Final Decision

AusNet Services Transmission Determination 2022 to 2027
Attachment 6
Operating expenditure

January 2022

AUSTRALIAN
ENERGY
REGULATOR

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AER reference: 65242

Note

This attachment 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

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6 Operating expenditure

Operating expenditure (opex) refers to the operating, maintenance and other non-capital expenses incurred in the provision of network 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.

This attachment outlines our assessment of AusNet Services' proposed total opex forecast for the 2022–27 regulatory control period.

6.1 Final decision

Our final decision is to accept AusNet Services' total opex forecast of $1387.4 million ($2021–22),[1] including debt raising costs, for the 2022–27 regulatory control period. Our alternative estimate of $1382.7 million ($2021–22) is not materially different ($4.7 million ($2021–22), or 0.3%, lower) than AusNet Services' revised proposal total opex forecast. We consider that AusNet Services' total opex forecast reasonably reflects the opex criteria.[2] Overall, we consider the revised proposal was largely a good one, addressing the issues raised in our draft decision and taking into account customer feedback. However, a particular area of focus was the new, relatively small, step changes introduced in the revised proposal. While we did not include these in our alternative estimate, we still found AusNet Services' total opex forecast reasonably reflects the opex criteria.

Our final decision opex forecast (AusNet Services' revised proposal) is:

- $133.2 million ($2021–22), or 10.6% higher than the opex forecast we approved in our final decision for the 2017–22 regulatory control period[3]
- $155.5 million ($2021–22), or 12.6% higher than AusNet Services' actual (and estimated) opex in the 2017–21 regulatory control period
- $35.4 million ($2021–22), or 2.5% lower than AusNet Services' updated initial proposal
- $68.9 million ($2021–22), or 5.2% higher than our draft decision.

Figure 6.1 shows AusNet Services' actual opex, our previous approved forecast opex, proposed opex for the 2022–27 regulatory control period (the green lines) and our alternative estimate for the draft decision (the red line), noting we have not shown the alternative estimate for the final decision as it is not visually different to AusNet Services' revised proposal. We have also shown the make-up of

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

2 NER, cl.6A.6.6(c).

3 Difference is calculated based on the opex allowance for the five year 2017–21 period converted to real 2021–22 dollars using unlagged inflation.

AusNet Services total opex proposal in terms of the easement land tax costs (darker green) and non-easement land tax costs (lighter green).

Figure 6.1 AusNet Services' opex over time ($ million, 2021–22)

Source: AusNet Services, *Revised proposal operating expenditure model 2023–27,* 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.

We have compared AusNet Services' revised proposal, which we accept, and our alternative estimate for the final decision in Table 6.1 which shows the key differences.

Table 6.1 AusNet Services' revised proposal and our alternative estimate ($ million, 2021–22)

	AER draft decision	AusNet Services' revised proposal	AER alternative estimate for the final decision	Difference between revised proposal and AER alternative estimate
Reported opex in 2020–21	1230.2	1211.8	1223.7	11.9
Final year increment	2.5	2.5	2.6	0.0
Remove category specific forecasts	–821.7	–829.8	–837.9	–8.1

	AER draft decision	AusNet Services' revised proposal	AER alternative estimate for the final decision	Difference between revised proposal and AER alternative estimate
Trend: Output growth	–	–	–	–
Trend: Real price growth	5.5	4.7	6.0	1.3
Trend: Productivity growth	–3.8	–3.6	–5.8	–2.2
Step changes	3.1	99.3	85.3	–14.0
Category specific forecasts	894.2	893.9	900.3	6.5
Total opex (excluding debt raising costs)	**1310.1**	**1378.9**	**1374.3**	**–4.7**
Debt raising costs	8.5	8.5	8.5	–
Total opex	**1318.6**	**1387.4**	**1382.7**	**–4.7**
Percentage difference to revised proposal				–0.3%

Source: AusNet Services, *Revised proposal operating expenditure model 2023–27, 1 September 2021; AER analysis.*

Note: Numbers may not add up to totals due to rounding. Differences are between the AER's alternative estimate and AusNet Services' revised proposal. Amounts of '0.0' and '–0.0' represent small non-zero amounts and '–' represents zero.

We assessed AusNet Services' opex proposal by applying our 'base–step–trend' forecasting approach to develop an alternative estimate. The following key factors explain the differences between our alternative estimate of total opex, and AusNet Services' revised proposal which we have accepted:

- we used a more recent, and higher, forecast of inflation to convert amounts into real terms
- we used updated, and higher, wage price index (WPI) 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*[4]
- we did not include the relatively small step changes relating to land tax, a mental health and well-being levy and phasor monitoring unit (PMU) requirements. Even when we did not include them in our alternative estimate, we found AusNet Services' total opex forecast reasonably reflects the opex criteria.

4 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.

These differences largely offset each other such that our alternative estimate of $1382.7 million ($2021–22) is only $4.7 million ($2021–22), or 0.3%, lower than AusNet Services' revised proposal of $1387.4 million ($2021–22). We are satisfied that AusNet Services' revised proposal reasonably reflects the opex criteria and we have accepted it.

6.2 AusNet Services' revised proposal

In its revised proposal, AusNet Services proposed total opex of $1387.4 million ($2021–22) for the 2022–27 regulatory control period, as set out in Table 6.2. This is 12.6% higher than AusNet Services' actual and estimated opex for the 2017–22 regulatory control period. AusNet Services' revised opex proposal is 2.5% lower than its updated initial proposal and 5.2% higher than our draft decision.[5]

Table 6.2 AusNet Services' proposed opex ($million, 2021–22)

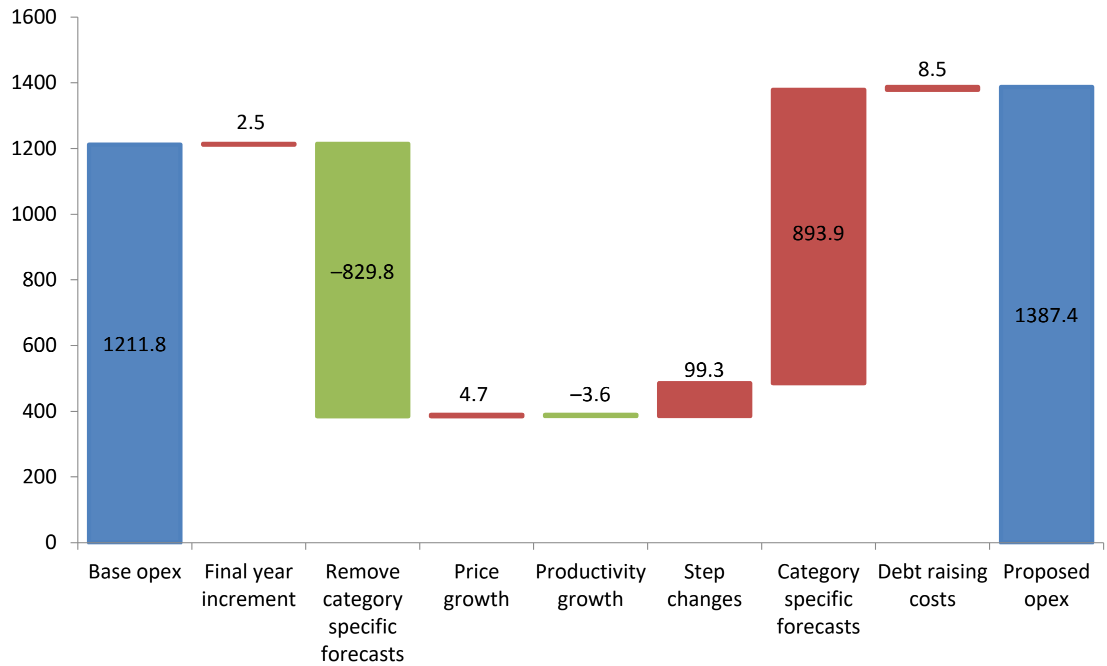
	2022–23	2023–24	2024–25	2025–26	2026–27	Total
Total opex excluding debt raising costs	275.9	276.1	275.3	275.7	275.9	**1378.9**
Debt raising costs	1.7	1.7	1.7	1.7	1.7	**8.5**
Total opex	**277.6**	**277.8**	**277.0**	**277.4**	**277.6**	**1387.4**

Source: AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, p. 85.

In Figure 6.2 we separate AusNet Services’ revised forecast opex proposal into its different components.

5 Comparisons are inclusive of debt raising costs.

Figure 6.2 AusNet Services' opex forecast ($ million, 2021–22)



Source: AusNet Services, *Revised revenue proposal 2023–27, Operating expenditure model*, 1 September 2021; AER analysis.

