

# Issues Paper

**ElectraNet**

**Electricity transmission revenue  
proposal**

**1 July 2023 to 30 June 2028**

**March 2022**

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# 1 Introduction

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

On 31 January 2022 we received a revenue proposal for South Australian electricity transmission network service provider ElectraNet, for the period 1 July 2023 to 30 June 2028 (2023–28 period).<sup>1</sup> Our final decision on this proposal will set the revenue allowance that forms the major component of ElectraNet’s transmission charges for the 5-year period.

However, over the 2023–28 period, there are a number of additional mechanisms under the NER that may operate to increase or decrease ElectraNet’s approved revenue in response to external drivers that materially change its efficient costs. For example, these may include:

- contingent projects that have been put forward by ElectraNet as part of its 2023–28 proposal that may be triggered
- projects defined by the Australian Energy Market Operator (AEMO) as necessary to its Integrated System Plan (ISP), and
- cost pass through events defined in the National Electricity Rules and our decision.

We have seen the effect of this during the current period. Large, ISP-driven projects, including Project Energy Connect and the Main Grid System Strength project, which were not initially included in forecast revenue for the 2018–23 period, were added following further consultation and engagement during the period. These projects have impacted pricing outcomes for consumers in the period and, as completed investments are added to ElectraNet’s regulatory asset base, are continuing to impact ElectraNet’s proposed revenue for 2023–28. We think it is important for stakeholders to be aware of these additional potential projects when considering the proposal put forward by ElectraNet.

This Issues Paper highlights some of the key elements of the proposal, and identifies issues that, on preliminary review, are likely to be the focus of our assessment.<sup>2</sup> We have set out a number of questions throughout this paper. Stakeholders can assist our process by providing their views on these or any other aspect of the proposal.

Throughout this review, we will also have the benefit of advice from our Consumer Challenge Panel (CCP25).<sup>3</sup> The expert members of CCP25 help us to make better

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<sup>1</sup> <https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/electranet-determination-2023%E2%80%9328/proposal>.

<sup>2</sup> As required under the National Electricity Rules (NER or Rules), cl. 6A.11.3(b1).

<sup>3</sup> CCP25 comprises Rob Nicholls, Elissa Freeman and Mike Swanston: <https://www.aer.gov.au/about-us/stakeholder-engagement/consumer-challenge-panel>.

regulatory decisions by providing input on issues of importance to consumers and bringing consumer perspectives to our processes.

## 1.1 How can you get involved?

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

You can contribute to our assessment by:

- Making a written submission on ElectraNet's proposal to [ElectraNet2023@aer.gov.au](mailto:ElectraNet2023@aer.gov.au), by **11 May 2022**.
- Joining us, ElectraNet and CCP25 at an online public forum on **31 March 2022**.<sup>4</sup> Details of how to register for this forum are available on our website.<sup>5</sup>

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

**Table 1 Key dates for ElectraNet's 2023–28 revenue determination**

Milestone	Date
AER publishes Issues Paper on ElectraNet's proposal	28 March 2022
AER holds public forum on Issues Paper and ElectraNet's proposal	31 March 2022
Submissions due on ElectraNet's proposal	11 May 2022
AER publishes draft decision	September 2022
AER holds public forum on draft decision (predetermination conference)	October 2022
ElectraNet submits revised proposal to AER	November 2022
Submissions due on draft decision and ElectraNet's revised proposal	January 2023
AER publishes final decision	April 2023

Note: Timelines are indicative and subject to change.

<sup>4</sup> COVID-19 continues to impact our stakeholder consultation approach and the ability of all market participants to engage. In line with our Statement of Expectations, the AER acknowledges the changing operating environment and the potential for this to impact on ElectraNet's five-year forecast. We propose to adopt a greater degree of flexibility in our approach to requesting and receiving information (from all stakeholders), as well as the way we consider the extenuating circumstances in our analysis.

<sup>5</sup> <https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/electranet-determination-2023%E2%80%9328>.

## 2 Our initial observations

ElectraNet proposes total revenue of \$1835.9 million (\$ nominal, smoothed) to be recovered from electricity consumers over the 2023–28 period. This is 12.6% higher than what we approved for the current, 2018–23, period.<sup>6</sup>

A transmission business recovers revenue from its consumers via network charges. While our decision will influence the revenue that ElectraNet can recover from consumers, it will not set transmission charges or the retail prices that end-consumers pay.

The electricity consumed by South Australian households and businesses is supplied through a network of ‘poles and wires’ divided into:

- transmission – high voltage electricity transmission networks connecting generators, distributors, and major end users.
- distribution – carrying electricity from the points of connection with the transmission network to virtually every residence and building.

Retail prices for electricity consumers in South Australia include the costs associated with operating and maintaining the transmission (11%) and distribution (37%) networks, and also costs of generation (28%), environmental schemes (10%) and costs incurred by retailers in selling electricity (14%).<sup>7</sup>

ElectraNet’s proposal goes to the transmission component of the retail bill, and the revenue allowance that ElectraNet will use to calculate transmission charges each year in accordance with its approved pricing methodology.

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

- ElectraNet’s average transmission charges would increase by 3.3% from approximately 3.2 cents per kWh in 2022–23 to approximately 3.3 cents per kWh in 2023–24.
- the average annual electricity bill for South Australian consumers would increase by 0.3% in nominal terms:
  - For residential customers, an increase of approximately \$5 in annual electricity bills in 2023–24, and of \$27 by 2027–28.

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<sup>6</sup> In real terms (\$2022–23), proposed total revenue is \$30.7 million (1.8%) higher than approved for 2018–23.

<sup>7</sup> AEMC, *Data Portal*, [Trends in SA supply chain components](#) 2021/22.

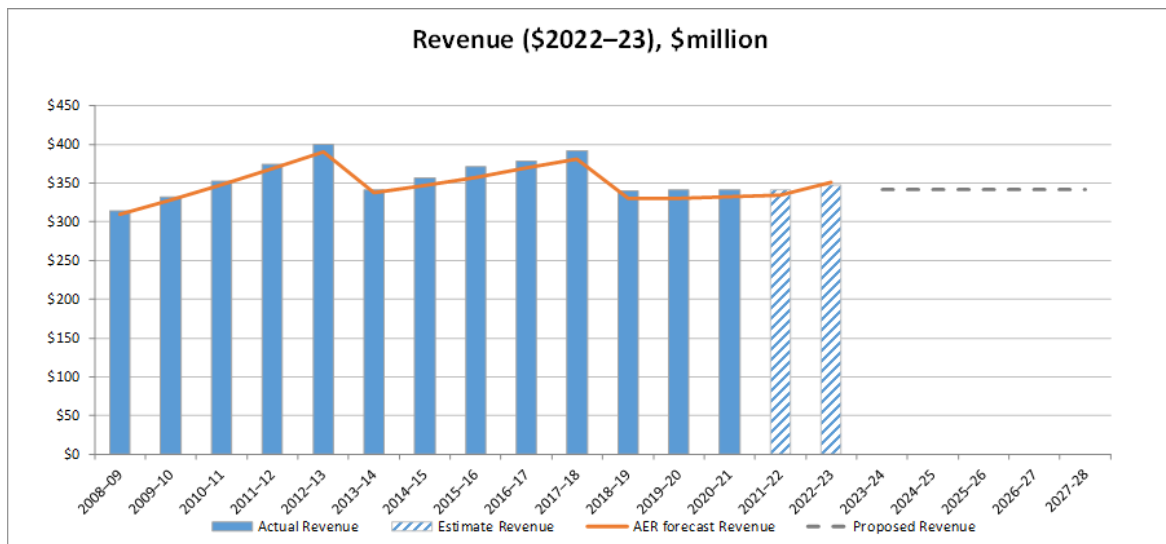
- For small business customers, an increase of approximately \$10 in annual electricity bills in 2023–24, and of \$55 by 2027–28.

## 2.1 Proposed revenue is increasing

To compare revenue from one regulatory period to the next on a like-for-like basis we make an adjustment for the impact of inflation. To do this, we use ‘real’ values based on a common year (in this case, 2022–23), which have been adjusted to remove the impact of inflation.

In real terms ElectraNet’s proposal, if accepted, would allow it to recover \$1709.4 million (\$2022–23, unsmoothed) from its consumers over the 2023–28 period. This is \$30.7 million (1.8%) higher than our decision for the 2018–23 period. Changes in ElectraNet’s regulated revenue over time are shown in Figure 1.

