REVENUE PROPOSAL 2019 - 2023

Attachment 1

Maximum Allowed Revenue

28 March 2017

ElectraNet

Company Information

ElectraNet Pty Ltd (ElectraNet) is the principal electricity transmission network service provider (TNSP) in South Australia.

For information about ElectraNet visit www.electranet.com.au.

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Note

This attachment forms part of our Revenue Proposal for the 2018-19 to 2022-23 regulatory control period. It should be read in conjunction with the other parts of the Revenue Proposal.

Our Revenue Proposal comprises the overview and attachments listed below, and the supporting documents that are listed in Attachment 15:

Revenue Proposal Overview

Attachment 1 – Maximum allowed revenue (this document)

Attachment 2 – Regulatory asset base

Attachment 3 – Rate of return

Attachment 4 – Value of imputation credits

Attachment 5 – Regulatory depreciation

Attachment 6 – Capital expenditure

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

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Attachment 14 – Negotiated services

Attachment 15 – List of supporting documents

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1. Maximum Allowed Revenue

1.1 Key points

- Our Maximum Allowed Revenue (MAR) reflects the sum of the revenue building blocks – namely the return on capital, return of capital (depreciation), operating expenditure, efficiency performance bonuses or penalties, and corporate tax allowance.
- Our revenue requirement is calculated in accordance with the standard post-tax building block approach outlined in the Rules, and the Australian Energy Regulator's (AER's) Post-Tax Revenue Model (PTRM).
- Our proposed X factors have been calculated in accordance with Rules requirements. Table 1.1 below shows the MAR and the X factors proposed for the forthcoming regulatory period of 2018-19 to 2022-23. For reference, our MAR for the final year of the current regulatory period is also shown.
- Our revenue requirement is 11% lower in nominal terms or 12% in real terms in 2018-19 (the first year of the forthcoming regulatory period) compared to 2017-18 (the final year of the current regulatory period). This reflects reductions in each of the building block components, with the exception of depreciation.
- For each of the four remaining years of the forthcoming period, our revenue requirement increases by 3.3% in real terms, noting that actual revenue will be influenced by annual updating of the cost of debt by the AER.
- Average transmission charges are estimated to reduce by approximately 10in nominal terms from approximately 2.8 cents per kWh in 2017-18 to approximately 2.5 cents per kWh in 2018-19.
- The average change in our transmission charges in 2018-19 will reduce the average residential customer's annual electricity bill by approximately $14 ($ nominal). The average small business customer's bill will be reduced by approximately $28.

Table 1.1: Smoothed revenue requirement, 1 July 2018 to 30 June 2023 ($m nominal)

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Annual expected MAR (Smoothed)	349.6	312.3	329.1	346.7	365.3	384.9	**1738.2**
X factor		12.4%	-3.3%	-3.3%	-3.3%	-3.3%	

1.2 Introduction

This attachment sets out our MAR for prescribed transmission services and other key aspects of our Revenue Proposal. The MAR is calculated in accordance with the standard post-tax building block approach outlined in Part C of Chapter 6A of the Rules and the AER's PTRM[1].

[1] PTRM version 3

The attachment is structured as follows:

- Section 1.3 defines the scope of the services covered by the MAR and this Revenue Proposal.
- Section 1.4 sets out other key aspects of our Revenue Proposal.
- Section 1.5 provides an overview of the methodology used to calculate the MAR.
- Section 1.6 sets out summary information on the opening Regulated Asset Base (RAB) and forecast RAB values used in the revenue calculations.
- Section 1.7 provides summary information on the return on capital.
- Section 1.8 sets out information on regulatory depreciation.
- Section 1.9 shows our annual operating expenditure requirements.
- Section 1.10 sets out details of our applicable incentive payments.
- Section 1.11 sets out the corporate tax allowance.
- Section 1.12 provides details of our shared asset revenue.
- Section 1.13 shows the calculations of the annual building block revenue requirement.
- Section 1.14 sets out the MAR and X factors for the forthcoming regulatory period.
- Section 1.15 shows the average price path under our proposed MAR.

