

# **DRAFT DECISION**

# TasNetworks Distribution Determination 2019 to 2024

# Attachment 1 Annual revenue requirement

September 2018



torest and the second second

© Commonwealth of Australia 2018

This work is copyright. In addition to any use permitted under the Copyright Act 1968, all material contained within this work is provided under a Creative Commons Attributions 3.0 Australia licence, with the exception of:

- the Commonwealth Coat of Arms
- the ACCC and AER logos
- any illustration, diagram, photograph or graphic over which the Australian Competition and Consumer Commission does not hold copyright, but which may be part of or contained within this publication. The details of the relevant licence conditions are available on the Creative Commons website, as is the full legal code for the CC BY 3.0 AU licence.

Requests and inquiries concerning reproduction and rights should be addressed to the Director, Corporate Communications, Australian Competition and Consumer Commission, GPO Box 3131, Canberra ACT 2601

or publishing.unit@accc.gov.au.

Inquiries about this publication should be addressed to:

Australian Energy Regulator GPO Box 520 Melbourne Vic 3001

Tel: 1300 585165

Email: <u>AERInquiry@aer.gov.au</u>

AER reference: 60152

#### Note

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

The draft decision includes the following attachments:

#### Overview

- Attachment 1 Annual revenue requirement
- Attachment 2 Regulatory asset base

Attachment 3 - Rate of return

- Attachment 4 Regulatory depreciation
- Attachment 5 Capital expenditure
- Attachment 6 Operating expenditure
- Attachment 7 Corporate income tax
- Attachment 8 Efficiency benefit sharing scheme
- Attachment 9 Capital expenditure sharing scheme
- Attachment 10 Service target performance incentive scheme
- Attachment 11 Demand management incentive scheme
- Attachment 12 Classification of services
- Attachment 13 Control mechanism
- Attachment 14 Pass through events
- Attachment 15 Alternative control services
- Attachment 16 Negotiated services framework and criteria
- Attachment 17 Connection policy
- Attachment 18 Tariff structure statement

#### Contents

| No | te   |          |   |
|----|------|----------|---|
| Со | nten | its      |   |
| Sh | orte | ned forr | ns1-4   |
| 1  | Anı  | nual rev | enue requirement1-6   |
|    | 1.1  | Draft d  | ecision1-6  |
|    | 1.2  | TasNet   | works' proposal1-8  |
|    | 1.3  | Assess   | sment approach1-8   |
|    |      | 1.3.1    | The building block costs 1-9                                    |
|    | 1.4  | Reaso    | ns for draft decision1-10                                       |
|    |      | 1.4.1    | Revenue smoothing 1-11  |
|    |      | 1.4.2    | Shared assets 1-12  |
|    |      | 1.4.3    | Indicative average distribution price impact                    |
|    |      | 1.4.4    | Expected impact of combined decisions on electricity bills 1-15 |

#### **Shortened forms**

| Shortened form                   | Extended form  |
|----------------------------------|--|
| ACS                              | alternative control services   |
| AEMC                             | Australian Energy Market Commission                                    |
| AEMO                             | Australian Energy Market Operator                                      |
| AER                              | Australian Energy Regulator  |
| augex                            | augmentation expenditure   |
| capex                            | capital expenditure  |
| ССР                              | Consumer Challenge Panel   |
| CCP 13                           | Consumer Challenge Panel, sub-panel 13                                 |
| CESS                             | capital expenditure sharing scheme                                     |
| CPI                              | consumer price index   |
| DRP                              | debt risk premium  |
| DMIAM                            | demand management innovation allowance (mechanism)                     |
| DMIS                             | demand management incentive scheme                                     |
| distributor                      | distribution network service provider                                  |
| DUoS                             | distribution use of system   |
| EBSS                             | efficiency benefit sharing scheme                                      |
| ERP                              | equity risk premium  |
| Expenditure Assessment Guideline | Expenditure Forecast Assessment Guideline for Electricity Distribution |
| F&A                              | framework and approach   |
| MRP                              | market risk premium  |
| NEL                              | national electricity law   |
| NEM                              | national electricity market  |
| NEO                              | national electricity objective   |
| NER                              | national electricity rules   |
| NSP                              | network service provider   |

