FINAL DECISION

TasNetworks
Distribution Determination
2019 to 2024

Attachment 1
Annual revenue requirement

April 2019

AUSTRALIAN
ENERGY
REGULATOR

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Note

This attachment forms part of the AER's final decision on TasNetworks' 2019–24 distribution determination. It should be read with all other parts of the final decision.

The final decision includes the following attachments:

Overview

Attachment 1 – Annual revenue requirement

Attachment 2 – Regulatory asset base

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

Attachment 6 – Operating expenditure

Attachment 7 – Corporate income tax

Attachment 9 – Capital expenditure sharing scheme

Attachment 10 – Service target performance incentive scheme

Attachment 13 – Control mechanisms

Attachment 15 – Alternative control services

Attachment 18 – Tariff structure statement

Attachment B – Negotiating framework

Contents

Shortened forms

Shortened form	Extended form
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
ARR	annual revenue requirement
CESS	capital expenditure sharing scheme
CPI	consumer price index
distributor	distribution network service provider
DMIAM	demand management innovation allowance mechanism
EBSS	efficiency benefit sharing scheme
NER	national electricity rules
OTTER	Office of the Tasmanian Economic Regulator
opex	operating expenditure
PTRM	post-tax revenue model
RAB	regulatory asset base
RIN	regulatory information notice

1 Annual revenue requirement

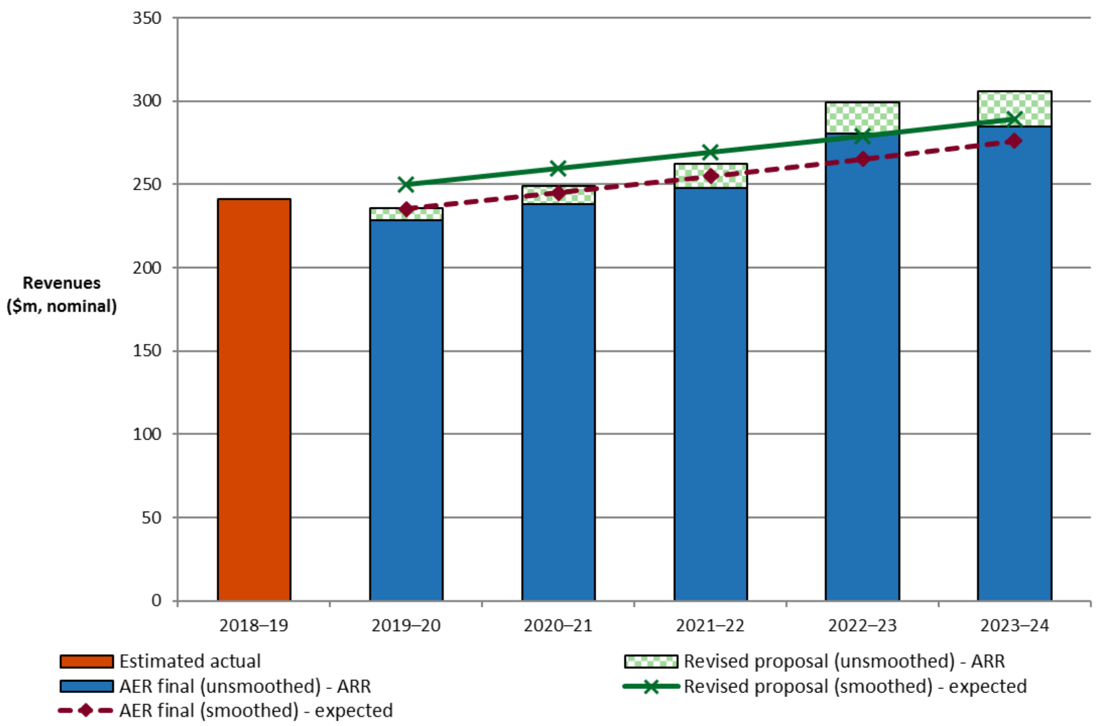
The annual revenue requirement (ARR) is the sum of the various building block costs for each year of the regulatory control period before smoothing. The ARRs are smoothed across the period to reduce fluctuations between years and to determine expected revenues for each year. The expected revenues are the amounts that TasNetworks will target for annual pricing purposes and recover from customers for the provision of standard control services for each year of the regulatory control period. This attachment sets out our final decision on TasNetworks' ARRs and expected revenues for the 2019–24 regulatory control period.

