation impacts the spending power of money. To compare revenue from one period to the next on a like-for-like basis, in this section we use 'real' values based on a common year (2021–22) that have been adjusted for the impact of inflation instead of the nominal values above.[4]

Our final decision largely accepts the revised proposal. AusNet Services' revised proposal was for total forecast revenue of $2725.9 million for the 2022–27 period ($2021–22). Our final decision of $2676.7 million allows $49.2 million (1.8%) less revenue than proposed by AusNet.

We have accepted AusNet Services' revised total capex and opex forecasts which are 8.8% and 5.2% higher than our draft decision, respectively. These elements of our decision are discussed in sections 2.4 and 2.5, below.

The minor differences between our final decision and the revised proposal result from updates to use the most recent information and market data available. These updates were anticipated in AusNet Services' revised proposal and are a standard part of our decision-making process. They have resulted in decreases to the return on capital, regulatory depreciation, revenue adjustments and the cost of corporate income tax.

In real terms, our final decision on 2022–27 total revenue is $109.45 million (3.9%) lower than AusNet's expected revenue for the 2017–22 period. Revenues are expected to decrease from 2021–22 levels by 1.3% in year 1, followed by decreases of 2.0% per annum over the remaining years.

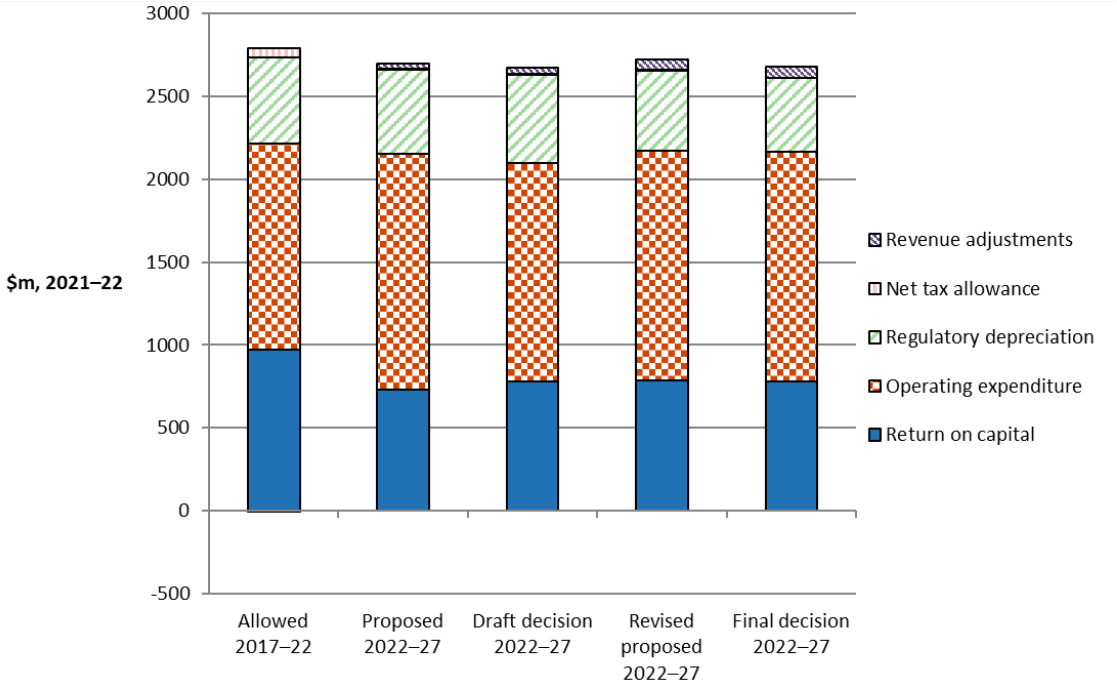
Figure 4 highlights the key drivers of the change in AusNet's allowed revenue from the 2017–22 period compared to what we expect in the 2022–27 period. Key changes include reductions in the building blocks for:

- A reduction of $191.5 million (19.7%) to the return on capital, driven largely by the lower rate of return applied in the 2022–27 regulatory control period

[4] That is, 31 March 2022 dollar terms based on AusNet Services' estimated actual revenue for 2021–22.

- A reduction of $70.1 million (13.6%) to regulatory depreciation, driven by a higher inflation indexation of the RAB[5] and a lower level of investment in shorter life assets such as IT and vehicles in the 2022–27 regulatory control period.[6]
- A reduction of $60.0 million (98.7%) to corporate income tax, predominately as a result of lower return on equity, higher gamma, and the new regulatory tax approach applied following our recent tax review.

Figure 4 Total revenue by building block components ($million, 2021–22)



Source: AER analysis.

Figure 4 also shows how these decreases are offset to an extent in our 2022–27 final decision by:

- An increase of $139.8 million (11.2%) to forecast opex relative to our final decision for the 2017–22 period. Our final decision makes allowances for a higher forecast for easement land tax and for recovery of efficient costs AusNet Services is likely to incur including as a result of increased council rates, cyber security obligations and higher insurance premiums.

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5 Our final decision forecast inflation of 2.45% per annum is higher than the forecast inflation of 2.4% per annum approved for the 2017–22 regulatory period. Regulatory depreciation equals straight-line depreciation less inflation indexation of the RAB. All else being equal, a higher forecast inflation means a higher inflation indexation of the RAB, which in turn reduces the regulatory depreciation.

6 Shorter life assets have higher depreciation rate over a regulatory control period compared to longer life assets. For example, IT assets will fully depreciate over 5 years, while longer life assets such as transformers will depreciate over 45 years.

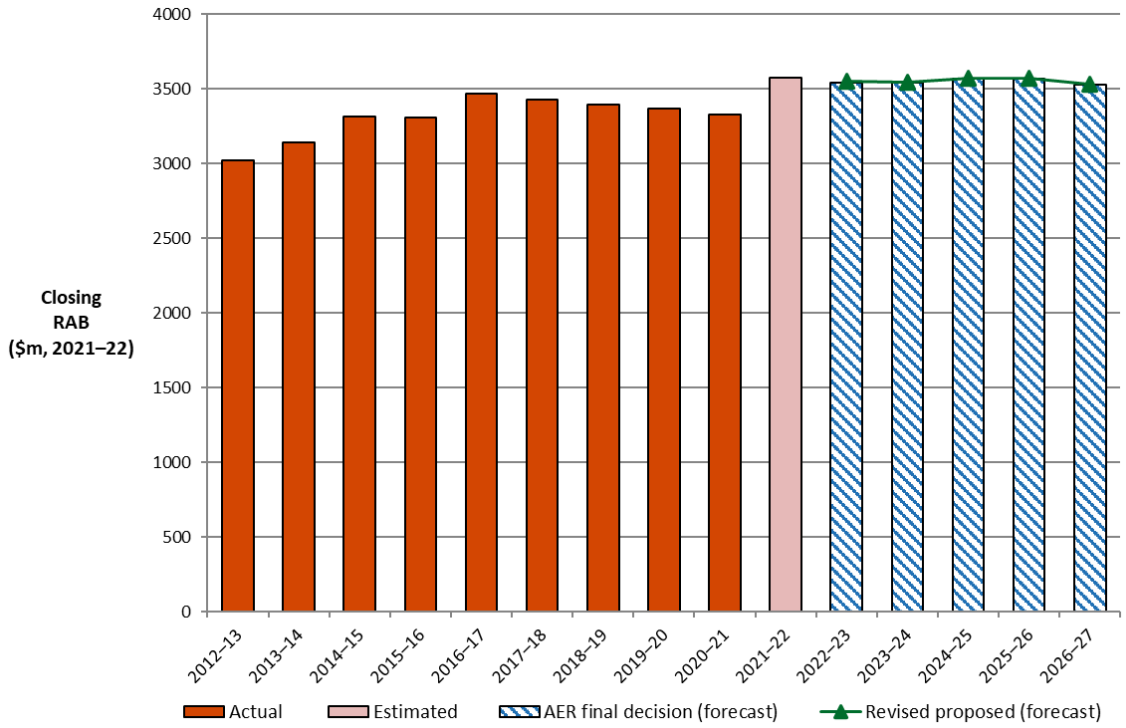
- Higher revenue adjustments under expenditure incentive schemes, which are $72.4 million higher than in 2017–22. Our 2017–22 decision added a capital expenditure sharing scheme (CESS) to the existing opex efficiency benefit sharing scheme (EBSS) for the first time. Both have resulted in positive revenue increments to be recovered over the 2022–27 period. In this decision, we have also introduced a third expenditure incentive in the form of a demand management innovation allowance mechanism, which will apply to AusNet Services from the start of the 2022–27 period.

