Draft Decision

ElectraNet Transmission Determination 2023 to 2028

(1 July 2023 to 30 June 2028)

Attachment 6
Operating expenditure

September 2022

AUSTRALIAN ENERGY REGULATOR

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1	30 September 2022	31

Note

This attachment forms part of the AER's draft decision on ElectraNet's 2023–28 transmission determination. It should be read with all other parts of the draft decision.

The draft decision includes the following documents:

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

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Attachment 10 – Service target performance incentive scheme

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6 Operating expenditure

Operating expenditure (opex) refers to operating, maintenance and other non-capital expenses. Forecast opex for prescribed transmission services is one of the building blocks we use to determine a service provider's total revenue requirement.

This attachment outlines our assessment of ElectraNet's proposed total opex forecast for the 2023–28 regulatory control period.

6.1 Draft decision

Our draft decision is to not accept ElectraNet's updated transmission opex forecast of $641.8 million ($2022–23), including debt raising costs,[1] for the 2023–28 regulatory control period because we are not satisfied that it reflects the opex criteria.[2] ElectraNet originally proposed an opex forecast of $626.5 million ($2022–23),[3] including debt raising costs and subsequently updated its opex forecast when responding to our request for additional information.

Our alternative estimate of total opex is $633.0 million ($2022–23). This is $8.8 million (or 1.4%) lower than ElectraNet's forecast and $75.7 million (or 13.6%) higher than actual and estimated opex for the current period (2018–22). We are satisfied that our alternative estimate of forecast opex reasonably reflects the opex criteria.

Table 6.1 sets out ElectraNet's proposal, its updated proposal, and our alternative estimate that is the basis for the draft decision and the difference between our draft decision and the updated proposal.

1 ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated)*, 18 May 2022.

2 NER, cll. 6A.6.6(c)–(d)

3 ElectraNet, *2024–28 Revenue proposal –ENET022 - ElectraNet - Opex Forecast 2024-28,* 31 January 2022.

Table 6.1 Comparison of ElectraNet's updated proposal and our alternative estimate of forecast opex ($million, 2022–23)

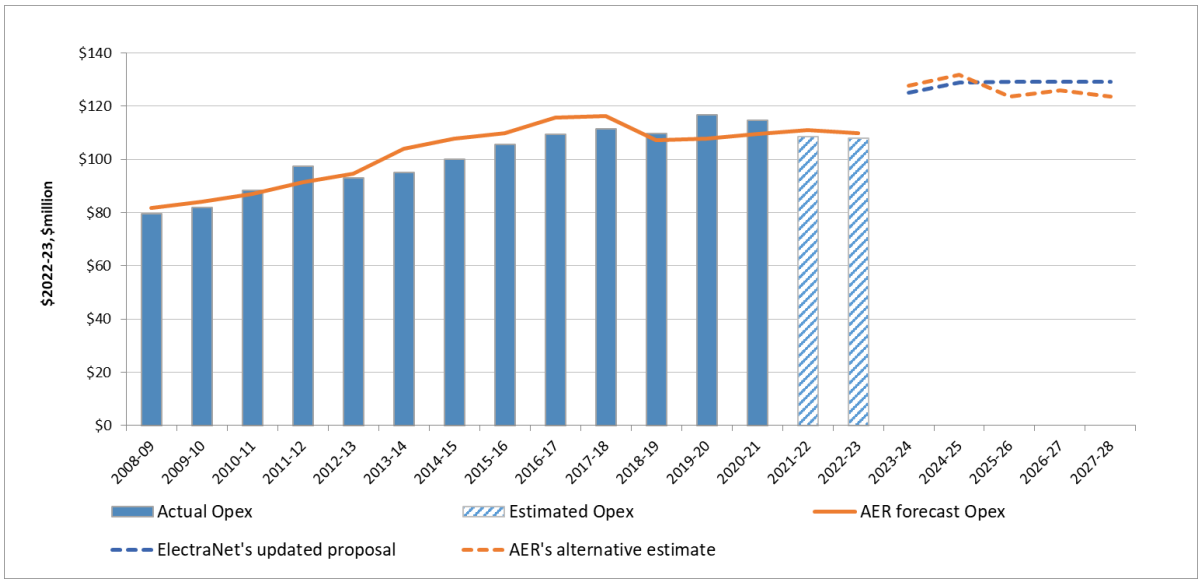
	ElectraNet's initial proposal	ElectraNet's updated proposal	AER's alternative estimate	Difference
Based on reported opex in 2020–21	**524.2**	**533.4**	**568.8**	**35.4**
Base year opex adjustment	**−1.9**	**−5.4**	**−4.8**	**0.5**
2020–21 to 2021–23 increment	**2.8**	**2.8**	**3.0**	**0.2**
Remove category specific forecasts	**−49.2**	**−41.4**	**−53.7**	**−12.3**
Output growth	*25.2*	*27.9*	*29.3*	*1.4*
Price growth	*5.1*	*5.3*	*10.8*	*5.5*
Productivity growth	*−4.3*	*−4.4*	*−7.8*	*−3.4*
Total trend	**26.0**	**28.8**	**32.3**	**3.5**
IFRS	*46.8*	*46.8*	*45.6*	**−1.2**
Insurance	*30.2*	*29.1*	*14.3*	*−14.8*
Cyber Security	*25.9*	*25.9*	*18.0*	−7.9
Cloud	*9.0*	*9.0*	–	*−9.0*
Rule change	*3.9*	*3.9*	–	*−3.9*
Total step changes	**115.8**	**114.7**	**77.9**	**−36.8**
Debt raising costs	*8.7*	*8.7*	*9.5*	*0.7*
Total category specific forecasts	**8.7**	**8.7**	**9.5**	**0.7**
Total	**626.5**	**641.8**	**633.2**	**−8.8**
Percentage difference to proposal				−1.4%

Source: ElectraNet, *2024–28 Revenue proposal –ENET022 - ElectraNet - Opex Forecast 2024-28*, 31 January 2022; ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated)*, 18 May 2022; AER analysis.

Note: Numbers may not add up to totals due to rounding. Differences of '0.0' and '–0.0' represent small variances and '–' represents no variance.

Figure 6.1 compares ElectraNet's updated opex forecast to its past actual opex, our previous regulatory decisions and our alternative estimate that is the basis for our draft decision.

Figure 6.1 Historical and forecast opex ($million, 2022–23)



Source: ElectraNet, *Regulatory accounts 2008–09 to 2020–21*; ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated)*, 18 May 2022; AER, *Revenue determination, PTRM (multiple periods 2008–13, 2013–18, 2018–22, 2023–28);* AER analysis.
Note: Include debt raising costs and movements in provisions.

Our lower alternative total opex forecast is driven by the opex related to step changes being $36.8 million ($2022–23) lower than ElectraNet's proposal. We have not included opex for the IT cloud migration and rule change step changes. We also included a lower forecast for the insurance and cyber security step changes. Offsetting this:

- our base year opex is $35.4 million ($2022–23) (or 5.5%) higher as we have applied the latest actual and forecast inflation inputs. Our updated figure for actual CPI for 2021–22 is 6.1%,[4] and forecast CPI for 2022–23 is 6.2%.[5] This is materially higher than the CPI estimates used by ElectraNet in its proposal (2.5% for June 2022 and 2.5% for June 2023).[6]
- our real price growth is $5.5 million ($2022–23) higher after accounting for the current wage price index growth forecast by our consultant KPMG and applying a different approach to superannuation guarantee increases than ElectraNet's proposal.
- our productivity growth estimate reduces total opex by $3.4 million ($2022–23) more than ElectraNet's estimate, as we applied the latest value (0.5%) from our 2021 annual benchmarking analysis.[7]

4 Australian Bureau of Statistics, *Consumer Price Index, Australia*, released on 27 July 2022 (accessed on 28 July 2022).

5 Reserve Bank of Australia, *Statement on monetary policy - Forecast table*, August 2022.

6 ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated)*, 18 May 2022.

7 We will update productivity in the final decision to reflect the results of our 2022 Annual Benchmarking Report, which is due to be published in November 2022.

