DRAFT DECISION
ElectraNet transmission determination 2018 to 2023

Overview

October 2017

AUSTRALIAN ENERGY REGULATOR

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Note

This overview forms part of the AER's draft decision on ElectraNet's revenue proposal for the 2018–23 regulatory control period. It should be read with 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 – value of imputation credits

Attachment 5 – regulatory depreciation

Attachment 6 – capital expenditure a

Attachment 7 – operating expenditure

Attachment 8 – corporate income tax

Attachment 9 – efficiency benefit sharing scheme

Attachment 10 – capital expenditure sharing scheme

Attachment 11 – service target performance incentive scheme

Attachment 12 – pricing methodology

Attachment 13 – pass through events

Attachment 14 – negotiated services

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Shortened forms

Shortened form	Extended form
AARR	aggregate annual revenue requirement
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
ARORO	allowed rate of return objective
ASRR	annual service revenue requirement
augex	augmentation expenditure
capex	capital expenditure
CCP	Consumer Challenge Panel
CCP 9	Consumer Challenge Panel, sub panel 9
CESS	capital expenditure sharing scheme
CPI	consumer price index
DRP	debt risk premium
EBSS	efficiency benefit sharing scheme
ERP	equity risk premium
MAR	maximum allowed revenue
MRP	market risk premium
NEL	national electricity law
NEM	national electricity market
NEO	national electricity objective

Shortened form	Extended form
NER	national electricity rules
NSP	network service provider
NTSC	negotiated transmission service criteria
opex	operating expenditure
PTRM	post-tax revenue model
RAB	regulatory asset base
RBA	Reserve Bank of Australia
repex	replacement expenditure
RFM	roll forward model
RIN	regulatory information notice
RIT - T	regulatory investment test for transmission
RPP	revenue and pricing principles
SLCAPM	Sharpe-Lintner capital asset pricing model
STPIS	service target performance incentive scheme
TNSP	transmission network service provider
TUoS	transmission use of system
WACC	weighted average cost of capital

1 Our draft decision

We, the Australian Energy Regulator (AER), are responsible for the economic regulation of electricity transmission and distribution systems. We work to make all Australian energy consumers better off, now and in the future. ElectraNet owns and operates the electricity transmission network in South Australia. We regulate the revenues that ElectraNet can recover from its customers.

ElectraNet submitted a revenue proposal to us on 28 March 2017. The proposal sets out the revenue ElectraNet proposes to recover from electricity consumers through transmission charges for the period 2018–23 financial years.

Our draft decision is to allow ElectraNet to recover 8.6% less revenue during the 2018–23 regulatory control period than it proposed. This will result in a modest reduction in transmission prices over the period.

ElectraNet undertook an open and collaborative consultation on its proposal in the 18 months prior to submission. This consultation included many customer working groups with customer representatives and the publication of a preliminary revenue proposal for stakeholder comment. Based on our observations, ElectraNet was receptive to feedback that it received from its customers and has taken this into account in formulating its proposal

ElectraNet's vision for South Australia's transmission network is that "it will deliver affordable and reliable power supplies that support customer choices for a sustainable future".[1] ElectraNet proposed a 0.3 per cent real decrease in revenues compared to its approved revenue we allowed in the current period. This included a real reduction in capital expenditure (capex) and operating expenditure (opex) from levels in the current period. ElectraNet also adopted our guideline approach to forecasting its return on investment. ElectraNet's proposal leads to a reduction in the value of its regulatory asset base, reversing a trend of increases since 2009. ElectraNet submits that the reductions in proposed opex, capex and asset base reflect the business's endeavour to operate its network as cost effectively as possible, to support the safe, secure and reliable and secure supply of electricity.

On 28 September 2016, South Australia experienced a total loss of electricity supply (a system black event). This occurred four months prior to when ElectraNet was due to submit its proposal and well into its consultation on the proposal. It is for this reason that we accepted a delay in the lodgement of ElectraNet's revenue proposal from 31 January to 28 March 2017. We consider that ElectraNet's proposed expenditure in response to the system black event is considered and proportionate, although we note that ElectraNet's revised proposal may contain additional expenditure in response to recent system security reviews. ElectraNet proposed the addition of targeted

[1] ElectraNet, *Revenue Proposal Overview 2019 – 2023*, 28 March 2017, p. 37.

investment to improve the security of the transmission network and increase its resilience to extreme weather events. This led to a 13 per cent increase in its proposed capex above that presented in its preliminary revenue proposal published on 6 September 2016.[2] ElectraNet also proposed five contingent projects be included in its revenue determination. Three of these are for addressing current power system security and reliability issues as well as delivering non-load driven net market benefits. The remaining two projects are for reinforcing the relevant parts of ElectraNet's transmission network under specific load driven growth scenarios.

Having assessed ElectraNet's revenue proposal against the NER and our guidelines our draft decision is to accept nearly all parts of its proposal including the capex and opex forecasts. Our draft decision is that ElectraNet can recover $1588.4 million ($nominal, smoothed) from consumers over the 2018–23 regulatory control period. This is an 8.6 per cent or $149.8 million ($nominal) reduction from ElectraNet's proposed revenue allowance of $1738.2 million ($nominal). The revenue allowance includes the measures that ElectraNet has proposed in response to the system black event.

We have made adjustments to ElectraNet's proposed rate of inflation and value of imputation credits (gamma) bringing them in line with our current approach to forecasting inflation and gamma. However, we are currently reviewing the regulatory treatment of inflation[3] and intend to apply the approach to inflation that is developed through this review. We will finalise our review into inflation prior to our final decision for ElectraNet. We have also applied our current approach to calculating the value of imputation credits. This approach aligns with our approach in other recent decisions and which has been upheld by the Federal Court of Australia.[4]

1.1 Forecast revenues

Figure 1.1 compares our draft decision on ElectraNet's revenue for 2018–23 to its proposed revenue and to the revenue allowed and recovered during the two previous regulatory control periods of 2008–13 and 2013–18. ElectraNet's annual revenue increased each year during 2009–13 and then again in 2014–17 in real dollar terms. Our draft decision allows for annual revenue that is lower in real terms than at the start of the previous regulatory period and remains constant in real terms through the forthcoming period. It is expected to lead to a reduction in prices faced by consumers over the period, as explained in section 1.2.

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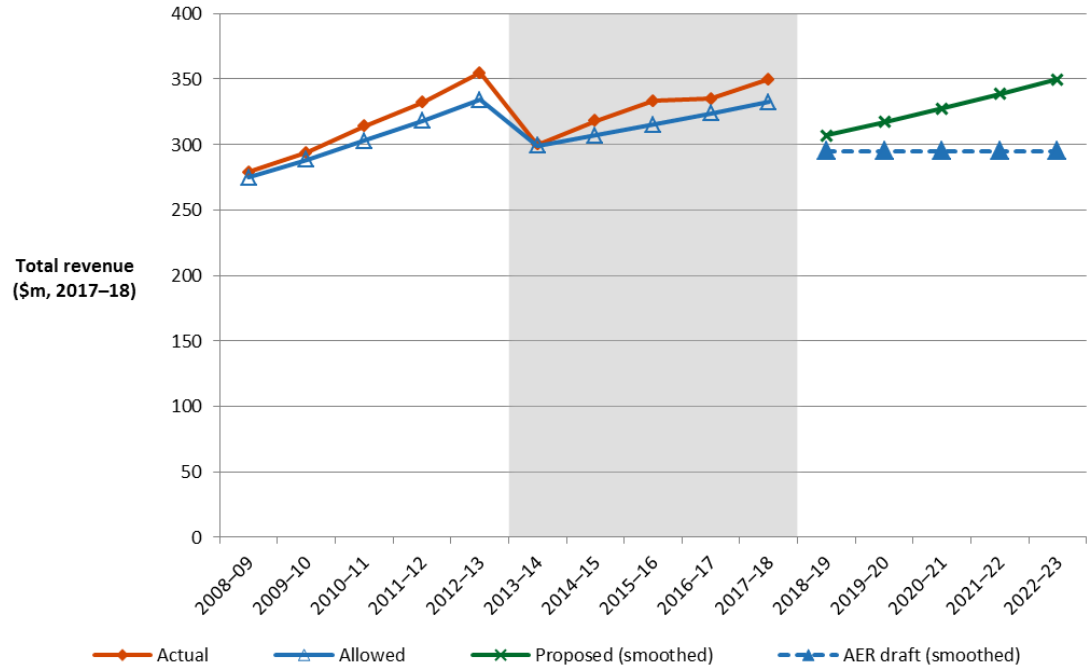
2 ElectraNet, *Revenue Proposal Overview 2019 – 2023*, 28 March 2017, p. 7.

3 More detail on this consultation is available on our website: https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/review-of-expected-inflation-2017 .

4 Federal Court of Australia, Australian Energy Regulator v Australian Competition Tribunal (No 2) [2017] FCAFC 79, May 2017, p. 216.