The value of the RAB substantially impacts AusNet Services' revenue requirement, and the price consumers ultimately pay, potentially over several regulatory control periods. Other things being equal, a higher RAB would increase both the return on capital and depreciation components of the revenue determination, and a lower RAB would decrease them.

As shown in Figure 5 below, after RAB growth of 3.1% and 17% over the previous two period, our final decision results in a forecast reduction of the RAB by $46 million ($2021–22) or 1.3% over the 2022–27 period.

In this decision, $291.5 million in growth assets commissioned during the current period have been rolled into the closing RAB in 2021–22. The forecast RAB does not include any 'growth assets' (augmentation capex), which may be commissioned during the 2022–27 regulatory control period. Capital expenditure works done by AusNet Services during a regulatory control period as a result of requests from AEMO or distribution network service providers sit outside of the RAB and are governed by commercial contracts until such time as they are rolled into the RAB at the subsequent revenue determination. While the growth assets constructed due to these requests provide prescribed transmission services, AusNet Services is not responsible for the planning of these expenditures and the forecast capex associated with these assets sits outside of this revenue determination

Figure 5 Value of AusNet's RAB over time – Actual RAB, revised proposal forecast RAB and AER final decision ($2021–22, million)



Source: AER analysis.

1.2 Expected impact of our final decision on electricity bills

Although our decision influences the total revenue AusNet Services can recover from its transmission customers, we do not set transmission charges for AusNet Services or determine the retail prices that Victorian consumers pay.

In this section we estimate the impact on bills by varying AusNet Services' transmission charges in accordance with our final decision, while holding constant all other component costs that make up the electricity bill. This approach isolates the effect of this decision on electricity prices but does not imply that other components will remain unchanged across the regulatory control period.[7]

1.2.1 Transmission charges

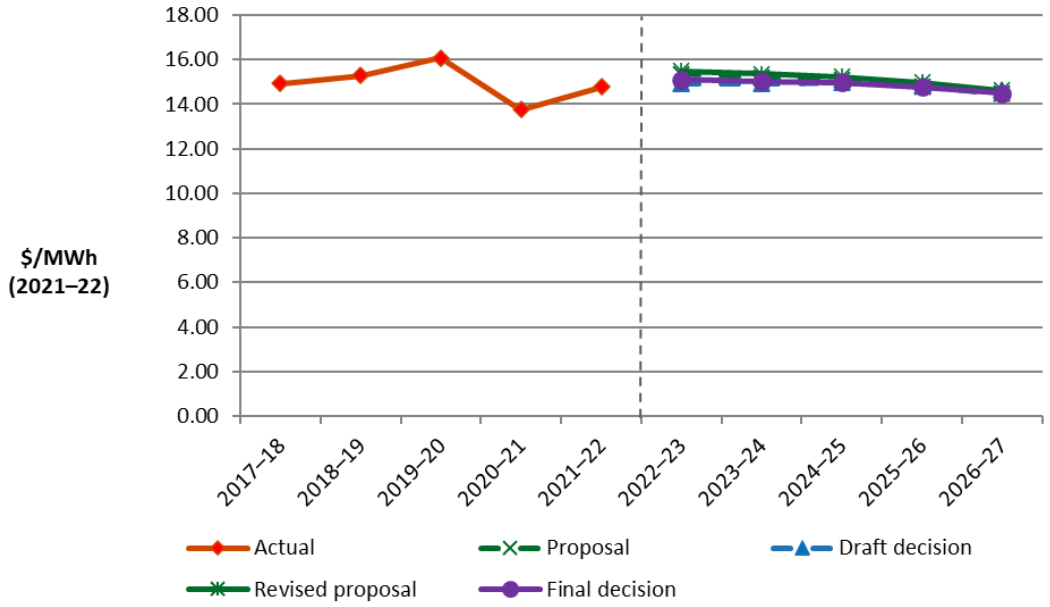
On average, transmission revenues under this final decision will increase by 0.5% ($ nominal) per annum from 2021–22 to 2026–27. The forecast energy delivered in

[7] It also assumes that actual energy consumption will equal the forecast adopted in our final decision. Since AusNet operates under a revenue cap, changes in energy consumption will also affect annual electricity bills across the 2022–27 period.

Victoria is expected to decrease by an average of 1.2% per annum across that period. As a result, we estimate transmission charges will increase from $14.8/MWh ($ nominal) in 2021–22 to $16.4/MWh, or 1.8% per annum, by 2026–27. These are an approximation of transmission charges (measured in MWh), not actual tariffs, and are provided here to illustrate the potential impact of our decision.[8]

Figure 6 shows an indicative average transmission price path for AusNet Services over the 2022–27 period in real terms, to illustrate how tariffs are changing over time. For this final decision, we estimate that in real terms AusNet Services' annual average transmission charges are decreasing over the 2022–27 period, from around $14.8/MWh for the 2017–22 period[9] to $14.5/MWh for the 2022–27 period.

Figure 6 Indicative transmission price path ($2021–22, $/MWh)



Source: AER analysis.

1.2.2 Potential bill impact

Electricity retailers' standing offers for electricity retail services are subject to Victorian Default Offer prices determined by the Essential Services Commission.[10] The prices consumers ultimately see on their electricity bills include the costs associated with transmission, distribution, generation as well as those incurred by retailers in selling the electricity.

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8 We estimate the forecast average transmission charges by taking AusNet's expected smoothed revenue and dividing it by the forecast annual energy delivered in Victoria as published by AEMO.

9 Transmission charges for 2017–18 to 2019–20 are based on actual revenue, while 2020–21 and 2021–22 transmission charges are based on estimated revenue.

10 https://www.esc.vic.gov.au/electricity-and-gas/prices-tariffs-and-benchmarks/victorian-default-offer

The revenue we allow AusNet Services in this decision contributes to the transmission network component of retail electricity bills. In Victoria, transmission accounts for about 5.5% of the total electricity bill for a typical residential customer. AusNet Services' network tariffs include the Victorian Government's easement land tax. Total Victorian transmission charges, levied by AEMO, also include the costs of AEMO's Victorian planning responsibilities and associated with its ISP. This explains the modest impact on bills arising from our final decision for AusNet Services.

We estimate that when our final decision is implemented, the transmission component of the average annual nominal electricity bill for AusNet Services' consumers would:

- Increase by $2 (0.2%) for residential consumers, $5 (0.2%) for low-usage small business consumers, and $9 (0.2%) for high-usage small business consumers in the first year of the 2022–27 period[11]
- Increase on average by around $1 (0.1%) for residential consumers, $2 (0.1%) for low-usage small business consumers, and $4 (0.1%) for high-usage small business consumers in each of the following four years of the 2022–27 period.[12]

By the end of the 2022–27 period, estimated nominal retail electricity bills for residential consumers, low-usage small business consumers, and high-usage small business consumers will have increased by $7 (0.5%), $15 (0.5%) and $26 (0.5%), respectively.[13]

Table 1 compares our estimates of the average annual electricity bill over the 2022–27 period to the current total bill level.[14]

Table 1 Estimated impact of AusNet's revised proposal and the AER's final decision on average annual bills over 2022–27 ($ nominal)

	2021–22	2022–23	2023–24	2024–25	2025–26	2026–27
AER final decision						
Residential annual electricity bill	1358	1360	1362	1363	1364	1365
Annual change		2 (0.2%)	1 (0.1%)	2 (0.1%)	1 (0.1%)	0 (0%)
Small business with 12,000 kWh consumption annual bill	3157	3162	3166	3169	3171	3172
Annual change		5 (0.2%)	3 (0.1%)	4 (0.1%)	2 (0.1%)	1 (0%)
Small business with 20,000 kWh consumption annual bill	5488	5497	5503	5509	5512	5514
Annual change		9 (0.2%)	6 (0.1%)	7 (0.1%)	3 (0.1%)	2 (0%)

11 As at 31 March 2023.

12 As at 31 March of each of the last four years of the 2022–27 period.

13 Compares 31 March 2027 (for the 2022–27 period) to 31 March 2022 (for the 2017–22 period).

14 As at 31 March 2022.

	2021–22	2022–23	2023–24	2024–25	2025–26	2026–27
AusNet revised proposal						
Residential annual electricity bill	1358	1362	1363	1365	1365	1365
Annual change		4 (0.3%)	1 (0.1%)	1 (0.1%)	0 (0%)	–0 (–0%)
Small business with 12,000 kWh consumption annual bill	3157	3166	3169	3172	3172	3172
Annual change		9 (0.3%)	2 (0.1%)	3 (0.1%)	1 (0%)	–0 (–0%)
Small business with 20,000 kWh consumption annual bill	5488	5504	5509	5513	5515	5514
Annual change		16 (0.3%)	4 (0.1%)	5 (0.1%)	1 (0%)	–0 (–0%)

Source: Essential Services Commission of Victoria, *Victorian Default Offer 2021*, *Final decision*, 25 November 2020, pp. 4–5, 47; Essential Services Commission of Victoria, *Victorian Energy Market update*, June 2021, p. 6. AusNet Services, *Regulatory Proposal 2023–27, Reset RIN Workbook 7,* 29 October 2020; AEMO, *National Electricity and Gas forecasting - 2021 Electricity Statement of Opportunities, Electricity and consumption forecast for Victoria (operations out)*, August 2021.
See http://forecasting.aemo.com.au/Electricity/AnnualConsumption/Operational, accessed on 2 November 2021.