1.3 Scope of services covered

The MAR relates to the costs of prescribed transmission services. Costs have been allocated to prescribed services in accordance with our approved Cost Allocation Methodology[2].

Prescribed services are:

- Shared transmission services provided to customers directly connected to the transmission network, and network service providers connected to the transmission network (prescribed Transmission Use of System (TUOS) services).
- Connection services provided to connect SA Power Networks' distribution network to the transmission network (prescribed exit services).
- Grandfathered connection services provided to generators and customers directly connected to the transmission network that were in place on 9 February 2006 under clause 11.6.11 of the Rules (prescribed entry and exit services).
- Prescribed common transmission services, which are necessary to ensure the integrity of the transmission network, including through the maintenance of power system security.

[2] Available at https://www.electranet.com.au/wp-content/uploads/resource/2016/06/20081508-Report-Cost-Allocation-Methodology.pdf.

For the avoidance of doubt, the revenues associated with negotiated transmission services are excluded from the MAR. Similarly, other services we provide (non-regulated transmission services) are not subject to economic regulation under Chapter 6A of the Rules and are therefore also excluded from the MAR.

1.4 Revenue Proposal details

1.4.1 Period over which the MAR applies

The MAR applies for the five year regulatory control period commencing on 1 July 2018 and ending on 30 June 2023.

1.4.2 Lodgement date

ElectraNet is required to lodge a Revenue Proposal by 31 January 2017, being 17 months prior to the expiry of the current regulatory period (i.e. 30 June 2018) under clause 6A.10.1(a) of the Rules.

In view of the unique challenges facing ElectraNet following the extreme weather event of 28 September 2016, and recognising ElectraNet's efforts in undertaking early engagement with stakeholders in developing its Revenue Proposal, the AER agreed to extend this lodgement date to 28 March 2017[3]. This Revenue Proposal is lodged in accordance with this agreed timeframe.

1.4.3 Capitalisation

Expenditure has been allocated to capital and operating expenditure in accordance with our capitalisation policy. No changes are proposed to our capitalisation policy at this time.

1.4.4 Presentation of numbers

In our Revenue Proposal, unless stated otherwise, forecast and historical expenditure is expressed in real terms (excluding inflation) in 2017-18 dollars to enable comparison of trends, while the RAB and revenue building blocks are presented in nominal dollars (including inflation) consistent with the AER's PTRM.

The reference date for escalation is 31 December (i.e. mid financial year values) unless otherwise indicated.

Note that totals presented in table rows and columns throughout this Revenue Proposal may not necessarily add due to rounding.

1.4.5 Confidential information

We have not identified any aspects of this Revenue Proposal to be confidential. Where a claim of confidentiality is made in relation to a supporting document listed in Attachment 15, a redacted version is provided along with details of the confidential information.

3 Letter dated 9 November 2016 from Sebastian Roberts, General Manager, AER, available at www.aer.gov.au/system/files/AER%20-%20Response%20to%20ElectraNet%20regarding%20request%20for%20extension%20of%20time%20to%20submit%20revenue%20proposal%20-%209%20November%202016.pdf.

ElectraNet's Revenue Proposal including supporting material comprises a total of 2703 pages of written material, of which 59 pages include confidential information we are unable to disclose, representing only 2% of the total.

Further information is contained in the confidentiality register which accompanies our Revenue Proposal.

1.4.6 Related Party Transactions

We confirm that ElectraNet is not a related party to any other entity which contributes to the provision of prescribed transmission services, or with the capacity to determine the outcome of decisions about ElectraNet's financial and operating policies. Accordingly, there are no contracts in place for the provision of services by any such entities.[4]

1.5 Methodology

Our MAR is calculated using the standard post-tax building block approach outlined in clause 6A.5.4 of the Rules and the AER's PTRM and accompanying handbook.

The revenue building block components are described in detail in the other attachments that comprise our Revenue Proposal. We have applied an inflation forecast of 1.97% for the forecast period as explained in Attachment 3.