AusNet Services stated that it used the same forecasting approach it used for its initial proposal and that it was consistent with the revealed cost base-step-trend approach set out in the *Expenditure forecast assessment guideline.*[6] The key elements of AusNet Services' revised proposal were:

- AusNet Services used its actual opex in 2020–21 of $242.4 million ($2021–22) as the starting point to forecast opex.[7] This is lower than the estimate of $245.5 million ($2021–22) it used in its initial proposal.[8] Base year opex accounts for $1211.8 million ($2021–22) of AusNet Services' total opex forecast.[9]
- AusNet Services applied the final year formula in our *Expenditure forecast assessment guideline* and increased its base year opex by $0.5 million ($2021–22) to estimate its final year opex. This increased its total opex forecast by $2.5 million ($2021–22).[10]
- AusNet Services reduced its final year estimate by $166.0 million ($2021–22) to remove the opex for the categories it forecast separately, specifically easement

6 AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, p. 85.
7 AusNet Services, *Revised revenue proposal 2023–27, Operating expenditure model*, 1 September 2021.
8 AusNet Services, *Revenue proposal 2023–27, Operating expenditure model – Revised*, 18 February 2021.
9 AusNet Services, *Revised revenue proposal 2023–27, Operating expenditure model*, 1 September 2021.
10 AusNet Services, *Revised revenue proposal 2023–27, Operating expenditure model*, 1 September 2021.

land tax and debt raising cost. This decreased its total opex forecast by $829.8 million ($2021–22).[11]

- AusNet Services then trended forward its final year estimate to account for:
  - the forecast growth in real input prices, including forecast increases in the price of labour inputs and an increase in line with the consumer price index (CPI) for non-labour inputs. This increased its total opex forecast by $4.7 million ($2021–22).[12]
  - forecast productivity growth. This reduced its total opex forecast by $3.6 million ($2021–22).[13]
- AusNet Services included ten step changes in its revised proposal, five of which were not included in its initial proposal, totalling $99.3 million ($2021–22).[14] The new step changes were for:
  - bushfire insurance premium increases, $7.6 million ($2021–22)[15]
  - land tax, $3.3 million ($2021–22)[16]
  - phasor monitoring units, $1.5 million ($2021–22)[17]
  - mental health and well-being levy, $3.6 million ($2021–22)[18]
  - Australian Energy Market Operator (AEMO) participant fees, $6.5 million ($2021–22).[19]
- AusNet Services included forecast easement land tax of $868.1 million ($2021–22), which it included as a category specific forecast.[20]
- AusNet Services included forecast opex of $25.8 million ($2021–22), as a category specific forecast, to operate and maintain growth assets to be rolled into the regulatory asset base at the start of the 2022–27 regulatory control period.[21]
- AusNet Services forecast $8.5 million ($2021–22) of debt raising costs, as a category specific forecast.[22]

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[11] AusNet Services, *Revised revenue proposal 2023–27, Operating expenditure model*, 1 September 2021.

[12] AusNet Services, *Revised revenue proposal 2023–27, Operating expenditure model*, 1 September 2021; AER analysis.

[13] AusNet Services, *Revised revenue proposal 2023–27, Operating expenditure model*, 1 September 2021; AER analysis.

[14] AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, p. 93.

[15] AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, pp. 98–100.

[16] AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, pp. 100–101.

[17] AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, pp. 102–103.

[18] AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, pp. 101–102

[19] AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, pp. 97–98.

[20] AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, p. 104.

[21] AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, p. 104.

[22] AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, p. 104.

6.2.1 Stakeholder views

We received four submissions on AusNet Services' 2022–27 revised proposal and only one raised issues about opex. The Consumer Challenge Panel, sub-panel 23 (CCP23) was generally supportive of our draft decision.[23] It noted the reduction in AusNet Services' base year actual opex[24] and commented specifically on the re-proposed and new step changes in the AusNet Services' revised proposal. CCP23 noted AusNet Services had consulted with customers on these step changes to be included in the revised revenue proposal. CCP23:

- noted that the council rates were the largest of the AusNet Services' proposed step changes but considered this is an externally imposed increase in costs that AusNet Services would need to pay. It also raised the consideration whether it be better treated for the purposes of a revenue allocation as a 'pass through' event, rather than a step change if the actual costs are still unknown at the time of the AER's final decision[25]
- noted that the cyber security step change was substantial while agreeing that responding to cyber threats is a genuine exogenously applied cost for energy network businesses and the proposed opex is within a 'reasonable range'[26]
- considered that the bushfire insurance step change was material enough to be considered a step change[27]
- considered that a number of the relatively smaller step changes like the Environment Protection Act 2017 (EPA), AEMO participant fee, land tax and mental health and well-being surcharge are legitimate and clear examples of step changes[28]
- acknowledged AusNet Services will need to implement the AEMO directive in relation to PMUs but did not consider the step change as 'material' and encouraged AusNet Services to absorb this cost.[29]

We have taken the CCP23's submission into account in developing the positions set out in this final decision. CCP23's comments on the individual step changes are reflected in Section 6.4.4 below.

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23 CCP23, *Advice to the AER on the AusNet Services Transmission Revised Regulatory Proposal and AER Draft Determination for the Regulatory Determination 2022–27,* 5 October 2021, pp. 26–29.

24 CCP23, *Advice to the AER on the AusNet Services Transmission Revised Regulatory Proposal and AER Draft Determination for the Regulatory Determination 2022–27*, 5 October 2021, p. 26.

25 CCP23, *Advice to the AER on the AusNet Services Transmission Revised Regulatory Proposal and AER Draft Determination for the Regulatory Determination 2022–27*, 5 October 2021, pp. 29–30.

26 CCP23, *Advice to the AER on the AusNet Services Transmission Revised Regulatory Proposal and AER Draft Determination for the Regulatory Determination 2022–27*, 5 October 2021, p. 29.

27 CCP23, *Advice to the AER on the AusNet Services Transmission Revised Regulatory Proposal and AER Draft Determination for the Regulatory Determination 2022–27*, 5 October 2021, p. 31.

28 CCP23, *Advice to the AER on the AusNet Services Transmission Revised Regulatory Proposal and AER Draft Determination for the Regulatory Determination 2022–27*, 5 October 2021, pp. 30–31.

29 CCP23, *Advice to the AER on the AusNet Services Transmission Revised Regulatory Proposal and AER Draft Determination for the Regulatory Determination 2022–27*, 5 October 2021, p. 31.

6.3 Assessment approach

Our role is to form a view about whether to accept a business' forecast of total opex. Specifically, we must form a view about whether a business' forecast of total opex 'reasonably reflects the opex criteria'.[30] In doing so, we must have regard to each of the opex factors specified in the National Electricity Rules (NER).[31]

If we are satisfied the business' forecast reasonably reflects the opex criteria, we must accept the proposed forecast.[32] If we are not satisfied, we must not accept the proposed forecast and must substitute an alternative estimate that we are satisfied reasonably reflects the opex criteria.[33] In making this decision, we take into account the reasons for the difference between our alternative estimate and the business' proposal, and the materiality of the difference. Further, we are required to consider interrelationships with the other building block components of our decision.[34]

As set out in our draft decision in detail, we generally assess a business' forecast total opex using a 'base-step-trend' approach, as summarised in Figure 6.3.[35]

30 NER, cl. 6A.6.6(c).

31 NER, cl. 6A.6.6(e)

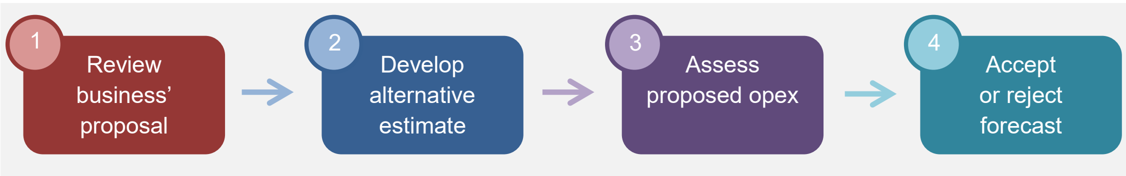
32 NER, cl. 6A.6.6(c).

33 NER, cll. 6A.6.6(d) and 6A.14.1(3)(ii).

34 NEL, s. 16(1)(c).

35 Our base-step-trend approach is set out in our expenditure guideline. See AER, *Expenditure forecast assessment guideline* for electricity transmission, November 2013.

Figure 6.3 Our opex assessment approach



1. Review business' proposal

We review the business' proposal and identify the key drivers.

2. Develop alternative estimate

Base – We use the business' opex in a recent year as a starting point (revealed opex). We assess the revealed opex (e.g. through benchmarking) to test whether it is efficient. If we find it to be efficient, we accept it. If we find it to be materially inefficient, we may make an efficiency adjustment.

Trend – We trend base opex forward by applying our forecast 'rate of change' to account for growth in input prices, output and productivity.

Step – We add or subtract any step changes for costs not compensated by base opex and the rate of change (e.g. costs associated with regulatory obligation changes or capex/opex substitutions).

Other – We include a 'category specific forecast' for any opex component that we consider necessary to be forecast separately.

3. Assess proposed opex

We contrast our alternative estimate with the business' opex proposal. We identify all drivers of differences between our alternative estimate and the business' opex forecast. We consider each driver of difference between the two estimates and go back and adjust our alternative estimate if we consider it necessary.

4. Accept or reject forecast

We use our alternative estimate to test whether we are satisfied the business' opex forecast reasonably reflects the opex criteria. We accept the proposal if we are satisfied.

If we are not satisfied the business' opex forecast reasonably reflects the opex criteria we substitute it with our alternative estimate.