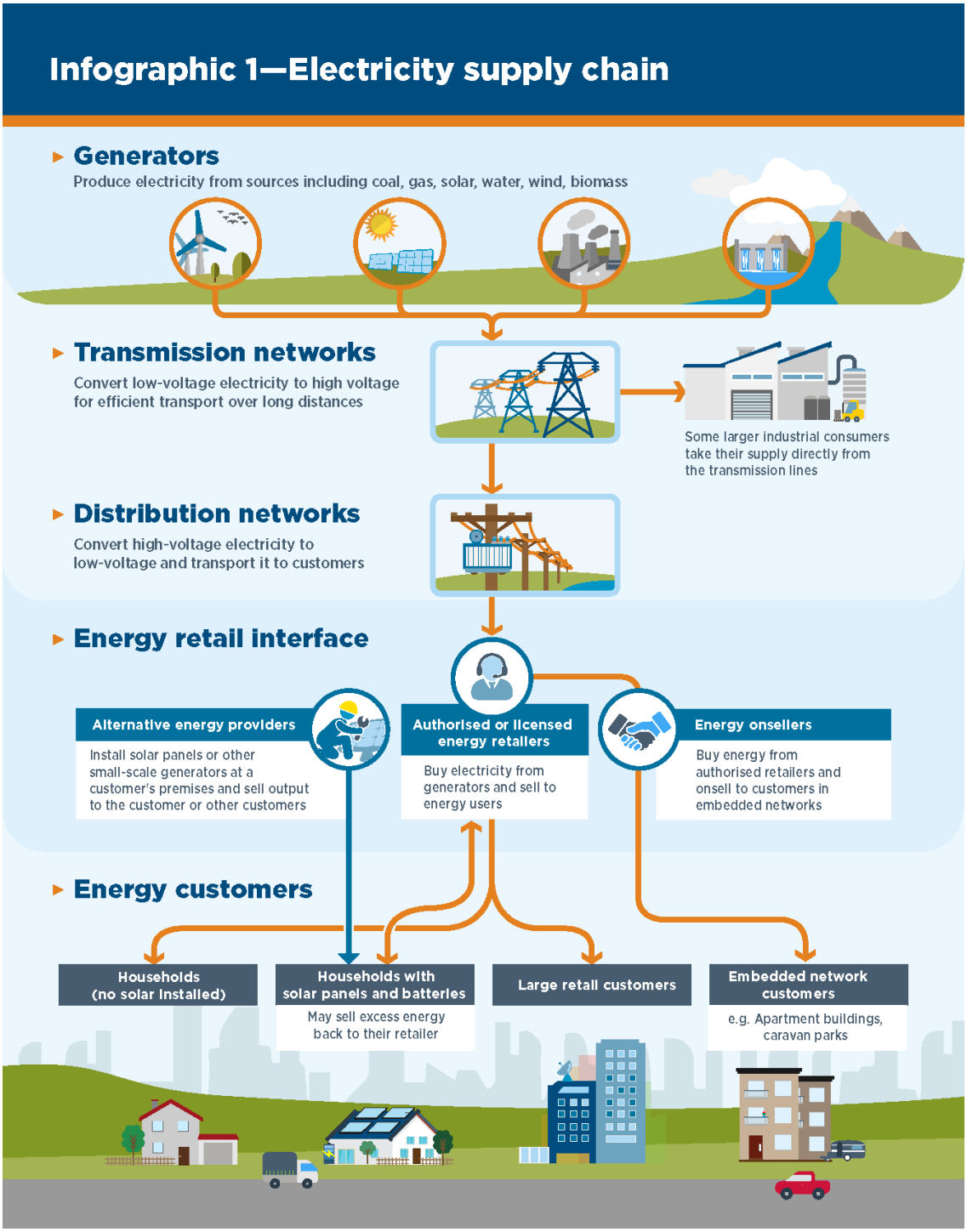
Figure 1.1 ElectraNet's past total revenue, proposed total revenue and AER draft decision total revenue allowance ($million, 2017-18)



Source: AER analysis.

1.2 Expected impact of decision on residential electricity bills

The annual electricity bill for customers in SA will reflect the combined cost of all the electricity supply chain components. Infographic 1 below illustrates the different components of the electricity supply chain.



Each of the components in the electricity supply chain can affect the electricity charges that customers receive in their bills. Our draft decision affects the transmission network charges component of the electricity bill for SA, which represent approximately 7 per cent of an average customer's annual electricity bill.[5] This small percentage largely

[5] ElectraNet, Reset RIN - Table 7.6.1, October 2015.

explains the relatively modest impact this draft decision is likely to have on average annual electricity bills.[6]

1.2.1 Transmission charges

Figure 1.2 shows our indicative estimate of the combined effect of our draft decision for ElectraNet on forecast average transmission charges in South Australia over the 2018–23 regulatory control period in nominal dollar terms. We estimate that our draft decisions will result in an average decrease in annual transmission charges over the 2018–23 regulatory control period.[7] There are several steps required to translate our revenue decisions into indicative transmission charges. [8] The average transmission charges are expected to decrease from around $27.9 per MWh in 2017–18 to $27.5 per MWh in 2022–23.

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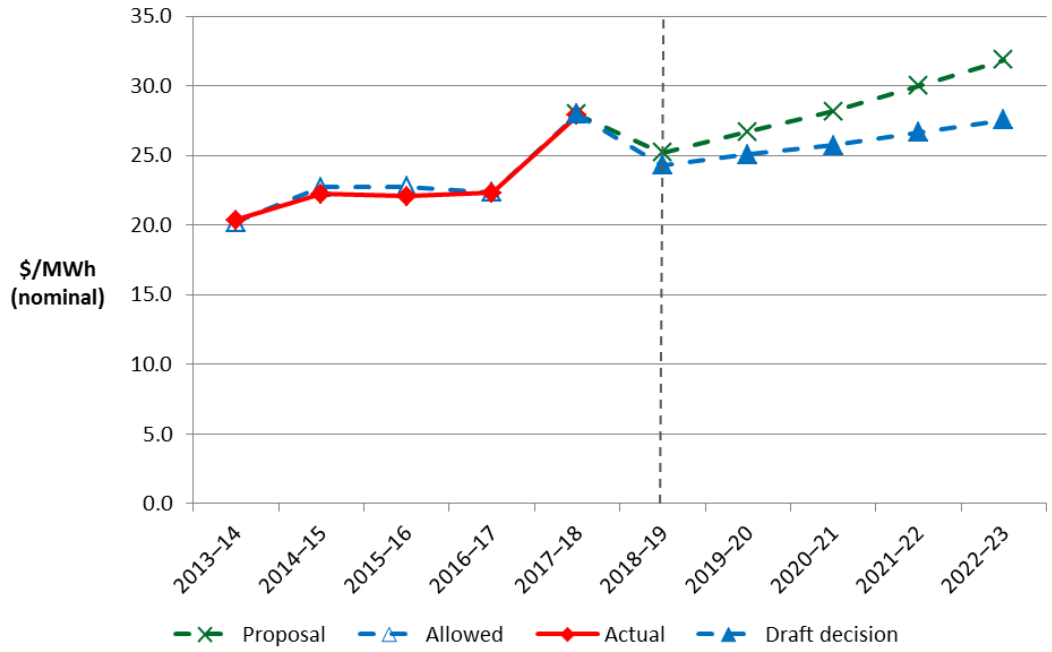
6 ElectraNet is the main transmission network service provider for South Australia. Therefore, our draft decision on ElectraNet's expected MAR will ultimately affect the annual electricity bills paid by customers in South Australia. In addition to ElectraNet's network, Murraylink operates a transmission network linking Victoria and South Australia, which is a small part of the transmission networks in these states. ElectraNet, as coordinating network service provider for South Australia, takes the portion of Murraylink's expected MAR for developing the applicable transmission charges to apply to customers. Based on Murraylink's current pricing methodology, 45 per cent of its regulated revenue will be recovered through transmission charges from South Australian customers. We are currently assessing Murraylink's revenue proposal for the 2018–23 regulatory control period, which coincides with ElectraNet's period. Our draft decision for Murraylink was published on 28 September 2017. See: https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/murraylink-determination-2018-23

7 We estimate the indicative effect of our draft decision on forecast average transmission charges in South Australia by 1) taking the sum of ElectraNet's annual expected MAR determined in this draft decision and Murraylink's annual expected MAR apportioned to South Australia, and 2) dividing it by the forecast annual energy delivered in South Australia published by AEMO. Reference: AEMO, *National Electricity and Gas forecasting - 2017 Electricity Forecasting Insights*, http://forecasting.aemo.com.au/Electricity/AnnualConsumption/Operational, accessed 25 August 2017.

8 On average, the draft decision transmission revenues will decrease by 0.9 per cent ($nominal) per annum from 2017–18 to 2022–23. The forecast energy delivered in South Australia will decrease by an average of 0.6 per cent per annum across that period. As a result, the indicative transmission charge will decrease by 0.3 per cent ($nominal) per annum from 2017–18 to 2022–23.

Figure 1.2 Indicative transmission price path for SA ($/MWh, nominal)



Source: AER analysis.

1.2.2 Potential bill impact

We calculate the expected potential bill impact by varying the transmission charges in accordance with our draft decision, while holding all other components constant. This approach isolates the effect of our draft decision on the core transmission charges that represent approximately 7 per cent on average of a typical residential customer's annual electricity bill in South Australia.[9] We estimate that our draft decision would lead to the average annual residential electricity bill in 2018–19 decreasing by about $22 ($nominal) from the current 2017–18 level (a 0.9 per cent decrease), all else being equal. By the end of the period, we expect that the average residential customer's annual electricity bills will be $2 ($nominal) less than the 2017–18 level (a 0.1 per cent decrease).

1.3 Next steps

This draft decision is one of the key steps in reaching our final decision. Our final decision will be released no later than 30 April 2018. Before that, ElectraNet will have the opportunity to submit a revised revenue proposal in response to this draft decision. Stakeholders will also have the opportunity to make submissions to us on our draft decision and ElectraNet's revised proposal.

[9] ElectraNet, *Reset RIN - Table 7.6.1*, October 2015.

ElectraNet revised proposal will respond to recommendations that follow from recent AEMC reviews, such as the System Security Market Frameworks Review and associated rule changes. Any system security obligations placed on ElectraNet are likely to create upward pressure on ElectraNet's operating costs, which will require further consideration before making our final decision.[10]

Following receipt of the revised revenue proposal and submissions, we will then make our final decision taking everything we have heard into account. Table 1.1 lists the key dates and consultation deadlines for the process.

Table 1.1 Key dates and consultation

Task	Date
AER draft decision published	26 October 2017
AER public forum to explain draft decision	6 November 2017
Revised revenue proposal due to AER	2 January 2018
Submissions on revised revenue proposal and draft decision due	29 January 2018
AER release of final decision	No later than 30 April 2018

[10] ElectraNet, *ElectraNet's Revenue Proposal 2019–23 – Update on Cost Pressures*, 6 October 2017. See late submissions on the ElectraNet proposal section on our website.