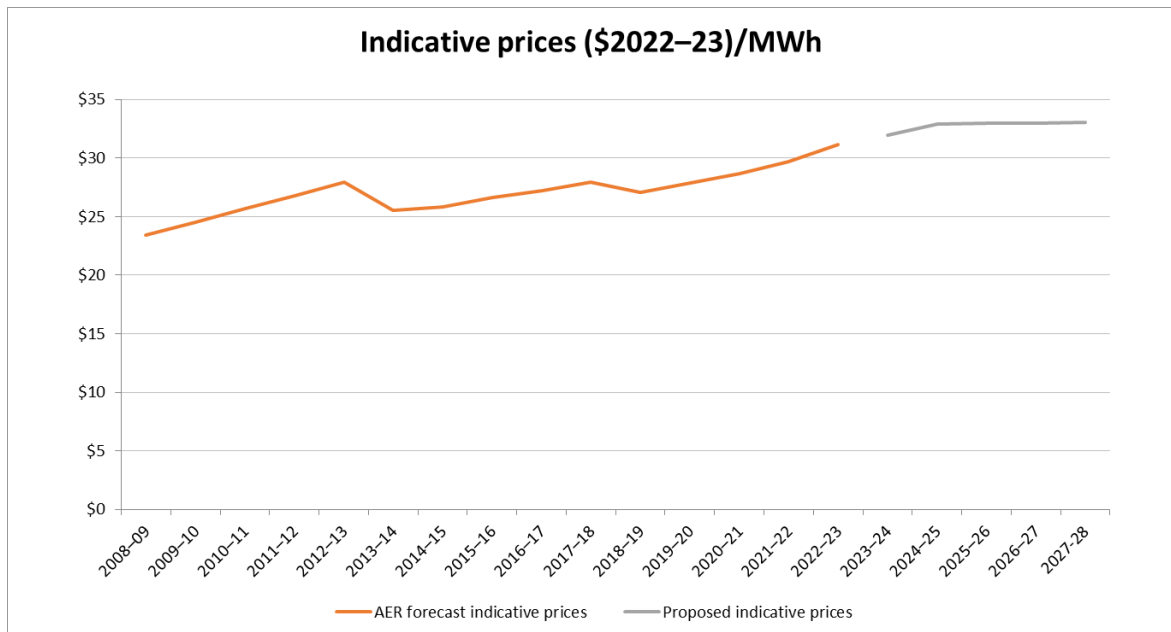
**Figure 1 Changes in regulated revenue over time (\$million, 2022–23)**



Source: AER, *Tribunal varied transmission determination* for ElectraNet for 2008–13; AER, *PTRM – Heywood interconnector contingent project* for ElectraNet for 2013–18, March 2014; AER, *PTRM – Project EnergyConnect (PEC) contingent project* for ElectraNet for 2018–23, May 2021; ElectraNet, *2023–28 Post-tax revenue model* for 2023–28, January 2022.

By 2027–28, the end of the period covered by this determination, average transmission charges are estimated to increase by 4.1% in real terms, subject to ongoing revenue adjustments and changes in customer energy consumption. Figure 2 compares this indicative price path for the 2023–28 period to the previous three control periods.

**Figure 2 Change in 2018–23 indicative prices to proposed 2023–28 indicative prices (\$2022–23) per MWh**



Source: AER, *Tribunal varied transmission determination* for ElectraNet for 2008–13; AER, *PTRM – Heywood interconnector contingent project* for ElectraNet for 2013–18, March 2014; AER, *PTRM – Project EnergyConnect (PEC) contingent project* for ElectraNet for 2018–23, May 2021 and ElectraNet, *2023–28 Post-tax revenue model*, January 2022; AEMO, *2020 Electricity Statement of Opportunities (ESOO)*.

Figure 3 highlights changes in ElectraNet’s proposal at a component, or ‘building block’, level to illustrate what is driving its proposed increase in total revenue from 2018–23 to 2023–28. We discuss these building blocks in section 4.

Much of the proposed increase in revenue relative to the current period is driven by major capital projects in the current regulatory period—Project EnergyConnect (PEC) and the Main Grid System Strength project—which have increased ElectraNet’s regulatory asset base (RAB). Current period investment in these projects has already been scrutinised through contingent project assessments and is outside the scope of the transmission determination we will make for 2023–28.

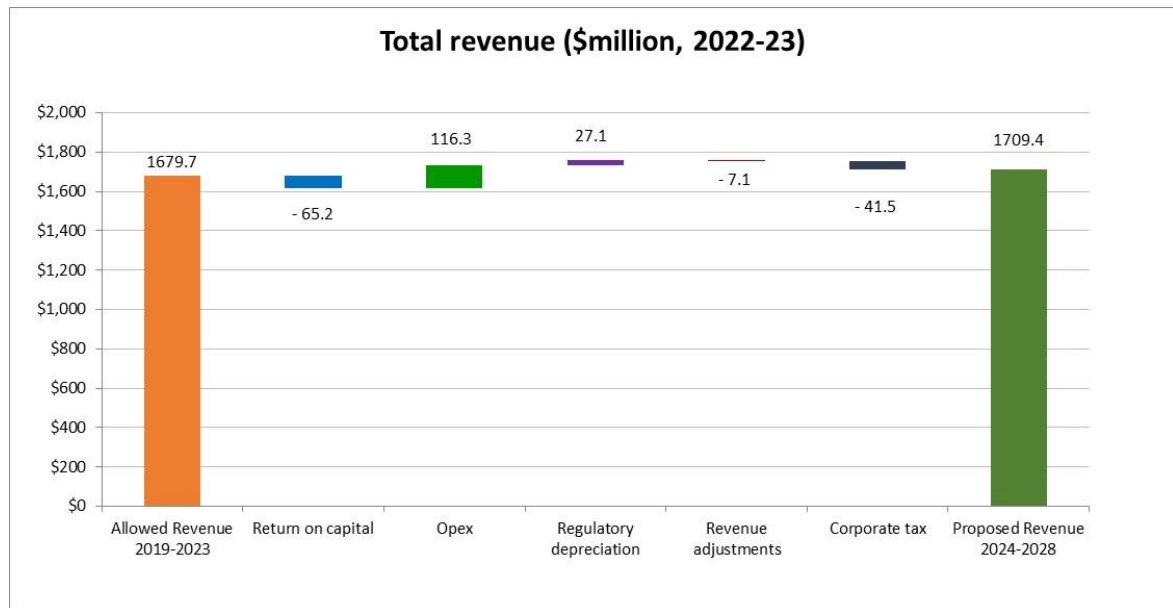
The impact of the higher RAB is offset by the lower rate of return now proposed in accordance with our 2018 Rate of Return Instrument, which results in a lower ‘return on capital’ in ElectraNet’s proposal. The rate of return calculation will be updated throughout this process, and in our final decision will be based on the most recent information available.

The proposal before us now projects slower RAB growth over the next 5 years. The smaller forecast of capital expenditure (capex) we are now assessing for 2023–28 focusses on refurbishment and replacement of aging assets and new investment in physical and cyber security, and includes little growth driven or augmentation expenditure. We are, however, asked to consider three potential contingent projects that—if approved—could trigger consideration of additional capex during the 2023–28 period.



In contrast, ElectraNet's proposed forecast of operating expenditure for 2023–28 is increasing. Some of this increase is driven by the forecast increase in circuit line length associated with the Eyre Peninsula Link and PEC. The largest driver of the increase in opex comes from a number of step changes ElectraNet has proposed in response to increased external costs, including new cyber security obligations, and expected increases in its insurance premiums.

**Figure 3 Changes in building blocks: ElectraNet's total revenue 2018–23 to forecast revenue 2023–28 (\$ million, 2022–23, unsmoothed)**



Source: AER, *PTRM — Project EnergyConnect (PEC) contingent project* for ElectraNet for 2018–23, May 2021; ElectraNet, *2023–28 Post-tax revenue model*, January 2022.

### 3 ElectraNet's consumer engagement

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

Our framework for considering consumer engagement in network revenue determinations is set out in the Better Resets Handbook.

Used in conjunction with our technical analysis, the framework for our regulatory decision making allows us to place weight on the outcomes of the engagement activities undertaken by a business to assist in providing an overall assessment of a proposal.

In November 2020, ElectraNet engaged its Consumer Advisory Panel (CAP) to develop a customer engagement approach for its 2023–28 revenue determination. The panel comprised members from Business SA, Uniting Communities, Primary Producers SA, SA Chamber of Mines and Energy, Energy Consumers Coalition of SA, South Australian Council of Social Services, Outback Communities Authority, University of Adelaide, and Energy Consumers Australia.<sup>8</sup> In July 2021, ElectraNet established a smaller Working Group of CAP members to focus on the finalisation of ElectraNet's proposal.<sup>9</sup> AER staff, and in the final stages of engagement the AER's Consumer Challenge Panel, were able to observe much of ElectraNet's engagement with its CAP and Working Group.

As a supplement to its proposal, ElectraNet has shared a report written for ElectraNet by Seed Advisory (Peter Eben) and Mark Henley (a member of ElectraNet's CAP).<sup>10</sup> This report, which has been reviewed and endorsed by the CAP, has been useful to us in understanding how ElectraNet's engagement was received, and its outcomes valued, by the participants in that process.

#### 3.1 Nature of engagement

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

Key messages we have taken from the Seed Advisory report on the nature of ElectraNet's engagement include that ElectraNet has demonstrated sincerity and a desire to engage collaboratively with consumers.<sup>11</sup> The report observed that while the process was genuinely intended to be collaborative, there were times when it fell short of this (for example, there was no deliberate co-design of the engagement process, and a missed

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<sup>8</sup> <https://www.electranet.com.au/our-approach/community/consumer-advisory-panel/>

<sup>9</sup> The Reset Working Group member are from Energy Consumers Coalition of SA, Outback Communities Authority, Uniting Communities, The University of Adelaide.