1-4

| Shortened form | Extended form                               |
|----------------|---|
| opex           | operating expenditure                       |
| PPI            | partial performance indicators              |
| 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               |
| RPP            | revenue and pricing principles              |
| SAIDI          | system average interruption duration index  |
| SAIFI          | system average interruption frequency index |
| SCS            | standard control services                   |
| SLCAPM         | Sharpe-Lintner capital asset pricing model  |
| STPIS          | service target performance incentive scheme |
| WACC           | weighted average cost of capital            |

#### 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 draft decision on TasNetworks' ARRs and expected revenues for the 2019–24 regulatory control period.

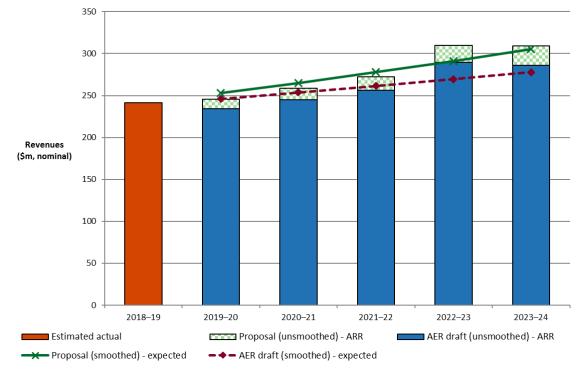
#### 1.1 Draft decision

We do not accept TasNetworks' proposed total ARR of \$1395.4 million (\$nominal) over the 2019–24 regulatory control period. This is because we have not accepted the building block costs in TasNetworks' proposal. We determine a total ARR of \$1312.1 million (\$nominal) for TasNetworks for the 2019–24 regulatory control period, reflecting our draft decision on the various building block costs. This is a reduction of \$83.3 million (\$nominal) or 6.0 per cent to TasNetworks' 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 draft decision is to approve total expected revenues (smoothed) of \$1308.3 million (\$nominal) for TasNetworks for the 2019–24 regulatory control period.

Figure 1.1 shows the difference between TasNetworks' proposal and our draft decision. Table 1.1 shows our draft decision on the building block costs, the ARR, annual expected revenue and X factor for the 2019–24 regulatory control period.





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

## Table 1.1AER's draft decision on TasNetworks' revenues for the2019–24 regulatory control period (\$million, nominal)

|   | 2019–20 | 2020–21 | 2021–22 | 2022–23 | 2023–24 | Total  |
|---|---------|---------|---------|---------|---------|--------|
| Return on capital                       | 96.2    | 99.8    | 103.1   | 105.3   | 108.0   | 512.5  |
| Regulatory depreciation <sup>a</sup>    | 57.4    | 62.9    | 69.3    | 73.9    | 78.3    | 341.8  |
| Operating expenditure <sup>b</sup>      | 85.4    | 87.1    | 88.4    | 89.7    | 91.0    | 441.5  |
| Revenue adjustments <sup>c</sup>        | -11.5   | -11.7   | -12.0   | 12.9    | 0.2     | -22.2  |
| Net tax allowance                       | 6.9     | 7.2     | 7.6     | 8.0     | 8.8     | 38.4   |
| Annual revenue requirement (unsmoothed) | 234.5   | 245.3   | 256.2   | 289.8   | 286.3   | 1312.1 |
| Annual expected revenue (smoothed)      | 246.1   | 253.7   | 261.4   | 269.4   | 277.7   | 1308.3 |
| X factor <sup>d</sup>                   | n/aª    | -0.60%  | -0.60%  | -0.60%  | -0.60%  | 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

1-7 2019–24 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 0.3 per cent lower than the approved expected revenue for 2018–19 in real terms, or 2.1 per cent higher in nominal terms.