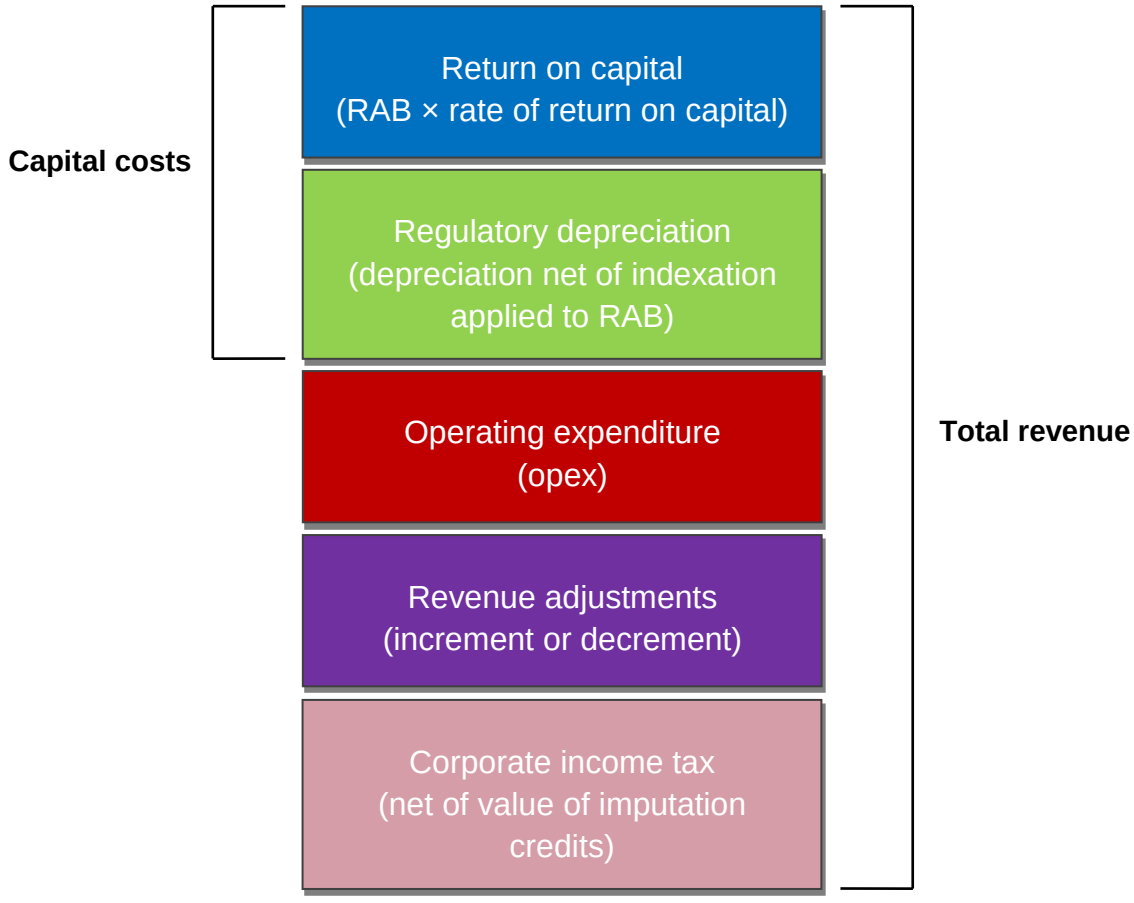
2 What is driving allowed revenue?

In this section, we step through the components of our decision that affect our revenue forecast and examine the drivers of the difference between our draft decision, ElectraNet's proposal and revenues in the previous period. To understand what is driving forecast revenues it is necessary to understand the components of our forecast revenue. We use a building block approach to determine ElectraNet's maximum allowed revenue (MAR). The building block approach consists of five costs that a business is allowed to recover through its revenue allowance.

The building block costs are illustrated in Figure 2.1and include:

- a return on the regulatory asset base (RAB) (or return on capital)
- depreciation of the RAB (or return of capital)
- forecast opex
- revenue increments or decrements resulting from incentive schemes such as the efficiency benefit sharing scheme (EBSS)
- the estimated cost of corporate income tax.

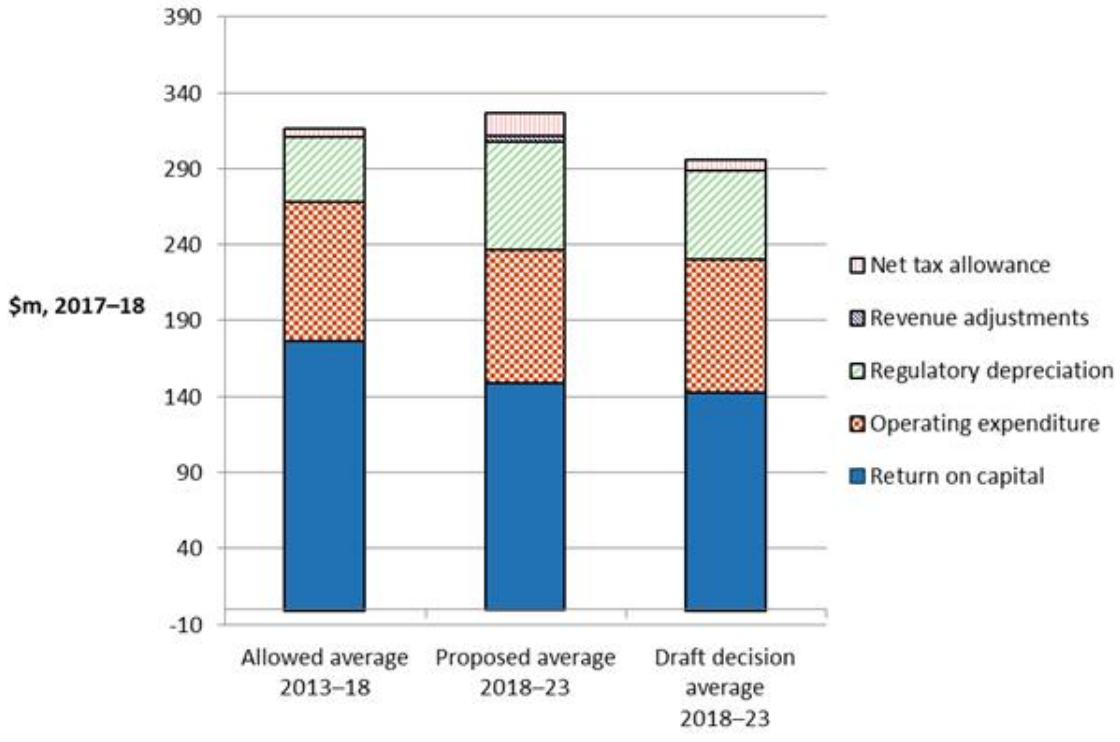
Figure 2.1 The building block approach for determining total revenue



The building block costs are comprised of key elements that we determine through our assessment process. For example, the size of the RAB—and therefore the revenue generated from the return on capital and return of capital building blocks—is directly affected by our assessment of capex.

Figure 2.2 compares the average annual building block revenue from our draft decision to that proposed by ElectraNet for the 2018–23 regulatory control period, and to the approved average amount for the 2013–18 regulatory control period. Figure 2.2 shows that ElectraNet has proposed a lower return on capital to that which we allowed in the previous period. This is driven by ElectraNet's lower capex and its adoption of our approach to forecasting the rate of return. However, ElectraNet has proposed a higher regulatory depreciation allowance – driven by its proposed approach to forecasting inflation.

Figure 2.2 AER's draft decision on constituent components of average annual revenue ($million, 2017–18)



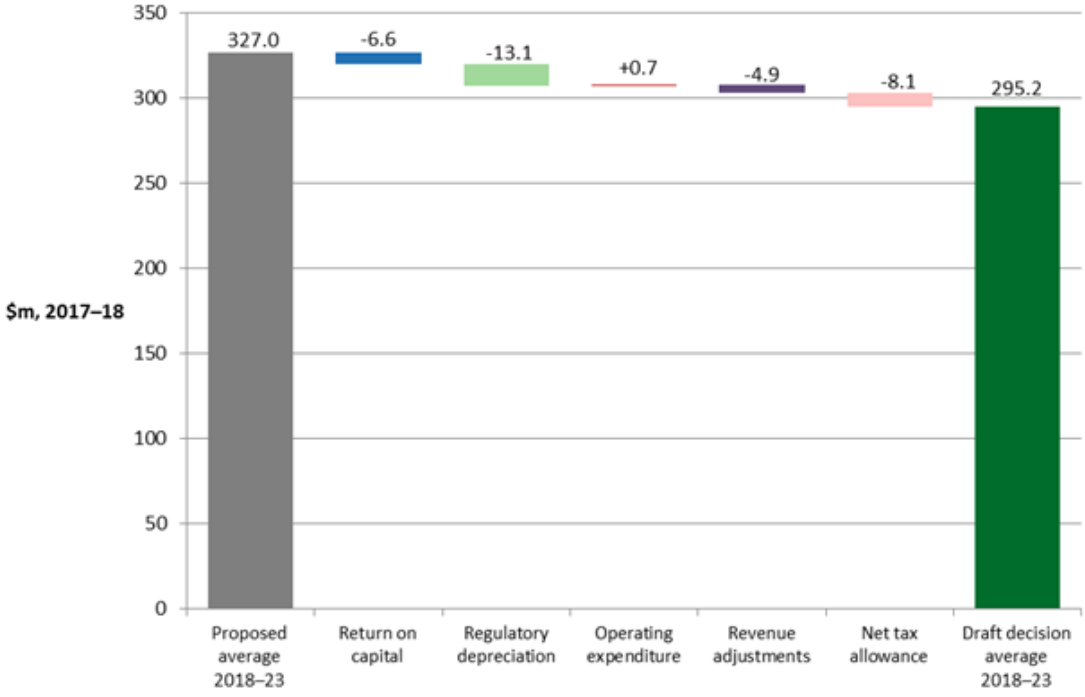
Source: AER analysis.

Figure 2.3 compares our draft decision with ElectraNet's proposal, broken down by the various building block components that make up the forecast revenue allowance. This shows that our draft decision allowances for tax, regulatory depreciation, return on capital and revenue adjustments are lower than ElectraNet's proposal. The reasons for these differences are as follows:

- The tax allowance is lower due to our approach to valuing imputation credits as well as a reduction in overall revenue.

- The regulatory depreciation allowance is lower due to the application of our current approach to forecasting inflation. This may change pending our review into our approach to forecasting inflation.
- The difference between our return on capital allowance and ElectraNet's reflects our use of current interest rates. We agree with ElectraNet on the approach to determining the return on capital, but have used updated interest rates in our forecast. Interest rates observable in financial markets are lower now than they were in the previous period and when ElectraNet prepared its revenue proposal.

Figure 2.3 AER's draft decision and ElectraNet's proposed average building block costs ($million, 2017–18)



Source: AER analysis. Table 2.1 shows our draft decision on ElectraNet's revenues including the building block components.

Table 2.1 AER's draft decision on ElectraNet's revenues ($million, nominal)

	2018–19	2019–20	2020–21	2021–22	2022–23	Total
Return on capital	147.7	151.1	153.6	156.6	159.1	768.1
Regulatory depreciation[a]	42.5	63.0	67.7	70.5	70.8	314.6
Operating expenditure[b]	89.0	91.6	94.8	98.0	101.0	474.4
Revenue adjustments[c]	–1.4	–1.4	–1.7	0.0	2.3	–2.1
Net tax allowance	4.4	6.8	7.9	8.7	9.3	37.2
Annual building block revenue	282.2	311.2	322.4	333.9	342.5	1592.1

requirement (unsmoothed)						
Annual expected MAR (smoothed)	**302.2**	**309.7**	**317.5**	**325.4**	**333.6**	**1588.4**[d]
X factor[e]	n/a[f]	0.00%	0.00%	0.00%	0.00%	n/a

Source: AER analysis.

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

(b) Operating expenditure includes debt raising costs.

(c) Includes efficiency benefit sharing scheme and shared asset amounts.

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

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

(f) ElectraNet is not required to apply an X factor for 2017–18 because we set the 2017–18 MAR in this decision. The MAR for 2017–18 is around 15.7 per cent lower than the approved MAR for 2016–17 in real terms, or 13.6 per cent lower in nominal terms.