Our inflation updates significantly mask the magnitude of the difference between our alternative estimate of total opex and ElectraNet's updated proposal. If we apply our inflation numbers to ElectraNet's updated proposal, our alternative estimate becomes 7.4% lower.

In the final decision, we will update inflation numbers to reflect the most up-to-date CPI forecasts at the time of publication.

The reasons for our draft decision are set out in section 6.4.

6.2 ElectraNet's proposal

ElectraNet used a 'base-step-trend' approach to forecast opex for the 2023–28 regulatory control period in its proposal, consistent with our standard approach.

In applying our base-step-trend approach to forecast opex for the 2023–28 period, ElectraNet's updated proposal:[8]

- used opex in 2020–21 as the base from which to forecast ($533.4 million ($2022–23))
- removed $5.4 million ($2022–23) from base opex to reflect:
  - movements in provisions, -$3.5 million (or -$0.7 million annually)[9]
  - capitalised leases, -$4.2 million (or -$0.8 million annually) to account for an accounting reporting change[10]
  - incremental opex related to the Main Grid System Strength and Project EnergyConnect augmentation projects, $1.2 million (or $0.2 million annually) and $1.3 million (or $0.3 million annually), respectively.[11]
- added $2.8 million to reflect the change in opex between 2020–21 and 2022–23
- removed $41.4 million of network support costs accounted as category specific opex
- applied a rate of change comprising of:
  - output growth ($27.9 million)
  - real price growth ($5.3 million)
  - productivity growth (-$4.4 million) or 0.3% per year.
- added five step changes totalling $114.7 million ($2022–23) for:
  - a change to the accounting treatment of intangible assets under the International Financial Reporting Standards (IFRS), which requires these costs to be expensed rather than capitalised ($46.8 million)
  - increased insurance premiums ($29.1 million)

8 ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated)*, 18 May 2022.

9 This is equivalent to -$0.64 million ($June 2018) as reported by ElectraNet in its updated opex model.

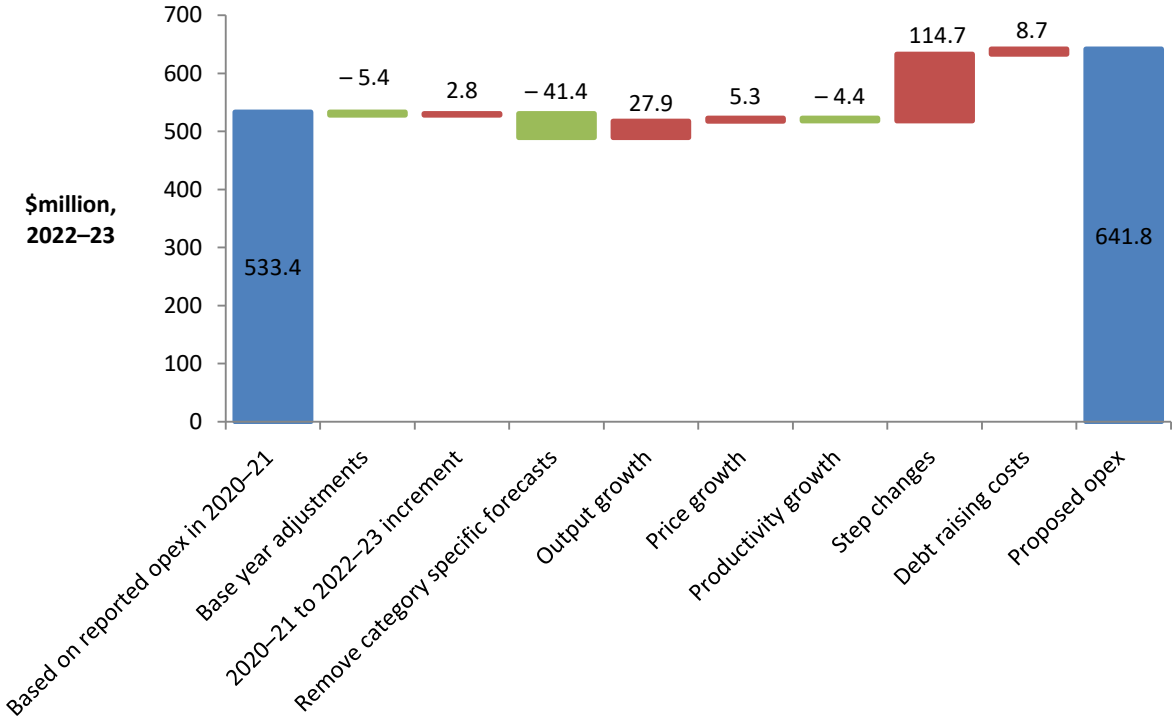
10 This is equivalent to -$0.77 million ($June 2018) as reported by ElectraNet in its updated opex model.

11 This is equivalent to $0.21 million ($June 2018) and $0.23 million ($June 2018), respectively, as reported by ElectraNet in its updated opex model.

  - cyber security costs to comply with new critical infrastructure legislation ($25.9 million)
  - IT cloud migration of some IT infrastructure ($9.0 million)
  - recent rule changes made in 2021 ($3.9 million).
- added $8.7 million of debt raising costs to arrive at total forecast opex of $641.8 million over the regulatory period 2023–28.

Figure 6.2 sets out ElectraNet's total opex proposal.

Figure 6.2 ElectraNet's proposed opex ($ million, 2022–23)



Source: ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated)*, 18 May 2022; AER analysis.

6.2.1 Submissions on ElectraNet's proposal

We have received two submissions on ElectraNet's 2023–28 regulatory proposal.

The AER's Consumer Challenge Panel, sub-panel 25 (CCP25) did not provide any opinion on whether ElectraNet's forecast opex for the 2023–28 period reasonably reflects the efficient costs of a prudent operator. It did not raise any issues with ElectraNet's proposed step changes.[12]

The South Australian Department of Energy and Mining acknowledged that price pressures are likely to persist for expenditure components such as cyber security, insurance and

12 CCP25, *ElectraNet - Advice to the AER on the 2023–28 Electricity Transmission Regulatory Revenue Proposal*, 11 May 2022, p. 18.

information technology.[13] It raised concerns with ElectraNet's limited transparency. For example, the South Australia government stated that capital savings referred to by ElectraNet in its proposal in relation to the IT cloud migration step change should have been itemised within the proposal and the reasons for classifying the associated costs as opex, rather than capex, be outlined. It made a similar statement regarding the IFRS step change.[14]

6.3 Assessment approach

Our role is to decide whether to accept a business' total opex forecast. We are to form a view about whether a business' forecast of total opex 'reasonably reflects' the opex criteria.[15] In doing so, we must have regard to the opex factors specified in the National Electricity Rules (NER).[16]

The *Expenditure forecast assessment guideline* (the Guideline), together with an explanatory statement, sets out our assessment approach in detail.[17] While the Guideline provides for greater regulatory predictability, transparency and consistency, it is not mandatory. However, if we make a decision that is not in accordance with the Guideline, we must state the reasons for departing from the Guideline.[18]

Our approach is to assess the business's forecast opex over the regulatory control period at a total level, rather than to assess individual opex projects. To do so, we develop an alternative estimate of total opex using a 'top-down' forecasting method, known as the 'base-step-trend' approach.[19] We compare our alternative estimate with the business's total opex forecast to form a view on the reasonableness of the business's proposal. If we are satisfied the business's forecast reasonably reflects the opex criteria, we accept the forecast.[20] If we are not satisfied, we substitute the business's forecast with our alternative estimate that we are satisfied reasonably reflects the opex criteria.[21]

In making this decision, we take into account the reasons for the difference between our alternative estimate and the business's proposal, and the materiality of the difference.

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13 Government of South Australia (Department of Energy and Mining), *Letter to AER - submission on ElectraNet transmission revenue proposal*, 21 June 2022.

14 Government of South Australia (Department of Energy and Mining), *Letter to AER - submission on ElectraNet transmission revenue proposal*, 21 June 2022, pp. 3-4; ElectraNet only provided the NPV analysis, business cases and calculations relating to the proposed step changes as part of our information request process.

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

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

17 AER, *Expenditure forecast assessment guideline for electricity transmission*, November 2013; AER, *Expenditure forecast assessment guideline, Explanatory statement*, November 2013.