The building block formula to be applied in each year of the regulatory control period is:

MAR	=	return on capital + return of capital + Operating expenditure + Tax +/- Efficiency payments
	=	(WACC x RAB) + D + Operating expenditure + Tax +/- Incentive payments

where:

MAR	=	Maximum allowable revenue
WACC	=	post tax nominal weighted average cost of capital ('vanilla' WACC)
RAB	=	Regulatory Asset Base
D	=	economic depreciation (nominal depreciation – indexation of the RAB)
Operating expenditure	=	operating expenditure
Tax	=	regulated business corporate tax allowance
Incentive payments	=	Efficiency Benefit Sharing Scheme (EBSS) and Network Capability Incentive Parameter Action Plan (NCIPAP) payments

The revenue calculated using the building block formula is smoothed with an X factor in accordance with the requirements of clause 6A.6.8 of the Rules.

[4] For completeness, it is noted that ElectraNet reports the payment of Directors' fees and interest on shareholder loan notes as related party transactions for the purposes of its annual regulatory financial reporting to the AER, consistent with our statutory reporting. ElectraNet Transmission Investments Pty Ltd as a related party owns certain negotiated and unregulated assets but does not provide any prescribed transmission services.

1.6 Regulatory asset base

A projection of the RAB is required for each year of the forthcoming regulatory period to calculate the annual "return on capital" building block.

The projected RAB values over the 2018-19 to 2022-23 regulatory period are set out in Table 1.2 below. These values reflect the capital expenditure forecast set out in Attachment 6 and the forecast regulatory depreciation over the period as described in Attachment 5.

Table 1.2: Asset base roll-forward from 1 July 2018 to 30 June 2023 ($m nominal)[5]

Regulatory Asset Base	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Opening RAB	2,552.0	2,597.5	2,628.3	2,666.1	2,694.0	-
Net capital expenditure	100.8	106.3	118.0	111.1	60.1	**496.3**
Straight line depreciation	(105.5)	(126.8)	(131.9)	(135.8)	(137.6)	**(637.5)**
Inflation adjustment on RAB	50.3	51.2	51.8	52.5	53.1	**258.8**
Closing RAB	2,597.5	2,628.3	2,666.1	2,694.0	2,669.6	-

1.7 Return on capital

As noted in Section 1.5, the annual "return on capital" building block is calculated by multiplying the projected RAB and the allowed rate of return (weighted average cost of capital, or WACC).

Our WACC calculation is detailed in Attachment 3. The return on capital has been calculated by applying the post-tax nominal vanilla WACC [6] to the opening RAB consistent with the AER's PTRM. This calculation is shown in Table 1.3 below.

Table 1.3: Return on capital from 1 July 2018 to 30 June 2023 ($m nominal)

Return on Capital	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Opening RAB	2,552.0	2,597.5	2,628.3	2,666.1	2,694.0	-
Return on capital	153.6	156.4	158.2	160.5	162.2	**790.9**

1.7.1 Equity raising costs

We have applied the AER's standard approach to forecast equity raising costs in the PTRM. This has resulted in a forecast of $0 in equity raising cost in the forthcoming regulatory period.

[5] The nominal figures presented in this chapter are expressed in end of year ($June) terms.

[6] As noted in Attachment 3, the WACC used for the purpose of this Revenue Proposal is based on an indicative averaging period for the risk-free rate and debt risk premium, and will need to be updated prior to the AER's final decision. The WACC will also be updated on an annual basis during the forthcoming regulatory period, consistent with the application of a 10-year trailing average cost of debt by the AER.

1.8 Regulatory depreciation

Our calculation of regulatory depreciation (or return of capital) is detailed in Attachment 5. It explains that depreciation will increase significantly in the forthcoming regulatory period, principally as a result of factors that are beyond our control including, for example, lower forecast inflation.

The AER's PTRM calculates regulatory depreciation by subtracting the indexation of the opening asset base from the depreciation for each regulatory year. A summary of this calculation is shown in Table 1.4 below.

Table 1.4: Regulatory depreciation from 1 July 2018 to 30 June 2023 ($m nominal)

Depreciation	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Straight line depreciation	105.5	126.8	131.9	135.8	137.6	**637.5**
Inflation adjustment on RAB	(50.3)	(51.2)	(51.8)	(52.5)	(53.1)	**(258.8)**
Regulatory depreciation	**55.3**	**75.6**	**80.2**	**83.2**	**84.5**	**378.7**

1.9 Operating expenditure

A detailed explanation of our operating expenditure requirements is provided in Attachment 7. The total operating expenditure (operating expenditure) is shown in Table 1.5 below.