The following sections summarise our draft decision on key elements of the building blocks. Incentive schemes including the EBSS and CESS are covered in section 3.

2.1 Regulatory asset base

We make a decision on ElectraNet's opening regulatory asset base (RAB) at 1 July 2018 as part of our revenue determination. We also make a decision on ElectraNet's projected RAB for the 2018–23 regulatory control period.[11]

The RAB roll forward accounts for the value of ElectraNet's regulated assets over the regulatory control period. The size of the RAB substantially impacts ElectraNet's revenue and the price consumers ultimately pay. It is an input into the determination of the return on capital and depreciation (return of capital) building blocks.[12] Other things being equal, a higher RAB increases both the return on capital and depreciation allowances. In turn, these increase ElectraNet's revenue, and prices for services.

Table 2.2 summarises our draft decision on the roll forward of ElectraNet's RAB over the 2013–18 regulatory control period. Further details on this roll forward, including some minor amendments to ElectraNet's proposal, are contained in attachment 2.

Table 2.2 AER's draft decision on ElectraNet's RAB for the 2013–18 regulatory control period ($million, nominal)

	2013–14	2014–15	2015–16	2016–17[a]	2017–18[b]
Opening RAB	2069.5	2187.9	2242.4	2337.5	2450.1

11 NER, cl. 6A.6.1.

12 The size of the RAB also impacts the benchmark debt raising cost allowance. However, this amount is usually relatively small and therefore not a significant determinant of revenues overall.

Capital expenditure[c]	136.6	117.1	165.4	166.2	168.9
Inflation indexation on opening RAB[d]	60.6	29.1	29.4	49.7	61.3
Less: straight-line depreciation[e]	78.9	91.6	99.7	103.3	109.6
Closing RAB	2187.9	2242.4	2337.5	2450.1	2570.7
Difference between estimated and actual capex (1 July 2012 to 30 June 2013)					–1.0
Return on difference for 2012–13 capex					–0.4
Opening RAB as at 1 July 2018					**2569.3**

Source: AER analysis.

(a) Based on estimated capex. We will update the RAB roll forward for actual capex in the final decision.

(b) Based on estimated capex provided by ElectraNet. We expect to update the RAB roll forward with a revised capex estimate in the final decision, and true-up the RAB for actual capex at the next reset.

(c) As-incurred, net of disposals, and adjusted for actual CPI.

(d) We will update the RAB roll forward for actual CPI for 2017–18 in the final decision.

(e) Adjusted for actual CPI. Based on actual as-commissioned capex.

Table 2.3 sets out our draft decision on the forecast RAB values for ElectraNet over the 2018–23 regulatory control period.

Table 2.3 AER's draft decision on ElectraNet's RAB for the 2018–23 regulatory control period ($million, nominal)

	2018–19	2019–20	2020–21	2021–22	2022–23
Opening RAB	2569.3	2627.8	2672.1	2724.2	2766.9
Capital expenditure[a]	101.0	107.3	119.7	113.2	61.6
Inflation indexation on opening RAB	64.2	65.7	66.8	68.1	69.2
Less: straight-line depreciation[b]	106.7	128.7	134.5	138.6	140.0
Closing RAB	**2627.8**	**2672.1**	**2724.2**	**2766.9**	**2757.6**

Source: AER analysis.

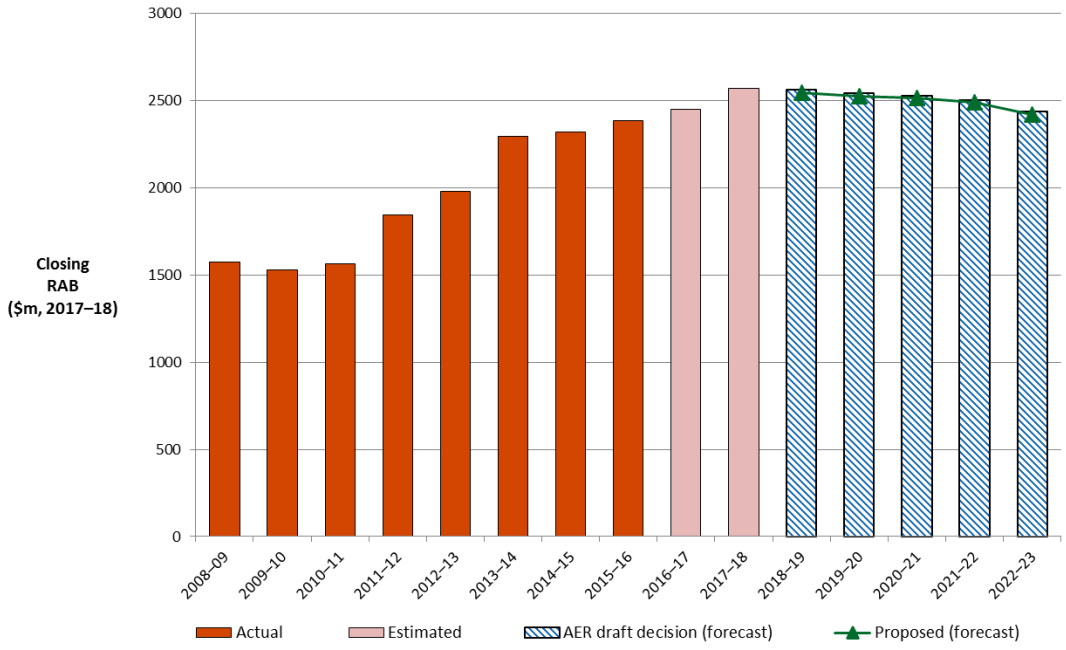
(a) As-incurred, and net of forecast disposals. In accordance with the timing assumptions of the post-tax revenue model (PTRM), the capex includes a half-WACC allowance to compensate for the six month period before capex is added to the RAB for revenue modelling.

(b) Based on as-commissioned capex.

We must determine whether actual or forecast depreciation is used to roll forward the RAB at the commencement of the 2023–28 regulatory control period.[13] We have accepted ElectraNet's proposal to use forecast depreciation. In isolation, the use of actual depreciation leads to higher powered incentives to achieve capex efficiency gains than forecast depreciation. Though this creates a lesser incentive to reduce capex, we consider this approach, in conjunction with the application of our capital expenditure sharing scheme (CESS), will provide sufficient incentives for ElectraNet to achieve capex efficiency gains over the 2018–23 regulatory control period.

Figure 2.4 compares our draft decision on ElectraNet's forecast RAB to ElectraNet's proposal and actual RAB in real dollar terms. Figure 2.4 shows that ElectraNet's RAB is decreasing in value.

Figure 2.4 ElectraNet's actual RAB, proposed forecast RAB and AER draft decision forecast RAB ($million, 2017-18)



Source: AER analysis.

Further detail on our draft decision in regards to ElectraNet's RAB is set out in attachment 2.

2.2 Forecast inflation

Our inflation forecast accounts for $61 million ($nominal) or 3.8 per cent of the difference between our revenue allowance and ElectraNet's proposed revenue allowance.

[13] NER, cl. S6A.2.2B(a).

Forecast inflation affects almost every component of our revenue determination for ElectraNet. However, the most significant impact is on our depreciation allowance. Given that we apply a nominal rate of return, and also annually index the RAB, we make a negative adjustment to our depreciation building block to avoid double counting inflation. If the estimate of expected inflation is not accurate, the result will be a potential under-recovery of costs (if the forecast of inflation is too high) or an over-recovery (if the forecast is too low).

The method for estimating expected inflation has been the subject of debate in recent regulatory determinations. We have chosen to conduct an industry-wide review before making any changes to the models given the widespread use of our post-tax revenue model (PTRM) and asset base roll forward model (RFM), and the requirements set out in the NER for consultation. Moreover, the general inflation rate is applicable across the economy, and therefore our treatment of inflation applies uniformly across all our determinations.

We recently released a preliminary position paper on the regulatory treatment of inflation.[14] We have called for submissions on this paper. Our preliminary position is to maintain the current approach for our regulatory treatment of inflation. Submissions are due by close of business 6 November 2017.

We will release our final position in December 2017 after carefully considering the submissions and any further evidence presented to us. If we are persuaded to depart from our preliminary position and there is reason to amend the PTRM or RFM, we will publish our proposed amendment in January 2018 with an explanatory statement. There would be an additional consultation period on the proposed amendment and then we would make a final decision on those amendments in April 2018.

ElectraNet proposed an alternative approach to forecasting inflation to that of our current approach. ElectraNet proposed to estimate expected inflation by reference to a market-based approach (referred to as the break-even approach). [15] This approach measures inflation by reference to the difference between the yields on nominal and real Commonwealth government bonds.[16] ElectraNet argues that our current approach to inflation is inconsistent with current inflation expectations.[17]

Our current approach is to use Reserve Bank of Australia's (RBA's) two year forecast of inflation (which is as far as the RBA forecasts). We combine these two values with the midpoint of the RBA's target band for inflation (currently 2.5 per cent) to extend the series out to ten years.

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[14] AER, *Regulatory treatment of inflation, Preliminary position*, October 2017. See the AER Inflation review project page at: https://www.aer.gov.au/networks-pipelines/guidelines-schemesmodels- reviews/review-of-expected-inflation-2017/initiation.

[15] ElectraNet, *Revenue Proposal 2019 - 2023, Attachment 3, Rate of Return*, 28 March 2017, p. 23.

[16] ElectraNet, *Revenue Proposal 2019 - 2023, Attachment 3, Rate of Return*, 28 March 2017, p. 28.

[17] ElectraNet, *Revenue Proposal 2019 - 2023, Attachment 3, Rate of Return*, 28 March 2017, pp. 25–27.

In our view, our current approach has the greatest strengths and fewest weaknesses and is therefore the best estimate of expected inflation. The approach we currently use is relatively simple and transparent. The RBA is highly respected and has been generally successful in its inflation targeting. The ACCC/AER working paper ranked this method highest of the four potential approaches and a number of stakeholders (including consumer groups) have supported the current approach.[18]

2.3 Rate of return (return on capital)

The allowed rate of return provides the business with a return on capital to service the interest on its loans and give a return on equity to investors. The return on capital building block is calculated as a product of the rate of return and the value of the RAB. Our allowed rate of return is a weighted average of our return on equity and return on debt estimates determined on a nominal vanilla basis that is consistent with our estimate of the value of imputation credits.

We have accepted ElectraNet's approach to determining the rate of return. We are satisfied this contributes to the achievement of the NEO, and achieves the allowed rate of return objective (ARORO) set out in the NER.[19] That is, we are satisfied that this allowed rate of return is commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as that which applies to ElectraNet in providing prescribed transmission services.[20]

ElectraNet proposed a rate of return, or weighted average cost of capital (WACC), of 6.02% (nominal vanilla, indicative) using the approach set in our Rate of Return Guideline (Guideline). Our draft decision rate of return is 5.7 per cent (nominal vanilla, indicative) for the first year of the 2018-23 regulatory control period.