18 NER, cl. 6A.2.3(c).

19 A 'top-down' approach forecasts total opex at an aggregate level, rather than forecasting individual projects or categories to build a total opex forecast from the 'bottom up.'

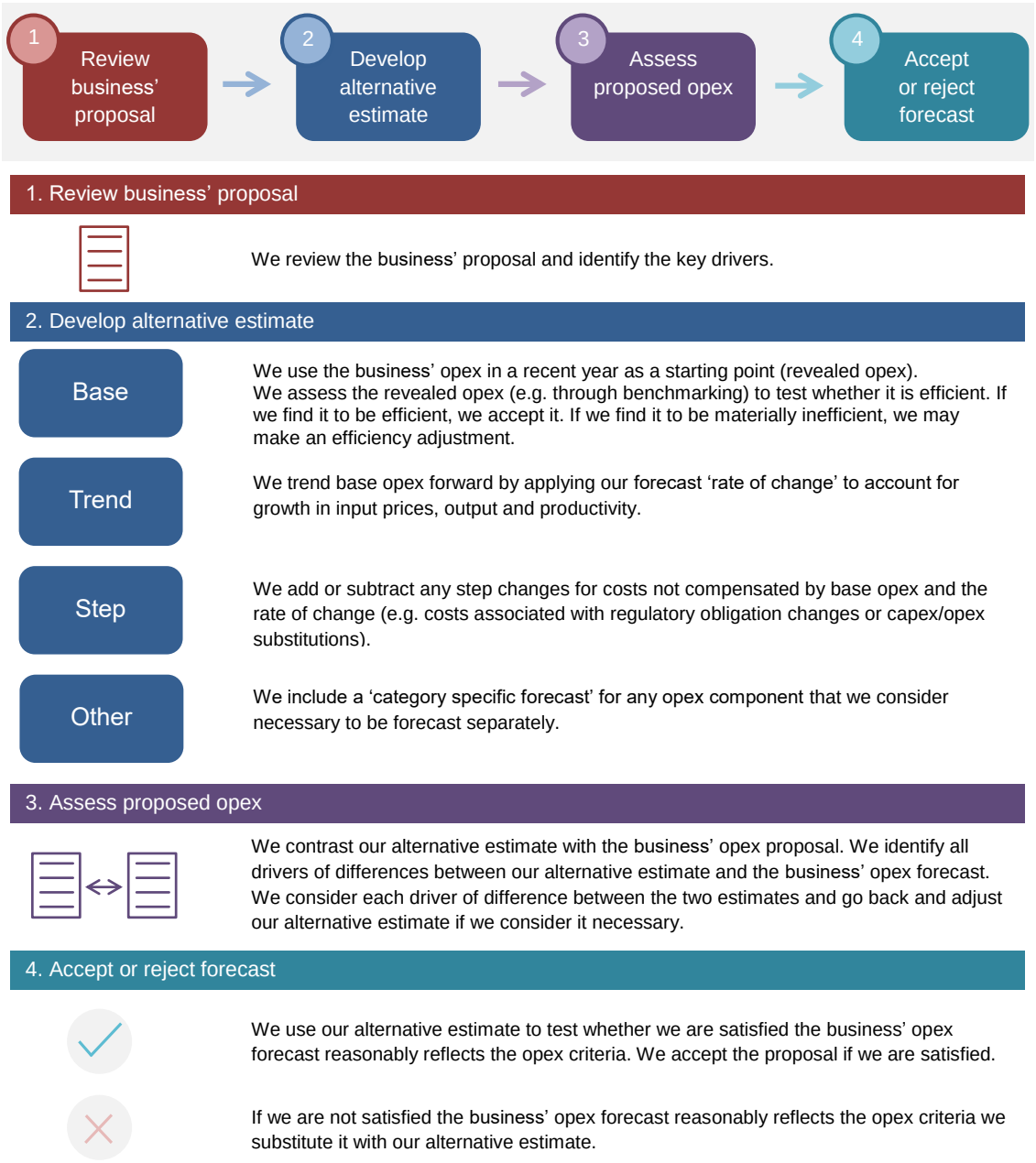
20 NER, cl. 6A.6.6(c).

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

Further, we take into consideration interrelationships between opex and the other building block components of our decision.[22]

Figure 6.3 summarises the base–step–trend forecasting approach.

Figure 6.3 Our opex assessment approach



6.3.1 Interrelationships

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

- the efficiency benefit sharing scheme (EBSS) carryover—the level of opex used as the starting point to forecast opex (the final year of the current regulatory control period

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

(2018–23)) should be the same as the level of opex used to forecast the EBSS carryover. 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 2018–23 regulatory control period, which provided ElectraNet 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.

6.4 Reasons for draft decision

We do not accept ElectraNet's updated opex forecast of $641.8 million ($2022–23) for the 2023–28 regulatory control period because we are not satisfied that it reasonably reflects the opex criteria.

Our draft decision is to include our alternative total opex forecast of $633.0 million ($2022–23) in ElectraNet's allowed revenue for the 2023–28 regulatory control period. This is $8.8 million (or 1.4%) lower than ElectraNet's total opex forecast of $641.8 million ($2022–23). We are satisfied our alternative estimate of total forecast opex for ElectraNet reasonably reflects the opex criteria.

Table 6.2 sets out ElectraNet's proposal, its updated proposal, our alternative estimate that is the basis for the draft decision and key differences (to the updated proposal).

Table 6.2 Comparison of ElectraNet's proposals and our draft decision on opex ($million, 2022–23)

	ElectraNet's initial proposal	ElectraNet's updated proposal	AER's draft decision	Difference
Base (reported opex in 2020–21)	524.2	533.4	568.8	35.4
Base year opex adjustment	−1.9	−5.4	−4.8	0.5
2020–21 to 2021–23 increment	2.8	2.8	3.0	0.2
Remove category specific forecasts	−49.2	−41.4	−53.7	−12.3
Trend - Output growth	25.2	27.9	29.3	1.4
Trend - Price growth	5.1	5.3	10.8	5.5
Trend Productivity growth	−4.3	−4.4	−7.8	−3.4
Step changes	115.8	114.7	77.9	−36.8
Total opex excluding debt raising costs	617.8	633.1	623.6	−9.5
Debt raising costs	8.7	8.7	9.5	0.7
Total including debt raising costs	**626.5**	**641.8**	**633.2**	**−8.8**
Percentage difference to (updated) proposal				**−1.4%**

Source: ElectraNet, *2024–28 Revenue proposal –ENET022 - ElectraNet - Opex Forecast 2024-28*, 31 January 2022; ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated)*, 18 May 2022; AER analysis.

Note: Numbers may not add up to totals due to rounding. Differences of '0.0' and '–0.0' represent small variances and '–' represents no variance.

The main drivers for the differences are set out in section 6.1 and we discuss the components of our alternative estimate below. Full details of our alternative estimate are set out in our opex model, which is available 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 ElectraNet would need for the safe and reliable provision of services over the 2023–28 regulatory control period.

6.4.1.1 Base year

We have relied on ElectraNet's proposed base year, 2020–21, for our alternative estimate of total forecast opex over the 2023–28 regulatory control period. In proposing 2020–21 as its base year, ElectraNet stated that it is the most recent year for which audited accounts are available.[23] ElectraNet also stated that opex in 2020–21 was lower than the previous year and also lower than forecast opex for 2021–22.[24]

We consider 2020–21 to be an appropriate base year as it is based on actual opex. While there will be year to year fluctuations in reported opex over the current regulatory period, due

[23] ElectraNet, *2024–2028 Revenue proposal - Overview*, January 2022, p.42.

[24] ElectraNet, *2024–2028 Revenue proposal - Overview*, January 2022, p.42.

to the interaction with the EBSS, we do not have concerns with the choice of base year, provided we find ElectraNet's opex in the base year to be efficient.

6.4.1.2 Efficiency of base year opex

Our standard approach for forecasting opex, as outlined in section 6.3, and in the Guideline, is to use a revealed cost approach.[25] 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.