Note: Energy consumption figures used in the bill calculation are based on AEMO's 2021 *Statement of Opportunities* demand forecasts.

Further details on the calculation of AusNet Services' revenue and the impact on network charges are set out in Attachment 1.

1.3 AusNet Services' consumer engagement

The AER's framework for considering consumer engagement in network revenue determinations at the time of AusNet Services' proposal and revised proposal was first developed for the 2021–26 revenue determinations for the Victorian electricity distribution networks, including AusNet Services' distribution network.[15] That consumer engagement framework is now reflected in the recently published Better Resets Handbook.

In a rapidly changing environment, it is essential that consumer preferences drive outcomes that are valued by them throughout the determination process. We want consumers to be partners in forming proposals rather than simply being asked for feedback on a proposal. We look for genuine commitment from network businesses extending down from their Boards and Executives to giving effect to consumer preferences, and for openness to new ideas and a willingness to change.

[15] This framework, sometimes referred to as 'Table 7' was considered in: AER, *Final decision, AusNet Services transmission determination 2022–27, Overview, Appendix C,* July 2021, p. 48.

Consumer engagement should be a continuous business-as-usual process, not a one-off process only undertaken in preparing for regulatory proposals. Ongoing engagement with consumers about outcomes that matter to them, which allows consumers to 'set the agenda'.

In our draft decision, we noted that AusNet Services' consumer engagement prior to and in the months following the submission of its initial proposal in October 2020 was not as comprehensive or effective as we would have expected and resulted in a missed opportunity to establish a strong relationship with consumers from the beginning. Despite this, AusNet Services' consumer engagement did build momentum at the end of April 2021, through a series of stakeholder engagement workshops regarding the potential changes to its expenditure forecasts.

While we acknowledge this significant improvement by AusNet Services, we also want to encourage businesses not to miss the opportunities that early engagement provides. Early engagement and consumer driven engagement plans have been seen in other decisions to have a clear impact on the success of an initial proposal. What this process has shown is that engagement is a journey, and that consultation with consumers throughout the entire determination can deliver continued benefits to the quality of a proposal and decision outcomes.

AusNet Services stated that following feedback from its stakeholders, it wanted to make the voice of its customer much clearer in its revised proposal.[16] Its Customer Advisory Panel (CAP) included a diverse membership of suitably qualified stakeholders, including experienced customer advocates, directly connected customers, Victorian electricity distributors and generators.[17] Its collaborative workshops also extended invitations to other interested stakeholders, including AEMO. CCP23 observed a high level of trust develop between AusNet Services and workshop participants and said there was 'a common purpose and open debate and discussion in all workshops.'[18] The EUAA also agreed that AusNet Services was 'open and transparent in discussing issues.'[19]

AusNet Services acknowledged that most of its post-lodgement engagement was undertaken at the *involve* or *collaborate* levels of the IAP2 spectrum. It did not aim to engage at the *empower level*, stating it did not see any 'genuine opportunity for stakeholders to influence our updated plans to this extent.'[20] It said stakeholders supported this approach, preferring the honesty of what can and cannot be influenced.[21]

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16 AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, p. 20.

17 AusNet Services, Revised revenue proposal 2023–27, 1 September 2021, p. 22.

18 CCP23, *Submission to AER on the Draft Decision and AusNet Services Transmission 2022–27 Revised Proposal*, October 2021, p. 8.

19 EUAA, *Submission to AER on the Draft Decision and AusNet Services Transmission 2022–27 Revised Proposal*, October 2021, p. 2.

20 AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, p. 20.

21 AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, p. 20.

At the commencement of the collaborative workshops, AusNet Services emphasised that stakeholder engagement was critical to the key information inputs that were changing during the revised proposal.[22] Workshop agendas were developed based on what the CAP wanted to hear, and there was flexibility where required as additional workshops were added to meet the needs of the panel. CCP23 noted:

> Workshop participants said that they wanted to use their time efficiently, focusing on topics involving major expenditure, significant change, and problems where solutions were not clear cut. They expected AusNet Services, as system manager and operator, to be pro-active in identifying issues of concern or interest, and in providing clear, concise information as needed.[23]

AusNet Services has clearly evidenced the consumer impact throughout its revised proposal, highlighting where stakeholders have collaborated and assessed elements of its proposals. For example:

- In response to concerns that duplication between capex programs could lead to over-investment, AusNet Services made a number of changes to address potential overlaps between its major station projects, the ISP and state government's Renewable Energy Zones development. One illustration of this response was the rescheduling of the Sydenham Termination rebuild to achieve synergies with the Western Victorian Transmission ISP project.[24]
- AusNet Services moved the expected network support cost elements of its capex and opex program consistent with stakeholder feedback. Given the uncertainty about the level of these costs at the time, preference was for AusNet Services to recover any network costs via cost pass throughs.[25]

Stakeholders have expressed support for AusNet Services' revised proposal and its CAP confirmed during discussions in Workshop 6 that their inputs had been accurately reflected.[26] CCP23 and the EUAA also commended the approach taken by AusNet Services on its post-lodgement engagement.[27]

Once AusNet Services' consumer engagement begun, it demonstrated a genuine opportunity to engage and represent the wants of consumers throughout its revised proposal. We recognise the significant work that was undertaken during the post-lodgement engagement and encourage AusNet Services to continue to invest in

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22 KPMG report, *TRR 2023–27 AusNet Report, AusNet Collaboration Workshop* 1, p 2.

23 CCP23, *Submission to AER on the Draft Decision and AusNet Services Transmission 2022–27 Revised Proposal*, October 2021, p. 6.

24 CCP23, *Submission to AER on the Draft Decision and AusNet Services Transmission 2022–27 Revised Proposal*, October 2021, p. 15.

25 CCP23, *Submission to AER on the Draft Decision and AusNet Services Transmission 2022–27 Revised Proposal*, October 2021, p. 15.

26 AusNet Services, *TRR 2023–27 AusNet Report, AusNet Collaboration Workshop 6*, pp. 3-4.

27 EUAA, *Submission to AER on the Draft Decision and AusNet Services Transmission 2022–27 Revised Proposal*, October 2021, p. 1 and CCP23, p. 11.

the relationship it has with its CAP and its commitment for this to become part of its business-as-usual approach.[28]

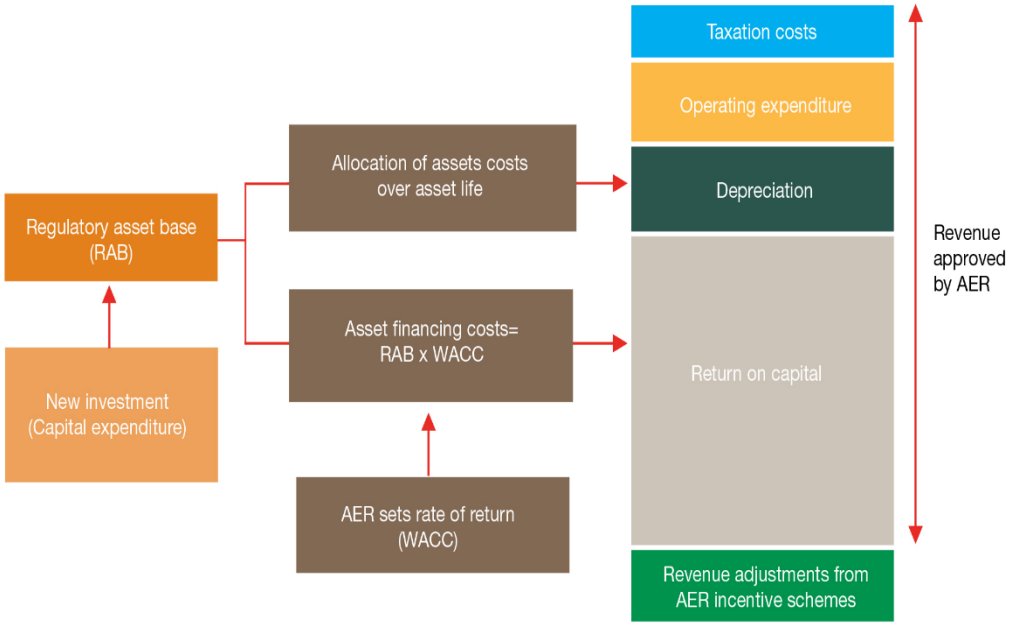
[28] AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, p. 11.