<sup>10</sup> Seed Advisory & Mark Henley, *CAP Engagement Report – Report for ElectraNet*, 28 February 2022

<sup>11</sup> Seed Advisory & Mark Henley, *CAP Engagement Report – Report for ElectraNet*, 28 February 2022, p 27.

opportunity to co-design the preliminary revenue proposal, which was developed by ElectraNet before the Working Group was first convened).<sup>12</sup>

The engagement process and its effectiveness improved over time, and a face-to-face workshop with the CAP in October 2021 provided a changing point from which engagement moved from “inform heavy” to “increased levels of involvement and genuine dialogue”.<sup>13</sup> The Seed Advisory report highlights this shift as an example of ElectraNet’s responsiveness to CAP feedback on its engagement process. ElectraNet has also identified a number of further engagement opportunities, which we consider positive steps in supporting the ability of consumers to engage in this and future processes.

## 3.2 Breadth and depth of Engagement

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

In the lead up to its proposal, ElectraNet has had ongoing discussions with its direct connect customers. ElectraNet held public forums on both its Preliminary Revenue Proposal and prior to this, on its 5-year Vision. ElectraNet also held several regional discussions, although these were hampered by a lack of attendance. ElectraNet’s main focus of engagement was its CAP which, it has been suggested, includes most of its key stakeholders. CAP members engaged with their own members and constituencies, and this informed their feedback to ElectraNet.

Key messages we have taken from the Seed Advisory report on the breadth and depth of ElectraNet’s consumer engagement include that the CAP were encouraged and able to test the assumptions and strategies underpinning the draft proposal.<sup>14</sup> The CAP noted that while they had the ability to access independent expertise and advice, there was limited time to utilise this resource and no independent advice was ever sought.<sup>15</sup> Both ElectraNet and the Seed Advisory report note challenges regarding the membership of the CAP in the lead up to submission of the proposal, including attrition throughout its engagement process. It is clear that the loss of several experienced CAP and Working Group members over the six months of engagement on the proposal left both groups somewhat depleted in the later stages of engagement, as the important shift from inform to involve was taking place.

## 3.3 Clearly Evidenced Impact

To give weight to consumer engagement, we need to see the impact of the engagement in the proposal that is ultimately put before us. We are interested to hear stakeholder views on whether the proposal before us has been driven by ElectraNet’s consumer engagement and by consumer preferences.

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<sup>12</sup> Seed Advisory & Mark Henley, *CAP Engagement Report – Report for ElectraNet*, 28 February 2022, pp 4, 26 & 30.

<sup>13</sup> Seed Advisory & Mark Henley, *CAP Engagement Report – Report for ElectraNet*, 28 February 2022, p 29.

<sup>14</sup> Seed Advisory & Mark Henley, *CAP Engagement Report – Report for ElectraNet*, 28 February 2022, p 27.

<sup>15</sup> Seed Advisory & Mark Henley, *CAP Engagement Report – Report for ElectraNet*, 28 February 2022, p 27.

The Seed Advisory report sends a clear message that Working Group members felt able to inform and influence outcomes in ElectraNet's proposal, both directly and indirectly. In arriving at its conclusions on the effectiveness of ElectraNet's consumer engagement, the Seed Advisory report points to a combination of robust, rigorous, and transparent internal process and solid CAP input, particularly through the Working Group. It also observed ElectraNet's ability, having undertaken that process, to 'consider expenditure and other issues internally as if there was a consumer voice in the room influencing their deliberations'.<sup>16</sup> This paints a picture of how ElectraNet heard and took consumer preferences into its own thinking.

Over the course of its engagement on the proposal, ElectraNet and the Working Group identified their own success criteria for the process, including that there should be no surprises in the proposal, and the Working Group would be satisfied if the AER were to accept it. In this respect we are pleased to find the conclusions and discussions in the Seed Advisory Report have confirmed that the revenue proposal does not contain any surprises. It was also regarded as 'capable of support' by the CAP, but with the caveat "[t]his is obviously pending the upcoming AER review".<sup>17</sup>

#### Questions

1. Do the key themes from ElectraNet's engagement resonate with your own preferences? Are there additional issues you would like to see influence ElectraNet's proposal and our assessment of the proposal?
2. Do you think ElectraNet has engaged meaningfully with consumers on all key elements of its 2023–28 proposal? Are there any key elements that require further engagement?
3. To what extent do you consider you were able to influence the topics engaged on by ElectraNet? Please give examples.

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<sup>16</sup> Seed Advisory & Mark Henley, *CAP Engagement Report – Report for ElectraNet*, 28 February 2022, p 30.

<sup>17</sup> Seed Advisory & Mark Henley, *CAP Engagement Report – Report for ElectraNet*, 28 February 2022, p 4.

## 4 Key elements of ElectraNet's revenue proposal

The regulatory framework governing electricity networks and our assessment of ElectraNet's proposal is set out in the National Electricity Law and Rules. Our work is guided by the National Electricity Objective (NEO) which promotes efficient investment in, and operation and use of, electricity services in the long-term interests of consumers.<sup>18</sup>

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

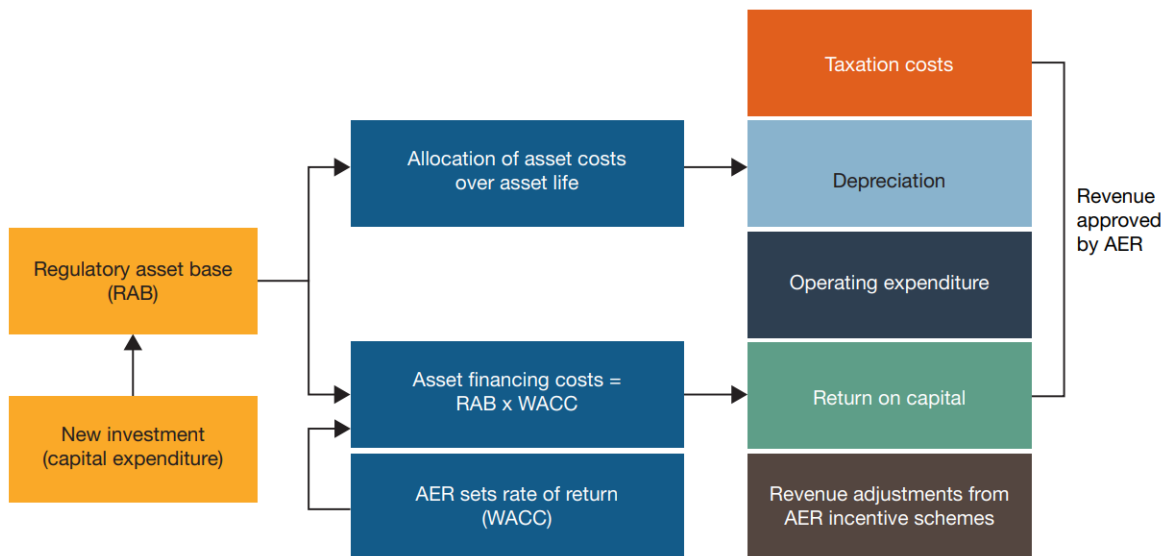
ElectraNet's proposed 2023–28 revenue reflects its forecast of the efficient cost of providing transmission network services over the 2023–28 period. The revenue proposal, and our assessment of it under the Law and Rules, are based on a 'building block' approach which looks at five cost components (see Figure 4):

- return on the regulatory asset base (RAB) – or return on capital, to compensate investors for the opportunity cost of funds invested in this business
- depreciation of the RAB – or return of capital, to return the initial investment to investors over time
- forecast opex – the operating, maintenance, and other non-capital expenses, incurred in the provision of network services
- revenue increments/decrements – resulting from the application of incentive schemes, such as the efficiency benefit sharing scheme (EBSS) for opex, capital expenditure sharing scheme (CESS) for capex and demand management innovation allowance mechanism (DMIAM) for research and development in demand management projects that have the potential to reduce long-term network costs
- estimated cost of corporate income tax.

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<sup>18</sup> National Electricity Law (NEL or Law), s. 7.

**Figure 4 The building block model to forecast network revenue**



Source: AER, *State of the Energy Market 2021*, June 2021, p. 134.

Our assessment breaks these costs down further. For example:

- Capital expenditure (capex)—the capital costs and expenditure incurred in the provision of network services—mostly relates to assets with long lives, the costs of which are recovered over several regulatory control periods. The forecast capex approved in our decisions directly affects the size of the RAB and, therefore, the revenue generated from the return on capital and depreciation building blocks. All else being equal, higher capex will lead to a higher RAB, return on capital and depreciation.
- The RAB accounts for the value of regulated assets over time. To set revenue for a new regulatory control period, we take the opening RAB value from the end of the last period and roll it forward year-by-year by indexing it for inflation, adding new capex and subtracting depreciation and other possible factors (such as disposals or consumer contributions).<sup>19</sup> This gives us a closing RAB value at the end of each year of the regulatory control period. The RAB value is used to determine the return on capital and depreciation building blocks.

## 4.1 Rate of return

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

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

<sup>19</sup> The term ‘rolled forward’ means the process of carrying over the value of the RAB from one regulatory year to the next. This is reflected in the AER’s roll forward model (RFM).