6.3.1 Interrelationships

In assessing AusNet Services' total forecast opex we took into account other components of its proposal and our determination, including:

- the efficiency benefit sharing scheme (EBSS) carryover—the estimate of opex for 2021–22 (the final year of the current regulatory control period (2017–22)) that we used to forecast opex, was the same as the level of opex we used to calculate EBSS carryover amounts. This consistency ensures that the business is rewarded (or penalised) for any efficiency gains (or losses) it makes in the final year the same as it would for gains or losses made in other years

- the operation of the EBSS in the 2017–22 regulatory control period, which provided AusNet Services an incentive to reduce opex in the base year
- the impact of cost drivers that affect both forecast opex and forecast capital expenditure (capex). For instance, forecast labour price growth affects forecast capex and our forecast price growth used to estimate the rate of change in opex
- the approach to assessing the rate of return, to ensure there is consistency between our determination of debt raising costs and the rate of return building block
- concerns of electricity consumers identified in the course of AusNet Services' engagement with consumers.

6.4 Reasons for final decision

Our final decision is to accept AusNet Services' revised total opex forecast of $1387.4 million ($2021–22), including debt raising costs.[36] Our alternative estimate of $1382.7 million ($2021–22) is not materially different ($4.7 million ($2021–22), or 0.3%, lower) than AusNet Services' revised total opex forecast proposal. We consider that AusNet Services' forecast total opex in its revised proposal reasonably reflects the opex criteria.[37]

The following sections outline the key inputs and assumptions we made in developing our alternative estimate of efficient costs for AusNet Services, using our base–step–trend approach. The opex model we used to calculate our alternative estimate is published on our website.

6.4.1 Base opex

This section provides our view on the prudent and efficient level of base opex that we consider AusNet Services would need for the safe and reliable provision of prescribed transmission electricity services over the 2022–27 regulatory control period.

6.4.1.1 Base year

Consistent with our draft decision, we have used 2020–21 opex as the base year for forecasting our alternative estimate of opex. As we stated in our draft decision, we have updated the estimate of base year expenditure that we used in our draft decision with AusNet Services' actual expenditure, which we now know.

Consistent with its initial proposal, AusNet Services used 2020–21 as its base year in its revised proposal. AusNet Services' actual 2020–21 opex, which it used in its revised proposal, was around $5.5 million (nominal) lower than the estimate it used in its initial proposal. AusNet Services stated that actual opex was lower than its initial proposal

36 AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, p. 85.

37 NER, cl.6A.6.6(c).

estimate due to its recent investment in new technology to drive efficiencies in its inspection and maintenance practices and new outsourced maintenance arrangements. In its submission, CCP23 accepted 2020–21 as being an appropriate base year.[38]

6.4.1.2 Efficiency of base opex

Given the lower actual opex, and AusNet Services' continued good performance in terms of opex benchmarking (discussed below) we remain satisfied its base year expenditure is efficient.

As outlined in Section 6.3, and in the *Expenditure forecast assessment guideline*, our standard approach for forecasting opex is to use a revealed cost approach.[39] This is because opex is largely recurrent and stable at a total level. Where a transmission business is responsive to the financial incentives under the regulatory framework, the actual level of opex it incurs should provide a good estimate of the efficient costs required for it to operate a safe and reliable network and meet its relevant regulatory obligations.

In assessing the efficiency of AusNet Services' base year expenditure, we considered a range of information including its actual opex over time and our benchmarking analysis. Our benchmarking analysis is limited by the small sample size of transmission businesses in the National Electricity Market (NEM), and the limited international data available, among other things. It also does not take into account all the operating environment factor differences between the networks. Reflecting this, we have taken the benchmarking into account but not solely relied on it in forming a view on the efficiency of AusNet Services 2020–21 actual opex.

Our 2021 *Annual Benchmarking Report*[40] showed that:

- AusNet Services ranked equal first amongst all regulated transmission service providers in terms of opex multilateral partial factor productivity (MPFP) in 2019–20 after achieving positive opex MPFP growth of 16.1% in this year.[41]
- AusNet Services' annual opex MPFP scores, while fluctuating over the 2006–20 period, have consistently placed it amongst the most efficient transmission service providers in the NEM and at or near the productivity frontier.
- AusNet Services' partial performance indicators are mixed depending on the indicator, but we consider these results are to be expected given the characteristics of its network. AusNet Services had the lowest total cost per end user, including in

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[38] CCP23, *Advice to the AER on the AusNet Services Transmission Revised Regulatory Proposal and AER Draft Determination for the Regulatory Determination 2022–27*, 5 October 2021, p. 26.

[39] AER, *Expenditure forecast assessment guideline - transmission*, November 2013, p. 22.

[40] AER, *2021 Annual Benchmarking Report, Electricity transmission network service providers,* November 2021.

[41] AER, *2021 Annual Benchmarking Report, Electricity transmission network service provider,* November 2021, pp. 21–22.The opex MPFP index measures the relationship between total output and opex and allows total productivity levels as well as growth rates to be compared between businesses.

2019–20,[42] likely driven by its denser transmission network relative to other transmission operators. On the other hand, AusNet Services reported in 2019–20 the equal highest total cost per kilometre of transmission circuit length,[43] which is reasonable considering its circuit length is relatively low.

- Overall, AusNet Services is operating relatively efficiently when compared to other service providers in the NEM.

CCP23 submitted that AusNet Services has benchmarked well for opex productivity using the AER's annual benchmarking reports.[44] However, it considered this is to be expected as it has higher population density than any other Australian transmission network. We note that the MPFP benchmarking analysis accounts for a transmission network's circuit length, number of end users, ratcheted maximum demand and energy throughput and therefore allows for key network density measures in the comparisons.

AusNet Services' opex was subject to the incentives of an ex-ante regulatory framework, including the application of the EBSS in the 2017–22 regulatory control period. This gave it a continuous incentive to reduce its opex, including in its proposed base year.

Reflecting the above, we have used actual opex in 2020–21 in forming our alternative estimate.

6.4.2 Final year increment

To estimate opex in the final year of the current regulatory control period, we add the difference between the opex forecast for the final year of the current regulatory control period and the opex forecast for the base year to the amount of actual opex in the base year.[45]

The EBSS requires an estimate of actual opex for the final year, which we do not typically know at the time of the final determination. By using an estimate of final year expenditure we allow AusNet Services to retain any incremental gains (or losses) made after the base year through the EBSS carryover. To the extent the estimate is incorrect, AusNet Services will still retain the incremental efficiency gains, but they will be retained through the opex forecast rather than EBSS carryovers.[46] We have used the same estimate of final year expenditure to calculate carryovers under the EBSS.

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42 AER, *2021 Annual Benchmarking Report, Electricity transmission network service provider,* November 2021, pp. 23–24.

43 AER, *2021 Annual Benchmarking Report, Electricity transmission network service provider*, November 2021, p. 25.

44 CCP23, *Advice to the AER on the AusNet Services Transmission Revised Regulatory Proposal and AER Draft Determination for the Regulatory Determination 2022–27*, 5 October 2021, p. 32.

45 AER, *Expenditure forecast assessment guideline - transmission*, November 2013, p. 23.

46 AER, *Expenditure forecast assessment guideline - transmission*, November 2013, pp. 22–23.

6.4.3 Rate of change

Having determined an efficient starting point, or base opex, we trend it forward to account for the forecast growth in prices, output and productivity. We refer to this as the rate of change.[47]

In its revised proposal, AusNet Services accepted our draft decision on price, output and productivity growth. It updated its price growth forecasts to reflect updated forecasts from BIS Oxford Economics.[48]

The rate of change proposed by AusNet Services contributes $1.2 million ($2021–22), or 0.1%, to AusNet Services' proposed total opex forecast of $1387.4 million ($2021–22). This equates to opex increasing on average by around 0.1% each year in the 2022–27 regulatory control period.[49]

We have included a rate of change in our alternative estimate that increases opex, on average, by 0.0%. We have set out in Table 6.3 AusNet Services' proposal and our alternative estimates for each component of the rate of change. We have also set out the reasons for our forecast below.

We received one submission, from CCP23, relating to the rate of change. It noted that we and AusNet Services largely agree on the approach to forecasting price, output and productivity growth. CCP23 stated that it 'accepts these trend estimates'.[50]

Table 6.3 Forecast rate of change, %

	2022–23	2023–24	2024–25	2025–26	2026–27
AusNet Services' revised proposal					
Price growth	0.4	0.3	0.4	0.6	0.5
Output growth	–	–	–	–	–
Productivity growth	0.3	0.3	0.3	0.3	0.3
Overall rate of change	**0.1**	**–0.0**	**0.1**	**0.3**	**0.2**
AER final decision alternative estimate					
Price growth	0.5	0.4	0.6	0.7	0.5
Output growth	–	–	–	–	–
Productivity growth	0.5	0.5	0.5	0.5	0.5
Overall rate of change	**0.0**	**–0.1**	**0.1**	**0.2**	**0.0**

47 AER, *Expenditure forecast assessment guideline - transmission*, November 2013, pp. 23–24.

48 AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, p. 90.

49 AusNet Services, *Revised revenue proposal 2023–27, Operating expenditure model*, 1 September 2021.

50 CCP23, *Submission to AER on the draft decision and AusNet Services Transmission 2022–27 revised proposal*, October 2021, p. 32.

	2022–23	2023–24	2024–25	2025–26	2026–27
Overall difference	**–0.1**	**–0.1**	**–0.0**	**–0.0**	**–0.2**

Source: AusNet Services, *Revised revenue proposal 2023–27, Operating expenditure model*, 1 September 2021; AER analysis.