The reason for the difference between our rate of return and ElectraNet's is our use of more recent data. This accounts for 2.4 per cent of the difference between ElectraNet's proposal and our draft decision.

ElectraNet's proposed approach to forecasting the WACC, which aligns with our Guideline approach, is to use an averaging period prior to the publication of our final decision to forecast the cost of debt and risk free rate. We will use RBA and Bloomberg data to forecast the cost of debt and Commonwealth government securities data to forecast the risk free rate. For this draft decision, we have used a placeholder averaging period of 20 business days up to 31 July 2017 to provide a current forecast of these parameters.

Table 2.4 sets out our rate of return and ElectraNet's proposed rate of return.

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18 ACCC/AER Working Paper #11, Consideration of best estimates of expected inflation: comparing and ranking approaches, April 2017, p. 101. AER, *Regulatory treatment of inflation, Preliminary position*, October 2017, p. 29.

19 NER, cl. 6A.6.2(b).

20 NER, cl. 6A.6.2(c).

Table 2.4 AER draft decision on ElectraNet's rate of return (per cent, nominal)

	AER previous decision (2014–18)	ElectraNet proposal (2018–23)	AER draft decision (2018–23)	Allowed return over 2018–23 regulatory control period
Return on equity (nominal post–tax)	9.51	7.4	7.2	Constant (7.2%)
Return on debt (nominal pre–tax)	6.79	5.1	4.78	Updated annually
Gearing	60	60	60	Constant (60%)
Nominal vanilla WACC	7.87	6.02	5.7	Updated annually for return on debt
Forecast inflation	2.45	1.97	2.5	Constant (2.5%)

Source: AER analysis; ElectraNet, *Transmission Revenue Review 2017–2022 regulatory proposal*, 30 October 2015; AER, *Final Decision: SP AusNet Transmission determination 2014-2017*, January 2014.

Further detail on our draft decision regarding ElectraNet's allowed rate of return is set out in attachment 3.

2.4 Value of imputation credits

Under the Australian imputation tax system, investors can receive an imputation credit for income tax paid at the company level.[21] We make adjustment to our taxation building block to account for the value of imputation credits. Our draft decision does not accept ElectraNet's proposed value of imputation credits (or gamma) of 0.25. Instead, we adopt a value of imputation credits of 0.4. This approach is consistent with the approach we have adopted in our recent decisions, which has been upheld by the Federal Court of Australia.[22] Submissions from the CCP9, South Australian Government, Business SA and Uniting Communities all supported a value of imputation credits of 0.4.[23]

Further detail on our draft decision regarding the value of ElectraNet's imputation credits is set out in attachment 4.

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21 *Income Tax Assessment Act 1997,* parts 3–6.

22 Federal Court of Australia, *Australian Energy Regulator v Australian Competition Tribunal (No 2) [2017] FCAFC 79*, May 2017, p. 216.

23 Consumer Challenge Panel Sub-Panel 9, *Submission to the AER; Response to proposals from ElectraNet for a revenue reset for 2018-19 to 2022-23*, dated 12 May 2017, p. 55; Government of South Australia, *Submission of ElectraNet's proposal 2018–23*, 12 July 2017, p. 4.; Business SA, Submission on ElectraNet's 2018–23 Revenue Proposal, 6 July 2017, p. 4. Uniting Communities, *Submission on ElectraNet Electricity Transmission Revenue Proposal 2018–23*, 25 July 2017, p. 15.

2.5 Regulatory depreciation (return of capital)

In our draft decision, we include an allowance for the depreciation of ElectraNet's asset base (otherwise referred to as return of capital). Regulated service providers invest in large sunk assets to provide electricity transmission services to customers. While some of the cost of such assets may be recovered from customers upfront, a greater proportion is recovered over time. The depreciation allowance is used for this purpose.

In deciding whether to approve the depreciation allowance proposed by ElectraNet, we make determinations on the indexation of the regulatory asset base (RAB) and depreciation building blocks for ElectraNet's 2018–23 regulatory control period.[24] The regulatory depreciation allowance is the net total of the RAB depreciation less the inflation indexation adjustment of the RAB.

Our draft decision approves a regulatory depreciation allowance of $314.6 million ($nominal) for the 2018–23 regulatory control period. This is $64.2 million (16.9 per cent) lower than ElectraNet's proposed value of $378.7 million ($nominal).

Table 2.5 shows our draft decision on ElectraNet's depreciation allowance for the 2018–23 regulatory control period.

Table 2.5 AER's draft decision on ElectraNet' depreciation allowance for the 2018–23 period ($million, nominal)

	2018–19	2019–20	2020–21	2021–22	2022–23	Total
Straight-line depreciation	106.7	128.7	134.5	138.6	140.0	648.6
Less: inflation indexation on opening RAB	64.2	65.7	66.8	68.1	69.2	334.0
Regulatory depreciation	**42.5**	**63.0**	**67.7**	**70.5**	**70.8**	**314.6**

Source: AER analysis.

Our draft decision:

- accepts ElectraNet's proposed real straight-line method used to calculate the regulatory depreciation allowance.
- largely accepts ElectraNet's proposed asset classes and standard asset lives, with the following exceptions:
    - We do not accept the proposed standard asset life of 27 years for the 'Transmission lines – life extension' asset class. This is because we consider this standard asset life does not reflect the economic life of the assets in this asset class. We determine a standard asset life of 48.1 years, which reflects the weighted average of the technical lives of the assets used for the

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

forecast transmission line life extension works for the 2018–23 regulatory control period.

- We also do not accept the proposed standard asset life for the 'Synchronous condensers' asset class at this time. We do not determine a standard asset life for this asset class at this time. The assets to be allocated to this class rely on a contingent project being triggered, and we will be better placed to determine an asset life for this asset class once the contingent project event is met. ElectraNet's revenues are not affected by this decision as such projects do not earn a return until they are triggered and the revenue determination is amended. At the time of this draft decision, however, we consider that ElectraNet's proposed standard asset life would not lead to a depreciation profile that reflects the nature of the assets over the economic life of the assets within this asset class.[25]

Further detail on our draft decision regarding depreciation is set out in attachment 5.

2.6 Capital expenditure

Capital expenditure (capex) refers to the capital expenses incurred in the provision of network services. The return on and return of forecast capex are two of the building blocks we use to determine a TNSP's total revenue requirement.

We accept ElectraNet's proposed capex allowance. We have assessed the proposed capex against a range of measures and consider it meets the NEO and is efficient. Our draft decision approves $459.1 million ($2017-18) total forecast capex for the 2018–23 regulatory control period.

Table 2.6 AER draft decision on total net capex ($million, 2017-18)

	2018–19	2019–20	2020–21	2021–22	2022–23	Total
AER draft decision	96.8	99.9	108.7	100.4	53.3	459.1

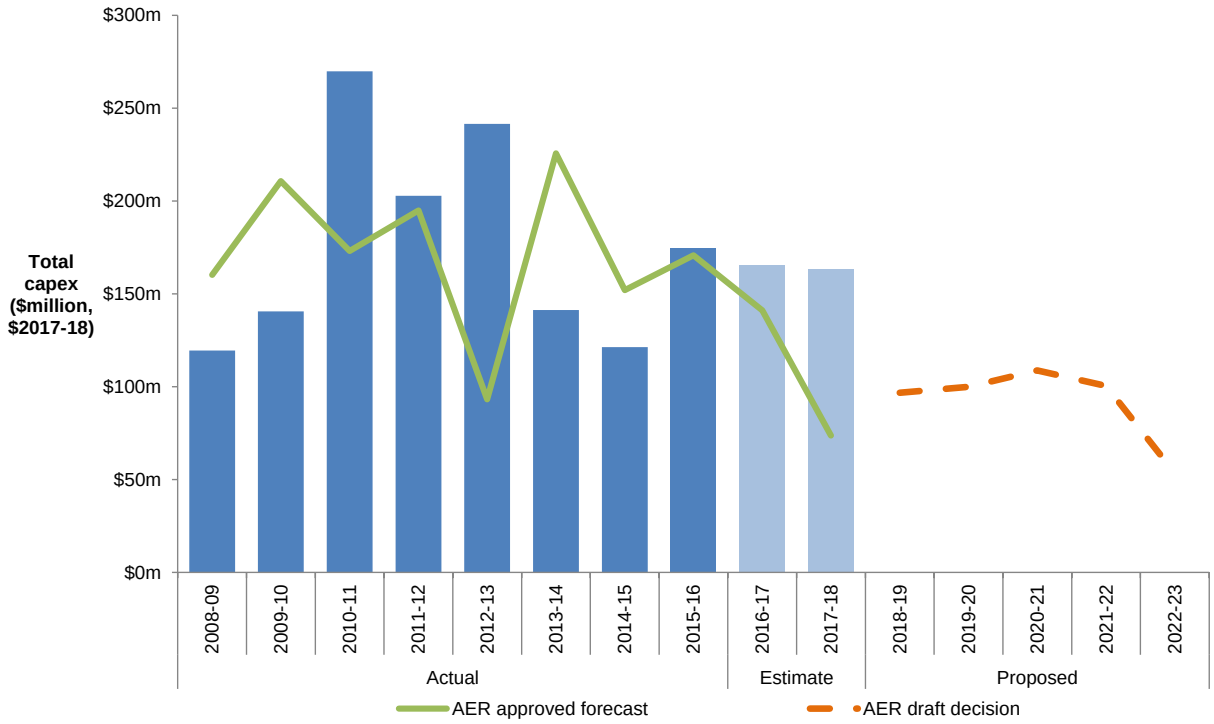
Source: ElectraNet, *Revenue Proposal,* October 2015, p. 81; AER analysis

Note: This reflects ElectraNet's forecast capex in real 2017-18 dollars using an estimate of expected inflation of 2.5 per cent, as discussed in Attachment 3 of this draft decision. Numbers may not total due to rounding.

Figure 2.5 shows our capex decision and past approved forecast, together with ElectraNet's past actual and estimated expenditure.

[25] NER, cl. 6A.6.3(b)(1).

Figure 2.5 AER draft decision capex and ElectraNet's total actual and forecast capex ($million, 2017-18)



ElectraNet proposed a substantial decrease in forecast capex for the 2018–23 regulatory control period of 39 per cent compared to capex in the current period. This is largely driven by projections of declining demand in South Australia, which means there is currently no need to augment the network to meet expected demand.

The majority of ElectraNet's forecast capex relates to asset replacement and refurbishment work driven by the need to manage the safety, security and reliability risks associated with ageing assets. Following the system security and reliability issues experienced in South Australia over the last 12 months, ElectraNet has also proposed a small number of specific projects to improve the ability of the network to withstand extreme weather events and to maintain and enhance the security of the network.