ElectraNet proposes a return on capital of \$753.2 million (\$2022–23) for the 2023–28 period, which is \$65.2 million (8.0%) lower than for the 2018–23 period. This is largely driven by a decline in the rate of return over recent years from around 5.43% to 4.29% in the first year of the 2023–28 period.

The approach that ElectraNet, and we, must take to estimate the rate of return, including the return on debt and the return on equity, as well as the value of imputation credits, is set out in our binding Rate of Return Instrument. We publish a new Rate of Return Instrument every 4 years. For the purpose of its proposal ElectraNet has applied our current, 2018 Rate of Return Instrument, as set out in Table 2. Our final decision on ElectraNet’s proposal, which will be made in April 2023, will apply the new 2022 Rate of Return Instrument we will publish later this year. Therefore, stakeholders should treat the rate of return estimates submitted by ElectraNet as indicative pending the 2022 Rate of Return Instrument.

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

**Table 2 Key rate of return values**

	ElectraNet’s proposal	2018 Instrument
Return on equity	5.00% (indicative)*	Risk free rate + 3.66%
Risk free rate	1.37% (indicative)	Based on criteria in the instrument
Market risk premium	6.1%	6.1%
Equity beta	0.6	0.6
Equity risk premium (market risk premium*equity beta)	0.6*6.1%=3.66%	0.6*6.1%=3.66%
Return on debt (nominal pre-tax)	3.82% (indicative)	Based on criteria in the instrument
Gearing	60%	60%
Gamma (value of imputation credits)	0.585	0.585

Source: ElectraNet, *ENET005 - ElectraNet - Attachment 3 - Rate of Return*, 31 January 2022; AER analysis

\* Result of rounding to 3 decimal places instead of 5 in Excel - consistent with ENET005 - ElectraNet - Attachment 3 - Rate of return, 31 January 2022.

## 4.2 Regulatory asset base and depreciation

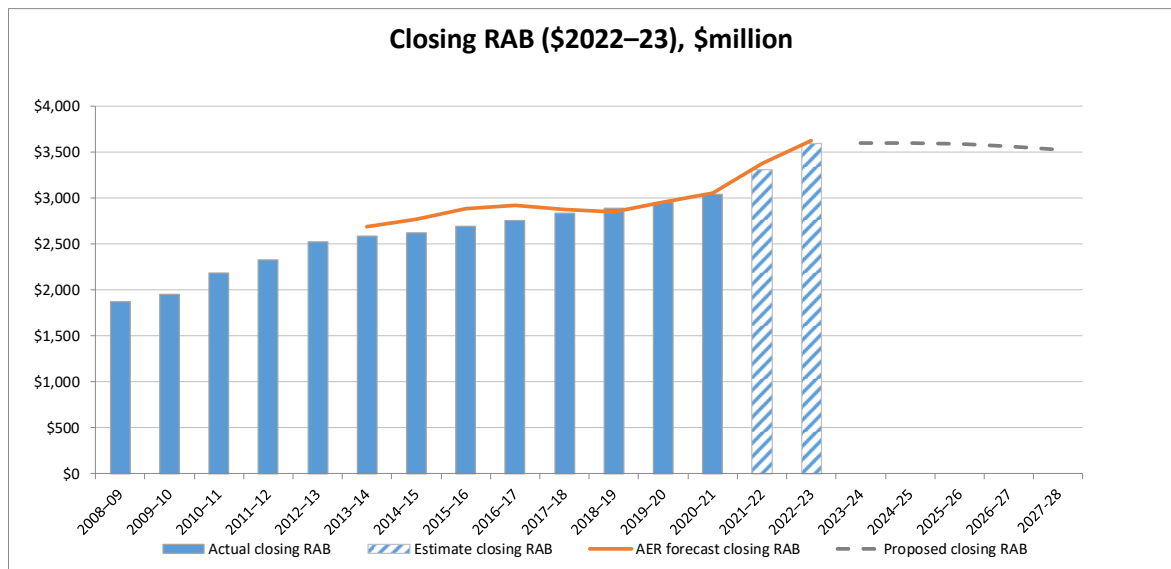
The RAB is the value of assets used by ElectraNet to provide network services. The value of the RAB substantially impacts ElectraNet’s revenue requirement, and the price consumers ultimately pay. Other things being equal, a higher RAB would increase both the return on capital and depreciation components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



ElectraNet proposes a RAB of \$3979.2 million (\$ nominal) by the end of 2023–28 period, which is \$385.5 million higher than at the end of the 2018–23 period. This follows a forecast RAB increase of \$1033.6 million (\$ nominal) over the 2018–23 period.

In real terms, removing the changing impact of inflation over time, ElectraNet’s RAB will be \$59.4 million lower by the end of 2023–28 period than at the end of the 2018–23, as shown in Figure 5. The proposed real RAB reduction over the 2023–28 period is driven by lower forecast capex and higher regulatory depreciation. As part of its RAB roll forward, ElectraNet also removed \$12.7 million of assets from the RAB because they will no longer be providing prescribed transmission services from 1 July 2023.<sup>20</sup>

**Figure 5 ElectraNet’s RAB value over time (\$ million, 2022–23)**



Source: AER, *Final decision roll forward model (RFM)* for ElectraNet for 2008–13, April 2013; AER, *Final decision roll forward model* for ElectraNet for 2013–18, April 2018; AER, *PTRM – Heywood interconnector contingent project* for ElectraNet for 2013–18, March 2014; AER, *PTRM – Project EnergyConnect (PEC) contingent project* for ElectraNet for 2018–23, May 2021; ElectraNet, *2023–28 Roll forward model* for 2018–23, January 2022; ElectraNet, *2023–28 Post-tax revenue model* for 2023–28, January 2022.

Regulatory depreciation is provided so investors recover their investment over the economic life of the asset (return of capital). ElectraNet proposes regulatory depreciation of \$340.6 million (\$2022–23) for the 2023–28 period, which is \$27.1 million (8.6%) higher than for the 2018–23 period. The higher depreciation is mainly due to the growth in the RAB, and a lower forecast inflation compared to the value approved in the 2018–23 determination.

#### Question

4. Do you have views on ElectraNet’s proposed depreciation approach, as set out in its 2023–28 proposal?

<sup>20</sup> ElectraNet, *ENET006 - ElectraNet, Attachment 2–Regulatory Asset base–Public*, January 2022, pp, 6 and 7.



## 4.3 Capital expenditure

Capital expenditure (capex) refers to the capital cost and expenditure incurred in the provision of ElectraNet's network services. Capex is added to the RAB, and so forms part of the capital costs of the building blocks used to determine total revenue.

We must accept the proposed forecast of total capex if we are satisfied it reasonably reflects the capex criteria set out in the Rules.<sup>21</sup> The capex criteria relate to the efficient costs incurred by a prudent operator in light of realistic demand forecasts and cost inputs. We must have regard to the capex factors in the Rules when making that decision.<sup>22</sup>

### 4.3.1 How we assess capex

We assess forecast capex proposals through a combination of top-down and bottom-up assessments. Our focus is typically on determining the prudent and efficient level of forecast capex in aggregate. In undertaking a bottom-up assessment, we undertake a project level assessment of the need for the expenditure, and the efficiency of the proposed projects and related expenditure to meet any justified expenditure need. This is likely to include consideration of the timing, scope, scale, and level of expenditure associated with proposed projects.

If we are satisfied the service provider's proposal reasonably reflects the capex criteria, we accept it. If we are not satisfied, the Rules require us to put in its place a substitute estimate which we are satisfied reasonably reflects the capex criteria taking into account the capex factors.<sup>23</sup>

The assessment techniques that we may adopt to assess ElectraNet's forecasts of total capex are outlined in our expenditure forecast assessment guideline.<sup>24</sup> We note that unlike our assessment for opex, past actual capex for transmission network service providers may not be an appropriate starting point given it is largely non-recurrent and hence 'lumpier', and so past expenditures or work volumes may not be indicative of future volumes. Further, transmission networks tend to propose smaller volumes of large, high-cost projects which we may need to consider on a case-by-case basis.

### 4.3.2 ElectraNet's capex proposal

ElectraNet proposes forecast capex of \$696 million (\$2022–23) for the 2023–28 period.<sup>25</sup> This represents a 51% decrease compared to its actual/expected expenditure for the 2018–23 period.<sup>26</sup>

Figure 6 shows ElectraNet's proposed capex forecast compared to historic levels. The significant uplift in estimated capex in 2021–22 and 2022–23 arises from the inclusion of two large projects identified by AEMO in its 2018 ISP report, which were contingent projects triggered and assessed after our last decision, and after consultation and

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<sup>21</sup> NER, cl. 6A.6.7(c).

<sup>22</sup> NER, cl.6A.6.7(e).

<sup>23</sup> NER, cl.6A.13.2(b)(4).