1.1 Final decision

We do not accept TasNetworks' revised proposed total ARR of $1351.5 million ($nominal) over the 2019–24 regulatory control period. This is because we have not accepted the building block costs in TasNetworks' revised proposal. We determine a total ARR of $1279.1 million ($nominal) for TasNetworks for the 2019–24 regulatory control period, reflecting our final decision on the various building block costs. This is a decrease of $72.4 million ($nominal) or 5.4 per cent to TasNetworks' revised proposal.

We determine the annual expected revenue (smoothed) and X factor for each regulatory year of the 2019–24 regulatory control period by smoothing the ARR. Our final decision is to approve total expected revenues (smoothed) of $1276.4 million ($nominal) for TasNetworks for the 2019–24 regulatory control period.

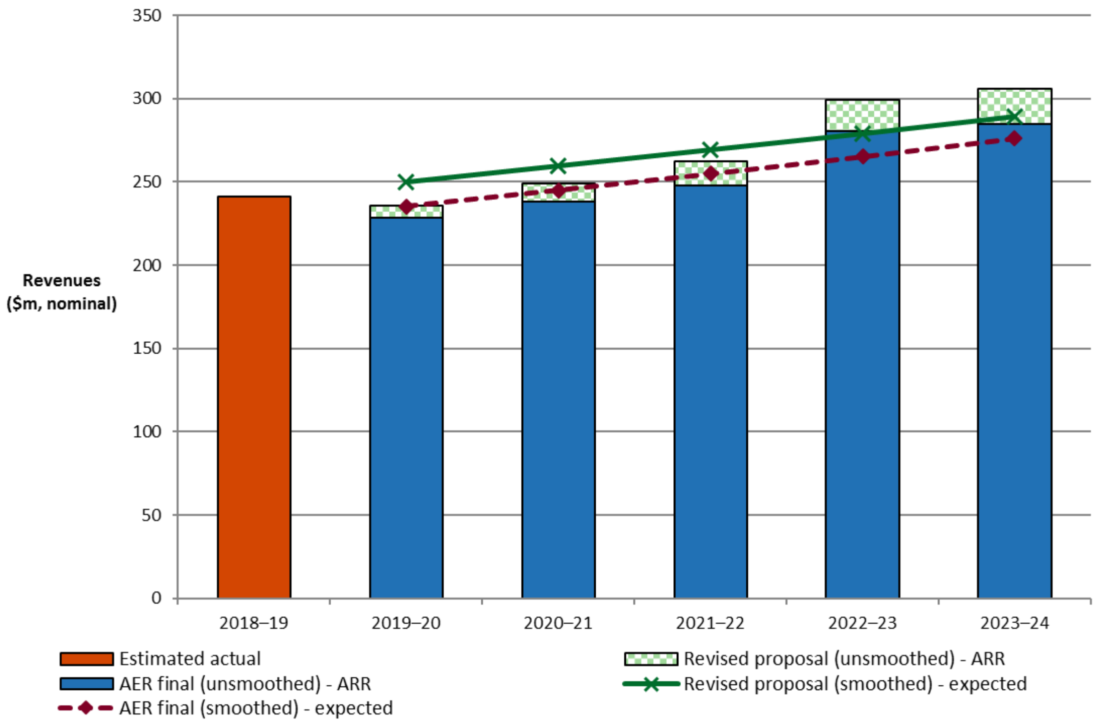
Figure 1-1 AER's final decision on TasNetworks' revenue for the 2019–24 regulatory control period ($million, nominal)



Source: TasNetworks, *Post Tax Revenue Model (PTRM) Distribution,* November 2018.
AER analysis.

shows the difference between TasNetworks' revised proposal and our final decision. Table 1-1 shows our final decision on the building block costs, the ARR, annual expected revenue and X factor for each year of the 2019–24 regulatory control period.