For this draft decision, we are satisfied that ElectraNet's forecast capex is consistent with the drivers of investment need and reasonably reflects the efficient costs that a prudent operator would incur in the 2018–23 regulatory control period. In forming this view we have considered the information we have received from ElectraNet, and input from stakeholders, including the Consumer Challenge Panel. We have also taken into account the early and extensive process of consumer engagement undertaken by ElectraNet to ensure its revenue proposal adequately reflects the preferences of its customers.

2.6.1 Asset risk management framework

ElectraNet applies a risk based approach in its asset management decision making. This means that decisions to replace or refurbish network assets are made based on

the risks associated with asset condition. ElectraNet's risk assessment framework considers the probability of asset failure, as well as the likelihood and cost of adverse consequences, to quantify a range of relevant risks including reliability, safety and environmental risks. Comparing the risk reduction benefits of investment against the costs of the proposed expenditure ensures that asset replacement decisions are made in an economic context.

For all large projects, ElectraNet conducts an economic assessment to determine whether the benefits of undertaking the project exceed the costs, considering all feasible options. This assessment also examines the optimal timing of the project to ensure that net benefits are maximised, and projects are deferred where this is more economic.

Based on our analysis, we are satisfied that ElectraNet's investment risk tool analysis used to inform the economic assessment of asset replacement and refurbishment decisions is consistent with good industry practice and generally reflects reasonable inputs and assumptions.

2.6.2 Contingent projects

ElectraNet proposed that five contingent projects be included in its revenue determination. Contingent projects are significant network projects that may arise during the regulatory control period but the need and or timing is uncertain. While the expenditures for such projects do not form a part of our assessment of the total forecast capital expenditure that we approve in this determination, the cost of the projects are ultimately recovered from customers in the future if certain conditions (trigger events) are met. Where an application for a contingent project is submitted to us, we will assess the application to determine if the costs represent a reasonable forecast of the capital and incremental operating expenditure required for the purpose of undertaking the contingent project.[26]

Three of ElectraNet's proposed contingent projects are for addressing current power system security and reliability issues as well as delivering non-load driven net market benefits. The remaining two projects are for reinforcing the relevant parts of ElectraNet's transmission network under specific step load driven growth scenarios. ElectraNet has commenced a regulatory investment test for transmission (RIT-T) process for both the Eyre Peninsula Reinforcement and South Australian Energy Transformation projects. Our draft decision sets out minor amendments to the proposed project trigger events for us to accept these contingent projects.

Further detail on our draft decision regarding capex is set out in attachment 6.

[26] NER, cl. 6A.8.2(e)(1)(i) & (ii).

2.7 Operating expenditure

Operating expenditure (opex) is the forecast of operating, maintenance and other non–capital costs incurred in the provision of prescribed transmission services. We accept ElectraNet's opex forecast of $440.1 million ($2017–18).[27] ElectraNet proposed an 11 per cent reduction in its operating costs by:

- right-sizing the organisation to match an environment of lower demand growth and lower capital expenditure
- more targeted and cost effective maintenance planning
- reduced maintenance costs through more efficient procurement and delivery strategies, allowing reinvestment of savings in the maintenance program
- challenging property value assessments to reduce land tax costs.[28]

We tested the proposed expenditure against a range of measures and consider that, in conjunction with the proposed efficiency incentives, it is efficient expenditure.

ElectraNet has advised us that it is likely to change its opex forecast in the revised proposal as a result of obligations arising from recent market reviews and rule changes.[29] This includes, amongst other things, the AEMC's recent rule changes regarding the management of power system frequency[30] and System Security Market Frameworks review.[31] These system security obligations are likely to create upward pressure on ElectraNet's operating costs, which will require further consideration before making our final decision.

Table 2.7 AER draft decision on total opex ($million, 2017–18)

	2018–19	2019–20	2020–21	2021–22	2022–23	Total
AER draft decision	**86.8**	**87.2**	**88.1**	**88.8**	**89.1**	**440.1**

Source: AER analysis.

Note: Includes debt raising costs.

Figure 2.6 shows our opex decision and past approved forecast, together with ElectraNet's past actual and estimated expenditure.

27 Including debt raising costs.

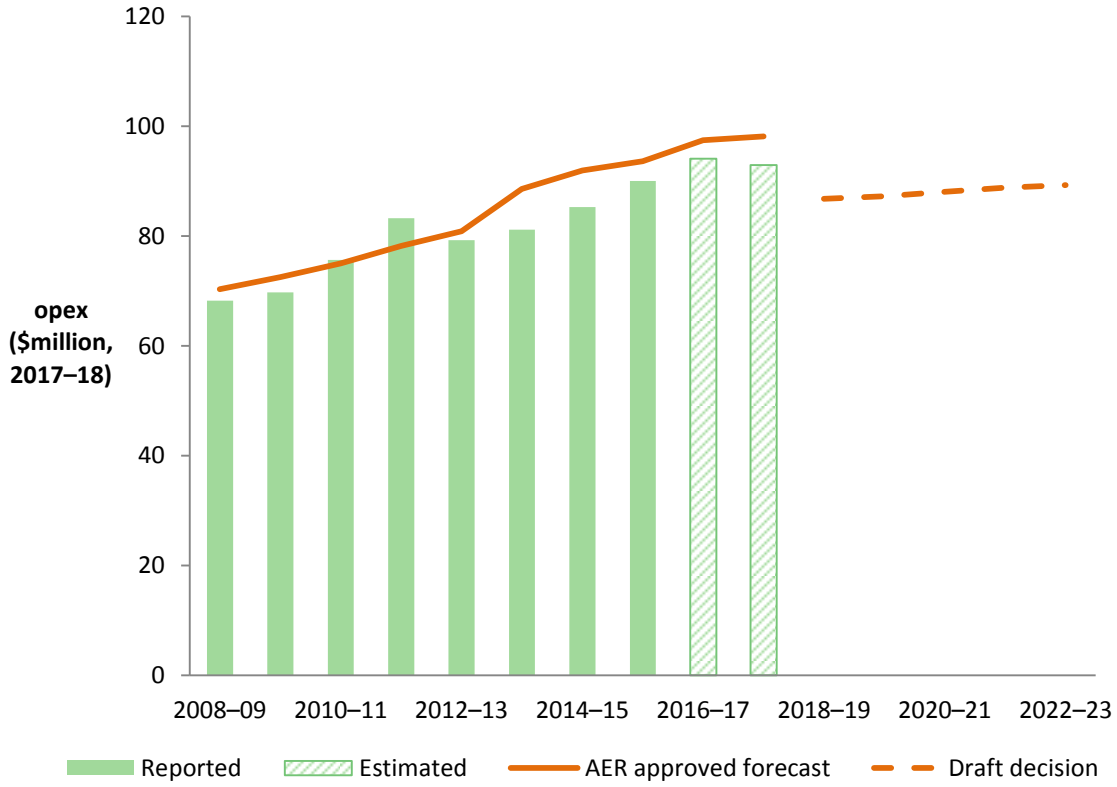
28 ElectraNet, *Revenue Proposal Overview 2019 – 2023*, 28 March 2017, p. 37.

29 ElectraNet, *ElectraNet's Revenue Proposal 2018–23 – Update on Cost Pressures*, 6 October 2017. See late submissions on the ElectraNet proposal section on our website.

30 See: AEMC, *Final Rule Determination, National Electricity Amendment (Managing the rate of change of power system frequency) Rule 2017*, 19 September 2017.

31 See: AEMC, *Final Report, System Security Market Frameworks Review*, 27 June 2017.

Figure 2.6 AER draft decision on total forecast opex ($million, 2017–18)



Source: ElectraNet, *Regulatory accounts 2008–09 to 2014–15*; ElectraNet, *Economic benchmarking—Regulatory information notice response 2006 to 2015*; AER analysis.

Further detail on our draft decision regarding opex is set out in attachment 7 and further information on our draft decision on efficiency incentives is set out in attachment 9.

2.8 Corporate income tax

Our draft decision includes a decision on the estimated cost of corporate income tax for ElectraNet's 2018–23 regulatory control period as part of our revenue determination.[32] It enables ElectraNet to recover the costs associated with the estimated corporate income tax payable during the regulatory control period.

Our draft decision includes an estimated cost of corporate income tax of $37.2 million ($nominal) for ElectraNet over the 2018–23 regulatory control period. This is $42.1 million (or 53.1 per cent) lower than ElectraNet's proposed value of $79.3 million. Table 2.8 shows our draft decision on ElectraNet's corporate income tax allowance for the 2018–23 regulatory control period.

[32] NER, cl. 6A.6.4.

Table 2.8 AER's draft decision on corporate income tax allowance for ElectraNet ($million, nominal)

	2018–19	2019–20	2020–21	2021–22	2022–23	Total
Tax payable	7.3	11.4	13.2	14.6	15.5	62.0
Less: value of imputation credits	2.9	4.6	5.3	5.8	6.2	24.8
Net corporate income tax allowance	**4.4**	**6.8**	**7.9**	**8.7**	**9.3**	**37.2**

Source: AER analysis.

The reduction reflects our amendments to ElectraNet's proposed inputs for forecasting the cost of corporate income tax including, the opening TAB at 1 July 2018, the standard tax asset lives and the value of imputation credits—gamma (attachment 4).

Our adjustments to the return on capital (attachments 2, 3 and 6)[33], the return of capital (attachment 5) and the revenue adjustment building blocks (attachment 1) affect revenues, which in turn impact the tax calculation. The changes affecting revenues are discussed in attachment 1.

Further detail on our draft decision regarding corporate income tax is set out in attachment 8.

[33] The forecast capex amount is a key input for calculating the return of and return on capital building blocks. Attachment 6 sets out our draft decision on ElectraNet's forecast capex.

3 Incentive schemes

Incentive schemes are a component of incentive–based regulation and complement our approach to assessing efficient costs. The incentive schemes that will apply to ElectraNet are:

- the efficiency benefit sharing scheme (EBSS)
- the capital expenditure sharing scheme (CESS)
- the service target performance incentive scheme (STPIS).

Our incentive schemes work together to encourage network businesses to make efficient decisions. They give network businesses an incentive to pursue efficiency improvements in opex and capex, and to share them with consumers. Incentives for opex and capex are balanced with the incentives under our STPIS. The incentive schemes encourage businesses to make efficient decisions on when and what type of expenditure to incur, and meet service reliability targets. Ultimately, the intention of our incentive schemes is to provide customers with better value for money through either improving network performance or lowering electricity bills.

3.1 Efficiency benefit sharing scheme (EBSS)

The EBSS provides an incentive for service providers to pursue efficiency improvements in opex.