#### **1.2 TasNetworks' proposal**

TasNetworks proposed a total revenue requirement of \$1395.4 million (\$nominal) for the 2019–24 regulatory control period. Table 1.2 shows TasNetworks' proposed building block costs, the ARR, expected revenue and X factor for each year of the 2019–24 regulatory control period.

## Table 1.2TasNetworks' proposed revenues for the 2019–24 regulatorycontrol period (\$million, nominal)

|   | 2019–20          | 2020–21 | 2021–22 | 2022–23 | 2023–24 | Total  |
|---|------------------|---------|---------|---------|---------|--------|
| Return on capital                       | 103.3            | 109.4   | 115.1   | 119.7   | 125.1   | 572.7  |
| Regulatory depreciation <sup>a</sup>    | 57.7             | 63.3    | 69.8    | 74.6    | 80.0    | 345.4  |
| Operating expenditure <sup>b</sup>      | 85.4             | 87.1    | 88.4    | 89.7    | 91.0    | 441.5  |
| Revenue adjustments <sup>c</sup>        | -11.2            | -11.4   | -11.7   | 14.0    | 0.5     | -19.8  |
| Net tax allowance                       | 10.1             | 10.4    | 11.0    | 11.7    | 12.4    | 55.7   |
| Annual revenue requirement (unsmoothed) | 245.3            | 258.9   | 272.6   | 309.6   | 309.0   | 1395.4 |
| Annual expected revenue (smoothed)      | 252.9            | 265.1   | 277.9   | 291.3   | 305.4   | 1392.7 |
| X factor                                | n/a <sup>d</sup> | -2.32%  | -2.32%  | -2.32%  | -2.32%  | n/a    |

Source: TasNetworks, *Transmission and Distribution Regulatory Proposal 2019–2024*, January 2018, p. 193.

(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 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**

In this section, we describe the approach used to determine the ARR and expected revenue for TasNetworks for each year of the 2019–24 regulatory control period.<sup>1</sup>

In this determination we first calculate the ARR for each year of the 2019–24 regulatory control period. To do this we consider the various costs facing the distributor and the

<sup>&</sup>lt;sup>1</sup> NER, cll. 6.3.2(a)(1) and 6.5.9(b)(2).

trade-offs and interactions between these costs, service quality and across years. This reflects our holistic assessment of the distributor's proposal.

The ARR for each year is the sum of the building block costs. These building block costs are set out in section 1.3.1. The AER's post-tax revenue model (PTRM) brings together these building block costs and calculates the resulting ARRs.

We understand the trade-offs that occur between building block costs and test the sensitivity of these costs to their various driver elements. These trade-offs are discussed in the interrelationships section of the various attachments to this draft decision and are reflected in the calculations made in the PTRM.<sup>2</sup> Such understanding allows us to exercise judgement in determining the final inputs into the PTRM and the ARRs that result from this modelling.

Having calculated the total revenue requirement for the 2019–24 regulatory control period, we smooth the ARRs for each regulatory year across that period. This step reduces revenue variations between years, and calculates the expected revenue and X factor for each year.<sup>3</sup> The X factors equalise (in net present value terms) the total expected revenues to be earned by the distributor with the total revenue requirement for the 2019–24 regulatory control period.<sup>4</sup> They must usually minimise, as far as reasonably possible, the variance between the expected revenue and ARR for the last regulatory year of the period.<sup>5</sup> By minimising this divergence, it helps to manage the prospect of a significant revenue change (and consequently prices) between the last year of the 2019–24 regulatory control period, and first year of the following 2024–29 regulatory control period. We therefore 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 reasonable, if this can promote smoother price changes over the regulatory control period.

The building block costs (and the elements that drive those costs) used to determine the unsmoothed ARR are set out in section 1.3.1.