2 Key components of our final decision on revenue

The total revenue AusNet Services has proposed reflects its forecast of the efficient cost of providing its transmission network services over the 2022–27 period. AusNet Services' revised proposal, and our assessment of it under the NEL and NER, are based on a 'building block' approach to determine a total revenue allowance (Figure 7) which looks at six cost components:

- a return on the RAB – or return on capital, to compensate investors for the opportunity cost of funds invested in this business (section 2.2)
- depreciation of the RAB – or return of capital, to return the initial investment to investors over time (section 2.3)
- capex – the capital costs and expenditure incurred in the provision of network services, which mostly relates to assets with long lives, the costs of which are recovered over several regulatory control periods. The capex forecast in our decisions (section 2.4) directly affects the size of the RAB and, therefore, the revenue generated from the return on capital and depreciation building blocks
- forecast opex – the operating, maintenance and other non-capital expenses, incurred in the provision of network services (section 2.5)
- revenue increments/decrements – from incentive schemes and allowances including the efficiency benefit sharing scheme (EBSS), capital expenditure sharing scheme (CESS) and demand management innovation allowance mechanism (DMIAM) (section 2.6)
- the estimated cost of corporate income tax (section 2.7).

Figure 7 The building block approach for determining total revenue



We use an incentive approach where, once regulated revenues are set for a five-year period, networks who keep actual costs below the regulatory forecast of costs retain part of the benefit. This benchmark incentive framework is a foundation of the regulatory framework which aims to promote the NEO. Service providers have an incentive to become more efficient over time because they retain part of the financial benefit from improved efficiency. Consumers also benefit when efficient costs are revealed, and a lower cost benchmark is set in subsequent regulatory periods.

Our final decision on AusNet Services' transmission revenues for the 2022–27 period is set out in Table 2.

Table 2 AER's final decision on AusNet Services' transmission annual building block revenue requirement, annual expected MAR, estimated total revenue cap and X factor ($ nominal, million)

	2022–23	2023–24	2024–25	2025–26	2026–27	Total
Return on capital	168.8	167.1	166.6	167.3	166.9	836.6
Regulatory depreciation[a]	96.1	81.9	91.1	101.0	109.6	479.7
Operating expenditure[b]	284.4	291.6	297.8	305.6	313.3	1492.8
Revenue adjustments[c]	25.7	15.8	14.4	12.7	–0.5	68.1
Net tax allowance	0.8	0.0	0.0	0.0	0.0	0.8
Annual building block revenue requirement (unsmoothed)	575.8	556.4	569.9	586.6	589.3	2878.0
Annual expected MAR (smoothed)	**570.7**	**573.0**	**575.3**	**577.6**	**579.9**	**2876.6**[d]
X factor (%)[e]	n/a[f]	2.00%	2.00%	2.00%	2.00%	n/a

Source: AER analysis.

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

(b) Includes debt raising costs.

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

(d) The estimated total revenue cap is equal to the total annual expected MAR.

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

(f) AusNet is not required to apply an X factor for 2022–23 because we set the 2022–23 MAR in this decision. The MAR for 2022–23 is around 1.3% lower than the approved MAR for 2021–22 in real terms, or 1.1% higher in nominal terms.

In the sections that follow, we discuss each component of our final decision on AusNet Services' revenue for the 2022–27 period in turn.

2.1 Regulatory asset base

The RAB is the value of the assets used by AusNet Services to provide regulated transmission services. The size of the RAB, and therefore the revenue generated from the return on capital and return of capital building blocks, is directly affected by our assessment of capex.

Table 3 sets out our final decision on the forecast RAB for AusNet Services over the 2022–27 regulatory control period.

Table 3 AER's final decision on AusNet Services' RAB for the 2022–27 regulatory control period ($ million, nominal)

	2022–23	2023–24	2024–25	2025–26	2026–27
Opening RAB	3575.1	3630.7	3716.0	3834.8	3932.4
Capital expenditure[a]	151.8	167.2	209.9	198.6	160.3
Inflation indexation on opening RAB	87.6	89.0	91.0	94.0	96.3
Less: straight-line depreciation[b]	183.7	170.8	182.2	194.9	205.9
Closing RAB	**3630.7**	**3716.0**	**3834.8**	**3932.4**	**3983.1**

Source: AER analysis.

(a) As incurred, and net of forecast disposals. In accordance with the timing assumptions of the PTRM, the capex includes a half-year WACC allowance to compensate for the six-month period before capex is added to the RAB for revenue modelling.

(b) Based on as-commissioned capex.

Our final decision is to determine an opening RAB value of $3575.1 million ($ nominal) at 1 April 2022. This final decision is $29.2 million (0.8%) higher than our draft decision value for AusNet Services' opening RAB of $3545.9 million,[29] but $0.7 million (less than 0.1%) lower than AusNet Services' revised proposed opening RAB of $3575.7 million.[30] The difference reflects our update to the roll forward model (RFM), which amends inputs for the final year asset adjustments for capitalised leases, 'growth assets' and actual CPI for 2021–22.

We roll forward the opening RAB by adding forecast capex and inflation and reducing the RAB by depreciation to arrive at a forecast closing value for the RAB at the end of the 2022–27 regulatory control period.[31] For this final decision, we determine a forecast closing RAB value at 31 March 2027 of $3983.1 million ($ nominal). This is $36.4 million (0.9%) higher than AusNet Services' revised proposal of $3946.7 million. Our final decision on the forecast closing RAB reflects the amended opening RAB, and

[29] This is mainly driven by higher indexation of the RAB because the updated 2021–22 actual inflation (3.0%) used in the final decision RFM is higher than the inflation estimate (1.9%) used in the draft decision.

[30] AusNet Services, *Revised regulatory proposal 2022–27*, September 2021, p. 111.

[31] NER, cl. S6A.2.4.

our final decisions on the expected inflation rate, forecast depreciation, and forecast capex.[32]

2.2 Rate of return and value of imputation credits

The return each business is to receive on its RAB (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 value of the RAB.

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

The estimate of the rate of return is important for promoting efficient prices in the long-term interests of consumers. If the rate of return is set too low, the network business may not be able to attract sufficient funds to be able to make the required investments in the network and reliability may decline. Conversely, if the rate of return is set too high, the network business may seek to spend too much, and consumers will pay inefficiently high tariffs.

The NEL requires us to apply the 2018 Instrument[33] to estimate the rate of return for AusNet Services. AusNet Services' revised proposal adopted the 2018 Instrument. The 4.72% (nominal vanilla) rate of return in this final decision is lower than the 4.76% placeholder in AusNet Services' revised proposal, principally due to a small decline in the risk free rate.

Table 4 sets our calculated rate of return that will apply to the first year of the 2022–27 period. A different rate of return will apply for the remaining regulatory years of the period. This is because we will update the return on debt component of the rate of return each year in accordance with the 2018 Instrument to use a 10-year trailing average portfolio return on debt that is rolled forward each year. Hence, 10% of the return on debt is calculated from the most recent averaging period, with 90% from prior periods.

Our final decision accepts AusNet Services' proposed risk free rate[34] and debt averaging periods because they satisfy the 2018 Instrument.[35]

Attachment 3 provides further detail on our final decision on the allowed rate of return, debt and equity costs, and expected inflation.

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32 Capex enters the RAB net of forecast disposals. It includes equity raising costs (where relevant) and the half-year WACC to account for the timing assumptions in the PTRM. Therefore, our final decision on the forecast RAB also reflects our amendments to the rate of return for the 2022–27 regulatory control period (attachment 3).

33 AER, *Rate of return instrument*, December 2018. See https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/rate-of-return-guideline-2018/final-decision

34 This is also known as the return on equity averaging period.

35 AER, *Rate of return instrument*, December 2018, clauses 7–8, 23–25, 36.

Table 4 AER's final decision on AusNet's rate of return (nominal %)

	AER draft decision (2022–27)	AusNet's revised proposal (2022–27)	AER's final decision (2022–27)	Allowed return over regulatory control period
Nominal risk free rate	1.68%[a]	1.68%	1.59%[b]	
Market risk premium	6.1%	6.1%	6.1%	
Equity beta	0.6	0.6	0.6	
Return on equity (nominal post–tax)	5.34%	5.34%	5.25%	Constant (%)
Return on debt (nominal pre–tax)	4.36%[a]	4.37%	4.37%[c]	Updated annually
Gearing	60%	60%	60%	Constant (60%)
Nominal vanilla WACC	4.76%	4.76%	4.72%	Updated annually for return on debt
Expected inflation	2.00%	2.25%	2.45%	Constant (%)

Source: AER analysis; AusNet Services, Transmission revenue review 2023–27, Revised revenue proposal, pp. 125–129.