Figure 1-1 AER's final decision on TasNetworks' revenue for the 2019–24 regulatory control period ($million, nominal)



Source: TasNetworks, *Post Tax Revenue Model (PTRM) Distribution,* November 2018.
AER analysis.

Table 1-1 AER's final decision on TasNetworks' revenues for the 2019–24 regulatory control period ($million, nominal)

	2019–20	2020–21	2021–22	2022–23	2023–24	Total
Return on capital	93.6	97.2	100.1	102.0	104.3	497.2
Regulatory depreciation[a]	57.1	62.7	69.3	73.8	78.6	341.5
Operating expenditure[b]	92.9	94.8	96.1	97.5	98.9	480.2
Revenue adjustments[c]	–21.0	–21.5	–22.0	2.4	–2.2	–64.2
Net tax allowance	5.6	4.7	4.4	4.7	5.1	24.4
Annual revenue requirement (unsmoothed)	228.2	237.9	248.0	280.4	284.7	1279.1
Annual expected revenue (smoothed)	**235.4**	**244.9**	**254.9**	**265.2**	**276.0**	**1276.4**

X factor[d]	n/a[e]	–1.60%	–1.60%	–1.60%	–1.60%	n/a

Source: AER analysis.

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

(b) Includes debt raising costs.

(c) Includes revenue adjustments from the efficiency benefit sharing scheme (EBSS), capital expenditure sharing scheme (CESS) and demand management innovation allowance mechanism (DMIAM).

(d) 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.

(e) TasNetworks is not required to apply an X factor for 2019–20 because we set the 2019–20 expected revenue in this decision. The expected revenue for 2019–20 is around 4.7 per cent lower than the approved expected revenue for 2018–19 in real terms, or 2.3 per cent lower in nominal terms.

1.2 TasNetworks’ revised proposal

TasNetworks' revised proposal included a total expected revenue of $1346.6 million ($nominal) for the 2019–24 regulatory control period. Table 1-2 shows TasNetworks' revised proposed building block costs, the ARR, expected revenue and X factor for each year of the 2019–24 regulatory control period.

Table 1-2 TasNetworks' revised proposed revenues for the 2019–24 regulatory control period ($million, nominal)

	2019–20	2020–21	2021–22	2022–23	2023–24	Total
Return on capital	99.3	105.0	109.9	113.8	118.1	546.0
Regulatory depreciation[a]	56.8	62.9	70.2	75.8	81.2	346.8
Operating expenditure[b]	93.0	94.8	96.2	97.6	99.0	480.6
Revenue adjustments[c]	–21.2	–21.7	–22.2	2.9	–2.2	–64.5
Net tax allowance	7.6	8.0	8.4	8.9	9.7	42.6
Annual revenue requirement (unsmoothed)	235.5	249.0	262.4	298.9	305.8	1351.5
Annual expected revenue (smoothed)	**250.0**	**259.3**	**269.0**	**279.0**	**289.3**	**1346.6**
X factor	n/a[d]	–1.25%	–1.24%	–1.24%	–1.24%	n/a

Source: TasNetworks, *Transmission and Distribution Revised Proposals 2019–2024*, November 2018, p. 12.

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

(b) Includes debt raising costs.

(c) Includes revenue adjustments from EBSS, CESS and DMIAM.

(d) TasNetworks is not required to apply an X factor for 2019–20 because we set the 2019–20 expected revenue in this decision.

1.3 Assessment approach

We did not change our assessment approach for the ARR from our draft decision. Section 1.3 of our draft decision details that approach.[1]

1.4 Reasons for final decision

For this final decision, we determine a total ARR of $1279.1 million ($nominal) for TasNetworks over the 2019–24 regulatory control period. This is a reduction of $72.4 million ($nominal) or 5.4 per cent to TasNetworks' revised proposed total ARR of $1351.5 million ($nominal) for this period. This reflects the impact of our final decision on the various building block costs.