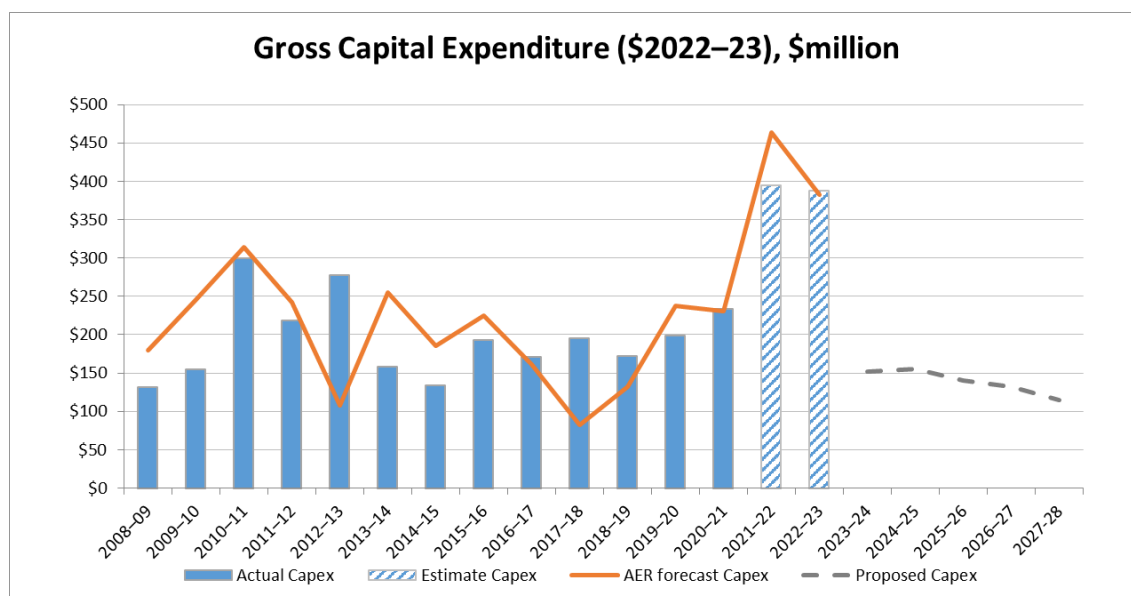
<sup>24</sup> AER, *Expenditure forecast electricity distribution guideline*, November 2013.

<sup>25</sup> ElectraNet, *ENET007 - ElectraNet - Attachment 5 - Capital expenditure*, 31 January 2022, p. 27.

<sup>26</sup> ElectraNet, *ENET007 - ElectraNet - Attachment 5 - Capital expenditure*, 31 January 2022, p. 27.

engagement added to ElectraNet’s revenue allowance during the current period.<sup>27</sup> The capex for these projects included \$166 million<sup>28</sup> for Main Grid System Strength and \$457 million<sup>29</sup> for PEC, demonstrating how ‘lumpy’ transmission expenditure can be. ElectraNet submits that its underlying capital expenditure, excluding these projects and before adjusting for the impact of new accounting standards, is forecast to be approximately 18% lower than the current period.<sup>30</sup>

**Figure 6 Comparison of past and forecast capex (\$ million, 2022–23)**



Source: AER final decision PTRM and RFM for previous regulatory periods, including updates for appeals; ElectraNet, *ENET023 - ElectraNet - PTRM 2023–28*, 31 January 2022; ElectraNet 2024-28 Reset RIN submissions; AER analysis.

<sup>27</sup> AEMO *Integrated System Plan*, July 2018, p. 83 (Group 1, SA system strength remediation) and p. 87 (Group 2, Riverlink, SA to NSW upgrade).

<sup>28</sup> AER, *Final Decision: ElectraNet Contingent Project Main Grid System Strength*, August 2019, p. 31. <https://www.aer.gov.au/system/files/AER%20-%20Final%20Decision%20-%20ElectraNet%20-%20SA%20system%20strength%20contingent%20project%20-%2016%20August%202019.pdf>

<sup>29</sup> AER, *Final Decision: ElectraNet Contingent Project Project EnergyConnect*, May 2021, p. 1. <https://www.aer.gov.au/system/files/AER%20-%20Final%20Decision%20-%20ElectraNet%20-%20Project%20EnergyConnect%20Contingent%20Project%20-%20May%202021.pdf>

<sup>30</sup> ElectraNet, *ENET007 - ElectraNet - Attachment 5 - Capital expenditure*, 31 January 2022, p. 24.

### 4.3.3 Key drivers of the capex proposal

Table 3 shows the breakdown of ElectraNet's proposed capex by driver category.

**Table 3 ElectraNet forecast capex categories**

Category	Forecast capex (\$2022–23)	Proportion of total	Change from 2018–23 (\$2022–23)	Change from 2018–23 (%)
Augmentation	59	8.5%	-348	-85.5%
Connection	0	0.0%	-3	-100.0%
Easement/land	6	0.9%	0	0.0%
Replacement	327	47.0%	-211	-39.3%
Refurbishment	67	9.6%	-25	-26.4%
Security/Compliance	168	24.1%	-100	-37.5%
Information Technology	43	6.2%	-36	-46.3%
Inventory/spares	12	1.7%	-1	-7.7%
Facilities	14	2.0%	2	16.7%
<b>Total</b>	<b>696</b>	<b>100.0%</b>	<b>-723</b>	<b>-51.0%</b>

Source: AER analysis; ElectraNet, *ENET007 - ElectraNet - Attachment 5 - Capital expenditure*, 31 January 2022, p. 27.

Note: Numbers may not add up due to rounding.

ElectraNet's capex forecast consists of:<sup>31</sup>

- **Refurbishment and replacement** – \$394 million<sup>32</sup> (57%) of forecast capex is for the replacement of deteriorating high risk assets. The replacement capex is driven by the ongoing need to manage safety, security and reliability risks associated with ageing assets. It reflects a reduced requirement for the replacement of assets following the completion of the major Eyre Peninsula line replacement in the current period. The forecast refurbishment capex reflects ongoing works to extend the useful life of ageing transmission lines and managing network safety, security, reliability, and fire start risks.
- **Security and safety** – \$168 million<sup>33</sup> (24%) of forecast capex is for the physical and cyber security of the network, to maintain public safety and security of supply, driven by changes to Commonwealth legislation and other factors. ElectraNet considers this capex will contribute to lowest long-term cost outcomes, with a reduced expenditure requirement following the installation of synchronous condensers in the current period.

<sup>31</sup> ElectraNet, *ENET007 - ElectraNet - Attachment 5 - Capital expenditure*, 31 January 2022, pp. 7–29.

<sup>32</sup> AER analysis; ElectraNet, *ENET007 - ElectraNet - Attachment 5 - Capital expenditure*, 31 January 2022, pp. 27–28.

<sup>33</sup> AER analysis; ElectraNet, *ENET007 - ElectraNet - Attachment 5 - Capital expenditure*, 31 January 2022, p. 27.

- **Augmentation** – \$59 million (8%) of forecast capex is for the completion of the PEC<sup>34</sup> project.<sup>35</sup> ElectraNet's capex forecast includes expenditure in the first two years of the period to allow for the completion of PEC. The project is now expected to be completed several months later than originally planned, which delays the final stages of construction from the current regulatory period into the next period.<sup>36</sup> There is minimal new load driven capex in the current declining demand environment.
- **Technology and systems** – \$43 million<sup>37</sup> (6%) of forecast capex is to support the ongoing uptake of renewable energy, both grid scale and distributed, and to harness new technologies.

The remaining 5% of total capex comprises minor strategic land acquisitions, inventory and spares, and facilities capex.

ElectraNet submits that the revised expenditure timing on the PEC project has allowed for reprioritisation of its capital program within the current regulatory period and avoided the need for deferral of a range of works until the forthcoming regulatory period.<sup>38</sup> It considers this has largely offset any net impact on the capex forecast in the forthcoming period from the movement of the PEC project.

In preparing its proposal, ElectraNet undertook a line-by-line management review of its forecast capex program, including the project need, scope, cost estimate and economic benefits to customers, reflecting on customer feedback received throughout its engagement. This feedback included that ElectraNet should be doing everything to keep its costs as low as possible. The resulting cancellation or deferral of some projects, and scope reductions and cost revisions to others, delivered reductions of approximately 12% to the forecast originally contemplated in its Preliminary revenue proposal.

#### Questions

5. Do you consider ElectraNet's capex proposal addresses the concerns of electricity consumers as identified in the course of its engagement on the proposal?
6. Do you consider ElectraNet's approach to forecasting replacement capex is appropriate and likely to produce a forecast of efficient replacement capex?
7. Do you consider ElectraNet's economic assessment framework and project documentation provide appropriate justification for its proposed capex projects and programs?
8. Do you consider ElectraNet's total forecast capex reasonably reflects the efficient costs of a prudent operator?

<sup>34</sup> AER, *Final Decision: ElectraNet Contingent Project - Project EnergyConnect*, May 2021, p. 1.  
<https://www.aer.gov.au/system/files/AER%20-%20Final%20Decision%20-%20ElectraNet%20-%20Project%20EnergyConnect%20Contingent%20Project%20-%20May%202021.pdf>

<sup>35</sup> AER analysis; ElectraNet, *ENET007 - ElectraNet - Attachment 5 - Capital expenditure*, 31 January 2022, p. 27.

<sup>36</sup> AER analysis; ElectraNet, *ENET007 - ElectraNet - Attachment 5 - Capital expenditure*, 31 January 2022, p. 20.

<sup>37</sup> AER analysis; ElectraNet, *ENET007 - ElectraNet - Attachment 5 - Capital expenditure*, 31 January 2022, p. 27.