We consider a range of information when assessing base opex efficiency. This includes ElectraNet's actual opex over time and the benchmarking analysis we undertake. Our benchmarking analysis for electricity transmission networks is limited by the small sample size of transmission businesses in the National Electricity Market (NEM), and the availability of relevant international data, 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 analysis into account but not solely relied on it in forming a view on the efficiency of ElectraNet's 2020–21 actual opex.

Analysis of revealed costs as illustrated in Figure 6.1 shows that ElectraNet overspent its allowance in the first three years of the current regulatory period (2018–2022). ElectraNet's actual opex in 2020–21 is 4.3% higher than the allowance we approved in that year.

The multilateral partial factor productivity (MPFP) benchmarking analysis over the 2006–20 period shows that ElectraNet's relative efficiency, in terms of opex MPFP, has declined over 2008–2020 but remained relatively stable between 2018 and 2020.[26] On this measure ElectraNet has performed poorly, its opex MPFP has consistently been ranked last over 2014–2020. In contrast, ElectraNet's productivity measured in terms of multilateral total factor productivity (MTFP) has ranked second over 2012–20.[27] This good performance on the MTFP measure is as result of ElectraNet's capital MPFP, which has been consistently ranked second over 2008–2020.

ElectraNet's partial performance indicator (PPI) results are mixed. ElectraNet rates well in some measures, such as total cost per circuit kilometre, but poorly on other measures, such as total cost per MWh of energy transported.[28]

ElectraNet submitted that its poor performance in terms of opex MPFP is expected given the age and composition of its network and the ongoing cost of maintaining it, compared with the other transmission networks.[29] It also noted that the benchmarking analysis does not account for the growing role of transmission to provide system services, such as system strength

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25 AER, *Expenditure forecast assessment guideline - transmission,* November 2013, p. 22.

26 AER, *2021 transmission network service provider benchmarking report*, November 2021, pp. 20-22. The opex MPFP index measures the relationship between total output and one input (opex) and allows total productivity levels as well as growth rates to be compared between businesses.

27 AER, *2021 transmission network service provider benchmarking report*, November 2021, pp. 20-22.

28 AER, *2021 transmission network service provider benchmarking report*, November 2021, pp. 23-27.

29 ElectraNet, *Revenue Proposal 2024–28, Overview*, 31 January 2022, p. 18.

services, which are not accounted for in the output measures chosen for the benchmarking analysis.[30]

The fact that ElectraNet has incurred higher network support costs than the other electricity transmission providers may also explain part of its relatively poor opex MPFP performance.[31] Higher network support costs would adversely affect a network's relative opex MPFP ranking, and network support costs represent approximately 10% of ElectraNet's total opex. We will continue to monitor ElectraNet's performance once the removal of network support costs is reflected in our benchmarking analysis. ElectraNet has submitted that the network support services associated with these costs will no longer be required going forward, following the completion of the Eyre Peninsula Link.[32]

Given the above considerations (broad benchmarking results and application of EBSS), we have used ElectraNet's 2020–21 opex as the starting point for our alternative estimate of total forecast opex. ElectraNet's opex was subject to the incentives of the EBSS in the 2018–23 period, which gave it a continuous incentive to reduce its opex, including in its proposed base year. We have included a base opex of $568.8 million ($2022–23) in our alternative estimate of total forecast opex, net of movements in provisions. This compares with ElectraNet's updated proposal of $533.4 million. The difference between our base year opex and that of ElectraNet is primarily driven by our updates to actual for 2021–22 and forecast CPI for 2022–23 (see section 6.1). If our actual and forecast CPI values are applied to ElectraNet's base year opex (all else being constant), it becomes $572.9 million ($2022–23).

We did not receive any submissions from stakeholders raising issues with the choice or efficiency of ElectraNet's base year.

6.4.1.3 Adjustments to base year opex

We have adjusted base year opex by −$11.1 million ($2022–23) (or −$55.5 million over five years) to reflect:

- removal of capitalised leases, −$1.0 million or −$4.8 million over five years
- removal of estimated final year of category specific opex (network support), −$10.7 million or −$53.7 million over five years[33]
- inclusion of increase in opex between 2020–21 and 2022–23 (final year increment), $0.6 million or $3.0 million over five years.

In contrast, ElectraNet proposed a total adjustment of −$8.8 million ($2022–23) or −$43.9 million over five years. The difference between our total adjustment and that of ElectraNet is primarily driven by the difference in actual and forecast CPI applied. In addition, ElectraNet proposed two adjustments that we did not include in our alternative estimate. Furthermore,

30 ElectraNet, *Revenue Proposal 2024–28, Overview*, 31 January 2022, p. 18.

31 AER, *2020 Annual Benchmarking Report for electricity transmission networks*, November 2020, p. 49.

32 ElectraNet, *2024–2028 Revenue proposal - Overview*, January 2022, p.39.

33 This is calculated based on the final year equation as: value reported in the base year (2020–21) minus allowance in the base year plus allowance in the final year (2022–23).

we corrected an error in ElectraNet's adjustment relating to network support. Our consideration of ElectraNet's proposed adjustments is set out below.

ElectraNet proposed the following adjustments.

- Removal of capitalised leases to reflect a changed accounting treatment, which we have included in our alternative estimate
- Removal of movements in provisions, which we have also applied to our alternative estimate. We typically assess base year expenditure exclusive of any movements in provisions. This ensures we base our alternative estimate on the actual costs incurred by the business, and not provisions the business set aside for liabilities it has yet to pay out.
- Removal of category specific opex relating to network support costs.[34] ElectraNet's approach is consistent with our base-step-trend approach under which category specific opex is typically removed from base opex prior to it being rolled forward. This is because expenditure classified as category specific opex is not forecast on a revealed cost basis.
  - In estimating its final year category specific opex (network support), ElectraNet reported actual network support costs of $10.3 million ($2022–23) in the base year (2020–21).[35] This is not consistent with the network support amount ElectraNet reported in its 2020–21 regulatory accounts ($12.2 million, ($2022–23)).[36] We have relied on the value reported in ElectraNet's 2020–21 regulatory accounts.
- Inclusion of incremental opex related to the Main Grid System Strength and Project EnergyConnect augmentation projects.[37] ElectraNet stated that these costs were not incurred in the base year because the AER approved them from 2021–22 onwards as part of the opex allowance. We have not included this incremental opex in our alternative estimate to avoid double counting. We consider that additional opex costs resulting from the implementation of approved contingent projects is already accounted for in the opex allowances we relied on in forming our alternative approach. Furthermore, these additional opex costs would, in future periods, be captured under the forecast output growth component of the rate of change.

6.4.2 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.[38]

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34 ElectraNet, *2024–28 Revenue proposal –ENET022 - ElectraNet - Opex Forecast 2024–28,* 31 January 2022.

35 This is equivalent to $8.7 million ($2018) as reflected in ElectraNet's updated opex model.

36 This is equivalent to $10.6 million (nominal) as reported in ElectraNet's 2020–21 regulatory accounts.

37 ElectraNet, *2024–28 Revenue proposal –ENET022 - ElectraNet - Opex Forecast 2024–28*, 31 January 2022.

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

ElectraNet's proposed forecast rate of change is a function of the forecast change in network outputs, changes in real input costs and changes in productivity,[39] consistent with our standard approach.[40]

We have included a rate of change that increases opex, on average, by 1.4% each year in our alternative estimate. This contributes $32.3 million ($2022–23), or 5.1%, to our alternative estimate of total forecast opex of $633.0 million. This compares to ElectraNet's average annual rate of change of 1.3%.[41] Our higher alternative estimate reflects that we have included higher labour price growth forecasts after reflecting WPI forecasts from our consultant, KPMG, and applying the superannuation guarantee increases differently relative to ElectraNet's proposal.

Table 6.3 shows both ElectraNet's updated proposal, and our alternative estimate for each component of the rate of change. We set out the reasons for our forecast below.

We have not received any submissions relating to the opex rate of change.