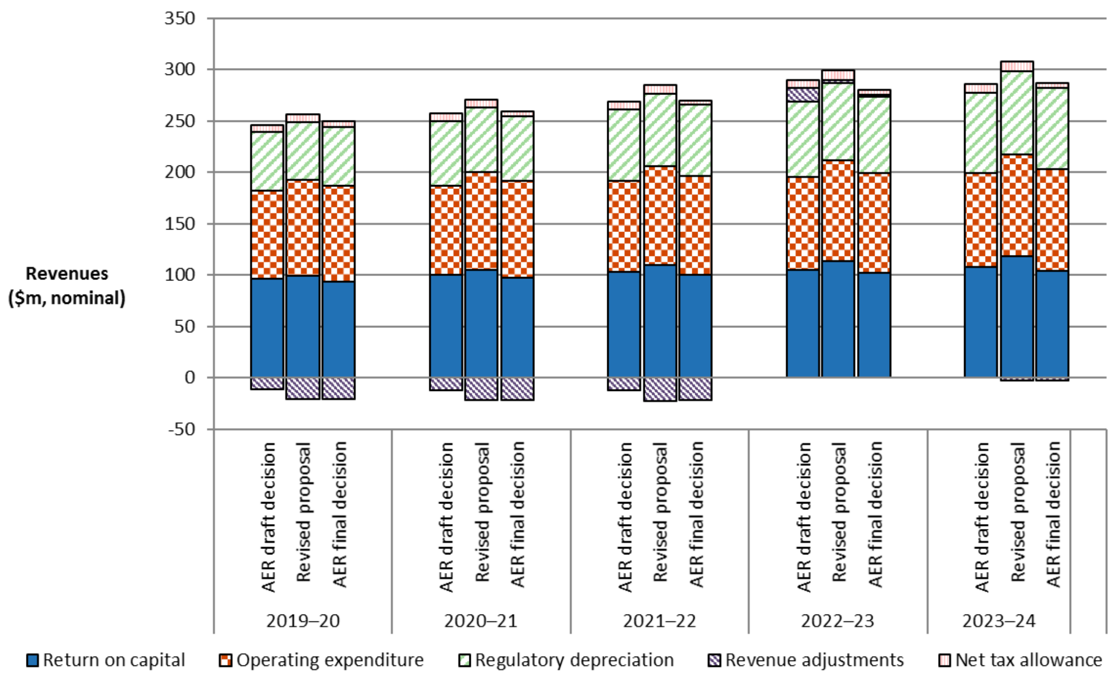
Figure 1-2 shows the building block components from our final determination that make up the ARR for TasNetworks, and the corresponding components from its revised proposal and our draft decision.

The changes we made to TasNetworks' revised proposal building blocks include (in nominal terms):

- a reduction in the return on capital allowance of $48.8 million or 8.9 per cent (attachments 2, 5 and section 2.2 of the Overview)
- a reduction in the regulatory depreciation allowance of $5.3 million or 1.5 per cent (attachment 2, 4 and 5)
- a reduction in the cost of corporate income tax allowance of $18.2 million or 42.7 per cent (attachment 7)
- an increase in the revenue adjustments of $0.3 million or 0.4 per cent arising from changes to EBSS (section 3.1 of the Overview), CESS (attachment 9) and DMIAM (section 3.4 of the Overview).

[1] AER, *TasNetworks 2019–24 – Distribution – Draft decision – Attachment 1 – Annual revenue requirement*, September 2018, pp. 8–10.

Figure 1-2 AER's draft and final decisions, and TasNetworks' revised



Source: TasNetworks, *Post Tax Revenue Model (PTRM) Distribution,* November 2018.

AER analysis.

Note: Revenue adjustments include EBSS, CESS and DMIAM amounts. Opex includes debt raising costs.

1.4.1 Revenue smoothing

We have taken into account the building block costs determined in this decision when smoothing the expected revenues for TasNetworks over the 2019–24 regulatory control period. In doing so, we first set the expected revenue for the first regulatory year (2019–20) at $235.4 million ($nominal). This is higher than the 2019–20 ARR (unsmoothed) of $228.2 million we determined. It is also $5.6 million lower than the approved expected revenue for 2018–19. We then applied a profile of X factors to determine the expected revenue in subsequent years.