(a) Calculated using a placeholder averaging period of the month ending 31 April 2021.

(b) Calculated using an averaging period of 1 September 2021 to 24 November 2021.

(c) Final decision return on debt is calculated using the proposed and accepted debt averaging period.

2.2.1 Imputation credits

Our final decision applies an imputation credits value (gamma) of 0.585 as per the binding 2018 Instrument.[36] AusNet Services' initial and revised proposals adopted the 2018 Instrument for gamma.

2.2.2 Expected inflation

Our estimate of expected inflation is 2.45%. It is an estimate of the average annual rate of inflation expected over a five-year period based on the outcome of our 2020 Inflation Review.[37]

[36] AER, *Rate of return instrument*, December 2018, clause 27.

[37] AER, *Final position, Regulatory treatment of inflation*, December 2020.

2.3 Regulatory depreciation (return of capital)

Depreciation is the amount provided so capital investors recover their investment over the economic life of the asset (return of capital). In deciding whether to approve the depreciation schedules submitted by AusNet Services, we make determinations on the indexation of the RAB and depreciation building blocks for AusNet Services' 2022–27 regulatory control period.[38] The regulatory depreciation amount is the net total of the straight-line depreciation less the inflation indexation adjustment of the RAB.

Our final decision is to determine a regulatory depreciation amount of $479.7 million ($ nominal) for AusNet Services for the 2022–27 regulatory control period, as set out in Table 5.

Table 5 AER's final decision on AusNet Services' regulatory depreciation for the 2022–27 regulatory control period ($million, nominal)

	2022-23	2023-24	2024-25	2025-26	2026-27	Total
Straight-line depreciation	183.7	170.8	182.2	194.9	205.9	937.6
Less: inflation indexation on opening RAB	87.6	89.0	91.0	94.0	96.3	457.9
Regulatory depreciation	**96.1**	**81.9**	**91.1**	**101.0**	**109.6**	**479.7**

Source: AER analysis.

This amount represents a decrease of $34.5 million (6.7%) to AusNet Services' revised proposal.[39] It is $80.5 million (or 14.4%) lower than the regulatory depreciation amount determined in our draft decision. The key reason for the decrease compared to our draft decision is the higher expected inflation rate that resulted from our updated calculation in the post-tax revenue model (PTRM).

The regulatory depreciation amount is the net total of the straight-line depreciation, less the inflation indexation of the RAB. The straight-line depreciation is impacted by our decisions on AusNet Services' opening RAB as at 1 April 2021, forecast capex and asset lives. Our final decision straight-line depreciation for AusNet Services is $4.2 million higher than its revised proposal. This is mainly due to the higher forecast capex in our final decision.

The indexation on the RAB is impacted by our decisions on AusNet Services' opening RAB, forecast capex and the expected inflation rate. Our final decision indexation on AusNet Services' forecast RAB is $38.8 million higher than its revised proposal. This is largely because we decided on an expected inflation rate of 2.45% per annum for this final decision compared with the inflation rate of 2.25% per annum that AusNet Services included in its revised proposal. The higher indexation has more than

[38] NER, cll. 6A 5.4(a)(1) and (3).

[39] AusNet Services, *Revised Proposal Post Tax Revenue Model*, 1 September 2021.

offset the small increase in straight-line depreciation (since indexation is deducted from the straight-line depreciation), which has resulted in a lower regulatory depreciation amount compared to the revised proposal.

2.4 Capital expenditure

Capex refers to the investment in assets to provide services. This investment mostly relates to assets with long lives, the costs of which are recovered over several regulatory periods. The financing cost and depreciation associated with these assets (return on, and of, capital) are recovered on an annual basis as part of the building blocks that make up the total revenue requirement.

Our final decision is to accept the forecast capex of $818.7 million ($2021–22) in AusNet Services' revised proposal for the 2022–27 period.[40] This is:

- $88.3 million (12.1%) higher than the total net capex AusNet Services is expected to spend by the end of the 2017–22 period
- $66.7 million (8.8%) higher than our draft decision, and
- $22.8 million (3%) higher than AusNet Services' initial proposal.

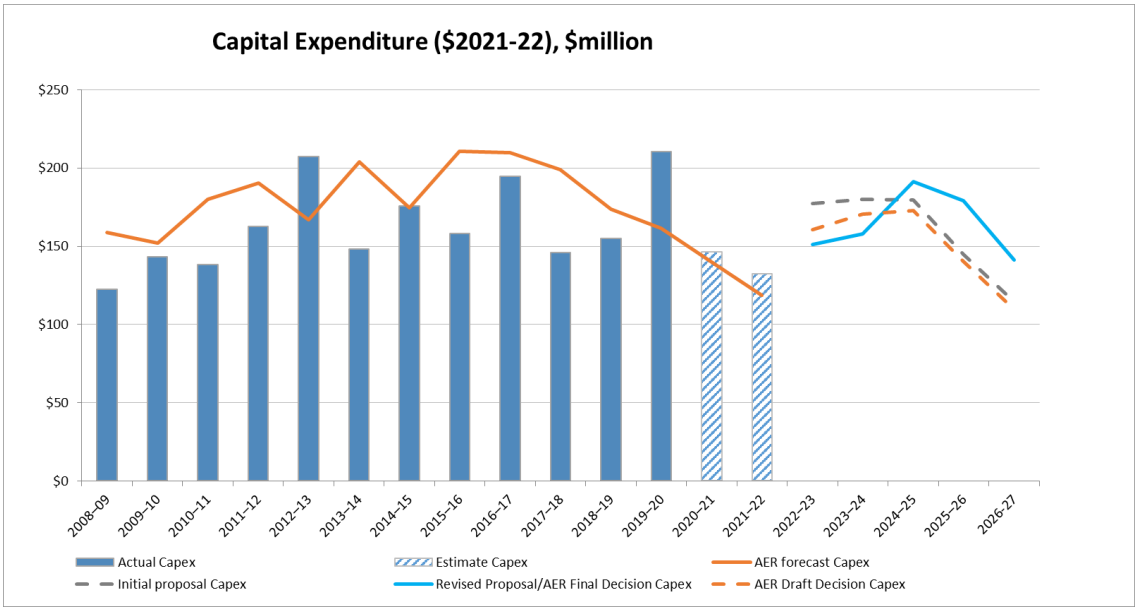
Key drivers of the increase in capex since AusNet Services' initial proposal include:

- the announcement by EnergyAustralia in March 2021 that the closure of the 1480MW Yallourn Power Station would be brought forward from 2032 to 2028
- the release of the Victorian Government's $1.6 billion energy budget in November 2020 and the Renewable Energy Zone Development Plan Directions Paper in February 2021
- more accurate cost estimates that have become available for several major station renewal projects
- a new project for the installation of Phasor Monitor Units (PMUs), which we have accepted in our final decision
- new AEMO demand forecasts outlining both higher maximum demands and materially lower minimum demands on the Victorian network.

Figure 8 shows AusNet Services' historical capex trend, and the change between its initial and revised proposals and our draft and final decisions for the 2022–27 period.

[40] AusNet Services' revised proposal capex forecast, submitted on 1 September 2021, was $820.5 million. However, AusNet Services subsequently identified an error and revised its South-West Communications Loop upgrade project capex down by $1.8 million. This reduced total capex forecast of $818.7 million. (AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, p. 42; AusNet Services, *AER Information Request #20 response*, 8 October 2021.)

Figure 8 Comparison of AusNet Services' past and forecast capex ($million, 2021–22)



Source: AER, Final decision PTRM for 2017–22; and AusNet Services, *Revised Revenue Proposal 2023–27*, 1 September 2021.

Figure 8 also highlights the change in the forecast capex profile between AusNet Services' initial proposal and our draft decision. The inclusion of a new major project related to the closure of Yallourn has increased total capex, while updated project cost estimates, network support costs and demand/energy forecasts have led to a deferral of capex within the upcoming regulatory control period.

Major station projects and replacement programs make up most of AusNet Services' forecast capex for the 2022–27 regulatory control period. We consider:

- AusNet Services has reasonably identified the need, timing and estimated capex required for these major station projects in its revised proposal. AusNet Services has continued to apply its good practice on the economic modelling approach and in determining project costs. Its approach to deferral of its major projects in light of updated project cost information is an example of this.
- Our draft decision identified two specific aspects of AusNet Services' replacement capex forecast—the South West Communications Loop and the risk allowance—which we considered did not reflect an underlying replacement need or the efficient costs of asset replacement.