Note: Amounts of '0.0' and '–0.0' represent small non-zero amounts and '–' represents zero.

6.4.3.1 Forecast price growth

We have included forecast average annual real price growth of 0.5% in our alternative opex estimate. This compares to AusNet Services' proposed average annual price growth of 0.4%.[51] This increases our alternative estimate of total opex by $6.0 million ($2021–22), instead of $4.7 million ($2021–22) as proposed by AusNet Services.[52]

Our real price growth forecast is a weighted average of forecast labour price growth and non-labour price growth:

- Like AusNet Services, to forecast labour price growth, we used the forecast of growth in the wage price index for the Victorian electricity, gas, water and waste services (utilities) industry. Specifically, we have used an average of forecasts from our consultant Deloitte and the BIS Oxford Economics forecasts submitted by AusNet Services.[53]
- Like AusNet Services, we applied a forecast non-labour real price growth rate of zero.
- Like AusNet Services, we applied benchmark input price weights of 70.4% for labour and 29.6% for non-labour.

Consequently, we have applied the same approach to forecast price growth as AusNet Services did. The differences between our price growth forecast and AusNet Services' is that we have used updated forecasts for WPI growth from Deloitte.[54] This is consistent with our draft decision in which we stated we would use updated forecasts from Deloitte in our final decision.[55] We have compared our labour price growth forecasts to AusNet Services' in Table 6.4 below.

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51 AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, p. 90.

52 AusNet Services, *Revised revenue proposal 2023–27, Operating expenditure model*, 1 September 2021.

53 BIS Oxford Economics, *Labour cost escalation forecasts to FY2027*, August 2021.

54 Deloitte Access Economics, *Wage Price Index forecasts*, 15 December 2021.

55 AER, *Draft decision, AusNet Services transmission 2022–27, Attachment 6, Operating expenditure*, 30 June 2021, p. 19.

Table 6.4 Forecast labour price growth, %

	2022–23	2023–24	2024–25	2025–26	2026–27
AusNet Services' revised proposal					
Deloitte Access Economics	0.3	–0.1	–0.2	0.2	0.3
BIS Oxford Economics	1.0	1.0	1.3	1.5	1.2
Average	**0.6**	**0.4**	**0.5**	**0.8**	**0.7**
AER final decision alternative estimate					
Deloitte Access Economics	0.5	0.2	0.3	0.6	0.3
BIS Oxford Economics	1.0	1.0	1.3	1.5	1.2
Average	**0.7**	**0.6**	**0.8**	**1.0**	**0.7**
Difference	**0.1**	**0.1**	**0.3**	**0.2**	**–0.0**

Source: AusNet Services, *Revised revenue proposal 2023–27, Operating expenditure model*, 1 September 2021; AER analysis.

Note: Amounts of '0.0' and '–0.0' represent small non-zero amounts and '–' represents zero.

6.4.3.2 Forecast output growth

Consistent with AusNet Services' initial and revised proposals, and our draft decision, we have not included output growth in our forecast rate of change.[56] This is because AusNet Services is not required to fund the operation and maintenance of new augmentation and connection of assets from its opex forecast over the 2022–27 regulatory control period. The division of transmission network operator functions is explained further in Section 6.4.5.2.

6.4.3.3 Productivity growth

We have forecast productivity growth of 0.5% per year in developing our alternative opex forecast. AusNet Services included forecast productivity growth of 0.3% per year in its opex forecast.[57] We also included forecast productivity growth of 0.3% per year in our alternative estimate in our draft decision.[58]

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[56] AusNet Services, *Revenue proposal 2023–27*, 29 October 2020, p. 143; AER, *Draft decision, AusNet Services transmission 2022–27, Attachment 6, Operating expenditure*, 30 June 2021, p. 19; AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, p. 90.

[57] AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, p. 90.

[58] AER, *Draft decision, AusNet Services transmission 2022–27, Attachment 6, Operating expenditure*, 30 June 2021, p. 19.

Our forecast of productivity growth reduces our alternative estimate of total opex by $5.8 million ($2021–22), compared to $3.6 million ($2021–22) for AusNet Services' revised proposal.

CCP23 stated that 'the lack of a challenging productivity improvement target' was a matter for AusNet Services to take up internally and with its customers and that this was a factor in its suggestion in relation to a specific step change that 'the very modest opex associated with PMU's be absorbed into the opex budget'.[59] We discuss our consideration of the relationship between forecast productivity growth and step changes in Section 6.4.4.1 below.

Our productivity growth forecast reflects our expectation of the opex productivity growth an efficient service provider in the transmission industry can achieve. It reflects historic industry opex productivity growth to the extent we consider past performance to be a good indicator of future performance under a business-as-usual situation.

We have forecast productivity growth of 0.5% based on the industry average growth of opex partial factor productivity index over the 2006–20 period.[60] This comes from our *2021 Annual benchmarking report*, which we have published since AusNet Services submitted its revised proposal. This is different to our draft decision in which we forecast 0.3% productivity growth based on opex partial factor productivity index analysis over the 2006–19 period.[61]

We consider this forecast, which is based on the latest available information, reflects a reasonable expectation of the productivity growth that an efficient and prudent transmission network can achieve for the forecast period.

6.4.4 Step changes

In its revised proposal, AusNet Services:

- accepted our draft decision on the IT cloud and five minute settlement step changes
- re-proposed three of the same step changes as in its initial proposal, for which we requested additional information be provided
- proposed five new step changes.[62]

For one of these new step changes, relating to AEMO core NEM participant fees, AusNet Services subsequently agreed with us through the information request process

59 CCP23, *Advice to the AER on the AusNet Services Transmission Revised Regulatory Proposal and AER Draft Determination for the Regulatory Determination 2022–27*, 5 October 2021, p. 32.

60 Economic Insights, *Economic Benchmarking Results for the Australian Energy Regulator's 2021 TNSP Annual Benchmarking Report*, 12 November 2021, p. 60.

61 Economic Insights, *Economic Benchmarking Results for the Australian Energy Regulator's 2020 TNSP Annual Benchmarking Report*, 15 October 2020, p. 62.

62 AusNet Services, *Revised revenue proposal 2023–27,* 1 September 2021, pp. 90–103.

that in the absence of a rule change allowing AusNet Services to recover actual costs, a category specific forecast is an appropriate approach for these fees.[63] As a result, this is not included in the discussion below, but rather in Section 6.4.5 examining category specific forecasts.

6.4.4.1 Assessment of a number of small new step changes

AusNet Services' revised proposal included a number of new relatively small step changes, which are driven by new regulatory obligations.

Our *Expenditure forecast assessment guideline* states that step changes should not double count the cost of an increasing regulatory burden over time, which forecast productivity growth may already account for.[64] The productivity growth that transmission networks have achieved, and which we use to forecast productivity growth (as set out in section 6.4.3), is what has been achieved historically while the networks have complied with new regulatory obligations. We therefore think step changes are not required for the historic 'average' change in costs associated with new regulatory obligations. We also stated in the *Expenditure forecast assessment guideline* that only exceptional events are likely to require explicit compensation as step changes.[65]

Further, we note that a business only has incentives to propose a step change for those components of opex it expects will increase. It does not have incentives to identify step changes for components of opex it expects will decrease. Since the draft decision, we have seen this in AusNet Services' revised proposal where it has identified a number of new step changes which increase costs. These asymmetric incentives potentially introduce an upward bias into the total opex forecast proposed by businesses.

Table 6.5 summarises the step changes AusNet Services included in its initial and revised proposals. For the reasons noted above, we have not included the following new and relatively small step changes proposed by AusNet Services in our alternative estimate of total opex:

- Land tax changed obligations ($3.3 million, $2021–22)
- New mental health and well-being levy ($3.6 million, $2021–22)
- PMU obligations from AEMO ($1.5 million, $2021–22).

Despite our decision not to include these step changes in our alternative estimate, we have accepted AusNet Services total opex forecast because it is very similar to our alternative total opex forecast and we find AusNet Services' total opex forecast reasonably reflects the opex criteria (see Section 6.1). In this regard, our overall task,

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63 AusNet Services, *Information request #17, Question 2 – AEMO participant fee, October* 2021.

64 AER, *Expenditure forecast assessment guideline for electricity transmission*, November 2013, p. 24.

65 AER, *Expenditure forecast assessment guideline for electricity transmission*, November 2013, p. 24.

consistent with the NER, is to assess forecast total opex and not individual components of opex.

Table 6.5 AusNet Services' step change proposals and our alternative estimates ($ million, 2021–22)

Step change	AusNet Services initial proposal	AER draft decision	AusNet Services revised proposal	AER alternative estimate for the final decision*
IT cloud	2.3	2.3	2.3	2.3
5 minute settlement	3.9	0.9	0.9	0.9
Council rates	71.5	–	43.3	43.3
Cyber Security	27.9	–	28.2	29.7
EPA	3.2	–	2.0	2.1
Insurance premiums	–	–	7.6	7.1
Land tax	–	–	3.3	–
Mental health and well-being levy	–	–	3.6	–
AEMO participant fees#	–	–	6.5	–
PMU	–	–	1.5	–
Total step changes	**108.7**	**3.1**	**99.3**	**85.3**

Source: AusNet Services, *Revised proposal operating expenditure model 2023–27, 1 September 2021; AER analysis*

Note: Numbers may not add up to total due to rounding. The difference is between AusNet Services' updated proposal and our final decision. Amounts of '0.0' and '–0.0' represent small non-zero amounts and '–' represents zero.