<sup>38</sup> ElectraNet, *ENET007 - ElectraNet - Attachment 5 - Capital expenditure*, 31 January 2022, p. 21.

#### 4.3.4 Contingent projects

ElectraNet's proposal includes 3 contingent projects with a total indicative cost of \$180-\$360 million (\$ nominal):

- **Interconnector Upgrade** – \$100-\$150 million to increase in inter-regional transfer capacity through such measures as control schemes and/or frequency response capability.
- **Eyre Peninsula Upgrade** – \$50-\$150 million to upgrade of the northern section of the Eyre Peninsula line from 132 kV to 275 kV to serve higher loads, which is accommodated in the design and/or augmentation of power transfer capacity between Davenport and Cultana.

ElectraNet's revenue determination for the 2018–23 period included \$74 million in capex for the refurbishment of the existing Eyre Peninsula transmission line. This was the minimum investment required to address the condition of the line and maintain the current reliability and security of supply. In addition to the ex-ante forecast to address the condition of the Eyre Peninsula line, we approved a contingent project for further reinforcement. That contingent project was triggered during the current period, and on 28 September 2020, we approved ElectraNet's Eyre Peninsula reinforcement contingent project for the installation of a new:<sup>39</sup>

- double-circuit line from Cultana to Yadnarie that is initially energised at 132 kV, but capable of being operated at 275 kV in the future if required, and
- 132 kV double-circuit line from Yadnarie to Port Lincoln.

The contingent project now proposed for the 2023–28 period would allow for a further upgrade of the northern section of the Eyre Peninsula line, from 132 kV to 275 kV, based on possible customer connections and higher loads occurring on this line.

- **Power Quality Management** – \$30-\$60 million to install equipment to maintain power quality standards across the transmission network in relation to voltage harmonic requirements.

In this determination, we will assess whether ElectraNet's proposed trigger events for these new contingent projects are appropriate. We may amend the wording of trigger events, if necessary, to ensure consistency across our determinations.

Additional actionable ISP projects or system strength projects may arise during the regulatory period as part of AEMO's ISP process.<sup>40</sup> While not requiring a decision from us as part of this review, these can also be classified as contingent projects under the Rules.<sup>41</sup>

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<sup>39</sup> <https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/contingent-projects/electranet-%E2%80%93-eyre-peninsula-reinforcement-contingent-project>

<sup>40</sup> The 2022 ISP is currently being consulted on, with the final ISP due to be released in June 2022. <https://aemo.com.au/consultations/current-and-closed-consultations/2022-draft-isp-consultation>. This may include 'actionable ISP' projects requiring future consideration.

<sup>41</sup> A contingent project is either proposed by the network service providers and determined by us to be included in the revenue determination (NER, cl. 6A.8.A1(a)) and/or actionable ISP projects for which the trigger event under clause 5.16A.5 of the NER has occurred (NER, cl. 6A.8.A1(b)).

Our determination will not include pre-approved capex for any contingent projects. If, during the 2023–28 period, ElectraNet considers an approved contingent project is ‘triggered’, a second assessment and consultation process will commence and it is at that point that ElectraNet will be required to demonstrate that the trigger has been met, that the cost implications of the project are material, and that its related expenditure (capex and opex) is prudent, efficient and in accordance with expenditure requirements under the Rules.

#### Question

9. Do you consider ElectraNet’s proposed contingent projects should be included as contingent projects for the 2023–28 period? Are the proposed project triggers appropriate?

## 4.4 Operating expenditure

Operating expenditure (opex) refers to the operating, maintenance and other non-capital expenditure incurred in the provision of network services. It includes labour costs and other non-capital costs that a prudent service provider is likely to require for the efficient operation of its network. Forecast opex is one of the ‘building blocks’ used to determine ElectraNet’s total revenue requirement.

We must accept a service providers’ forecast of total opex if we are satisfied it reasonably reflects the opex criteria.<sup>42</sup> The opex criteria relate to the efficient costs incurred by a prudent operator in light of realistic expectations of the demand forecast and cost inputs. We must have regard to the opex factors when assessing the service provider’s forecast opex.<sup>43</sup>

If we are not satisfied the opex proposal reasonably reflects the opex criteria, we must not accept it.<sup>44</sup> We must estimate the total required opex that, in our view, reasonably reflects the opex criteria taking into account the opex factors.

### 4.4.1 How we assess opex

We have outlined our approach to assessing forecasts of total opex in our expenditure forecast assessment guideline.<sup>45</sup>

Our approach is to compare the service provider’s total forecast opex with an alternative estimate that we develop and that reasonably reflects the opex criteria.<sup>46</sup> By doing this, we form a view on whether we are satisfied that the service provider’s proposed total forecast opex reasonably reflects the opex criteria. If we conclude the proposal does not reasonably reflect the opex criteria, we use our estimate to develop a substitute forecast.

Our estimate is unlikely to exactly match the service provider’s forecast because it may not adopt the same forecasting method. However, if the service provider’s inputs and

<sup>42</sup> NER, cl. 6A.6.6(c).

<sup>43</sup> NER, cl. 6A.6.6(e).

<sup>44</sup> NER, cl. 6A.6.6(d).

<sup>45</sup> AER, *Expenditure forecast assessment guideline*, November 2013.

<sup>46</sup> AER, *Expenditure forecast assessment guideline*, November 2013.

assumptions are reasonable, its method should produce a forecast consistent with our estimate.

If a service provider's total forecast opex is materially different to our estimate and we find no satisfactory explanation for this difference, we may form the view that the service provider's forecast does not reasonably reflect the opex criteria. Conversely, if our estimate demonstrates that the service provider's forecast reasonably reflects the opex criteria, we will accept the forecast.<sup>47</sup>

#### 4.4.2 ElectraNet's opex proposal

ElectraNet has proposed total opex of \$626.6 million (\$2022–23). This is

- \$93.9 million (17.6%) higher than ElectraNet's actual and estimated opex over the 2018–23 regulatory control period.
- \$116.8 million (22.9%) higher than the opex forecast we approved for the 2018–23 regulatory control period.

ElectraNet's proposal highlights its reconsideration of several issues relating to its opex forecasts as a result of its consumer engagement. ElectraNet has noted that while opportunities to reduce opex were explored during engagement, these were perhaps more limited than those considered as part of its capex forecasting. For example, it reviewed risk sharing between customers and the business in areas such as insurance and cyber security, and options for cost pass-throughs. While it concluded that the majority of these costs cannot be avoided, this process did lead to some changes to its proposal in the form of reduced step changes, and additional context around its opex benchmarking performance.

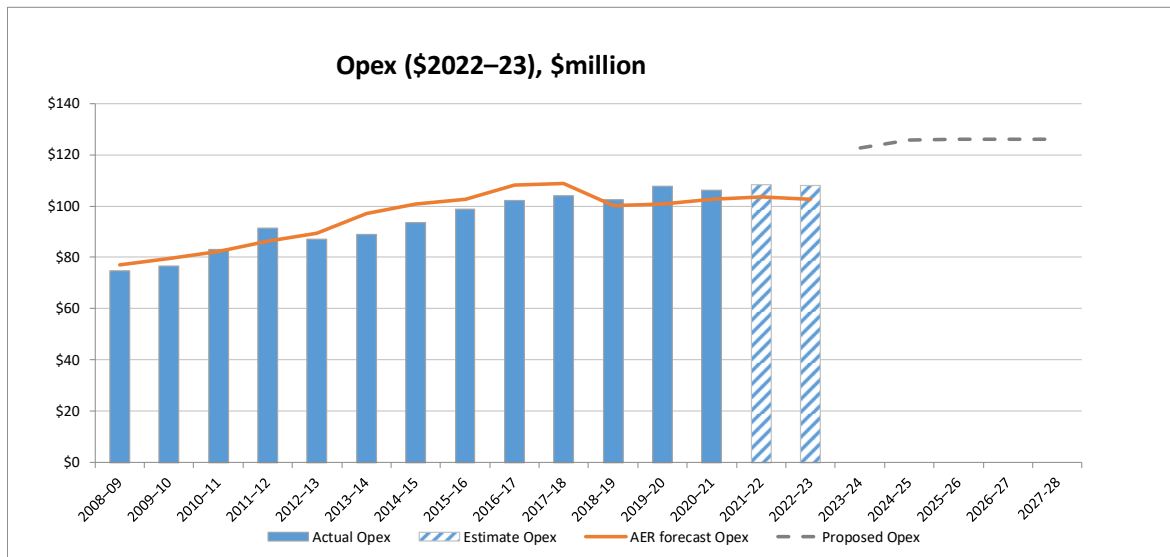
Figure 7 shows the trend in ElectraNet's total opex over time.

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<sup>47</sup> NER, cl. 6A.6.6(c).



**Figure 7 ElectraNet's opex over time (\$ million, 2022–23)**



Source: ElectraNet Economic benchmarking – Regulatory Information Notice response 2006–20; AER final decision PTRM 2008–13; AER final decision 2013–18 PTRM; AER final decision 2018–23 PTRM and opex model; ElectraNet, Regulatory proposal 2023–28, 31 January 2022; AER analysis

#### 4.4.3 Key drivers of the opex proposal

ElectraNet used a base-step-trend approach to forecast opex. This is broadly consistent with our approach to assessing opex, as outlined in our expenditure forecast assessment guideline.