Table 6.3 Forecast rate of change, %

	2023–24	2024–25	2025–26	2026–27	2027–28
ElectraNet's updated proposal					
Price growth	0.3	0.4	0.5	0.3	0.2
Output growth	2.6	3.7	0.0	0.0	0.1
Productivity growth	0.3	0.3	0.3	0.3	0.3
Overall rate of change	**2.6**	**3.8**	**0.2**	**0.0**	**−0.0**
AER alternative estimate					
Price growth	0.5	0.9	0.9	0.5	0.4
Output growth	2.6	3.7	0.0	0.0	0.1
Productivity growth	0.5	0.5	0.5	0.5	0.5
Overall rate of change	**2.7**	**4.1**	**0.4**	**−0.0**	**−0.1**
Overall difference	**0.0**	**0.3**	**0.2**	**–0.0**	**−0.0**

Source: ElectraNet, *2024–28 Revenue proposal –ENET022 - ElectraNet - Opex Forecast 2024-28*, 31 January 2022; ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated)*, 18 May 2022; AER analysis.

Note: Numbers may not add up to totals due to rounding. Differences of '0.0' and '–0.0' represent small variances and '–' represents no variance.

6.4.2.1 Forecast price growth

We have used a forecast average annual real price growth of 0.6 % which increases our alternative estimate of total opex by $10.8 million ($2022–23). This compares to ElectraNet's proposed average annual price growth of 0.3%.[42]

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39 ElectraNet, *Revenue Proposal 2023–28, Attachment 6: operating expenditure*, 31 January 2022, p. 19.

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

41 ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated),* 18 May 2022.

42 ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated),* 18 May 2022.

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

- to forecast labour price growth, we have used the forecast of growth in the wage price index (WPI) for the South Australia electricity, gas, water and waste services (utilities) industry. Specifically, we have used an average of forecasts from our consultant KPMG[43] and the BIS Oxford Economics forecasts submitted by ElectraNet, to which we have added the superannuation guarantee increases as relevant. In contrast, ElectraNet added superannuation guarantee increases to the BIS Oxford WPI forecast, then halved the resulting numbers – KPMG's WPI forecasts were not available prior to ElectraNet's proposal being submitted.[44]
- both we and ElectraNet applied a forecast non-labour real price growth rate of zero.[45]
- both we and ElectraNet applied benchmark input price weights of 70.4% and 29.6% for labour and non-labour, respectively.[46]

Table 6.4 compares our forecast labour price growth with ElectraNet's updated proposal.

Table 6.4 Forecast labour price growth, %

	2023–24	2024–25	2025–26	2026–27	2027–28
ElectraNet's updated proposal					
AER consultant	–	–	–	–	–
BIS Oxford Economics (including superannuation guarantee increases)	0.9	1.2	1.3	0.8	0.6
Average (incl. superannuation guarantee increases)	**0.5**	**0.6**	**0.7**	**0.4**	**0.3**
AER alternative estimate					
KPMG	0.2	1.0	0.7	0.5	0.5
BIS Oxford Economics (excluding superannuation guarantee increases)	0.4	0.7	0.8	0.8	0.6
Average, excluding superannuation guarantee increases	0.3	0.8	0.8	0.6	0.5
Superannuation guarantee increases	0.5	0.5	0.5	–	–
Average, including superannuation guarantee increases	**0.8**	**1.3**	**1.3**	**0.6**	**0.5**
Overall difference	**0.3**	**0.7**	**0.6**	**0.2**	**0.2**

Source: ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated),* 18 May 2022; KPMG, *WPI forecast report*, September 2022, p. 40; AER analysis.
Note: Numbers may not add up to totals due to rounding. Differences of '0.0' and '–0.0' represent small variances and '–' represents no variance.

43 KPMG, *WPI forecast report*, September 2022, p. 40.
44 ElectraNet, *Revenue Proposal 2023–28, Attachment 6: operating expenditure*, 31 January 2022, p. 20.
45 ElectraNet, *Revenue Proposal 2023–28, Attachment 6: operating expenditure*, 31 January 2022, p. 21.
46 ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated),* 18 May 2022.

6.4.2.2 Forecast output growth

We and ElectraNet have included forecast average annual output growth of 1.3% in our alternative opex estimate.[47] This increases our alternative estimate of total opex by $29.3 million ($2022–23), instead of $27.9 million as proposed by ElectraNet (see Figure 6.2). The increase in total opex due to output growth in our alternative estimate is higher than in ElectraNet's proposal because we have applied output growth to a higher base opex amount.

We and ElectraNet have forecast output growth by:

- forecasting the growth rates for four outputs (customer numbers, circuit line length, energy throughput, and ratcheted maximum demand)
- calculating the weighted average of output growth rates using the output weights from our opex MPFP benchmarking model (see Table 6.6).

We discuss these below.

6.4.2.2.1 Forecast growth of the individual output measures

In developing our alternative estimate, we have used the same forecasts of the individual output measures as ElectraNet used in its proposal (see Table 6.5).

Table 6.5 Forecast growth in individual output measures, %

	2023–24	2024–25	2025–26	2026–27	2027–28
Customer numbers	0.8	0.8	0.9	0.9	0.9
Circuit length	5.6	7.6	–	–	–
Ratcheted maximum demand	–	–	–	–	–
Energy throughput	−2.6	−2.7	−0.3	−0.2	−0.1

Source: ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated),* 18 May 2022; AER analysis.
Note: Numbers may not add up to totals due to rounding. Differences of '0.0' and '–0.0' represent small variances and '–' represents no variance.

We are satisfied that the above forecasts reflect a realistic expectation of the forecast growth in these output measures because they are largely consistent with forecast trends from external sources that have been previously tested and validated.

- **Customer numbers**: ElectraNet based its forecast on the aggregate number of customers forecast for SA Power Networks as set out in our final decision for the 2020–25 regulatory control period.[48]
- **Circuit length:** ElectraNet forecast circuit length to increase from 5,516 km to 6,295 km, consistent with the expected total increase in circuit line length of 779 km associated with Project EnergyConnect and Eyre Peninsula Link.[49]

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47 ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated),* 18 May 2022.
48 ElectraNet, *Revenue Proposal 2023–28, Attachment 6: operating expenditure*, 31 January 2022, p. 19.
49 ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated),* 18 May 2022.

- **Ratcheted maximum demand**: ElectraNet forecast zero growth as it did not expect maximum demand to surpass the level achieved in 2012–13. We consider this outcome reasonable as it is consistent with the central scenario in the Australian Energy Market Operator's (AEMO's) 2021 Electricity Statement of Opportunities (2021 ESOO),[50] which forecast maximum demand in South Australia to remain flat in the short term (until 2029–30).
- **Energy delivered:** ElectraNet used the forecast growth in energy delivered for the South Australian network plus net imports.[51] ElectraNet forecast a negative growth for energy delivered within South Australia in each year of the 2023–28 regulatory period, with an average annual decline of 1.2%.[52] We consider this outcome reasonable as it broadly aligns with the trend reflected in the central scenario of AEMO's 2021 ESOO.

The output weights that both we and ElectraNet have used are in Table 6.6. These are the weights we use in our economic benchmarking of transmission networks.[53]

Table 6.6 Output weights, %

Customer numbers	Circuit length	Ratcheted maximum demand	Energy delivered
7.6	52.8	24.7	14.9

Source: ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated),* 18 May 2022.

6.4.2.3 Productivity growth

We have included forecast productivity growth of 0.5% per year in our alternative estimate of opex, consistent with our 2021 Annual Benchmarking Report. This reduces our alternative estimate of total opex by $7.8 million ($2022–23).

In contrast, ElectraNet included forecast productivity growth of 0.3% per year in its opex forecast.[54] ElectraNet chose to adopt 0.3% to be consistent with our recent decisions for Powerlink and AusNet Services.[55]

We will update our productivity growth forecast for the final decision in line with our 2022 Annual Benchmarking Report, which is due to be published in November 2022.

6.4.3 Step changes

In developing our alternative estimate, we typically include step changes for cost drivers such as new regulatory obligations or efficient capex/opex trade-offs. As we explain in the Guideline, we will generally include a step change if the efficient base opex and the rate of

50 AEMO, *2021 Electricity statement of opportunities*, August 2021, p. 85.

51 ElectraNet, *Revenue Proposal 2023–28, Attachment 6: operating expenditure*, 31 January 2022, p. 19.

52 ElectraNet, *Revenue Proposal 2023–28, Attachment 6: operating expenditure*, 31 January 2022, p. 20; ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated),* 18 May 2022.