Table 1.5: Operating expenditure from 1 July 2018 to 30 June 2023 ($m nominal)

Operating Expenditure	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Controllable operating expenditure	77.0	78.8	81.2	83.6	85.6	**406.2**
Self-insurance	1.5	1.5	1.5	1.6	1.6	**7.8**
Network support costs	9.2	9.4	9.7	9.9	10.2	**48.4**
Debt raising costs	0.2	0.2	0.2	0.2	0.2	**0.8**
Total	**87.8**	**89.9**	**92.6**	**95.2**	**97.6**	**463.1**

1.10 Incentive payments

Under the applicable incentive schemes, efficiency bonuses or penalty payments are determined based on performance against established targets. The operation of these schemes is described further in the relevant Attachments.

Our revenue forecast includes payments to be made in the forthcoming regulatory period under the following incentive arrangements:

- EBSS – bonus / penalty payments made to reflect operating expenditure efficiency performance in the current regulatory period; and
- NCIPAP – bonus payments made based on successful delivery of approved projects.

The contribution of these payments to total forecast revenue is shown in Table 1.6 below.

Table 1.6: Incentive payments from 1 July 2018 to 30 June 2023 ($m nominal)

Incentive Payments	2018-19	2019-20	2020-21	2021-22	2022-23	Total
EBSS	(0.9)	(1.3)	(1.7)	0.0	1.9	**(1.9)**
NCIPAP	4.6	4.8	5.1	5.4	5.7	**25.6**
Total	**3.7**	**3.6**	**3.5**	**5.4**	**7.6**	**23.7**

We will also be subject to the following incentive schemes in the forthcoming regulatory period:

- Service Target Performance Incentive Scheme (STPIS) – bonus/ penalty payments will be determined annually by the AER based on performance under the service target measures and market impact component of the Scheme during the forthcoming regulatory period; and

- Capital Efficiency Sharing Scheme (CESS) – bonus/ penalty payments will be determined with reference to capital expenditure performance over the forthcoming regulatory period, payable in the following regulatory period commencing 1 July 2023.

1.11 Corporate tax allowance

The calculation of the corporate tax allowance is detailed in Attachment 8. Our estimate of the value of imputation credits (gamma) is set out in Attachment 4. The corporate tax allowance is shown in Table 1.7 below.

Table 1.7: Tax allowance from 1 July 2018 to 30 June 2023 ($m nominal)

Tax Allowance	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Tax payable	15.9	20.1	22.0	23.4	24.3	**105.7**
Less value of imputation credits	(4.0)	(5.0)	(5.5)	(5.8)	(6.1)	**(26.4)**
Corporate tax allowance	**11.9**	**15.1**	**16.5**	**17.5**	**18.2**	**79.3**

1.12 Shared asset revenue

The AER's Shared Asset Guideline requires a revenue adjustment to be made if the average annual non-regulated revenue from shared assets that provide both prescribed transmission services and non-regulated services exceeds a materiality threshold of 1% of total smoothed revenue over the regulatory period. This Guideline does not apply where the approved Cost Allocation Methodology (CAM) has been applied.

Table 1.8 below sets out the applicable revenue from non-regulated services using shared assets.

Table 1.8: Shared asset revenue from 1 July 2018 to 30 June 2023 ($m nominal)

Revenue	2018-19	2019-20	2020-21	2021-22	2022-23
Shared Asset Revenue	0.6	0.6	0.6	0.6	0.6
Average annual Shared Asset Revenue	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
Smoothed MAR	312.3	329.1	346.7	365.3	384.9
1% of Smoothed MAR	**3.1**	**3.3**	**3.5**	**3.7**	**3.8**

Applying the materiality test indicates that the 1% threshold will not be exceeded in the forthcoming regulatory control period, and a revenue adjustment for shared assets will therefore not be required.