  AusNet Services' revised proposal included more detailed technical information and explanations in response to our concerns. Based on that additional information we are satisfied that it has demonstrated that forecast replacement programs, including the communication systems and risk allowance, are prudent.

In addition to accepting AusNet Services' revised proposed capex forecast of $818.7 million ($2021–22), we have also accepted its proposed contingent project for

the replacement of transformers at the Hazelwood Terminal Station due to the earlier than expected closure of Yallourn in 2028.

2.5 Operating expenditure

Opex is the operating, maintenance and other non-capital expenses incurred in the provision of network and related services. Forecast opex for prescribed transmission services is one of the building blocks we use to determine a service provider's annual total revenue requirement.

Our final decision is to accept AusNet Services' total opex forecast of $1387.4 million ($2021–22),[41] including debt raising costs, for the 2022–27 regulatory control period.

We assessed AusNet Services' revised opex proposal by applying our 'base–step–trend' forecasting approach to develop an alternative estimate. Overall, we consider the revised proposal was largely a good one, addressing the issues raised in our draft decision and taking customer feedback into account.

Our alternative estimate of total opex differed from AusNet Services' revised proposal in a number of respects:

- we used a more recent, and higher, forecast of inflation to convert amounts into real terms
- we used updated, and higher, wage price index forecasts from Deloitte Access Economics
- we used updated, and higher, productivity growth forecasts from our *2021 Annual Benchmarking Report for electricity transmission network service providers*[42]
- we did not include the relatively small step changes relating to land tax, a mental health and wellbeing levy and PMU requirements.

However, these differences largely offset each other such that our alternative estimate was $4.7 million (0.3%) lower than AusNet Services' revised proposal. Consequently, we are satisfied that AusNet Services' revised proposal reasonably reflects the opex criteria and we have accepted it.

As Figure 9 shows, the total forecast opex approved in this decision is:

- $133.2 million (10.6%) higher than the opex forecast we approved in our final decision for the 2017–22 regulatory control period[43]

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41 Including debt raising cost. AusNet Services, *Revised regulatory proposal 2023–27*, 1 September 2021, p. 85.

42 AER, *2021 Annual Benchmarking Report, Electricity transmission network service providers,* November 2021 and Economic Insights, *Economic Benchmarking Results for the Australian Energy Regulator's 2021 TNSP Annual Benchmarking Report*, 12 November 2021, p. 60.

43 The difference is calculated using the opex allowance for the five year 2017–21 period converted to real 2021–22 dollars using unlagged inflation. The difference of $139.8 million stated in section 1.1 has been calculated using lagged inflation.

- $155.5 million (12.6%) higher than AusNet Services' actual (and estimated) opex in the 2017–21 regulatory control period
- $35.4 million (2.5%) lower than AusNet Services' updated initial proposal
- $68.9 million (5.2%) higher than our draft decision.

Figure 9 also highlights the impact of easement land tax costs, which are outside AusNet Services' control, have had on total opex.

Figure 9 AusNet Services' opex over time ($ million, 2021–22)

Source: AusNet Services, *Revised proposal operating expenditure model,* September 2021; AER, *Draft Decision – AusNet Services transmission determination 2022–27, Attachment 6 operating expenditure,* June 2021; AER analysis.

Note: We have not shown our alternative estimate of opex for this final decision on this chart because it is not visually different to AusNet Services' revised proposal.

2.6 Revenue adjustments

Our final decision on AusNet Services' total revenue includes adjustments made under incentive schemes and allowances that have applied to AusNet Services in the 2017–22 period and will apply to AusNet Services in the 2022–27 period.

These include:

- EBSS carryover amounts totalling $64.3 million ($2021–22) from the application of the EBSS in the 2017–22 period.[44] This is consistent with AusNet Services' revised proposal[45], but $24.8 million higher than our draft decision. In our draft decision we used an estimate of AusNet Services' actual opex for 2020–21 to calculate its EBSS carryover amounts. This was because we did yet have its audited actual amounts for 2020–21.
- A CESS revenue increment of $8.3 million ($2021–22) from the application of the CESS in the 2017–22 period.[46] This is slightly higher than our draft decision increment of $5.1 million ($2021-22), primarily because AusNet Services' actual 2020-21 capex is lower than the estimate included in its initial proposal. This is attributed to the impact of COVID-19 on its capital works programs, which led to some planned expenditure being deferred.
- An amount of $2.9 million ($2021–22) under the DMIAM for the 2022–27 period. This allowance is provided upfront as part of AusNet Services maximum allowed revenue. Any unspent funding will be returned to consumers in the subsequent regulatory control period.
- A shared assets revenue decrement of $10.8 million ($2021–22). This is consistent with AusNet Services' revised proposal and our draft decision. Shared assets are used to provide both the prescribed services we regulate and unregulated services. If the revenue from shared assets is material, 10 per cent of the unregulated revenues that a service provider earns from shared assets will be used to reduce its revenue for prescribed services.

2.7 Corporate income tax

Our final decision on AusNet Services' estimated cost of corporate income tax is $0.8 million over the 2022–27 regulatory control period.[47] This enables AusNet Services to recover the costs associated with the estimated corporate income tax that is payable during the period.[48]

Our final decision is $5.6 million (87.6%) lower than AusNet Services' revised proposed cost of corporate income tax of $6.4 million ($nominal). The key reasons for this change are:

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44 NER, cl. 6A.5.4(a)(5) and 6A.6.5.

45 This is $0.6 million ($2021–22) higher than AusNet Services' proposal of $63.6 million ($2021– 22), because we have used updated inflation figures to convert amounts into 2021–22 dollars.

46 NER, cl. 6A.14.1(5A).

47 NER, cl. 6A.6.4.

48 Our final decision determined an estimated cost of corporate income tax of $0.8 million for the first year of 2022–27 regulatory control period and $0 for the remaining four years. This is because we expect AusNet Services to incur forecast tax loss in the last four years of the 2022–27 regulatory control period. The forecast tax loss arises because AusNet Services' forecast tax expenses will exceed its revenue for tax assessment purposes in those years. We have determined that $4.6 million in tax losses as at 31 March 2027 will be carried forward to the 2027–32 regulatory control period where it can be used to offset future tax liabilities.

- Our final decision to reduce the regulatory depreciation amount (attachment 4).[49]
- Our final decision to reduce the rate of return on equity (attachment 3).[50]

The reduction due to the above two changes is partially offset by:

- Our final decision to increase the revised proposed opening tax asset base (TAB) value as at 1 April 2022 by $1.0 million to $2817.2 million.[51]
- Our final decision to reduce the forecast immediate expensing of capex.[52]

We accept AusNet Services' revised proposal on the standard tax asset lives for all of its asset classes, which are consistent with our draft decision. We have updated AusNet Services' remaining tax asset lives as at 1 January 2022 to reflect our amendments to the opening TAB value.

We have also set the tax treatment of the DMIAM to be both taxable income and tax expense. This change reduced the forecast cost of corporate income tax by $0.6 million.[53]

Table 6 sets out our final decision on the estimated cost of corporate income tax for AusNet Services over the 2022–27 regulatory control period.

Table 6 AER's final decision on AusNet Services' cost of corporate income tax for the 2022–27 regulatory control period ($ million, nominal)

	2022–23	2023–24	2024–25	2025–26	2026–27	Total
Tax payable	1.9	0.0	0.0	0.0	0.0	1.9
Less: value of imputation credits	1.1	0.0	0.0	0.0	0.0	1.1
Net cost of corporate income tax	**0.8**	**0.0**	**0.0**	**0.0**	**0.0**	**0.8**

Source: AER analysis.

49 See section 4.1 of attachment 4 of this final decision for details.

50 All else being equal, a lower rate of return on equity will reduce the cost of corporate income tax because it reduces the return on equity, a component of the taxable income.

51 All else being equal, a higher opening TAB value will increase the tax depreciation, a component of the tax expense, and reduce the cost of corporate income tax.

52 All else being equal, a lower forecast immediate expensing of capex will increase the cost of corporate income tax because it reduces tax depreciation, a component of the tax expense.

53 The estimated impact on forecast cost of corporate income tax is calculated based on AusNet Services' revised proposal PTRM.
AusNet Services, *Follow up Response to AER Information Request #018*, 1 October 2021.