53 Economic Insights, *Economic Benchmarking Results for the Australian Energy Regulator's 2021 TNSP Annual Benchmarking Report*, 12 November 2021, p. 55.

54 ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated),* 18 May 2022.

55 ElectraNet, *Revenue Proposal 2023–28, Attachment 6: operating expenditure*, 31 January 2022, p. 21;

change in opex of an efficient service provider do not already include the proposed cost for such items.[56]

ElectraNet's updated proposal included five step changes for the 2023–28 regulatory control period at a total cost of $114.7 million ($2022–23). Table 6.7 shows ElectraNet's updated proposal along with our alternative estimate for the draft decision, which is to include step changes totalling $77.9 million ($2022–23). Our lower alternative estimate largely reflects the reductions we have applied to avoid double counting.

Table 6.7 Step changes ($million, 2022–23)

Step change	ElectraNet's proposal	AER's alternative estimate	Difference
International Financial Reporting Standards (IFRS)	46.8	45.6	–1.2
Insurance	29.1	14.3	−14.8
Cyber security	25.9	18.0	−7.9
IT cloud migration	9.0	–	−9.0
Rule changes	3.9	–	−3.9
Total step changes	**114.7**	**77.9**	**−36.8**

Source: ElectraNet, *2024–28 Revenue proposal –ENET022 - ElectraNet - Opex Forecast 2024–28*, 31 January 2022; ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated),* 18 May 2022; AER analysis.
Note: Numbers may not add up to totals due to rounding. Differences of '0.0' and '–0.0' represent small variances and '–' represents no variance.

The following sections set out the reasons for our draft decision, including the alternative estimates we have developed.

6.4.3.1 IFRS

We have included $45.6 million ($2022–23) for the proposed IFRS step change in our alternative estimate. We consider this is an accounting change resulting in forecast expenditure that is prudent and efficient.

Table 6.8 IFRS step change ($million, 2022–23)

	2023–24	2024–25	2025–26	2026–27	2027–28	Total
ElectraNet's proposal	9.4	9.4	9.4	9.4	9.4	**46.8**
AER draft decision	12.2	10.9	7.1	9.4	6.0	**45.6**
Difference	2.8	1.5	–2.3	0.0	–3.4	–1.2

Source: ElectraNet, *ENET199 - Electranet - IR016 - response to AER information request #16,* 27 June 2022, p. 5; AER analysis.
Note: Numbers may not add up to totals due to rounding: Differences of '0.0' and '–0.0' represent small variances and '–' represents no variance.

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

ElectraNet initially proposed a $46.8 million ($2022–23) step change for the implementation of new IFRS guidance relating to the classification of costs associated with software-as-a-service (SaaS) arrangements.[57] In response to our information requests, ElectraNet subsequently reduced this step change to $45.6 million ($2022–23), removing some costs which were covered by its proposed cyber security step change.[58] SaaS costs were considered as capex in ElectraNet's 2018–23 determination. In April 2021, the International Accounting Standards Board clarified its definition of intangible assets which led to most SaaS costs no longer meeting that definition. This IFRS guidance suggested that these costs should be expensed (opex) rather than capitalised (capex).[59] ElectraNet proposed to implement the IFRS guidance change in its regulatory accounts at the start of the 2023–28 regulatory control period.[60] This approach is consistent with its treatment of leases which are to be capitalised under the AASB 16 accounting standard update.[61]

ElectraNet stated that this step change does not represent a cost increase and is the direct transfer from capex to opex of several projects originally proposed as capital projects, which no longer meet the definition of intangible assets and must be expensed.[62] It provided an independent report from KPMG which confirmed that the projects expensed in this step change conform to the latest IFRS guidance.[63] In response to our information requests ElectraNet provided the associated NPV analysis, business cases and cost breakdowns at the project level.[64]

We have reviewed ElectraNet's proposal after receiving additional information as part our information request process. We are satisfied that the increase in opex due to the proposed step change is associated with the appropriate decrease in capex, and that no costs have been double counted between this step change and other aspects of ElectraNet's proposal. We believe that the costs identified by ElectraNet in this step change fall within the relevant categories impacted by the recent IFRS accounting guidance and the reclassification of these expenses is appropriate. We consider ElectraNet's approach to maintaining the current capitalisation method for SaaS costs until the beginning of the next regulatory period to be our desired approach to all accounting changes. This approach avoids the risk of windfall gains or losses arising from efficiency incentive schemes as a result of the movement of

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57 ElectraNet, *2024–28 Revenue proposal –ENET022 - ElectraNet - Opex Forecast 2024–28,* 31 January 2022; *ElectraNet, 2024–28 Revenue proposal – Operating Expenditure Model (Updated),* 18 May 2022.

58 ElectraNet, *ENET199 - Electranet - IR014 - response to AER information request #14*, 8 May 2022, p. 5; ElectraNet, *ENET199 - Electranet - IR016 - response to AER information request #16*, 27 June 2022, p. 5.

59 IASB, *Configuration or customisation in a cloud computing arrangement (IAS Intangible Assets)*, 27 April 2022, pp. 1-2.

60 ElectraNet, *ENET229 - Electranet - IR016 - response to AER information request 16,* 27 June 2022, p 6.

61 ElectraNet, *ENET229 - Electranet - IR016 - response to AER information request 16*, 27 June 2022, p 6; AASB, *Compiled AASB Standard AASB 16 Leases*, 29 April 2022, pp 24-30.

62 ElectraNet, *ENET172 - Electranet - IR003 - response to AER information request #3*, 12 May 2022, p. 10.

63 KPMG, *Memorandum on Cloud Computing Considerations*, 11 February 2022.

64 ElectraNet, *ENET172 - Electranet - IR003 - response to AER information request #3*, 12 May 2022; ElectraNet, *ENET199 - Electranet - IR014 - response to AER information request #14*, 27 May 2022; ElectraNet*, ENET1220 - Electranet - IR014 - further response to AER information request #14*, 8 June 2022; ElectraNet, *ENET229 - Electranet - IR016 - response to AER information request #16*, 27 June 2022.

expenditure between capex and opex due to mid-period accounting changes. As such, we have included ElectraNet's reduced amount of $45.6 million for the IFRS implementation step change in our alternative estimate.

6.4.3.2 Insurance

We have included a step change of $14.3 million ($2022–23) for insurance in our alternative estimate. This is 51% lower than ElectraNet's proposal of $29.1 million.[65]

ElectraNet proposed a step change of $29.1 million ($2022–23) based on cost forecasts provided by its consultant, Marsh. The cost forecasts provided by Marsh relate to the full spectrum of ElectraNet's insurance program.[66]

We engaged Taylor Fry to assist our review of ElectraNet's proposal. Taylor Fry's key conclusion was that the forecasts provided by Marsh are directionally consistent with Taylor Fry's expectations of future premiums, given its understanding of the prevailing market conditions, and can be considered reasonable.[67]

While we accept Taylor Fry's findings, we have adjusted the proposed step change amount to avoid double counting relating to growth in the scale of ElectraNet's network and apply a different calculation method. Specifically, we have calculated the step change as the difference between the cost forecasts prepared by ElectraNet's consultant, Marsh (which we have adjusted to remove the scale factor) and the total cost of insurance estimate in the final year of the current regulatory period (2022–23). This approach ensures that the final year equation of our Base-Step-Trend approach treats all efficiency rewards and penalties in a similar manner. This is essential to ensure that the EBSS, which is intrinsically linked to our approach to forecast opex, provides a continuous incentive for ElectraNet to pursue efficiency improvements in opex and to share efficiency gains with the network users.

In contrast, ElectraNet calculated the proposed step change as the difference between the insurance costs in its base year, and the cost forecasts prepared by its consultant, Marsh,[68] which included a factor for growth in the network (scale). We consider that a step change should not include elements of growth in network scale as this is already compensated through output growth. Furthermore, ElectraNet's calculations (relative to the base year) assumed that any efficiency rewards related to this step change are treated differently from the other efficiency rewards captured by the EBSS.

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65 ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated),* 18 May 2022; (ElectraNet originally proposed the insurance step change as $30.2 million but revised this amount to $29.1 upon receipt of an updated Marsh report.)