1.13 Annual building block revenue requirement

The annual building block revenue requirement for each year of the forthcoming regulatory period is calculated in accordance with clause 6A.5.4 of the Rules as the sum of the building blocks – namely return on capital, return of capital (regulatory depreciation), operating expenditure, efficiency bonuses or penalties, and corporate tax allowance.

Table 1.9 below presents a summary of the building blocks and the annual building block revenue requirement.

Table 1.9: Annual building block revenue requirement 1 July 2018 to 30 June 2023 ($m nom)

	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Return on capital	153.6	156.4	158.2	160.5	162.2	**790.9**
Return of capital (regulatory depreciation)	55.3	75.6	80.2	83.2	84.5	**378.7**
Operating expenditure	87.8	89.9	92.6	95.2	97.6	**463.1**
Efficiency payments	3.7	3.6	3.5	5.4	7.6	**23.7**
Corporate tax allowance	11.9	15.1	16.5	17.5	18.2	**79.3**
Annual building block revenue requirement	**312.3**	**340.6**	**350.9**	**361.9**	**370.0**	**1,735.7**

1.14 Maximum allowed revenue and X factors

In accordance with clauses 6A.5.3(c) and 6A.6.8 of the Rules, the annual building block revenue requirement is converted into a MAR in order for the revenue cap to be implemented. We have applied the standard revenue smoothing approach in the AERs PTRM to calculate an adjusted revenue path[7].

7 This involves adjustments to the MAR amounts to be recovered in 2019-20 to 2022-23 to create a smoother revenue path in NPV neutral terms, while holding MAR for 2018-19 constant. ElectraNet would be open to alternative approaches that would reduce price volatility further.

The X factors we propose follow the requirements of the Rules because:

- The MAR in the last year of the forthcoming period (the year ending 30 June 2023) is within 5% of the annual building block revenue requirement for that year. This is consistent with clause 6A.6.8(c)(2) which requires the X factor to be set so that these two values are as close as reasonably possible.
- The total building block revenue and the total MAR for the regulatory control period (that is, the total revenue cap) are equal in net present value terms, as required by clause 6A.5.3(c)(1).

Table 1.10 below shows the annual building block revenue requirement, the MAR, the X factors and the total revenue cap for the forthcoming regulatory control period.

Table 1.10: Smoothed revenue requirement, 1 July 2018 to 30 June 2023 ($m nominal)

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Annual building block revenue requirement (Unsmoothed)	349.6	312.3	340.6	350.9	361.9	370.0	**1,735.7**
Annual expected MAR (Smoothed)	349.6	312.3	329.1	346.7	365.3	384.9	**1,738.2**
X factor		12.4%	-3.3%	-3.3%	-3.3%	-3.3%	

Figure 1.1 below shows the forecast step reduction in our nominal revenue path in the first year of the forthcoming regulatory period of 11%.