* Note that as the final decision is to accept AusNet Services revised proposal total opex, then this alternative estimate has not been substituted for AusNet Services revised proposal.

This step change was part of AusNet Services revised proposal, but in response to an information request it agreed that it could be treated a category specific forecast instead.[66]

In the following sections we have set out the reasons for whether we have included each step change in our alternative estimate and where we have the basis for the cost included in the alternative estimate. Although we have arrived at an alternative estimate for comparison purposes, our final decision is to accept AusNet Services' revised proposal total opex.

[66] AusNet Services, *Information request #17 Question 2 – AEMO participant fee, October* 2021.

6.4.4.2 IT Cloud

In making this final decision, and consistent with our draft decision, we have included $2.3 million ($2021– 22) in our alternative estimate for IT cloud opex.[67]

AusNet Services proposed a $2.3 million ($2021–22) step change to replace critical IT applications that are reaching end-of-life or needing upgrades, with a migration to cloud-based services at a lower cost.[68]

CCP23 considered this step change to be relatively straightforward and supported it.[69]

As in our draft decision, we consider that the proposed step change meets the requirements for a capex/opex trade off and is the lowest cost option in order for AusNet Services to achieve its cloud migration.

Table 6.6 IT Cloud ($ million, 2021–22)

	2022–23	2023–24	2024–25	2025–26	2026–27	Total
AusNet Services revised proposal	0.5	0.5	0.5	0.5	0.5	**2.3**
AER alternative estimate for the final decision	0.5	0.5	0.5	0.5	0.5	**2.3**
Difference	0.0	0.0	0.0	0.0	0.0	**0.0**

Source: AusNet Services, *Revised regulatory proposal 2023–27*, 1 September 2021, p. 91; AER analysis.

Note: Numbers may not add up to total due to rounding. Amounts of '0.0' and '–0.0' represent small non-zero amounts and '–' represents zero.

6.4.4.3 5 Minute settlement

In making this final decision, and consistent with our draft decision, we have included $0.9 million ($2021– 22) in our alternative estimate for the implementation of new five minute settlement obligations.[70].

AusNet Services proposed a step change of $0.9 million ($2021–22) to comply with the new five minute settlement rule by the Australian Energy Market Commission (AEMC) that came into effect on 1 October 2021.[71]

As in our draft decision, we consider AusNet Services' response to the new regulatory obligation to be prudent and efficient.

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67 AER, *Draft Decision – AusNet Services transmission determination 2022–27, Attachment 6 operating expenditure*, June 2021, pp. 27–28.

68 AusNet Services, *Revenue Proposal 2023–27*, 29 October 2020, p. 152

69 CCP23, *Advice to the AER on the AusNet Services Transmission Revised Regulatory Proposal and AER Draft Determination for the Regulatory Determination 2022–27*, 5 October 2021, p. 28.

70 AER, *Draft Decision – AusNet Services transmission determination 2022–27, Attachment 6 operating expenditure,* June 2021, pp. 23–24.

71 AusNet Services, *Information request 02*, November 2020.

Table 6.7 5 Minute settlement ($ million, 2021–22)

	2022–23	2023–24	2024–25	2025–26	2026–27	Total
AusNet Services revised proposal	0.2	0.2	0.2	0.2	0.2	**0.9**
AER alternative estimate for the final decision	0.2	0.2	0.2	0.2	0.2	**0.9**
Difference	0.0	0.0	0.0	0.0	0.0	**0.0**

Source: AusNet Services, *Revised regulatory proposal 2023–27*, 1 September 2021, p. 91; AER analysis.

Note: Numbers may not add up to total due to rounding. Amounts of '0.0' and '–0.0' represent small non-zero amounts and '–' represents zero.

6.4.4.4 Council rates

In making this final decision we have included a step change of $43.3 million ($2021–22) for increased council rates in our alternative estimate, consistent with AusNet Services' revised proposal.

Table 6.8 Council rates ($ million, 2021–22)

	2022–23	2023–24	2024–25	2025–26	2026–27	Total
AusNet Services revised proposal	8.7	8.7	8.7	8.7	8.7	**43.3**
AER alternative estimate for the final decision	8.7	8.7	8.7	8.7	8.7	**43.3**
Difference	–	–	–	–	–	**–**

Source: AusNet Services, *Revised regulatory proposal 2023–27*, 1 September 2021, p. 96; AER analysis.

Note: Numbers may not add up to total due to rounding. Amounts of '0.0' and '–0.0' represent small non-zero amounts and '–' represents zero.

AusNet Services re-proposed a step change for higher council rates due to an anticipated overall increase in the valuation of its terminal station sites by the Valuer-General Victoria (Valuer General). It submitted that under this increase, council rates will be based on an updated valuation approach taking into account land value and capital improvements (i.e. the Capital Improved Value) rather than just land value. AusNet Services estimated this step change to be $71.5 million ($2021–22) in its initial proposal, based on limited information. AusNet Services updated it to $43.3 million ($2021–22) in its revised proposal based on more up-to-date information and discussions with the Valuer General.[72]

As a result of a 2017 amendment to the *Valuation of Land Act 1960*, the Valuer General is now the sole valuation authority to conduct annual valuations of all rateable

[72] AusNet Services, *Revised regulatory proposal 2023–27*, 1 September 2021, pp. 95–96.

land in Victoria for council rating and taxing purposes. Following this amendment, the Valuer General continues to work with AusNet Services and other industry participants to improve the level of rigour and consistency of valuation application across the substation asset class throughout Victoria in accordance with the *Valuation of Land Act 1960*.

AusNet Services estimated the Capital Improved Value for its regulated sites to include the written down book value of the land at each site (derived from its fixed asset register) and then added on any capital improvements identified for that site. This approach leads to an estimated Capital Improved Value of $1.9 billion as at May 2021.[73] AusNet Services also took into account the council rate factor for each relevant council by calculating and applying the historical 5-year average rating factor (and fire services property levy) to the Capital Improved Value estimated above and re-estimated the future council rate liability for the next regulatory control period to be $43.3 million ($2021–22).

The details of the AusNet Services' calculated Capital Improved Value and its discussions with the Valuer General are confidential as they relate to sensitive information on AusNet Services' assets and non-public official communication between the Valuer General and AusNet Services. To the extent that we have relied on this confidential information to arrive at our final decision, the details of this information are contained in a Confidential Appendix A.

Overall, we consider the higher council rate forecast for the next regulatory control period is prudent and efficient. While the higher costs are strictly not a result of a legislative change, they are nonetheless a requirement imposed by statutory bodies (Valuer General and relevant local councils) that AusNet Services will need to comply with and pay. We consider the impact is significant and that while there is some uncertainty faced by AusNet Services in estimating its council rates this is not materially different from that faced in forecasting other future costs (i.e. not above the norms of a typical business environment). We consider the way AusNet Services has estimated its future council rates to take account of capital / infrastructure improvements is reasonable based on the best information available.

CCP23 considered there was little doubt that this is an externally imposed increase in costs that AusNet Services would need to pay. However, CCP23 was not fully satisfied that the actual council rates costs are known at this time and considered if such cost is still unknown at the time of the AER's final decision, it may be better treated as a 'pass through' event.[74]

In considering the uncertainty faced by AusNet Services, we explored the potential of using a nominated cost pass through event. However, we consider that the overall opex forecast proposed by AusNet Services, which includes this step change, is

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73 AusNet Services, *Revised regulatory proposal 2023–27*, 1 September 2021, p. 96

74 CCP23, *Advice to the AER on the AusNet Services Transmission Revised Regulatory Proposal and AER Draft Determination for the Regulatory Determination 2022–27*, 5 October 2021, p. 30.

prudent and efficient. We also consider that the step change proposed by AusNet Services is a suitable mechanism for managing the associated uncertainty and will encourage AusNet Services to manage council rates efficiently in future to the extent possible. Conversely, the incentive on AusNet Services to proactively manage this uncertainty and constantly seek to minimise cost related to this exposure would likely be significantly reduced if we were to accept this as a pass through event.

For comparative purposes, our alternative estimate includes a $43.3 million ($2021–22) step change for council rates.

6.4.4.5 Cyber security

In making this final decision we included a step change of $29.7 million ($2021–22) for new cyber security obligations in our alternative estimate. This is slightly higher than AusNet Services' revised proposal.

Table 6.9 Cyber security ($ million, 2021–22)

	2022–23	2023–24	2024–25	2025–26	2026–27	Total
AusNet Services' revised proposal	7.6	6.5	5.1	4.8	4.2	**28.2**
AER alternative estimate for the final decision	8.9	6.5	5.1	4.8	4.3	**29.7**
Difference	1.3	0.1	0.0	0.0	0.0	**1.5**

Source: AusNet Services, *Revised regulatory proposal 2023–27*, 1 September 2021, p. 96; AER analysis.

Note: Numbers may not add up to total due to rounding. Amounts of '0.0' and '–0.0' represent small non-zero amounts and '–' represents zero.