66 Marsh, *ElectraNet Revenue Proposal Insurance Market Update and Premium Projections*, 31 January 2022.

67 Taylor Fry, *Insurance step change - Review summary – ElectraNet*, 20 June 2022, p. 3.

68 ElectraNet, *Revenue Proposal 2023–28, Attachment 6: operating expenditure*, 31 January 2022, p. 21.

Table 6.9 Insurance step change ($million, 2022–23)

	2023–24	2024–25	2025–26	2026–27	2027–28	Total
ElectraNet's proposal	5.8	5.8	5.8	5.8	5.8	29.1
AER draft decision	1.5	2.6	3.2	3.5	3.6	14.3
Difference	−4.4	−3.3	−2.6	−2.4	−2.2	−14.8

Source: ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated),* 18 May 2022; AER analysis.
Note: Numbers may not add up to totals due to rounding: Differences of '0.0' and '–0.0' represent small variances and '–' represents no variance.

6.4.3.3 Cyber security

Our draft decision is to include a step change of $18.0 million ($2022–23) for cyber security in our alternative estimate. This is $7.9 million lower than the $25.9 million ($2022–23) proposed by ElectraNet,[69] and reflects that we are not satisfied that the proposed amount is prudent and efficient.

Table 6.10 Cyber security step change ($million, 2022–23)

	2023–24	2024–25	2025–26	2026–27	2027–28	Total
ElectraNet's proposal	5.2	5.2	5.2	5.2	5.2	25.9
AER draft decision	6.8	6.8	1.1	1.1	2.2	18.0
Difference	1.6	1.6	–4.1	–4.1	–3.0	–7.9

Source: ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated),* 18 May 2022; AER analysis.
Note: Numbers may not add up to totals due to rounding: Differences of '0.0' and '–0.0' represent small variances and '–' represents no variance.

ElectraNet proposed a step change of $25.9 million ($2022–23) to uplift its cyber security maturity to implement the Australian Energy Sector Cyber Security Framework (AESCSF) to achieve Security Profile 3 (SP–3) maturity within the 2023–28 period.[70] This cyber security maturity uplift will allow ElectraNet to comply with the Security of Critical Infrastructure Act 2018 (Cwth), including the Security Legislation Amendment Critical Infrastructure Act 2021[71] and the Security Legislation Amendment (Critical Infrastructure Protection) Act 2022.[72]

The AESCSF was developed by AEMO in conjunction with industry and government stakeholders and provides a self-assessment framework for measuring cyber security maturity levels against 11 domains. These domains represent groupings of cyber security practices that cover a broad range of areas such as risk management, event and incident

69 ElectraNet, *Revenue Proposal 2023–28, Attachment 6: operating expenditure*, 31 January 2022, p. 22.

70 ElectraNet, *Revenue Proposal 2023–28, Attachment 6: operating expenditure*, 31 January 2022, p. 21.

71 Australian Government, *Security Legislation Amendment (Critical Infrastructure) Act 2021*, December 2021.

72 Australian Government, *Security Legislation Amendment (Critical Infrastructure Protection) Act 2022*, April 2022.

response and external party practices such as supply chain and external dependencies management.[73]

We agree with ElectraNet and consider it prudent for ElectraNet, as a transmission network service provider, to uplift its cyber security and achieve SP–3 maturity. This is also supported by our consultant Energy Market Consulting associates (EMCa), who provided expert advice on the assessment of this step change. EMCa notes that it is appropriate for ElectraNet to achieve an AESCSF maturity level of SP–3 based on the combination of legislation, appropriate risk management, and the urgent request of the Australian Cyber Security Centre (ACSC) to adopt an enhanced cyber security posture.[74]

In developing this step change, ElectraNet engaged Deloitte to assist its analysis of the cyber security uplift requirement, including assessing the current SP maturity against the AESCSF to estimate the resource and cost requirement to bridge the identified maturity gaps. Deloitte's analysis for ElectraNet is confidential as it is based on sensitive information relating to ElectraNet's cyber security maturity. 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.**

We assessed the information provided in ElectraNet's proposal and its response to our information requests to justify its cost of $25.9 million ($2022–23). We are not satisfied that ElectraNet's proposed cyber security expenditure is prudent and efficient. Our draft decision includes a lower step change amount of $18.0 million ($2022–23) which reflects a reduction of $7.1 million ($2020–21) for reduced resource requirements in 2023–28 period, and a $1.3 million ($2020–21) reduction for expenditure ElectraNet brought forward to the 2018–23 period.[75]

We consider ElectraNet appears to have chosen a more rigorous and hence more resource intensive approach than is likely to be efficient. In forming our decision, we have taken into consideration advice received from EMCa, who provided their expert advice based on their relevant industry experience and the information provided by ElectraNet in response to our information requests. EMCa's technical analysis identified a number of areas where the gap to SP–3 could be closed with less resources. As a result, we consider savings of around $7.1 million ($2020–21) can be achieved in relation to the cost proposed by ElectraNet to meet the new cyber security requirements.

Given the elevated and increasing cyber threat landscape, we asked ElectraNet whether it had considered accelerating its progress towards achieving higher cyber security maturity in its current 2018–23 period. Following this, ElectraNet advised that it conducted a review of the activities it considers necessary to address the most immediate risks and accordingly is advancing some activities initially scheduled to be undertaken in the 2023–28 period to the

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73 AEMO, *Australia Energy Sector Cyber Security Framework – quick reference guide*, AEMO website, accessed 26 May 2021.

74 EMCa, *ElectraNet Revenue Proposal 2023–28 Review of proposed Cyber Security and Cloud Migration opex step change: Public Version,* July 2022, p.17.

75 ElectraNet's proposal step change values were calculated in $2020–21 terms. For our draft decision, we have escalated our alternative estimate value based on the latest CPI estimates available from the ABS and RBA to bring it to $2022–23 terms as per the requirements of the opex model.

current period. The advancement of these activities account for a further $1.3 million ($2020–21) reduction to the proposed opex step change amount in our alternative estimate.

6.4.3.4 IT cloud migration

We have not included a step change for IT cloud migration in our alternative estimate of total forecast opex as we consider this program results in tangible productivity benefits which outweigh its associated costs. We consider that ElectraNet already has a financial incentive to complete the proposed IT cloud program through reduced costs and would be compensated for doing this via the normal operation of the EBSS.

Table 6.11 IT cloud migration step change ($million, 2022–23)

	2023–24	2024–25	2025–26	2026–27	2027–28	Total
ElectraNet's proposal	1.8	1.8	1.8	1.8	1.8	9.0
AER draft decision	–	–	–	–	–	–
Difference	−1.8	−1.8	−1.8	−1.8	−1.8	−9.0

Source: ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated),* 18 May 2022; AER analysis.

Note: Numbers may not add up to totals due to rounding: Differences of '0.0' and '–0.0' represent small variances and '–' represents no variance.

ElectraNet proposed a step change of $9.0 million for IT cloud migration.[76] This relates to the operating expenditure cost of migrating the majority of its business IT infrastructure from an on-premise model to a cloud hosting model – referred to as Infrastructure as a Service (IaaS). ElectraNet stated that it will incur ongoing service fees (opex) but will no longer incur the capital and maintenance cost associated with owning its own IT infrastructure.[77]

ElectraNet submitted that the cloud migration program was driven by the following three factors: Infrastructure approaching its end-of-technical life, including the Data Centre;[78] on-premise solutions no longer being available for some infrastructure;[79] and opportunities to reduce operating costs that would otherwise be incurred.[80] In response to our information requests, ElectraNet provided business cases based on the aforementioned drivers, and NPV analysis showing that it had considered several options and had chosen the most efficient option.[81]

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76 ElectraNet, *Revenue Proposal 2023–28, Attachment 6: operating expenditure*, 31 January 2022, p. 22, Table 6-10.

77 ElectraNet, *ENET172 - Electranet - IR003 - response to AER information request #3*, 12 May 2022, pp 5-6.

78 EMCa, *ElectraNet Revenue Proposal 2023–28 Review of proposed Cyber Security and Cloud Migration opex step change: Public Version,* July 2022, pp. 13-14.