To smooth the revenue increases from the second regulatory year (2020–21) onwards, we have applied a constant X factor over the entire length of the 2019–24 regulatory control period. This allows for a relatively predictive price movement over the regulatory control period, and provides a stable trend moving forward. This approach smooths the revenues by allowing for a more gradual path for higher revenues over the 2019–24 regulatory control period.

Based on the X factors we have determined for TasNetworks, the difference between the expected revenue and ARR for 2023–24 is 3.0 per cent. We note TasNetworks' revised proposal applied a profile of X factors that resulted in a final year difference of 5.4 per cent. This is a larger divergence than our target band of 3 per cent. We do not consider this divergence to be compliant with the NER.[2] Consistent with our draft decision, our approach for this final decision helps to avoid the situation of a large price increase (greater than 5 per cent in real terms) in 2024–25 if the ARR in 2023–24 is reasonably expected to be maintained at the same level in 2024–25. Therefore, we consider that our profile of X factors results in an expected revenue in the last year of the regulatory control period that is as close as reasonably possible to the ARR for that year.

1.4.2 Shared assets

Our final decision is not to apply a shared asset revenue adjustment to TasNetworks' total revenue requirement because the materiality threshold is not met in any year of the 2019–24 regulatory control period.

Distributors, such as TasNetworks, may use assets to provide both the standard control services we regulate and other unregulated services. These assets are called 'shared assets'.[3] If the revenue from shared assets is material, ten per cent of the unregulated revenues that a distributor earns from shared assets will be used to reduce the distributor's revenue for standard control services.[4]

The shared asset principles establish that use of shared assets should be material before cost reductions are applied.[5] The NER do not define materiality in this context. Our approach to what constitutes a material use of shared assets is that unregulated use of shared assets in a specific regulatory year is material when a distributor's annual average unregulated revenue from shared assets is expected to be greater than one per cent of its expected revenue for that regulatory year.[6]

In our draft decision, we did not apply a shared asset revenue adjustment to TasNetworks' total revenue requirement as the materiality threshold of one per cent was not met in any year of the 2019–24 regulatory control period.[7] We considered TasNetworks' forecast unregulated revenues from shared assets for the 2019–24 regulatory control period to be reasonable because they were comparable with its historical unregulated revenues from shared assets.

Based on the expected revenues determined in this final decision, we estimate that the unregulated revenues will be between 0.2 and 0.3 per cent of TasNetworks' expected

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2 NER, cl. 6.5.9(b)(2). We consider a divergence of up to 3 per cent between the expected revenue and ARR for the last year of the regulatory control period is appropriate, if this can achieve smoother price changes for users over the regulatory control period.

3 NER, cl. 6.4.4.

4 AER, *Shared asset guideline*, November 2013, p. 15.

5 NER, cl. 6.4.4(c)(3).

6 AER, *Shared asset guideline*, November 2013, p. 8.

7 AER, *TasNetworks 2019–24 – Distribution – Draft decision – Attachment 1 – Annual revenue requirement*, September 2018, p. 12.

revenues in each year of the 2019–24 regulatory control period. Hence, the materiality threshold of one per cent is not met in any year of the 2019–24 regulatory control period and we do not apply a shared asset revenue adjustment.

We note unregulated revenues from shared assets may in future become material. We will monitor TasNetworks' shared asset unregulated revenues for future regulatory control periods.