AusNet Services re-proposed a $28.2 million ($2021–22) step change to enhance its cyber security program to comply with new regulatory obligations under the Australian Energy Sector Cyber Security Framework.[75] This is expected to commence in 2024 (in the next regulatory control period) aligning with requirements for transmission businesses to meet the Maturity Indicator Level 3 (MIL3) standard.[76] This is also consistent with the cyber security requirements in the *Security Legislation Amendment (Critical Infrastructure) Bill* 2020. In proposing this step change, AusNet Services noted the likely cost impacts from new security measures across governance, physical security, supply chain and personnel that might arise at a future date stemming from the *Security Legislation Amendment (Critical Infrastructure) Bill* 2020. This broader cost impact beyond the cyber security requirements is not included in the cyber security step change proposed by AusNet Services.

In our draft decision, we considered it was prudent for AusNet Services to achieve MIL3, but required it to provide sufficient evidence that the proposed costs are prudent

75 AusNet Services, *Revised regulatory proposal 2023–27*, 1 September 2021, pp. 93–94.

76 AusNet Services, *Transmission revenue proposal 2023–27*, 29 October 2020, pp. 147–148.

and efficient. AusNet Services provided further details in its revised proposal of the specific issues and works required to close the gaps from its current maturity level to MIL3. Based on the additional information and analysis presented in its revised proposal, AusNet Services considered that a cost of $33.7 million ($2021–22) was justified as prudent and efficient.[77] However, it chose not to revise its estimate upwards and retained its initial $28.2 million ($2021–22) proposal for the step change.

We assessed the additional information provided in the revised proposal to justify its cost of $33.7 million ($2021–22). We consider AusNet Services appeared to have chosen a more rigorous and hence the more resource intensive approach than may be efficient. Our technical analysis identified a number of cases (e.g. in software licenses and services costs) where the gap to MIL3 could be closed with less resources. As a result, we consider savings of around $4 million can be identified in relation to the cost identified by AusNet Services in its revised proposal to meet the new cyber security requirements (i.e. $33.7 million ($2021–22)). This results in an alternative estimate of this step change of $29.7 million ($2021–22), which is higher than AusNet Services proposed in maintaining its initial proposal ($28.2 million ($2021–22)).

Further, as noted above, the impending amendments to the *Security of Critical Infrastructure Act 2018* are expected to have direct impacts on the energy businesses including AusNet Services. This amended legislation covers all hazards of which cyber is a core element, but also includes other areas of risk which must be addressed such as physical assets, personnel, and supply chains. AusNet Services noted in its revised proposal that it had not considered all possible changes or requirements associated with this legislation and these may need to be addressed via a cost pass through (as a regulatory change event). In the event that there is a cost pass through application, we would expect AusNet Services to consider the synergies between these different areas of risk and take these and any opportunities for efficiencies into account (that we have not been able to do in this assessment).

CCP23 considered that responding to cyber threat is a genuine exogenously applied cost for energy network businesses and it was satisfied that the expenditure proposed by AusNet Services was within a ‘reasonable range’ of expenditure.[78]

For comparative purposes, our alternative estimate includes a step change of $29.7 million ($2021–22) for cyber security.

6.4.4.6 Environment Protection Act 2017

In making this final decision we have included a step change of $2.1 million ($2021–22) in our alternative estimate for meeting the new requirements under the Environment Protection Act 2017 (EPA).

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77 AusNet Services, *Revised regulatory proposal 2023–27*, September 2021, p. 94.

78 CCP23, *Advice to the AER on the AusNet Services Transmission Revised Regulatory Proposal and AER Draft Determination for the Regulatory Determination 2022–27*, 5 October 2021, p. 29.

Table 6.10 EPA new requirements ($ million, 2021–22)

	2022–23	2023–24	2024–25	2025–26	2026–27	Total
AusNet Services revised proposal	0.8	0.3	0.3	0.3	0.3	**2.0**
AER alternative estimate for the final decision	0.8	0.3	0.3	0.3	0.3	**2.1**
Difference	0.0	0.0	0.0	0.0	0.0	**0.0**

Source: AusNet Services, *Revised regulatory proposal 2023–27*, 1 September 2021, p. 97; AER analysis.

Note: Numbers may not add up to total due to rounding. Amounts of '0.0' and '–0.0' represent small non-zero amounts and '–' represents zero.

In our draft decision, we considered it prudent for AusNet Services to comply with the new EPA requirements and that a step change may be required, but we were not satisfied that AusNet Services had demonstrated that the costs it proposed were efficient. AusNet Services re-proposed this step change and reduced its estimate to $2.0 million ($2021–22) (from $3.2 million ($2021–22)) in its revised proposal to meet the new EPA requirements.[79]

We assessed the additional information provided by AusNet Services in its revised proposal which contained considerably more information than its initial proposal. In particular, it provided more transparency regarding the basis of the costs proposed and the resourcing and activities that AusNet Services considered it has to perform under the new EPA requirements. Overall, we are satisfied that the proposed step change is prudent and efficient.

CCP23 considered that AusNet Services' proposed lower cost estimate of $2.0 million ($2021–22) in the revised proposal is a legitimate step change.[80]

For comparative purposes, our alternative estimate includes a step change of $2.1 million ($2021–22) for new EPA requirements. The small difference is due to our different inflation estimate for the year to March 2022.

6.4.4.7 Insurance premiums

In making this final decision we have included a step change of $7.1 million ($2021–22) for increases in insurance premiums in our alternative estimate. For the reasons set out below this is slightly lower than AusNet Services revised proposal, but is the same amount suggested in the updated information it provided after its revised proposal.

79 AusNet Services, *Revised regulatory proposal 2023–27*, 1 September 2021, pp. 96–97.

80 CCP23, *Advice to the AER on the AusNet Services Transmission Revised Regulatory Proposal and AER Draft Determination for the Regulatory Determination 2022–27*, 5 October 2021, p. 30.

Table 6.11 Insurance premiums ($ million, 2021–22)

	2022–23	2023–24	2024–25	2025–26	2026–27	Total
AusNet Services revised proposal	0.7	1.1	1.5	1.9	2.4	**7.6**
AER alternative estimate for the final decision	0.4	1.1	1.4	1.8	2.3	**7.1**
Difference	–0.3	–0.0	–0.1	–0.1	–0.1	**–0.6**

Source: AusNet Services, *Revised regulatory proposal 2023–27*, 1 September 2021, p. 100; AusNet Services, *Information request #17, October* 2021; AER analysis.

Note: Numbers may not add due to rounding. Amounts of '0.0' and '–0.0' represent small non-zero amounts and '–' represents zero.

AusNet Services proposed a new $7.6 million ($2021–22) step change in its revised proposal relating to the increased premiums for its bushfire liability insurance.[81] The basis for this step change in insurance premiums reflected similar circumstances in the insurance liability market faced by the Victorian electricity distributors in our recent decisions. We have verified that a similar approach was used by AusNet Services as in these resets. This includes that a correct incremental amount was estimated relative to the insurance costs in the base year and that previously assumed premium growth rates in the AusNet Services distribution reset were used.

Following its latest annual renewal, AusNet Services updated us about its premium paid in 2021–22.[82] As a result, it noted this updated information would lead to a lower step change for the insurance premiums of $7.1 million ($2021–22) compared to the $7.6 million in its revised proposal. We consider that the approach taken by AusNet Services is reasonable.

CCP23 considered that AusNet Services accurately summarised its collaborative workshop discussion on the issue of insurance premiums. In particular, that stakeholders did not express concern about funding the increases in light of the market-driven nature of the insurance premium increases, and the AER's recent decision to approve a similar bushfire insurance step change for the Victorian electricity distributors.[83]

For comparative purposes, our alternative estimate includes a step change of $7.1 million ($2021–22) million for insurance premium increases.

81 AusNet Services, *Revised regulatory proposal 2023–27*, 1 September 2021, pp. 98–100.

82 AusNet Services, *Information request #17 – Follow up on insurance step change calculation*, 21 October 2021.

83 CCP23, *Advice to the AER on the AusNet Services Transmission Revised Regulatory Proposal and AER Draft Determination for the Regulatory Determination 2022–27*, 5 October 2021, p. 31.

6.4.4.8 Land tax

AusNet Services proposed a new land tax step change of $3.3 million ($2021–22) in light of 2021–22 Victorian Budget announcements relating to increases in the land tax rate.[84]

CCP23 noted that the land tax step change is a clear example of a step change as it is exogenously determined, ongoing and material.[85]

We acknowledge this step change is driven by new regulatory obligations and had support from customers. However, for the reasons outlined in Section 6.4.4.1 we have not included it in our alternative estimate. Overall, this decision to not include it in our alternative estimate did not alter our final decision to accept AusNet Services revised total opex estimate.

Table 6.12 Land tax ($ million, 2021–22)

	2022–23	2023–24	2024–25	2025–26	2026–27	Total
AusNet Services revised proposal)	0.6	0.7	0.7	0.7	0.7	**3.3**
AER alternative estimate for the final decision	–	–	–	–	–	**–**
Difference	–0.6	–0.7	–0.7	–0.7	–0.7	**–3.3**

Source: AusNet Services, *Revised regulatory proposal 2023–27*, 1 September 2021, p. 101; AER analysis.

Note: Numbers may not add due to rounding. Amounts of '0.0' and '–0.0' represent small non-zero amounts and '–' represents zero.