3 Incentive schemes to apply for 2022–27

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 decision is that the following incentive schemes and allowances will apply to AusNet Services in the 2022–27 period:

- **Efficiency benefit sharing scheme (EBSS)**. This provides AusNet Services with a continuous incentive to pursue efficiency improvements in opex and provide for a fair sharing of these between AusNet Services and network users. Consumers benefit from improved efficiencies through lower opex in regulated revenues for future periods.
- **Capital expenditure sharing scheme (CESS)**. This incentivises AusNet Services to undertake efficient capex throughout the period by rewarding efficiency gains and penalising efficiency losses, each measured by reference to the difference between forecast and actual capex. Consumers benefit from improved efficiencies through a lower RAB, which is reflected in regulated revenues for future periods.
- **Service target performance incentive scheme (STPIS)**. This balances AusNet Services' incentive to reduce expenditure with the need to maintain or improve service quality. It achieves this by providing financial incentives to maintain and improve service performance where consumers are willing to pay for these improvements. AusNet Services can only retain its rewards for sustained and continuous improvements to the reliability of supply and the service level to the National Electricity Market. Once improvements are made, consumers benefit as the benchmark performance targets will be tightened in future years.
- **Demand management innovation allowance mechanism (DMIAM)**. This funds AusNet Services for research and development in demand management projects that have the potential to reduce long-term network costs. Projects to be funded under the DMIAM must meet approval criteria, as set out in the DMIAM instrument.

Our final decision on the application of the EBSS, CESS and DMIAM is consistent with both our draft decision and AusNet Services' revised proposal.

Our final decision also confirms the continued application of all components of the STPIS in the 2022–27 period. Changes in generation mix and location of new generators across the National Electricity Market have the potential to impact market and network constraints. In that context, AusNet Services raised concerns that the Market Impact Component of the STPIS may no longer be fit for purpose and required review. Absent that review, it sought a more pragmatic approach in interpreting and applying exclusion criteria to accommodate the increase in renewable generation.

Fundamentally, AusNet Services' submission relates to how the exclusion criteria should be applied to ensure only outages within the reasonable control of AusNet Services are counted under the scheme. Given the recent significant level of semi-

dispatch generation in the Victorian region, we have identified a number of issues arising from how these generators bid into the market. For example, some constraints arising from planned network outages previously counted are actually outside AusNet Services' control. These constraints are caused by generators bidding into the market in excess of the nominated export level higher than the actual network configuration would allow.

In Attachment 10 to this decision, we have provided further clarification on how the exclusion criteria should be best interpreted and applied under the current market operating environment to ensure incentives under the scheme target those constraints within AusNet Services' control, so that the integrity and objective of the scheme is preserved.

4 Pricing methodology

Our final decision is to approve AusNet Services' revised pricing methodology.

AusNet Services' pricing methodology allocates its revenue to its prescribed transmission services, and to the connection points of network users. It determines the structure of prices that are charged for each category of prescribed transmission service. It addresses only the pricing matters for which AusNet Services has responsibility: prescribed entry services and prescribed exit services. In Victoria, the pricing of all other prescribed transmission services is the responsibility of AEMO. We do not make a revenue determination for AEMO, but will make a determination on its pricing methodology in April 2022.

AusNet Services' revised proposal included a number of revisions to the pricing methodology in its original proposal, including to use a demand measure consistent with AEMO's to allocate exit service costs.

We consider AusNet Services' proposed recovery arrangements to account for exit services costs for non-distributor connection customers who share in the use of prescribed connection assets are also, in principle, reasonable.

AusNet Services' revised pricing methodology states: [54]

> The shared cost allocated will be recognised as a negotiated exit charge and the amount calculated annually will be subtracted from the maximum allowed revenue.

The term "negotiated exit charge" refers to the charges for non-distributor connection customers that are "negotiated transmission services" under the NER, and subject to AusNet Services' negotiating framework and negotiated transmission service criteria.[55]

AusNet Services will subtract the amount of the negotiated exit charge from the maximum allowed revenue. As negotiated transmission service revenue, the amount subtracted cannot then be recovered in the current or future regulatory years under its prices for prescribed transmission services.[56]

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54 AusNet Services, *Revised Revenue Proposal 2023–27, Appendix 11A Revised Proposed Pricing Methodology*, 1 September 2021, p. 13.

55 AusNet Services, *Response to information request #021 - Revised proposed pricing methodology clarification*, 25 November 2021; AusNet Services, *Response to information request #023 - Shared exit services in revised proposed pricing methodology clarification*, 6 December 2021.

56 AusNet Services, *Response to information request #023 - Shared exit services in revised proposed pricing methodology clarification*, 6 December 2021.

5 Negotiated services

AusNet Services must comply with its negotiating framework and negotiated transmission service criteria when negotiating the terms and conditions of access for negotiated transmission services to be provided to a person.

Our final decision is to approve AusNet Services' proposed negotiating framework, [57] and apply the negotiated transmission service criteria set out in our draft decision.[58]

While we considered the substance of the proposed negotiating framework met the requirements in the NER, our draft decision required AusNet Services to amend its proposed negotiating framework so that it applied to AusNet Services only (and not to AusNet Services and AEMO as it had proposed).[59]

Since our draft decision, we have continued to discuss the implications of the Australian Energy Market Commission's 2017 rule change on the Victorian arrangements[60] with AusNet Services and AEMO. We now consider the 2017 rule change preserved the requirement for AEMO to have a negotiating framework in place for its 2022–27 regulatory control period.[61]

The negotiating framework AusNet Services submitted in its initial and revised proposals are identical.[62] AEMO will continue with its negotiating framework from the 2014–19 regulatory control period, which is identical to that submitted by AusNet Services. We are satisfied that AEMO's and AusNet Services' practice of submitting a joint and co-branded negotiating framework is appropriate given the Victorian arrangements.

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57 AER, *Draft Decision: AusNet Services Transmission Determination 2022 to 2027: Attachment 14: Negotiating framework*, July 2021, pp. 9–10.

58 NER, clause 11.98.8; NER (version 109) clause 6A.9.5(c).

59 AER, *Draft Decision: AusNet Services Transmission Determination 2022 to 2027: Attachment 14: Negotiating framework*, July 2021, pp. 5 and 8.

60 NER, clause 11.98.8; AEMC, *Rule Determination: National Electricity Amendment (Transmission Connection and Planning Arrangements) Rule 2017*, 23 May 2017.

61 However, AEMO is not required to submit a negotiating framework to the AER for approval (consistent with the position in our draft decision). For further discussion, see AER, *Draft Decision: AEMO Transmission Determination 2022 to 2027*, October 2021, p. 25; AER, *Draft Decision: AusNet Services Transmission Determination 2022 to 2027: Attachment 14: Negotiating framework*, July 2021, p. 8.

62 AusNet Services, *TRR 2023-27 - Revised Revenue Proposal*, 1 September 2021, p. 166; AusNet Services, *TRR2023-27 - Appendix 11B Victorian Negotiating Framework*, 1 September 2021.

A National Electricity Law and Rules

The NEL and NER provide the regulatory framework governing electricity networks. Our work under this framework is guided by the NEO:[63]

> "…to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to—
>
> (a) price, quality, safety, reliability and security of supply of electricity; and
>
> (b) the reliability, safety and security of the national electricity system."

The NEL requires us to make our decision in a manner that contributes, or is likely to contribute, to achieving the NEO.[64] The focus of the NEO is on promoting efficient investment in, and operation and use of, electricity services (rather than assets) in the long-term interests of consumers.[65] This is not delivered by any one of the NEO's factors in isolation, but rather by balancing them in reaching a regulatory decision.[66]

Electricity determinations are complex decisions. In most cases, the provisions of the NER do not point to a single answer, either for our decision as a whole or in respect of particular components. They require us to exercise our regulatory judgement. Where there are choices to be made among several plausible alternatives, we have selected what we are satisfied would result in an overall decision that contributes to the achievement of the NEO to the greatest degree.[67]

Our determinations are predicated on a number of constituent decisions that we are required to make (see Appendix B).[68] In coming to a decision that contributes to the achievement of the NEO, we have considered interrelationships of the constituent components of our final decision. Examples include:

- Underlying drivers and context which are likely to affect many constituent components of our decision – For example, forecast demand affects the efficient levels of capital expenditure and operating expenditure in the regulatory control period (see Attachments 5 and 6).
- Direct mathematical links between different components of a decision – For example, the value of imputation credits (gamma) has an impact on the appropriate tax allowance, and the benchmark efficient entity's debt to equity ratio has a direct

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63 NEL, s. 7.

64 NEL, section 16(1)(a).

65 This is also the view of the AEMC. See, for example, AEMC, *Applying the Energy Objectives: A guide for stakeholders*, 1 December 2016, p. 5.

66 Hansard, *SA House of Assembly,* 26 September 2013, p. 7173. See also AEMC, *Applying the Energy Objectives: A guide for stakeholders*, 1 December 2016, pp. 7-8.

67 NEL, s. 16(1)(d).

68 NER, cl. 6A.14.1.

effect on the cost of equity, cost of debt, and overall vanilla rate of return (see Attachments 3 and 7).