ElectraNet used opex in 2020–21 as the base from which to forecast (\$524.2 million (\$2022–23)). It then:

- adjusted base opex by:
  - removing \$1.9 million (\$2022–23) from base opex for certain ‘non-recurrent’ costs. While this resulted in a net reduction it did include the addition of some costs that ElectraNet did not describe in its revenue proposal
  - adding \$2.8 million (\$2022–23) to reflect the change in opex between 2020–21 and 2022–23 using the approach outlined in the expenditure forecast assessment guideline
  - removing \$49.2 million of network support costs ElectraNet considers will no longer be needed following completion of the Eyre Peninsula Link.
- proposed applied a rate of change comprised of:
  - output growth (\$25.2 million), largely driven by the forecast increase in circuit line length associated with the Eyre Peninsula Link and PEC. ElectraNet used the output measures and weights from our 2020 Economic Benchmarking Report,<sup>48</sup> consistent with our standard approach. We intend to undertake an independent review of the output weights for the 2022 Annual Benchmarking Report. We

<sup>48</sup> AER, *Annual Benchmarking Report – Electricity transmission network service providers*, November 2021, pp. 4–5.



updated the output weights in our 2020 annual benchmarking report following the correction of an error in our multilateral total factor productivity benchmarking. This increased the weight to circuit length and reduced the weight to customer numbers. Following this correction stakeholders have suggested an independent review of the output weights, given that we have not reviewed the materiality of these changes and the approach to determining these weights since 2014.

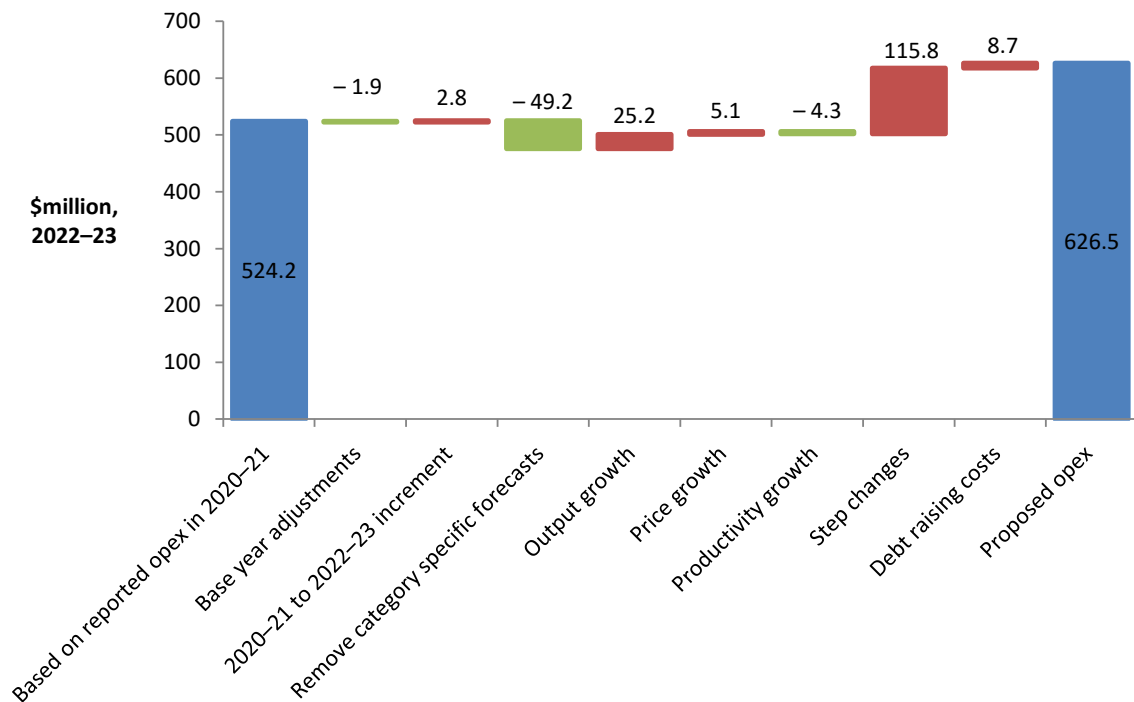
- real price growth (\$5.1 million), based on half the WPI growth forecast by BIS Oxford Economics (for the purposes of its proposal ElectraNet has assumed our own consultant's WPI growth forecasts, which we typically average against those provided on behalf of a business, would be zero)
- productivity growth (–\$4.3 million) of 0.3% per year. This is the growth rate from our 2020 Annual benchmarking report, which is less than the 0.5% in our more recent 2021 Annual benchmarking analysis (published in November 2021).<sup>49</sup>
- added five step changes totalling \$115.8 million for:
  - a change to the accounting treatment of intangible assets under the International Financial Reporting Standards which requires these costs to be expensed rather than capitalised (\$46.7 million)
  - increased insurance premiums (\$30.2 million)
  - additional cyber security costs to comply with new critical infrastructure legislation (\$25.9 million)
  - migration of some IT infrastructure to the cloud (\$9.0 million)
  - \$3.9 million for recent rule changes made in 2021
- added \$8.7 million of debt raising costs to arrive at total forecast opex.

Figure 8 shows how each of these components contributes to ElectraNet's total opex forecast.

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<sup>49</sup> Economic Insights, *Economic Benchmarking Results for the Australian Energy Regulator's 2021 TNSP Annual Benchmarking Report*, November 2021, p. 60.

**Figure 8 Breakdown of ElectraNet's opex forecast (\$ million, \$2022–23)**



Source: ElectraNet, *ENET022 - ElectraNet - Opex forecast 2024–28*, 31 January 2022; AER analysis.

ElectraNet has also signalled potential, additional opex items that it has not included in its opex forecast at this stage but may seek to add:

- **Network support** – ElectraNet stated that it is currently working to respond to a shortfall in fast frequency response services in South Australia declared by AEMO. ElectraNet indicated that it would include these additional costs in its proposed network support allowance in its revised revenue proposal.
- **AEMO participant fees** – ElectraNet noted that a rule change has been submitted seeking to clarify the ability of TNSPs to recover new AEMO participant fees outside of their maximum allowed revenue. ElectraNet stated that if this rule change is unsuccessful or delayed, its revised proposal may include additional opex to recover these costs.

Based on our preliminary review of ElectraNet's proposed forecast opex, key issues that we will need to consider are:

- **The efficiency of ElectraNet's base opex:** We will use a range of techniques including benchmarking to test the efficiency of ElectraNet's proposed base opex. In our last decision, we noted that ElectraNet's opex multilateral partial factor productivity (MPFP) was relatively poor; ElectraNet ranked fifth among its peers in terms of opex MPFP. We noted at the time that this outcome might have been explained by the fact that ElectraNet had incurred higher network support costs than the other electricity

transmission providers.<sup>50</sup> Since then, ElectraNet's opex has increased and its opex productivity has declined.<sup>51</sup>

- Its proposed step changes, our assessment of which will need to verify that the forecasts are prudent and efficient, as set out in the expenditure forecast assessment guideline.<sup>52</sup> We will consider the latest advice from relevant government bodies and our treatment of similar costs from recent decisions.

#### Question

10. Do you consider ElectraNet's opex proposal addresses the concerns of electricity consumers as identified in the course of its engagement on the proposal?
11. Do you consider ElectraNet's forecast opex for the 2023–28 period reasonably reflects the efficient costs of a prudent operator?

## 4.5 Corporate income tax

The building block approach to calculating the annual revenue includes an amount for the estimated cost of corporate income tax payable by the business. We forecast tax in accordance with the requirements of the Rules.<sup>53</sup>

In December 2018, we completed a review of our regulatory tax approach.<sup>54</sup> Using the approach from our 2018 tax review and implemented in the latest version of the PTRM, ElectraNet has calculated the tax payable is zero and no tax allowance is included in ElectraNet's proposed revenue requirement for the forthcoming regulatory period.

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<sup>50</sup> AER, *Draft Decision ElectraNet Transmission Determination 2018–23 - Attachment 7 - Operating expenditure*, October 2017, p. 13.

<sup>51</sup> AER, *Annual Benchmarking Report Electricity transmission network service providers*, November 2021, p. 18; p. 21.

<sup>52</sup> AER, *Expenditure forecast assessment guideline*, November 2013, pp. 11, 24.

<sup>53</sup> NER, cl. 6A.6.4.

<sup>54</sup> AER, *Final report: Review of regulatory tax approach*, December 2018, p. 76.

## 5 Nominated cost pass through events

During the regulatory control period, a service provider can apply to us to pass material changes in its costs arising from pre-defined exogenous events through to customers, in the form of higher or lower network charges. These events are called cost pass through events.<sup>55</sup> The Rules prescribe a number of pass through events for all transmission determinations.<sup>56</sup>

Additional (nominated) pass through events may be specified in our determination.<sup>57</sup> ElectraNet has nominated six such cost pass through events. Four of these—an insurer credit risk event, insurance coverage event, natural disaster event and terrorism event—applied in the same or similar form to ElectraNet in the current period. ElectraNet has also proposed two new events that we have not considered in other determinations:

- A ‘renewable energy zone (REZ) design report event’, which would recover the cost of preparing REZ design reports in accordance with a new planning Rule that was introduced in May 2021. ElectraNet’s proposal does not include any allowance for the cost of preparing REZ design reports, as no reports are currently required in a final Integrated System Plan. However, ElectraNet considers it reasonably likely that AEMO will require one or more REZ design reports to be completed during the 2023–28 period.