6.4.4.9 Mental health and well-being levy

AusNet Services proposed a new mental health and well-being step change of $3.6 million ($2021–22) in light of 2021–22 Victorian Budget announcement relating to the introduction of a mental health and wellbeing levy.[86]

CCP23 noted that this is a clear example of a step change.[87]

We acknowledge this step change is driven by new regulatory obligations and had support from customers. However, for the reasons outlined in Section 6.4.4.1 we have not included it in our alternative estimate. Overall, this decision to not include it in our alternative estimate did not alter our final decision to accept AusNet Services revised total opex estimate.

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84 AusNet Services, *Revised regulatory proposal 2023–27*, 1 September 2021, pp. 100–101.

85 CCP23, *Advice to the AER on the AusNet Services Transmission Revised Regulatory Proposal and AER Draft Determination for the Regulatory Determination 2022–27*, 5 October 2021, p. 31.

86 AusNet Services, *Revised regulatory proposal 2023–27*, 1 September 2021, pp. 101–102.

87 CCP23, *Advice to the AER on the AusNet Services Transmission Revised Regulatory Proposal and AER Draft Determination for the Regulatory Determination 2022–27*, 5 October 2021, p. 31.

Table 6.13 Mental health and well-being ($ million, 2021–22)

	2022–23	2023–24	2024–25	2025–26	2026–27	Total
AusNet Services revised proposal	0.7	0.7	0.7	0.7	0.7	**3.6**
AER alternative estimate for the final decision	–	–	–	–	–	–
Difference	–0.7	–0.7	–0.7	–0.7	–0.7	**–3.6**

Source: AusNet Services, *Revised regulatory proposal 2023–27*, 1 September 2021, p. 102; AER analysis.

Note: Numbers may not add due to rounding. Amounts of '0.0' and '–0.0' represent small non-zero amounts and '–' represents zero.

6.4.4.10 AEMO participant fee

As noted above, this proposed step change is discussed in the Section 6.4.5.

6.4.4.11 Phasor Monitoring Unit (PMU)

AusNet Services proposed a new $1.5 million ($2021–22) step change related to a capex project to install new PMUs at various locations on the transmission network. This is to allow it to meet the requirements placed on it by an AEMO notice, in which AEMO is seeking to discharge its market and power system security functions.[88]

CCP23 accepted that AusNet Services would need to implement the AEMO directive to install PMUs. However, it regarded this as primarily a capex program, opex of $0.3 million ($2021–22) per year was considered not 'material' and it was questioned whether a step change was warranted. CCP23 considered that AusNet Services should be encouraged to absorb this cost.[89]

We acknowledge this step change is driven by new regulatory obligations and had support from some customers. However, for the reasons outlined in Section 6.4.4.1 we have not included it in our alternative estimate. Overall, this decision to not include it in our alternative estimate did not alter our final decision to accept AusNet Services revised total opex estimate.

Table 6.14 PMU ($ million, 2021–22)

	2022–23	2023–24	2024–25	2025–26	2026–27	Total
AusNet Services revised proposal	0.3	0.3	0.3	0.3	0.3	1.5
AER alternative estimate for the final decision	–	–	–	–	–	–

88 AusNet Services, *Revised regulatory proposal 2023–27*, 1 September 2021, pp. 102–103.

89 CCP23, *Advice to the AER on the AusNet Services Transmission Revised Regulatory Proposal and AER Draft Determination for the Regulatory Determination 2022–27*, 5 October 2021, p. 31.

	2022–23	2023–24	2024–25	2025–26	2026–27	Total
Difference	–0.3	–0.3	–0.3	–0.3	–0.3	–1.5

Source: AusNet Services, *Revised regulatory proposal 2023–27*, 1 September 2021, p. 103; AER analysis.

Note: Numbers may not add due to rounding. Amounts of '0.0' and '–0.0' represent small non-zero amounts and '–' represents zero.

6.4.5 Category specific forecasts

While our preferred forecasting approach is to apply the base–step–trend approach described in Section 6.3, there are a few categories of opex we do not include in our base–step–trend forecast. We have included these as category specific forecasts instead for reasons outlined below.

Our alternative estimate for the final decision includes category specific forecasts for easement land tax, debt raising costs, the opex associated with the roll in of group 3 assets and costs associated with the AEMO participant fees. We show these in Table 6.15, alongside AusNet Services' revised proposal.

Table 6.15 Category specific forecasts, ($ million, 2021–22)

Category specific forecast	AusNet Services initial proposal	AER draft decision	AusNet Services revised proposal	AER alternative estimate for the final decision
Easement land tax	815.9	868.1	868.1	868.1
Group 3 assets roll in	26.1	26.1	25.8	25.8
AEMO participant fees*	–	–	–	6.5
Debt raising costs	8.7	8.5	8.5	8.5
Total	**850.7**	**902.7**	**902.4**	**908.8**

Source: AusNet Services, *Revised proposal operating expenditure model 2023–27*, 1 September 2021; AER analysis.

Note: Numbers may not add up to total due to rounding. Amounts of '0.0' and '–0.0' represent small non-zero amounts and '–' represents zero.

* AusNet Services included this as a step change in its revised proposal. In response to an information request it agreed that it could be treated a category specific forecast instead.[90]

6.4.5.1 Easement land tax

AusNet Services' network is built on a series of easements, which are subject to the Victorian Government's easement land tax. We include a forecast of AusNet Services'

90 AusNet Services, *Information request #17 Question 2 – AEMO participant fee, October* 2021.

easement land tax as part of forecast total opex. Where the forecast differs (higher or lower) from the actual tax paid, the difference is accounted for as a pass through.[91] This ensures AusNet Services only recovers the actual easement land tax it pays.

Consistent with our draft decision, AusNet Services included forecast easement land tax of $868.1 million ($2021–22) in its revised proposal, based on its (2020–21) tax assessment notice.[92] We maintain the view that this represents a reasonable expectation of AusNet Services' easement land tax liability because it reflects the latest valuations. As noted above, a pass through provision provides assurance that neither AusNet Services, nor its customers, will receive a windfall gain (or loss) due to the actual land tax payments required of AusNet Services being lower (or higher) than forecast in its revenue determination.

6.4.5.2 Group 3 asset roll in

We have included growth asset roll in opex of $25.8 million ($2021–22) as a category specific forecast in our alternative estimate. This is consistent with AusNet Services' revised proposal.[93] It is a slight reduction from the $26.1 million ($2021–22) we included in our draft decision.[94] AusNet Services updated its forecast to reflect adjustments it made to the value of growth assets to be rolled into the regulatory asset base (RAB).[95]

In Victoria, AEMO or a distribution business may request AusNet Services to augment the transmission network or distribution connection services during a regulatory control period. We do not roll these assets into the RAB until the subsequent revenue determination.

The opex associated with these growth assets before they are rolled into the RAB is charged to customers outside the revenue cap and is not reflected in reported standard control services opex. Consequently, we need to increase our opex forecast for the additional expenses associated with the operation and maintenance of the growth assets that we roll into the RAB.[96] This arrangement is a transfer of existing costs rather than new costs being passed on to customers. Therefore, it does not impact the current price being paid by customers (just who it is paid to). Currently, AEMO and the Victorian distribution businesses fund and pass these costs onto customers. When these assets are rolled into AusNet Services' RAB, AusNet Services then fund operation and maintenance of growth assets through its opex allowance.[97]

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91 NER, cl. 6A.7.3.

92 AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, p. 105; AER, *Draft decision, AusNet Services transmission 2022–27, Attachment 6, Operating expenditure*, 30 June 2021, pp. 31–32.

93 AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, p. 105.

94 AER, *Draft decision, AusNet Services transmission 2022–27, Attachment 6, Operating expenditure*, 30 June 2021, p. 30.

95 AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, p. 105.

96 In accordance with NER, cl. 11.6.21(c).

97 AusNet Services, *Revenue proposal 2023–27*, 29 October 2020, p. 145.

6.4.5.3 AEMO participant fee

AusNet Services proposed additional costs of $6.5 million ($2021–22) following AEMO's decision to reallocate a portion of its core NEM fees from market customers to transmission networks (including AusNet Services).[98] This reflects AEMO's increasing involvement in network related activities, such as power system security, with the fees commencing from 2023–24. This transfers the payment from market customers (who have historically charged the cost to end use customers) to transmission networks, without increasing the end cost of electricity to customers.[99]

In its revised proposal AusNet Services also noted that Energy Networks Australia, on behalf of the transmission networks, had submitted a rule change request to the AEMC.[100] If the rule change is made, AusNet Services' annual revenue requirement would be adjusted by the actual amount of the core NEM fees allocated to AusNet Services each year. If the rule change is not made, then AusNet Services would need to recover these costs from the annual revenue we determine in this revenue determination process. Further, if the rule change is made after this final decision, AusNet Services' undertook that it would adjust its revenue recovery either positively or negatively to ensure that only actual costs are recovered from customers.

AusNet Services proposed these additional costs as a step change. As noted in Section 6.4.4.1, AusNet Services subsequently agreed with us through the information request process that in the absence of a rule change, as outlined above, a category specific forecast is an appropriate approach for AEMO's core NEM participant fees.[101] It considered this was the case because AEMO's final electricity fee structure is only applicable from 1 July 2023 to 30 June 2026 and then subject to a separate future review. Further, that this would mean these fees are excluded from base opex for the next regulatory control period and provide an opportunity to reforecast these fees for the next regulatory control period using the best available data if required.