1.4.3 Indicative average distribution price impact

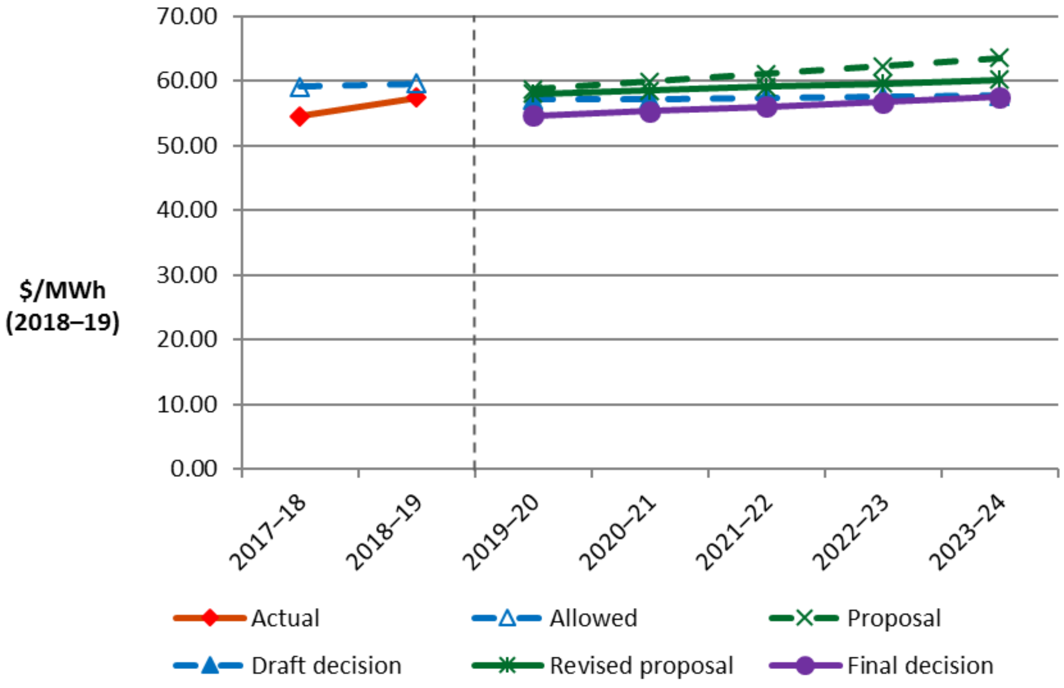
Our final decision on TasNetworks' expected revenues ultimately affects the prices consumers pay for electricity. There are several steps required in translating our revenue decision into indicative distribution price impact.

We regulate TasNetworks' standard control services under a revenue cap form of control. This means our final decision on TasNetworks' expected revenues do not directly translate to price impacts. This is because TasNetworks' revenue is fixed under the revenue cap form of control, so changes in the consumption of electricity will affect the prices ultimately charged to consumers. We are not required to establish the distribution prices for TasNetworks as part of this determination. However, we will assess TasNetworks' annual pricing proposals before the commencement of each regulatory year within the 2019–24 regulatory control period. In each assessment we will administer the pricing requirements set in this distribution determination.

For this final decision, we have estimated some indicative average distribution price impacts flowing from our determination on the expected revenues for TasNetworks over the 2019–24 regulatory control period. In this section, our estimates only relate to standard control services (that is, the core electricity distribution charges), not alternative control services (such as metering charges). These indicative price impacts assume that actual energy consumption across the 2019–24 regulatory control period matches TasNetworks' forecast energy consumption, which we have adopted for this final decision.

Figure 1 shows TasNetworks' indicative price path over the periods 2017–18 to 2023–24 in real 2018–19 dollar terms based on the expected revenues established in our final decision compared to TasNetworks' revised proposed revenue requirement.

Figure 1-3 Indicative distribution price path for Tasmania ($/MWh, 2018–19)



Source: AER analysis.

We estimate that our final decision on TasNetworks' annual expected revenue will result in distribution charges staying steady over the 2019–24 regulatory control period in real 2018–19 dollar terms.[8] This compares to the real average increase of approximately 0.9 per cent per annum in TasNetworks' revised proposal for the 2019–24 regulatory control period.[9] These high-level estimates reflect the aggregate change across the entire network and do not reflect the particular tariff components for specific end users.

Table 1-3 displays in nominal terms the comparison of the revenue and price impacts of TasNetworks' revised proposal and our final decision.