79 ElectraNet, *ENET172 - ElectraNet - IR003 - response to AER information request #3*, 12 May 2022, p 5.

80 EMCa, *ElectraNet Revenue Proposal 2023–28 Review of proposed Cyber Security and Cloud Migration opex step change: Public Version,* July 2022, pp. 13-14.

81 ElectraNet, *ENET172 - Electranet - IR003 - response to AER information request #3*, 12 May 2022; ElectraNet, *ENET199 - Electranet - IR014 - response to AER information request #14*, 27 May 2022; ElectraNet, *ENET1220 - Electranet - IR014 - further response to AER information request #14*, 8 June 2022; ElectraNet, *ENET229 - Electranet - IR016 - response to AER information request 16*, 27 June 2022.

We engaged EMCa to assist us in our assessment of ElectraNet's proposed IT cloud step change. In summary:[82]

- EMCa assessment of ElectraNet's NPV analysis and business cases found that the option chosen by ElectraNet was likely the most efficient option.
- EMCa indicated that ElectraNet's chosen scope as well as its derivations of estimated costs and benefits were satisfactory.
- EMCa indicated that the costs and scope of ElectraNet's chosen option are prudent and efficient. Using ElectraNet's own analysis, EMCa confirmed that the tangible benefits ElectraNet expects to receive from undertaking the projects outweigh the associated costs, and this supports self-funding.
- Based on the above findings, EMCa recommended the AER not accept the proposed step change of $9.0 million over the 2023–28 period.

We agree with EMCa's conclusion and recommendation. While EMCa's analysis supported the prudent and efficient nature of this program, EMCa also identified that it does not meet the criteria for an opex step change as the tangible benefits outweigh the associated costs. This has confirmed ElectraNet's own findings in terms of benefits and costs associated with the proposed IT cloud migration program. As such, ElectraNet already has a financial incentive to fund the IT cloud program with its normal revenue allowance, and would be compensated for doing this via the standard operation of the EBSS. Providing further incentive to undertake a program which will already generate net tangible benefits for ElectraNet is unnecessary and stands contrary to the intention of the incentive framework. This is consistent with our view as reflected in the Explanatory Statement of the Guideline, which states:

> We will also consider whether the proposed step change is funded through other aspects of the expenditure allowance. For example, proposed step changes that improve efficiency should be funded through the costs avoided by the step change and the associated rewards from the CESS or EBSS.[83]

6.4.3.5 Rule changes

We have not included this step change in our alternative estimate of total forecast opex as we consider ElectraNet has not demonstrated the prudency or efficiency of the proposed step change. We are not satisfied the proposed rule changes costs meet the requirements of a step change.

ElectraNet proposed a step change of $3.9 million ($2022–23) for the costs associated with it undertaking additional responsibilities in planning and managing an increasingly complex electricity network.[84] ElectraNet did not provide the estimated cost build-up for the proposed step change in its initial proposal. However, in response to our request for additional

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82 EMCa, *ElectraNet Revenue Proposal 2023–28 Review of proposed Cyber Security and Cloud Migration opex step change: Public Version,* July 2022, pp. 13-14.

83 AER, *Better Regulation – Expenditure forecast expenditure guideline – Explanatory statement*, November 2013, p. 51.

84 ElectraNet, *Revenue Proposal 2023–28, Attachment 6: operating expenditure*, 31 January 2022, p. 22.

information, ElectraNet stated that the cost impacts of the rule changes step change are expected to be experienced mainly as increased staffing requirements in its network planning functions.[85] ElectraNet submitted that the total estimated increase in staffing requirement is approximately four FTE and an additional one off cost of $1 million for new specialist power system planning models.[86] ElectraNet did not submit analysis to demonstrate how these costs are recurrent or efficient, or meet the requirements of a step change.

Table 6.12 Rule changes step change ($million, 2022–23)

	2023–24	2024–25	2025–26	2026–27	2027–28	Total
ElectraNet's proposal	0.8	0.8	0.8	0.8	0.8	3.9
AER draft decision	–	–	–	–	–	–
Difference	−0.8	−0.8	−0.8	−0.8	−0.8	−3.9

Source: ElectraNet, *2024–28 Revenue proposal – Operating Expenditure Model (Updated),* 18 May 2022; AER analysis.
Note: Numbers may not add up to totals due to rounding: Differences of '0.0' and '–0.0' represent small variances and '–' represents no variance.

We have not included this step change in our alternative estimate because:

- we consider that ElectraNet has not demonstrated that rule changes costs have caused a significant increase to its BAU costs. This is evidenced through ElectraNet's estimate of these costs which make up only 0.6% of its total opex forecast for the 2023–28 period. This is a relatively immaterial increase to ElectraNet's planning expenditure, which would not fundamentally change ElectraNet's opex requirements.
- aside from base opex, we also consider that our output growth forecast captures costs associated with network planning activities. Planning resulting from rule changes relates to planning for expected growth in the network. We consider our standard approach to forecasting output growth will provide ElectraNet sufficient opex to undertake planning functions resulting from the rule changes stated in ElectraNet's proposal.
- we stated in the Guideline that step changes caused by incremental changes in obligations are likely to be compensated through a lower productivity estimate that accounts for high costs resulting from changed obligations.[87] We maintain this position regarding the proposed rule changes step change. Under this approach, only changes in costs that demonstrably do not reflect historic 'average' changes will be compensated as separate step changes in forecast opex.

6.4.4 Category specific forecasts

We have included only one expenditure item in our opex forecast outside of the base-step-trend approach: debt raising costs. This is consistent with ElectraNet's proposal.

85 ElectraNet, *Response to AER information request IR011*, 18 May 2022, pp. 6–7.
86 ElectraNet, *Response to AER information request IR011*, 18 May 2022, pp. 6–7.
87 AER, *Explanatory Statement - Expenditure Forecast Assessment Guideline*, 13 November 2013, p. 52.

6.4.4.1 Debt raising costs

We have included debt raising costs of $9.5 million ($2022–23) in our alternative estimate. This is $0.7 million ($2022–23) higher than the $8.7 million forecast ($2022–23) proposed by ElectraNet.

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.

6.4.5 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.[88] Table 6.13 summarises how we have taken the opex factors into account in making our draft decision.

Table 6.13 AER consideration of opex factors

AER consideration of opex factors	AER 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. 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 ElectraNet's 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 ElectraNet's 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.[89] We consider the Deep Dive workshop ElectraNet conducted with members of the Consumer Advisory Panel (CAP) members covered a number of areas related to opex including ElectraNet's productivity performance and some of the proposed step changes. CCP25 welcomed ElectraNet's transparency and accountability in engaging with CAP (e.g., ElectraNet published the Consumer Engagement Report as

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

89 AEMC, *Rule Determination National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012*, 29 November 2012, pp. 101, 115.

AER consideration of opex factors	AER consideration
	part of its Draft Proposal).[90]
The relative prices of capital and operating inputs	We have had regard to multilateral total factor productivity benchmarking when deciding whether forecast opex reflects the opex criteria. Our multilateral total factor productivity analysis considers the overall efficiency of networks in the use of both capital and operating inputs with respect to the prices of capital and operating inputs.
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 ElectraNet's opex in the 2018–23 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 ElectraNet's opex for the 2023–28 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 Electricity Statement of Opportunities and consider this to be consistent with ElectraNet's forecast opex (see section 6.4.2.2.1).
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.
Any relevant project assessment conclusions report required under 5.16.4 or 5.16A.4.	We have not identified any RIT–T project that has been submitted by ElectraNet and would impact the total forecast opex. We are unaware of any RIT–T project being submitted by ElectraNet.
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 ElectraNet of any other opex factor.

Source: AER analysis.

90 CCP25, *ElectraNet - Advice to the AER on the 2023–28 Electricity Transmission Regulatory Revenue Proposal*, 11 May 2022, p. 5.

Glossary

Term	Definition
ABS	Australian Bureau of Statistics
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
Capex	Capital expenditure
CCP25	Consumer Challenge Panel (sub-panel 25)
CESS	Capital efficiency sharing scheme
CPI	Consumer Price Index
EBSS	Efficiency benefits sharing scheme
IFRS	International Financial Reporting Standards
NEL	National Electricity Law
NER	National Electricity Rules
Opex	Operating expenditure