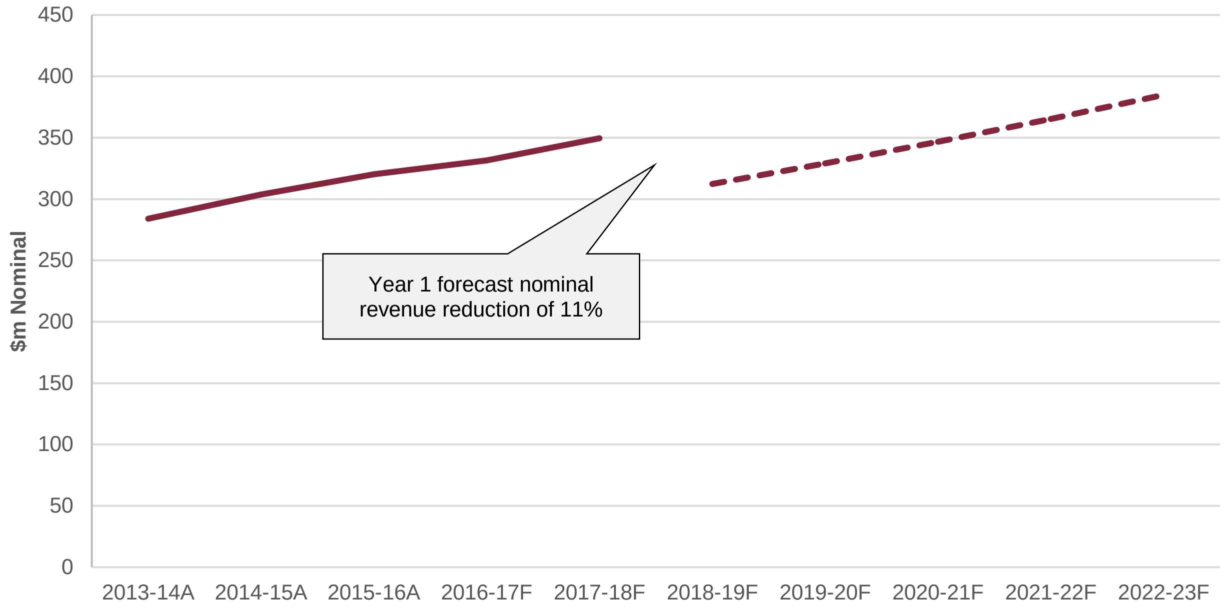

Figure 1.1: Revenue path ($m nominal)

1.15 Average price path

We determine our annual transmission charges based on the AER approved revenues and our approved Pricing Methodology, which meets the Rules requirements. The effect of our Revenue Proposal on average transmission charges can be roughly approximated by taking the MAR and dividing it by forecast delivered energy in South Australia.

Based on this approach, we estimate that our Revenue Proposal will result in an average reduction of about 10% (in nominal terms) in transmission charges in the first year of the forthcoming regulatory period. It must be emphasised, however, that many customers will experience changes that differ from this average.

Figure 1.2 below shows the average price path resulting from this Revenue Proposal during the next regulatory period compared with the average price for the current regulatory period (2013-14 to 2017-18).

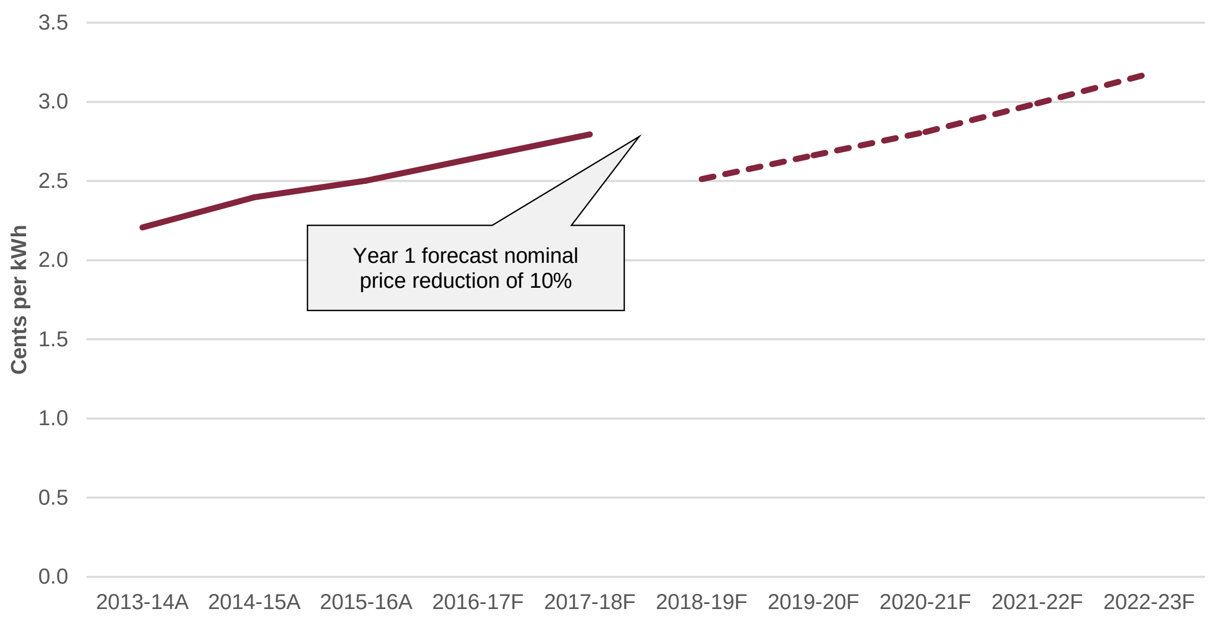

Figure 1.2: Average price path (nominal cents per kWh) [8]

Table 1.11 below shows the average price path over the forthcoming regulatory period.