Table 1-3 Comparison of revenue and price impacts of TasNetworks' revised proposal and the AER's final decision ($nominal)

	2018–19	2019–20	2020–21	2021–22	2022–23	2023–24
AER final decision						

[8] In nominal terms we estimate average distribution charges to increase by 2.4 per cent per annum, compared to an increase of 3.4 per cent proposed by TasNetworks in its revised proposal. This amount reflects an expected inflation rate of 2.42 per cent per annum as determined in this final decision.

[9] This amount reflects an expected inflation rate of 2.45 per cent per annum as proposed by TasNetworks in its revised proposal.

Revenue ($million)	241.0	235.4	244.9	254.9	265.2	276.0
Price path ($/MWh)[a]	57.43	55.93	58.04	60.21	62.46	64.79
Revenue (change)		–2.3%	4.1%	4.1%	4.1%	4.1%
Price path (change)		–2.6%	3.8%	3.7%	3.7%	3.7%
TasNetworks revised proposal						
Revenue ($ million)	241.0	250.0	259.3	269.0	279.0	289.3
Price path ($/MWh)[a]	57.43	59.40	61.45	63.54	65.69	67.92
Revenue (change)		3.7%	3.7%	3.7%	3.7%	3.7%
Price path (change)		3.4%	3.4%	3.4%	3.4%	3.4%

Source: AER analysis.

(a) The price path is in nominal terms and is constructed by dividing nominal expected revenue for standard control services by forecast energy consumption for each year of the regulatory control period.

1.4.4 Expected impact of combined decisions on electricity bills

The annual electricity bill for customers in Tasmania reflects the combined cost of all the electricity supply chain components—wholesale energy generation, transmission, distribution, metering, and retail costs. This final decision primarily relates to the distribution charges for standard control services. We also made a final decision for TasNetworks' transmission determination for the 2019–24 regulatory control period which relates to the transmission charges for prescribed transmission services. The expected impact on electricity bills discussed in this section reflects the combined impact of both final decisions.

TasNetworks' transmission and distribution charges represent approximately:

- 42 per cent on average for residential customers' annual electricity bill in Tasmania[10]
- 43 per cent on average for small business customers' annual electricity bill in Tasmania.[11]

We estimate the expected bill impact by varying the transmission and distribution charges in accordance with our final decision, while holding all other components—including the metering component—constant. This approach isolates the effect of our

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[10] This can be broken down to 10 per cent and 32 per cent for transmission and distribution proportions of the annual customer bill respectively; AEMC, *Final report: 2018 Residential Electricity Price Trends*, 21 December 2018, p. 95; AER analysis.

[11] This can be broken down to 11 per cent and 32 per cent for transmission and distribution proportions of the annual customer bill respectively; TasNetworks, *Reset RIN final template 1 - Regulatory determination distribution*, January 2018; TasNetworks, *Reset RIN final template 1 - Revenue determination transmission*, January 2018.

final decision on the core network charges only. However, this does not imply that other components will remain unchanged across the regulatory control period.[12]

Based on this approach, we expect that the networks component of the average annual residential electricity bill in 2019–20 would decrease by about $53 ($nominal) from the 2018–19 level, followed by average annual increases of $30 ($nominal) over the remaining years of the 2019–24 regulatory control period (2020–24).[13] By comparison, had we accepted TasNetworks' revised proposals, the networks component of the average residential electricity bill in 2019–20 would increase by about $1 ($nominal) from the 2018–19 level, followed by average annual increases of $30 ($nominal) over the remaining years of the 2019–24 regulatory control period (2020–24).[14]

Similarly, for an average small business customer in Tasmania, we expect the networks component of the average annual small business electricity bill in 2019–20 to decrease by about $162 ($nominal) from the 2018–19 level, followed by average annual increases of $87 ($nominal) over the remaining years of the 2019–24 regulatory control period (2020–24).[15] By comparison, had we accepted TasNetworks' revised proposals, the average small business electricity bill in 2019–20 would decrease by about $4 ($nominal) from the 2018–19 level, followed by average annual increases of $89 ($nominal) over the remaining years of the 2019–24 regulatory control period (2020–24).[16]

Our estimated impact on TasNetworks' customers is based on an average annual electricity usage of around 7908 kWh for residential households[17] and 23700 kWh for small businesses.[18] Therefore, customers with different usage will experience different changes in their bills. We also note that there are other factors, such as metering, wholesale and retail costs, which affect electricity bills.