- Trade-offs between different components of revenue – For example, undertaking a particular capital expenditure project may affect the need for operating expenditure, or vice versa (see Attachments 5 and 6).

In general, we consider that the long-term interests of consumers are best served where consumers receive a reasonable level of safe and reliable service that they value at least cost in the long run.[69] A decision that places too much emphasis on short term considerations may not lead to the best overall outcomes for consumers once the longer-term implications of that decision are taken into account.[70]

There may be a range of economically efficient decisions we could make in a revenue determination, each with different implications for the long-term interests of consumers.[71] A particular economically efficient outcome may nevertheless not be in the long-term interests of consumers, depending on how prices are structured, and risks allocated within the market.[72] There are also a range of outcomes that are unlikely to advance the NEO, or advance the NEO to the degree than others would. For example, we consider that:

- The long-term interests of consumers would not be advanced if we encourage over-investment that results in prices so high that consumers are unwilling or unable to efficiently use the network.[73]
- Equally, the long-term interests of consumers would not be advanced if allowed revenues result in prices so low that investors do not invest to sufficiently maintain the appropriate quality and level of service, and where consumers are making more use of the network than is sustainable leading to safety, security and reliability concerns.[74]

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69 Hansard, *SA House of Assembly,* 9 February 2005, p. 1452.

70 See, for example, the AEMC, *'Applying the Energy Objectives: A guide for stakeholders'*, 1 December 2016, pp. 6-7.

71 Re Michael: Ex parte Epic Energy [2002] WASCA 231 at [143].

72 See, for example, the AEMC, *'Applying the Energy Objectives: A guide for stakeholders'*, 1 December 2016, p. 5.

73 NEL, s. 7A(7).

74 NEL, s. 7A(6).

B Constituent decisions

Our final decision on AusNet Services' transmission revenue determination for the 2022–27 regulatory control period includes the following constituent components:[75]

Constituent component
In accordance with clause 6A.14.1(1)(i) of the NER, the AER's decision is not to approve the total revenue cap set out in AusNet Services' building block proposal. Our decision on AusNet Services' total revenue cap is $2876.6 million ($ nominal, smoothed) for the 2022–27 regulatory control period. This decision is discussed in Attachment 1 of this decision.
In accordance with clause 6A.14.1(1)(ii) of the NER, the AER's decision is not to approve the maximum allowed revenue (MAR) for each regulatory year of the regulatory control period set out in AusNet Services' building block proposal. Our decision on AusNet Services' MAR for each year of the 2022–27 regulatory control period is set out in Attachment 1 of this decision.
In accordance with clause 6A.14.1(1)(iii) of the NER, the AER's decision is to apply the service component, network capability component and market impact component of Version 5 of the service target performance incentive scheme (STPIS) to AusNet Services for the 2022–27 regulatory control period. The values and parameters of the STPIS that are approved by the AER are set out in Attachment 10 of this decision.
In accordance with clause 6A.14.1(1)(iv) of the NER, the AER's decision on the values that are to be attributed to the parameters for the efficiency benefit sharing scheme (EBSS) that will apply to AusNet Services in respect of the 2022–27 regulatory control period is set out in Attachment 8 of this decision.
In accordance with clause 6A.14.1(1)(v) of the NER, the AER's decision is to approve the commencement and length of the regulatory control period as AusNet Services proposed in its revenue proposal. The regulatory control period will commence on 1 April 2022 and the length of this period is five years, expiring on 31 March 2027.
In accordance with clause 6A.14.1(2)(i) of the NER and acting in accordance with clause 6A.6.7(c), the AER's decision is to accept AusNet Services' proposed total forecast capital expenditure of $818.7 million ($2021–22). The reasons for our decision are set out in Attachment 5 of this decision.
In accordance with clause 6A.14.1(3)(i) of the NER and acting in accordance with clause 6A.6.6(c), the AER's decision is to accept AusNet Services' proposed total forecast operating expenditure inclusive of debt raising costs of $1387.4 million ($2021–22). The reasons for our decision are set out in Attachment 6 of this decision.
In accordance with clause 6A.14.1(4)(i) of the NER, the AER's decision is that the following project is a contingent project for the purpose of this revenue determination for AusNet: • Hazelwood Terminal Station asset replacement contingent project This is set out in Attachment 5 of this decision.
In accordance with clause 6A.14.1(4)(ii) of the NER, the AER's decision is that it is satisfied that the capital expenditure of $45 million ($2021–22) for the one contingent project as described in AusNet Services' revenue proposal reasonably reflects the capital expenditure criteria, taking into account the capital expenditure factors. This is set out in Attachment 5 of this decision.
In accordance with clause 6A.14.1(4)(iii) of the NER, the AER's decision on the trigger events for the contingent project is set out in Attachment 5 of this decision.
In accordance with clause 6A.14.1(5A) of the NER, the AER's decision is that version 1 of the capital expenditure sharing scheme (CESS) as set out in the Capital Expenditure Incentives Guideline will apply to AusNet Services in the 2022–27 regulatory control period. This is set out in Attachment 9 of this decision.
In accordance with clause 6A.14.1(5A) of the NER, the AER's decision is that the demand management innovation allowance mechanism (DMIAM) for electricity transmission networks will apply to AusNet Services in the 2022–27 regulatory control

[75] NEL, s. 16(1)(c).

Constituent component
period. The allowance provided under the DMIAM is $2.9 million ($2021–22).
In accordance with clause 6A.14.1(5B) and 6A.6.2 of the NER, the AER's decision is that the allowed rate of return for the 2022–23 regulatory year is 4.72% (nominal vanilla), as set out in Attachment 3 of this decision. The rate of return for the remaining regulatory years 2023–27 will be updated annually because our decision is to apply a trailing average portfolio approach to estimating debt which incorporates annual updating of the allowed return on debt.
In accordance with clause 6A.14.1(5C) of the NER, the AER's decision is that the value of imputation credits as referred to in clause 6A.6.4 is 0.585. This is set out in Attachment 3 of this decision.
In accordance with clause 6A.14.1(5D) of the NER, the AER's decision, in accordance with clause 6A.6.1 and schedule 6A.2, is that the opening regulatory asset base (RAB) as at the commencement of the 2022–27 regulatory control period, being 1 April 2022, is $3575.1 million ($ nominal). This is set out in Attachment 2 of this decision.
In accordance with clause 6A.14.1(5E) of the NER, the AER's decision is that the depreciation approach based on forecast capex (forecast depreciation) is to be used to establish the RAB at the commencement of AusNet Services' regulatory control period as at 1 April 2027. This is set out in Attachment 2 of this decision.
In accordance with clause 6A.14.1(8) of the NER, the AER's decision is to approve AusNet Services' proposed pricing methodology. This is set out in Attachment 12 of this decision.
In accordance with clause 6A.14.1(9) of the NER, the AER's decision is to apply the following nominated pass through events to AusNet Services for the 2022–27 regulatory control period in accordance with clause 6A.7.3(a1)(5): • insurance coverage event • terrorism event • natural disaster event • insurer credit risk event • Victorian Energy Minister's power to direct augmentation event. These events have the definitions set out in Attachment 13 of this decision.
By virtue of clause 11.98.8 of the NER, the provisions for negotiated transmission services in version 109 of the NER continue to apply in Victoria. Under clauses 6A.2.2(3) and 6A.14(6) of version 109 of the NER, the AER's decision is to approve AusNet Services' proposed negotiating framework.
By virtue of clause 11.98.8 of the NER, the provisions for negotiated transmission services in version 109 of the NER continue to apply in Victoria. In accordance with clause 6A.14.1(7) of version 109 of the NER the AER has specified the negotiated transmission services criteria for AusNet Services.

C List of submissions

We received four submissions in response to the AER's draft decision and AusNet Services' revised proposal. These are listed below.

Stakeholder	Date
AusNet Services Transmission Customer Advisory Panel,	October 2021
Australian Energy Market Operator	October 2021
Consumer Challenge Panel, sub-panel 23	October 2021
Energy Users Association Australia	October 2021

D Shortened forms

Shortened form	Extended form
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
capex	capital expenditure
CCP23	Consumer Challenge Panel, sub-panel 23
CESS	capital expenditure sharing scheme
CPI	consumer price index
DMIAM	demand management innovation allowance mechanism
EBSS	efficiency benefit sharing scheme
MAR	maximum allowed revenue
ISP	AEMO's integrated system plan
NEL	National Electricity Law
NEO	National Electricity Objective
NER	National Electricity Rules
opex	operating expenditure
PTRM	post-tax revenue model
RAB	regulatory asset base
RFM	roll forward model
RIN	regulatory information notice
STPIS	service target performance incentive scheme
TNSP	transmission network service provider
WACC	weighted average cost of capital