ElectraNet has proposed that no materiality threshold apply to this event. However, under the NER, the AER may only determine pass through amounts in respect of an event which is a ‘positive change event’ or a ‘negative change event’, both of which incorporate a pre-defined materiality threshold.

- A ‘system strength services event’, to recover system strength service costs incurred by ElectraNet under a new rule relating to the supply, coordination, and demand for system strength services.<sup>58</sup> A key feature of this new rule is that System Strength Services will be supplied through a TNSP-led procurement of system strength.

### Question

12. Do you consider it appropriate to recover the costs of the proposed nominated cost pass through events—and in particular those covered by the two new events proposed by ElectraNet—through the pass through mechanism?

<sup>55</sup> AEMC 2012, *Cost pass through arrangements for Network Service Providers, Rule Determination*, 2 August 2012, Sydney, p. 2

<sup>56</sup> NER, cl. 6A.7.3(a1)(1)–(4) and (6)–(7): a regulatory change event, a service standard event, a tax change event, an insurance event, an inertia shortfall event, and a fault level shortfall event. Each of these prescribed events is defined in Chapter 10 (Glossary) of the NER.

<sup>57</sup> NER, cl. 6A.7.3(a1)(5).

<sup>58</sup> NER cl. 5.20C.3.

## 6 Incentive schemes and allowances to apply for 2023–28

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

In our Framework and Approach Paper for ElectraNet, we noted our intention to apply the following incentive schemes and allowances to ElectraNet in the 2023–28 period:

- **Efficiency benefit sharing scheme (EBSS):** This provides ElectraNet with a continuous incentive to pursue efficiency improvements in opex and provide for a fair sharing of these between ElectraNet and network users. Consumers benefit from improved efficiencies through lower opex in regulated revenues for future periods.
- **Capital expenditure sharing scheme (CESS):** This incentivises ElectraNet to undertake efficient capex throughout the period by rewarding efficiency gains and penalising efficiency losses, each measured by reference to the difference between forecast and actual capex. Consumers benefit from improved efficiencies through a lower RAB, which is reflected in regulated revenues for future periods.
- **Service target performance incentive scheme (STPIS):** This provides a financial incentive to ElectraNet to maintain and improve service performance. There are three STPIS components that are applicable to ElectraNet:
  - a service component, which incentivises ElectraNet to reduce the frequency of unplanned outages and the time taken to return the network to service
  - a market impact component, which incentivises ElectraNet to minimise the financial impact of outages on the dispatch of generation
  - a network capability component, which incentivises ElectraNet to identify transmission network limits and increase capability by undertaking projects with a capital cost of less than \$6 million and which are likely to result in a material benefit.
- **Demand management innovation allowance mechanism (DMIAM).** This funds ElectraNet for research and development in demand management projects that have the potential to reduce long-term network costs. Projects to be funded under the DMIAM must meet approval criteria, as set out in the DMIAM instrument.

In the current period ElectraNet was subject to the CESS, EBSS and STPIS. Consistent with the positions we put forward in our Framework and Approach Paper for ElectraNet in July 2021, its proposal includes the continued application of those schemes in 2023–28.

Also consistent with the position put forward in our Framework and Approach Paper, ElectraNet has proposed the application of the DMIAM as part of its determination for 2023–28. Its proposal sets out a number of indicative examples of the types of demand management projects that it may explore through the DMIAM.<sup>59</sup> ElectraNet proposes to

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<sup>59</sup> ElectraNet, *ENET015 – ElectraNet – Attachment 13 – Demand management innovation allowance mechanism*, 31 January 2022, pp. 7-8.

work with its CAP to obtain independent assessments of projects and their eligibility to be funded through this allowance.<sup>60</sup>

**Question**

13. Do you agree that we should apply the incentive schemes as proposed by ElectraNet?

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<sup>60</sup> ElectraNet, *ENET015 - ElectraNet - Attachment 13 - Demand management innovation allowance mechanism*, 31 January 2022, p. 7.

## 7 Pricing methodology

Our transmission determination for ElectraNet must specify a pricing methodology for its prescribed transmission services.<sup>61</sup> Its role is to answer the question ‘who should pay how much’<sup>62</sup> in order for a transmission business to recover its costs.

ElectraNet has proposed several amendments to its pricing methodology:

- clarification that customers must provide notification of annual demand adjustments by 1 February each year, even if the customer’s Transmission Connection Agreement specifies a later date
- clarification that, considering the increasing prevalence of reverse flows at connection points, load is energy being taken from the transmission network
- provision for the non-locational component of prescribed TUOS to be adjusted for National Transmission Planning function fees advised by AEMO
- confirmation that the optimised replacement cost of non-prescribed transmission system assets that are designated network assets or identified user shared assets is zero
- clarification of the billing arrangements for dedicated connection assets and approach to prudent discounts.

### Questions

14. Do you consider ElectraNet’s proposed changes to its pricing methodology for the 2023–28 period are appropriate and give effect to the pricing principles for prescribed transmission services?
15. Do you have any concerns on the requirement for customers to provide notification of annual demand adjustments by 1 February each year?

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<sup>61</sup> NER, cl. 6A.2.2(4)

<sup>62</sup> AEMC, Rule determination: National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006 No. 22, 21 December 2006, p. 1.

## Summary of questions

<p>Consumer engagement approach</p> <ol style="list-style-type: none"> <li>1. Do the key themes from ElectraNet's engagement resonate with your own preferences? Are there additional issues you would like to see influence ElectraNet's proposal and our assessment of the proposal?</li> <li>2. Do you think ElectraNet has engaged meaningfully with consumers on all key elements of its 2023–28 proposal? Are there any key elements that require further engagement?</li> <li>3. To what extent do you consider you were able to influence the topics engaged on by ElectraNet? Please give examples.</li> </ol>
<p>Regulatory asset base and depreciation</p> <ol style="list-style-type: none"> <li>4. Do you have views on ElectraNet's proposed depreciation approach, as set out in its 2023–28 proposal?</li> </ol>
<p>Capital expenditure</p> <ol style="list-style-type: none"> <li>5. Do you consider ElectraNet's capex proposal addresses the concerns of electricity consumers as identified in the course of its engagement on the proposal?</li> <li>6. Do you consider ElectraNet's approach to forecasting replacement capex is appropriate and likely to produce a forecast of efficient replacement capex?</li> <li>7. Do you consider ElectraNet's economic assessment framework and project documentation provide appropriate justification for its proposed capex projects and programs?</li> <li>8. Do you consider ElectraNet's total forecast capex reasonably reflects the efficient costs of a prudent operator?</li> <li>9. Do you consider ElectraNet's proposed contingent projects should be included as contingent projects for the 2023–28 period? Are the proposed project triggers appropriate?</li> </ol>
<p>Operating expenditure</p> <ol style="list-style-type: none"> <li>10. Do you consider ElectraNet's opex proposal addresses the concerns of electricity consumers as identified in the course of its engagement on the proposal?</li> <li>11. Do you consider ElectraNet's forecast opex for the 2023–28 period reasonably reflects the efficient costs of a prudent operator?</li> </ol>
<p>Nominated cost pass through events</p> <ol style="list-style-type: none"> <li>12. Do you consider it appropriate to recover the costs of the proposed nominated cost pass through events—and in particular those covered by the two new events proposed by ElectraNet—through the pass through mechanism?</li> </ol>
<p>Incentive schemes and allowances</p> <ol style="list-style-type: none"> <li>13. Do you agree that we should apply the incentive schemes as proposed by ElectraNet?</li> </ol>
<p>Pricing methodology</p> <ol style="list-style-type: none"> <li>14. Do you consider ElectraNet's proposed changes to its pricing methodology for the 2023–28 period are appropriate and give effect to the pricing principles for prescribed transmission services?</li> <li>15. Do you have any concerns on the requirement for customers to provide notification of annual demand adjustments by 1 February each year?</li> </ol>



## Shortened forms

Shortened form	Extended form
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
CAP	Consumer Advisory Group (ElectraNet's)
Capex	Capital expenditure
CESS	Capital expenditure sharing scheme
DMIAM	Demand management innovation allowance mechanism
EBSS	Efficiency benefit sharing scheme
ESCO	Electricity Statement of Opportunities
ISP	Integrated System Plan
2018 Instrument	2018 Rate of Return Instrument
MAR	Maximum allowed revenue
MPFP	Multilateral partial factor productivity
MW / MWh	Megawatt / megawatt hour
NEL or Law	National Electricity Law
NEO	National Electricity Objective
NER or Rules	National Electricity Rules
Opex	Operating expenditure
PEC	Project EnergyConnect
PTRM	Post-tax revenue model
RAB	Regulatory asset base
REZ	Renewable energy zone
RFM	Roll forward model
STPIS	Service target performance incentive scheme
TNSP	Transmission network service provider