Typically opex is largely recurrent and predictable, and as such opex in one period is often a good indicator of opex in the next period.[34] Where a service provider is relatively efficient, we use the actual opex it incurred in a chosen base year to forecast opex for the next regulatory control period. We call this the 'revealed cost approach'.

However, using a network business's past information to set future targets can reduce the incentives of the business to reduce its costs—since the business knows that any cut in its expenditure will decrease its revenue allowance in the future. It also provides an incentive to increase opex in any year expected to be used as the base year.

To encourage a business to become more efficient it is allowed to keep any difference between its approved forecast and its actual opex during a regulatory control period. Additional to this, the EBSS allows the business to retain efficiency savings, and is required to carry efficiency losses, for a longer period of time. In this way, the EBSS can provide businesses with an additional reward for reductions in opex and additional penalties for increases in opex.

Under the EBSS, a business gets to keep the benefits of any efficiency gains for an additional five years after the year in which it achieved the gain. After that all the gains

[34] Step changes provide for increases/decreases where this is not the case.

are passed on to consumers in the form of lower network charges. In this way, a business benefits from efficiency gains made at the start of the regulatory period the same as those it makes at the end. This ensures the business faces a continuous incentive. The EBSS also discourages a service provider from inflating its base year opex in order to receive a higher opex allowance in the following regulatory control period.[35]

Our draft decision is to approve EBSS carryover amounts totalling –$2.2 million ($2017–18) from the application of the EBSS in the 2013–18 regulatory control period. This is a $0.2 million difference compared to the –$1.9 million ($2017–18) ElectraNet proposed. The primary reason for the difference is that we excluded defined benefit superannuation opex from reported opex. This is consistent with our final decision for the 2013–18 regulatory control period.[36] ElectraNet only removed the movements in provisions for defined benefits superannuation.

We set out our draft decision on the EBSS carryover amounts ElectraNet accrued during the 2013–18 regulatory control period in Table 3.1.

Table 3.1 AER's draft decision on ElectraNet EBSS carryover amounts ($million, 2017–18)

	2018–19	2019–20	2020–21	2021–22	2022–23	Total
ElectraNet' proposed carryover	–0.9	–1.2	–1.6	–	1.7	–1.9
Draft decision	**–1.4**	**–1.3**	**–1.6**	**–**	**2.0**	**–2.2**

Source: ElectraNet, *Revenue proposal*, PTRM, March 2017; AER analysis.

Our draft decision is to apply version two of the EBSS to ElectraNet in the 2018–23 regulatory control period. This is consistent with our final framework and approach paper[37] and ElectraNet's proposal.[38]

Further detail on our draft decision regarding the application of the EBSS, including the expenditure items we will exclude, is set out in attachment 9.

3.2 Capital expenditure sharing scheme (CESS)

Our draft decision is to apply our CESS to ElectraNet in the 2018–23 regulatory control period. This is the first time that the CESS has been applied to ElectraNet following the making of our capex incentive guideline.[39] This is to balance the incentives for ElectraNet to pursue opex efficiencies with its incentives to pursue capex efficiencies.

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35 These concepts are explained more fully in the explanatory statement to the EBSS; AER, *Efficiency benefit sharing scheme for electricity network service providers – explanatory statement,* November 2013.

36 AER, *ElectraNet: Transmission determination: 2013–14 to 2017–18*, April 2013, p. 7.

37 AER, *Final framework and approach for ElectraNet transmission determination 2018–23,* April 2015, p. 16.

38 ElectraNet, *Revenue proposal*, Attachment 9, March 2017, p. 7.

39 AER, *Capex incentive guideline*, November 2013.

The CESS provides an incentive for service providers to pursue efficiency improvements in capex. Similar to the EBSS, the CESS provides a network service provider with the same reward for an efficiency saving and the same penalty for an efficiency loss regardless of which year they make the saving or loss. Under the application of the CESS and EBSS incentives for opex and capex are balanced (30 per cent) and constant.

3.3 Service target performance incentive scheme (STPIS)

The STPIS is intended to balance a business's incentive to reduce expenditure with the need to maintain or improve service quality. It achieves this by providing financial incentives to businesses to maintain and improve service performance where customers are willing to pay for these improvements.

Businesses can only retain their rewards for sustained and continuous improvements to the reliability of supply for customers. Once improvements are made, the benchmark performance targets will be tightened in future years.

Our draft decision is to apply all components of version 5 of the STPIS to ElectraNet for the 2018–23 regulatory control period. The STPIS parameters applied in our draft decision are set out in attachment 11.

4 Consumer engagement

The NEO requires ElectraNet to operate its network in the long term interests of consumers. An important part of this is ensuring that regulatory proposals ElectraNet puts to us for approval reflects the NEO, and that ElectraNet has engaged with its consumers to determine how best to provide services that align with their long term interests.

Consumer engagement in this context is about ElectraNet working openly and collaboratively with consumers and providing opportunities for their views and preferences to be heard and to influence ElectraNet's decisions. In the regulatory process, stronger consumer engagement can help us test service providers' expenditure proposals, and can raise alternative views on matters such as service priorities, capital expenditure proposals and price structures.

In 2013 we published a guideline setting out what we consider to be the key components of good consumer engagement for network businesses.[40] The NER also requires us to consider the extent to which the proposed expenditure addresses consumers' relevant concerns identified during the network service provider's engagement with consumers.[41]

4.1 Our review of ElectraNet's consumer engagement

We tasked the AER Consumer Challenge Panel (CCP9) specifically with advising us on the effectiveness of ElectraNet's engagement activities with consumers and how this was reflected in the development of its proposal. CCP9 members have attended four Customer Advocacy Panel (CAP) and CAP Working Group meetings conducted by ElectraNet. They also met separately with ElectraNet's senior executives and their external independent consultant and facilitator who was responsible for co-ordinating much of ElectraNet's consumer engagement program.[42]

We think—and CCP9 agrees—that ElectraNet has undertaken an extended, open and well-structured program that has made a positive contribution to the development of ElectraNet's proposal.[43] This is reflected in positive feedback participants in ElectraNet's engagement process provided to CCP9. ElectraNet's consultation is particularly commendable given that it is ElectraNet's first since release of our consumer engagement guideline. We consider that ElectraNet's regulatory proposal has benefited from this consultation and contributed to our acceptance of most of the proposal.

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40 AER, Better Regulation; *Consumer engagement guideline for network service providers*, November 2013.

41 NER, cl. 6A.10.1(g)(2).

42 Consumer Challenge Panel Sub-Panel 9, *Submission to the Australian Energy Regulator (AER), Response to proposals from ElectraNet for a revenue reset for the 2018-23 regulatory period*, 12 July 2017, p. 7.

43 Consumer Challenge Panel Sub-Panel 9, *Submission to the Australian Energy Regulator (AER),Response to proposals from ElectraNet for a revenue reset for the 2018-23 regulatory period*, 12 July 2017, p. i.

We were particularly happy to see CCP9 confirm that:

- ElectraNet made an early start to the process enabling the building of trust and knowledge, and has established a sound framework for consumer engagement at the start of the process, including more structured process to select participants, locations, topics and priorities, and communication channels. ElectraNet commenced its program in September 2015, well in advance of the submission of the revenue proposal in March 2017
- The structure was well designed, appears sustainable and can continue to be effective beyond the submission of ElectraNet's proposal. The appointment of an independent facilitator to maintain the overall structure was considered a valuable component
- ElectraNet's approach and customer representative expectations for the type of engagement were reasonably well matched, providing well involved stages at the CAP level, as well as more collaborative stages addressed through the Working Group and 'deep dive' sessions on capital and operating expenditure plans
- ElectraNet's consumer engagement was supported by its Board, CEO and senior management, who are committed to facilitating culture change across the organisation
- ElectraNet's process included clear and continuous provision of information to stakeholders, with a focus on plain English, transparency and readily accessible communication material. This included information on key stages in the process, and also how stakeholders have influenced ElectraNet's decisions.

In recent years we have seen a number of businesses raise the bar on consumer engagement in developing regulatory proposals. In a recent news article written by Irina Umback, the ENA stated that:

> There is widespread recognition that genuine consumer and stakeholder engagement goes beyond simply providing an opportunity to stakeholders to express their views. Customers must have clarity about what decisions they can influence, trust that their views are heard and understood, and be able to see how those views have been taken into consideration.[44]

ElectraNet's consumer engagement for this revenue proposal has led the way and establishes one of the best practices we have seen from network service providers. This is also reflected in the comments made by the CCP9:

> ElectraNet has undertaken an extended, open and well-structured program that has provided multiple opportunities for customers to develop their understanding of the transmission business's issues and to provide meaningful feedback to ElectraNet on its plans. It has endeavoured, and generally succeeded, in building a high level of trust amongst its stakeholders.

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[44] Irina Umback, 'Green shoots' emerge in networks customer engagement, ENA news release, 20 July 2017.

…

> An important initiative taken by ElectraNet was to issue a Preliminary Revenue Proposal for discussion some three months prior to the Final Revenue Proposal. This Preliminary Revenue proposal set out most of the elements of the Final Revenue Proposal. ElectraNet's underlying purpose was to ensure that the Final Revenue Proposal contained "no surprises" for consumers or the AER and would thereby facilitate the AER's review process and the community's understanding of the proposal.[45]

Though CCP9 mostly praised ElectraNet's consumer engagement, they did make some minor recommendations regarding future consultation processes. These are as follows:

- CCP9 recommends that ElectraNet consider the feedback from some of the consumer representatives in terms of ensuring an ongoing focus on achieving the outcomes sought by consumers of affordability, reliability continuity and sustainability.
- Feedback from consumer representatives highlighted the time and resourcing challenges they face given most representatives are representing their constituency on multiple issues. CCP9 recommends that ElectraNet carefully consider the balance between meaningful engagement and these limited resources given the long regulatory time frames.
- ElectraNet review its meeting agendas to ensure there is adequate time for full discussion on key issues at the meeting.[46]

We agree with these recommendations, however they do not take away from our view that ElectraNet's consumer engagement is of a high standard.

In its submission, Uniting Communities was supportive of ElectraNet's early engagement:

> The collegiality demonstrated by ElectraNet in developing their regulatory proposal has been deeply appreciated by Uniting Communities and we are accepting of their regulatory proposal as reasonable and certainly developed in good faith with significant efforts being made to engage consumer and stakeholder views. We certainly feel that we [have] been taken seriously over the nearly 2 years since we first talked about this particular regulatory proposal.[47]

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45 Consumer Challenge Panel Sub-Panel 9, *Submission to the AER; Response to proposals from ElectraNet for a revenue reset for 2018-19 to 2022-23*, 12 July 2017, pp. 3–5.

46 Consumer Challenge Panel Sub-Panel 9, *Submission to the AER; Response to proposals from ElectraNet for a revenue reset for 2018-19 to 2022-23*, 12 July 2017, p. 19.