CCP23 considered this as a legitimate step change.[102]

We acknowledge this increase in costs is driven by new regulatory obligations and has support from AusNet Services' customers. We have included these costs as a category specific forecast of $6.5 million ($2021–22) in our alternative estimate. We have examined AusNet Services' approach to forecasting these costs and consider it to be reasonable.

We also consider including these costs as a category specific forecast is appropriate because if the rule changes occurs they will not be forecast on a single year revealed cost basis for the regulatory control period commencing in 2027–28. Additionally, the

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98 AusNet Services, *Revised regulatory proposal 2023–27*, 1 September 2021, pp. 97–98.

99 AusNet Services, *Revised regulatory proposal 2023–27*, 1 September 2021, pp. 97–98.

100 The rule change request was submitted on 24 June 2021 and is still being considered.

101 AusNet Services, *Information request #17 Question 2 – AEMO participant fee*, October 2021.

102 CCP23, *Advice to the AER on the AusNet Services Transmission Revised Regulatory Proposal and AER Draft Determination for the Regulatory Determination 2022–27*, 5 October 2021, p. 30.

amount already included in the annual revenue requirement can be clearly identified in order to ensure that only actual costs are recovered from customers. This reflects that AusNet Services has committed to ensure that it recovers only the actual amount of the core NEM participant fees and proposed to do this by reducing the annual revenue requirement approved in the final decision.

In addition, if the rule change occurs we will exclude these costs from the operation of the EBSS, which we discuss further in Attachment 8 in Section 8.4.2.1. Forecasting these costs as a category specific forecast will allow us to exclude these costs from the EBSS.

6.4.5.4 Debt raising costs

We have included debt raising costs of $8.5 million ($2021–22) in our alternative estimate. Our estimate is marginally higher than the $8.5 million forecast ($2021–22) AusNet Services included in its revised proposal.[103] AusNet Services stated that it accepted our draft decision on debt raising costs.[104]

Debt raising costs are transaction costs incurred each time a business raises or refinances debt. The appropriate approach is to forecast debt raising costs using a benchmarking approach rather than a service provider’s actual costs in a single year. This provides consistency with the forecast of the cost of debt in the rate of return building block.

We used our standard approach to forecast debt raising costs which is discussed further in Attachment 3 to the final decision.

6.4.6 Assessment of opex factors

In deciding whether we are satisfied the service provider's forecast reasonably reflects the opex criteria we have regard to the opex factors.[105] Table 6.16 summarises how we have taken the opex factors into account in making our draft decision.

Table 6.16 AER consideration of opex factors

Opex factor	Consideration
The most recent annual benchmarking report that has been published under rule 6A.31 and the benchmark operating expenditure that would be incurred by an efficient network service provider over the relevant regulatory control period.	There are two elements to this factor. First, we must have regard to the most recent annual benchmarking report. Second, we must have regard to the benchmark operating expenditure that would be incurred by an efficient transmission network service provider over the period. The annual benchmarking report is intended to provide an annual snapshot of the relative efficiency of each service provider.

103 AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, p. 105.
104 AusNet Services, *Revised revenue proposal 2023–27*, 1 September 2021, p. 105.
105 NER, cl. 6A.6.6(e).

Opex factor	Consideration
	The second element, that is, the benchmark operating expenditure that would be incurred by an efficient provider during the forecast period, necessarily provides a different focus. This is because this second element requires us to construct the benchmark opex that would be incurred by a hypothetically efficient provider for that particular network over the relevant period. The benchmarking analysis is limited by the small sample size of transmission businesses in the National Electricity Market (NEM), and the limited international data available, among other things. It also does not take into account all the operating environment factor differences between the networks. Noting these limitations, we have taken the benchmarking results into account but not solely relied on it when assessing the efficiency of AusNet Services' proposed total forecast opex.
The actual and expected operating expenditure of the transmission network service provider during any proceeding regulatory control periods.	Our forecasting approach uses the service provider's actual opex as the starting point. We have compared several years of AusNet Services' actual past opex with that of other service providers as a part of forming a view about whether its revealed expenditure is sufficiently efficient to rely on.
The extent to which the operating expenditure forecast includes expenditure to address the concerns of electricity consumers as identified by the Network Service Provider in the course of its engagement with electricity consumers.	We understand the intention of this particular factor is to require us to have regard to the extent to which service providers have engaged with consumers in preparing their revenue proposals, such that they factor in the needs of consumers.[106] We consider the Deep Dive workshops AusNet Services conducted with its consumers post lodgement of its initial proposal covered a number of areas related to opex including the choice of base year and some of the proposed step changes.[107] CCP23 considered AusNet Services listened actively and responsively to consumers on the topics on which were engaged.[108] Subsequent to our draft decision, CCP23 considered the process by AusNet Services was excellent with high quality, open and respectful engagement, focused on collaborative workshops. It also made the observation that customer perspectives and advice were well incorporated into the revised proposal.[109] In relation to the opex forecast, CCP23 noted that the revised proposal forecast is $14M lower than the version AusNet Services consulted with its customers on and so there is good evidence that AusNet Services had sought to reduce controllable opex. It considered this reflected AusNet Services listened to customers, and had an intent to reduce opex, notwithstanding the observation that a

106 AEMC, *Rule Determination*, 29 November 2012, pp. 101, 115.

107 AusNet Services, *Revised regulatory proposal 2023–27*, 1 September 2021, pp. 11–13.

108 CCP23, *Advice to AER on AusNet Services Transmission regulatory proposal*, 12 February 2021, p. 1.

109 CCP23, *Advice to the AER on the AusNet Services Transmission Revised Regulatory Proposal and AER Draft Determination for the Regulatory Determination 2022–27*, 5 October 2021, p. 8.

Opex factor	Consideration
	significant proportion of the proposed step changes are exogenous to AusNet Services control.[110]
The relative prices of capital and operating inputs	We have considered capex/opex trade-offs in considering AusNet Services' proposed step changes. For example, the IT cloud step change where AusNet Services' proposed a $2.3 million ($2021–22) step change to replace critical IT applications (that are reaching end-of-life or needing upgrades) with a migration to cloud-based services at a lower cost.
The substitution possibilities between operating and capital expenditure.	Some of our assessment techniques examine opex in isolation—either at the total level or by category. Other techniques consider service providers' overall efficiency, including their capital efficiency. We have had regard to several metrics when assessing efficiency to ensure we appropriately capture capex and opex substitutability. In developing our benchmarking models we have had regard to the relationship between capital, opex and outputs.
Whether the operating expenditure forecast is consistent with any incentive scheme or schemes that apply to the network service provider under clauses 6A.6.5, 6A.7.4 or 6A.7.5.	The incentive scheme that applied to AusNet Services' opex in the 2017–22 regulatory control period, the EBSS, was intended to work in conjunction with a revealed cost forecasting approach. We have applied our estimate of base opex consistently in applying the EBSS and forecasting AusNet Services' opex for the 2022–27 regulatory control period.
The extent the operating expenditure forecast is preferable to arrangements with a person other than the network service provider that, in the opinion of the AER, do not reflect arm's length terms.	Some of our techniques assess the total expenditure efficiency of service providers and some assess the total opex efficiency. Given this, we are not necessarily concerned whether arrangements do or do not reflect arm's length terms. A service provider which uses related party providers could be efficient or it could be inefficient. Likewise, for a service provider that does not use related party providers. If a service provider is inefficient, we adjust their total forecast opex proposal, regardless of their arrangements with related providers.
Whether the operating expenditure forecast includes an amount relating to a project that should more appropriately be included as a contingent project under clause 6A.8.1(b).	This factor is only relevant in the context of assessing proposed step changes (which may be explicit projects or programs). We did not identify any contingent projects in reaching our draft decision.
The most recent Integrated System Plan and any submissions made by AEMO, in accordance with the NER, on the forecast of the Transmission Network Service Provider's required operating expenditure	We have had regard to AEMO's most recent Integrated System Plan and consider this to be consistent with AusNet Services' forecast opex.[111]
The extent the network service provider has considered, and made provision for, efficient and prudent non-network alternatives.	We have not found this factor to be significant in reaching our draft decision.

110 CCP23, *Advice to the AER on the AusNet Services Transmission Revised Regulatory Proposal and AER Draft Determination for the Regulatory Determination 2022–27*, 5 October 2021, p. 27.

111 AusNet Services, *Revised regulatory proposal 2023–27*, 1 September 2021, p. 34.

Opex factor	Consideration
Any relevant project assessment conclusions report required under 5.16.4.	We have not identified any RIT–T project that has been submitted by the AusNet Services and would impact the total forecast opex.
Any other factor the AER considers relevant and which the AER has notified the service provider in writing, prior to the submission of its revised Revenue Proposal under 6A.12.3, is an operating expenditure factor.	We did not identify and notify AusNet Services of any other opex factor.

Source: AER analysis.

Shortened forms

Shortened form	Extended form
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
capex	capital expenditure
CCP 23	Consumer Challenge Panel, sub-panel 23
CESS	capital expenditure sharing scheme
CPI	consumer price index
EBSS	efficiency benefit sharing scheme
EPA	Environment Protection Act 2017
NEL	National Electricity Law
NEM	National Electricity Market
NER	National Electricity Rules
NSP	network service provider
opex	operating expenditure
PMU	Phasor Monitoring Unit
RAB	regulatory asset base
RIN	regulatory information notice