[8] Based on South Australian energy forecasts (neutral case) published by AEMO in its annual *National Electricity Forecasting Report: For The National Electricity Market,* June 2016 available at www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Planning-and-forecasting/National-Electricity-Forecasting-Report.

Table 1.11: Average price path ($m nominal)

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Smoothed revenue requirement	349.6	312.3	329.1	346.7	365.3	384.9
Energy (GWh)	12,508	12,432	12,359	12,339	12,214	12,111
Average transmission price ($/MWh, nominal)	27.95	25.12	26.62	28.10	29.91	31.78
Average transmission price ($/MWh, real)	27.95	24.64	25.61	26.50	27.66	28.82

Average transmission charges are estimated to decrease from approximately 2.8 cents per kWh in 2017-18 (the last year of the current regulatory period) to approximately 2.5 cents per kWh in 2018-19.

We estimate that the decrease in our transmission charges in the first year of the forthcoming regulatory period would reduce the average residential customer's annual electricity bill by approximately $14. The average small business customer's bill would be reduced by approximately $28.

Based on our proposed revenues, transmission costs are projected to fall to around 8% of an average household electricity bill by the end of the forthcoming regulatory period based on current market projections.[9]

The average price reduction is slightly lower than the fall in total revenue due to the continued fall in expected energy consumption over the forthcoming period, which is projected to decline by 0.6% per annum based on the forecasts of the Australian Energy Market Operator (AEMO)[10], placing upward pressure on unit prices.

Actual revenue and price outcomes by the end of the period will be influenced by annual movements in energy consumption, inflation and the WACC as the actual cost of debt (assuming the AER Guideline approach) is updated annually throughout the period.

These revenue and pricing outcomes also exclude the impact of additional capital projects (known as 'contingent projects') that may be approved separately by the AER if certain trigger events are met. We have identified five such projects in our Revenue Proposal.

9 Based on published data on average residential and small business electricity usage, including $1,767 per annum for average annual household bill and 5,000 kWh annual household consumption as per ESCOSA, *Energy Retail Offers Comparison Report 2015-16*, August 2016 available at www.escosa.sa.gov.au/ArticleDocuments/534/20160831-Energy-2016RetailOffersComparisonReport.pdf.aspx?Embed=Y. Assuming annual price growth of 1.1% p.a. as per the Jacobs *Retail Electricity Price History and Projections - Public* Report, 23 May 2016, prepared for AEMO, available at www.aemo.com.au/-/media/Files/Electricity/NEM/Planning_and_Forecasting/NEFR/2016/Retail-electricity-price-history-and-projections.pdf.

10 Based on South Australian energy forecasts (neutral case) published by AEMO in its annual *National Electricity Forecasting Report: For The National Electricity Market,* June 2016 available at www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Planning-and-forecasting/National-Electricity-Forecasting-Report.

We are actively investigating two of these projects at present though the RIT-T process, which involves assessing the benefits and costs of these projects to determine if they are economically justifiable, namely:

- The South Australian Energy Transformation RIT-T that is considering new interconnector options to the eastern States as well as non-network alternatives; and
- A full rebuild of the transmission lines on the Eyre Peninsula (as discussed in Attachment 6).

By way of illustration, were either of these potential projects found to be economic and later approved by the AER:

- The development of a new interconnector to New South Wales at an indicative cost for the South Australian portion of the link of $250m would add approximately $8 to the average annual residential customer bill from the time of commissioning, which would be expected to be towards the end of the forthcoming regulatory period; and
- A full rebuild of the transmission line serving the Eyre Peninsula at an additional cost of approximately $120m would add approximately $4 to the average annual residential customer bill from the time of commissioning, which would be expected to be towards the end of the forthcoming regulatory period.

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