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12 It also assumes that actual energy delivered will equal the forecast adopted in our final decision. Since TasNetworks operates under a revenue cap, changes in energy delivered will also affect annual electricity bills across the 2019–24 regulatory control period. The 2018 AEMC price trends report for Tasmania forecasts the networks component making up an increasingly higher proportion of the total customer bills; AEMC, *2018 Residential electricity price trends – Tasmanian fact pack*, December 2018, p. 3.

13 This equates to a 2.3 per cent decrease in the average residential customer's total electricity bill in 2019–20, followed by average annual increases of 1.3 per cent in the remaining years of the 2019–24 regulatory control period.

14 This equates to a 0.1 per cent increase in the average residential customer's total electricity bill in 2019–20, followed by average annual increases of 1.3 per cent in the remaining years of the 2019–24 regulatory control period.

15 This equates to a 2.5 per cent decrease in the average small business' total bill in 2019–20, followed by average annual increases of 1.4 per cent in the remaining regulatory years.

16 This equates to a 0.1 per cent decrease in the average customer's total bill in 2019–20, followed by average annual increases of 1.3 per cent in the remaining regulatory years.

17 This reflects the average annual consumption for residential customers using tariffs 31 and 41 in Tasmania. AEMC, *2018 Residential Electricity Price Trends Report*, December 2018, p. 94.

18 This reflects the average annual consumption for small business customers using tariff 22 in Tasmania. OTTER, *Typical electricity customers*, April 2017, p. 4.

Table 1-4 shows our estimated impact of our final decision and TasNetworks' revised proposal on the average annual electricity bills for residential and small business customers in Tasmania over the 2019–24 regulatory control period.

Table 1-4 Estimated impact of TasNetworks' revised proposal and the AER's final decision on annual electricity bills for the 2019–24 regulatory control period—combined transmission and distribution ($nominal)

	2018–19	2019–20	2020–21	2021–22	2022–23	2023–24
AER final decision						
Residential annual bill	2250[a]	2197	2226	2254	2284	2318
Annual change[c]		–53 (–2.3%)	28 (1.3%)	29 (1.3%)	29 (1.3%)	34 (1.5%)
Small business annual bill	6485[a]	6323	6406	6489	6574	6673
Annual change[c]		–162 (–2.5%)	83 (1.3%)	83 (1.3%)	85 (1.3%)	99 (1.5%)
TasNetworks revised proposal						
Residential annual bill	2250[b]	2251	2280	2309	2338	2373
Annual change[c]		1 (0.1%)	29 (1.3%)	29 (1.3%)	30 (1.3%)	34 (1.5%)
Small business annual bill	6485[b]	6482	6566	6650	6736	6836
Annual change[c]		–4 (–0.1%)	84 (1.3%)	84 (1.3%)	86 (1.3%)	101 (1.5%)

Source: AER analysis; AER, Energy Made Easy website (standing offer); AEMC, *2018 Residential Electricity Price Trends Report*, December 2018; OTTER, *Typical electricity customers*, April 2017; TasNetworks, *Post Tax Revenue Model (PTRM) Transmission, November 2018*; TasNetworks, *Post Tax Revenue Model (PTRM) Distribution, November 2018.*

(a) Annual bill for 2018–19 is sourced from Energy Made Easy and reflects an average residential customer's consumption of 7908 kWh per year (postcode 7000).

(b) Annual bill for 2018–19 is sourced from Energy Made Easy and reflects an average small business customer in Tasmania consuming 23700 kWh of electricity per year (postcode 7000).

(c) Annual change amounts and percentages are indicative. They are derived by varying the networks component of the 2018–19 bill amounts in proportion to yearly expected revenue divided by TasNetworks' forecast energy delivered for Tasmania for transmission and distribution components respectively. The combined impact is calculated by summing the two transmission and distribution bill impacts together. Actual bill impacts will vary depending on electricity consumption and tariff class.