47 Uniting communities, *Submission to the AER, Topic: ElectraNet Electricity Transmission Revenue Proposal*, July 2017, p. 2.

However, the South Australian Council of Social Service (SACOSS) was less supportive. They submitted that ElectraNet's consumer engagement placed significant additional expectation on consumer representatives. They submitted that arguably already stretched consumer representative resources were requested to extend to numerous meetings with the business and independent facilitator, in addition to participation on the ElectraNet Consumer Advisory Panel which also met regularly over the consultation period.[48] We acknowledge SACOSS's concerns and the resource implications of fully participating in ElectraNet's consumer engagement. However, we consider that the opportunities presented by ElectraNet's consumer engagement would be of benefit to organisations that choose to participate.

SACOSS also submitted that it understood that one aim of the early engagement approach was to have the proposal fast tracked through the AER processes, so that the draft decision was as close to a final decision as possible. SACOSS was not supportive of fast tracking and considered that a revenue determination requires a consultation process of dialogue and discussion and as a deliberative process, it needs to run its course.[49] We consider that the early engagement process complements and enhances the revenue determination process. It cannot act as a substitute to the formal decision making process required of us under the rules. Our role and responsibilities under the NER remain and we have adhered to this process in undertaking a rigorous assessment of ElectraNet's revenue proposal.

[48] SACOSS, *ElectraNet Determination 2018-23 – Revenue Proposal*, July 2017, p.1.

[49] SACOSS, *ElectraNet Determination 2018-23 – Revenue Proposal*, July 2017, p. 2.

5 Understanding the NEO

The NEL requires us to make our decision in a manner that contributes, or is likely to contribute, to achieving the NEO.[50] The focus of the NEO is on promoting efficient investment in, and operation and use of, electricity services (rather than assets) in the long term interests of consumers.[51] This is not delivered by any one of the NEO's factors in isolation, but rather by balancing them in reaching a regulatory decision.[52]

In general, we consider that the long-term interests of consumers are best served where consumers receive a reasonable level of safe and reliable service that they value at least cost in the long run.[53] A decision that places too much emphasis on short term considerations may not lead to the best overall outcomes for consumers once the longer term implications of that decision are taken into account. [54]

There may be a range of economically efficient decisions that we could make in a revenue determination, each with different implications for the long term interests of consumers.[55] A particular economically efficient outcome may nevertheless not be in the long term interests of consumers, depending on how prices are structured and risks allocated within the market.[56] There are also a range of outcomes that are unlikely to advance the NEO, or advance the NEO to the degree that others would. For example, we consider that:

- the long term interests of consumers would not be advanced if we encourage overinvestment which results in prices so high that consumers are unwilling or unable to efficiently use the network.[57] This could have significant longer term pricing implications for those consumers who continue to use network services
- equally, the long-term interests of consumers would not be advanced if allowed revenues result in prices so low that investors do not invest to sufficiently maintain the appropriate quality and level of service, and where customers are making more use of the network than is sustainable.[58] This could create longer term problems in the network, and could have adverse consequences for safety, security and reliability of the network

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50 NEL, section 16(1).

51 This is also the view of the Australian Energy Markets Commission (AEMC). See, for example, the AEMC, *Applying the Energy Objectives: A guide for stakeholders*, 1 December 2016, p. 5.

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

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

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

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

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

57 NEL, s. 7A(7).

58 NEL, s. 7A(6).

The legislative framework recognises the complexity of this task by providing us with significant discretion in many aspects of the decision-making process to make judgements on these matters.

5.1 Achieving the NEO to the greatest degree

Electricity transmission determinations are complex decisions. In most cases, the provisions of the NER do not point to a single answer, either for our decision as a whole or in respect of particular components. They require us to exercise our regulatory judgement. For example, chapter 6A of the NER requires us to prepare forecasts, which are predictions about unknown future circumstances. Very often, there will be more than one plausible forecast, [59] and much debate amongst stakeholders about relevant costs. For certain components of our decision there may therefore be several plausible answers or several plausible point estimates.

When the constituent components of our decision are considered together, this means there will almost always be several potential, overall decisions. More than one of these may contribute to the achievement of the NEO. In these cases, our role is to make an overall decision that we are satisfied contributes to the achievement of the NEO to the greatest degree.[60]

We approach this from a practical perspective, accepting that it is not possible to consider every permutation specifically. Where there are choices to be made among several plausible alternatives, we have selected what we are satisfied would result in an overall decision that contributes to the achievement of the NEO to the greatest degree.

5.2 Interrelationships between constituent components

Examining constituent components in isolation ignores the importance of the interrelationships between components of the overall decision, and would not contribute to the achievement of the NEO. We have considered these interrelationships in our analysis of the constituent components of our draft decision in the relevant attachments. Examples include:

- underlying drivers and context which are likely to affect many constituent components of our decision. For example, forecast demand affects the efficient levels of capex and opex in the regulatory control period (see attachment 6 and 7)
- direct mathematical links between different components of a decision. For example, the level of gamma has an impact on the appropriate tax allowance; the benchmark

[59] AEMC, *Rule Determination: National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006*, 16 November 2006, p. 52.

[60] NEL, s. 16(1)(d).

efficient entity's debt to equity ratio has a direct effect on the cost of equity, the cost of debt, and the overall vanilla rate of return (see attachments 3, 4 and 8)

- trade-offs between different components of revenue. For example, undertaking a particular capex project may affect the need for opex or vice versa (see attachments 6 and 7).

A Constituent components

This overview, together with its attachments, constitutes our draft decision on ElectraNet's revenue proposal. Our draft decision on ElectraNet's transmission determination includes the following constituent components:[61]

Constituent component
In accordance with clause 6A.14.1(1)(i) of the NER, the AER does not approve the total revenue cap set out in ElectraNet's building block proposal. Our draft decision on ElectraNet's total revenue cap is $1588.4 ($nominal) for the 2018–23 regulatory control period. This decision is discussed in Attachment 1 of this draft decision.
In accordance with clause 6A.14.1(1)(ii) of the NER, the AER does not approve the maximum allowed revenue (MAR) for each regulatory year of the regulatory control period set out in ElectraNet's building block proposal. Our decision on ElectraNet's MAR for each year of the 2018–23 regulatory control period is set out in Attachment 1 of this draft decision.
In accordance with clause 6A.14.1(1)(iii) of the NER, the AER has decided to apply the service component, network capability component and market impact component of Version 5 of the service target performance incentive scheme (STPIS) to ElectraNet for the 2018–23 regulatory control period. The values and parameters of the STPIS are set out in Attachment 11 of this draft decision.
In accordance with clause 6A.14.1(1)(iv) of the NER, the AER's decision on the values that are to be attributed to the parameters for the efficiency benefit sharing scheme (EBSS) that will apply to ElectraNet in respect of the 2018–23 regulatory control period are set out in Attachment 9 of this draft decision.
In accordance with clause 6A.14.1(1)(v) of the NER, the AER has approved the commencement and length of the regulatory control period as ElectraNet proposed in its revenue proposal. The regulatory control period will commence on 1 July 2018 and the length of this period is five years, expiring on 30 June 2023.
In accordance with clause 6A.14.1(2) and acting in accordance with clause 6A.6.7(d) of the NER, the AER has accepted ElectraNet's total forecast capital expenditure of $459.1 ($2017–18).
In accordance with clause 6A.14.1(3) and acting in accordance with clause 6A.6.6(d) of the NER, the AER has accepted ElectraNet's total forecast operating expenditure inclusive of debt raising costs of $440.1 ($2017–18). This is discussed in Attachment 7 of this draft decision.
In accordance with clause 6A.14.1(5A) of the NER, the AER has determined that version 1 of the capital expenditure sharing scheme (CESS) as set out the Capital Expenditure Incentives Guideline will apply to ElectraNet in the 2018–23 regulatory control period. This is discussed in Attachment 10 of this draft decision.
In accordance with clause 6A.14.1(5B) and 6A.6.2 of the NER, the AER has decided that the allowed rate of return for the 2018–19 regulatory year is 5.7 (nominal vanilla), as set out in Attachment 3 of this draft decision. The rate of return for the remaining regulatory years 2018–23 will be updated annually because our decision is to apply a trailing average portfolio approach to estimating debt which incorporates annual updating of the allowed return on debt.
In accordance with clause 6A.14.1(5C) of the NER, the AER has decided that the return on debt is to be estimated using a methodology referred to in clause 6A.6.2(i)(2), and using the formula to be applied in accordance with clause 6A.6.2(l). The methodology and formula are set out in Attachment 3 of this draft decision.
In accordance with clause 6A.14.1(5D) of the NER, the AER has decided that the value of imputation credits as referred to in clause 6A.6.4 is 0.4. This is set out in Attachment 4 of this draft decision.
In accordance with clause 6A.14.1(5E) of the NER, the AER has decided, in accordance with clause 6A.6.1 and schedule 6A.2, that the opening regulatory asset base (RAB) as at the commencement of the 2018–23 regulatory control period, being 1 July

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

Constituent component
2018, is $2569.3 ($nominal). This is set out in Attachment 2 of this draft decision.
In accordance with clause 6A.14.1(5F) of the NER, the AER has decided that the depreciation approach based on forecast capex (forecast depreciation) is to be used to establish the RAB at the commencement of ElectraNet's regulatory control period as at 1 July 2023. This is discussed in Attachment 2 of this draft decision.
In accordance with clause 6A.14.1(6) of the NER, the AER has approved ElectraNet's proposed negotiating framework. This is set out in Attachment 14 of this draft decision.
In accordance with clause 6A.14.1(7) of the NER, the AER has specified the negotiated transmission services criteria for ElectraNet. This is set out in Attachment 14 of this draft decision.
In accordance with clause 6A.14.1(8) of the NER, the AER has approved ElectraNet's proposed pricing methodology. This is set out in Attachment 12 of this draft decision.
In accordance with clause 6A.14.1(9) of the NER, the AER has approved the following nominated pass through events to apply to ElectraNet for the 2018–23 regulatory control period in accordance with clause 6A.6.9: • terrorism event • insurance cap event • natural disaster event • insurer's credit risk event These events have the definitions set out in Attachment 13 of this draft decision.

B List of submissions

We received 10 submissions in response to ElectraNet's revenue proposal. These are listed below.

Submission from	Date received
Business SA	6 July 2017
Leigh Creek Energy	7 July 2017
Iron Road Limited	7 July 2017
SA Chamber of Mines and Energy	11 July 2017
Consumer Challenge Panel (CCP9)	12 July 2017
Government of South Australia	13 July 2017
SA Council of Social Services	13 July 2017
Uniting Communities	25 July 2017
District Council of Lower Eyre Peninsula	2 August 2017
ElectraNet	6 October 2017