#### 1.3.1 The building block costs

The efficient costs to be recovered by a distributor can be thought of as being made up of various building block costs. Our draft decision assesses each of the building block

<sup>&</sup>lt;sup>2</sup> There are trade-offs that are not modelled in the PTRM but are reflected in the inputs to the PTRM. For example, service quality is not explicitly modelled in the PTRM, but the trade-offs between service quality and price are reflected in the forecast capex and opex inputs to the model. Other trade-offs are obvious from the calculations in the PTRM. For example, while someone may expect a lower regulatory asset base to also lower revenues, the PTRM shows that this will not occur if the reduction in the regulatory asset base is due solely to an increase in the depreciation rate. In such circumstances, revenues increase as the increased depreciation allowance more than offsets the reduction in the return on capital caused by the lower regulatory asset base.

<sup>&</sup>lt;sup>3</sup> NER, cl. 6.5.9(a).

<sup>&</sup>lt;sup>4</sup> NER, cl. 6.5.9(3)(i). The X factors represent the real revenue path over the 2019–24 regulatory control period under the CPI–X framework.

<sup>&</sup>lt;sup>5</sup> NER, cl. 6.5.9(b)(2).

costs and the elements that drive these costs. The building block costs are approved reflecting trade-offs and interactions between the cost elements, service quality and across years.

Table 1.3 shows the building block costs that form the ARR for each year and where discussion on the elements that drive these costs can be found within this draft decision.

#### Table 1.3 Building block costs

| Building block costs                        | Attachments where elements are discussed           |
|---|--|
|   | Regulatory asset base (attachment 2)               |
| Return on capital                           | Rate of return (attachment 3)                      |
|   | Capital expenditure (attachment 5)                 |
|   | Regulatory asset base (attachment 2)               |
| Regulatory depreciation (return of capital) | Regulatory depreciation (attachment 4)             |
|   | Capital expenditure (attachment 5)                 |
| Operating expenditure                       | Operating expenditure (attachment 6)               |
| Estimated cost of corporate tax             | Corporate income tax (attachment 7)                |
| Other revenue adjustments                   |  |
| Adjustment for shared assets                | Annual revenue requirement (attachment 1)          |
| Operating efficiency benefits/penalties     | Efficiency benefit sharing scheme (attachment 8)   |
| Capital efficiency benefits/penalties       | Capital expenditure sharing scheme (attachment 9)  |
| Demand management innovation allowance      | Demand management incentive scheme (attachment 11) |

#### 1.4 Reasons for draft decision

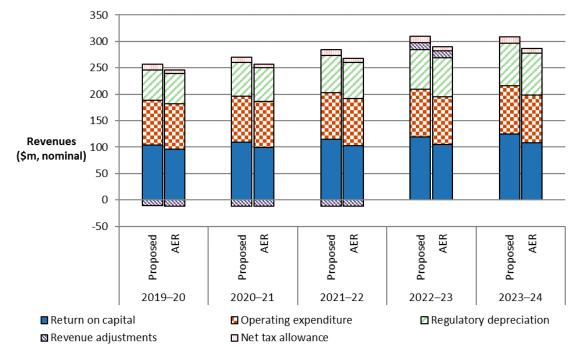
We determine a total ARR of \$1312.1 million (\$nominal) for TasNetworks over the 2019–24 regulatory control period. This is a reduction of \$83.3 million (\$nominal) or 6.0 per cent to TasNetworks' proposed total ARR of \$1395.4 million (\$nominal) for this period. This reflects the impact of our draft decision on the various building block costs.

Figure 1.2 shows the building block components from our determination that make up the ARR for TasNetworks, and the corresponding components from its proposal.

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

- a reduction in the return on capital allowance of \$60.1 million or 10.5 per cent (attachments 2, 3 and 5)
- a reduction in the regulatory depreciation allowance of \$3.5 million or 1.0 per cent (attachments 2, 4 and 5)
- a reduction in the cost of corporate income tax allowance of \$17.3 million or 31.0 per cent (attachment 7 and section 2.2 of the overview)

• a reduction in the revenue adjustments of \$2.4 million or 12.0 per cent (attachments 8, 9 and 11).



## Figure 1.2 AER's draft decision and TasNetworks' proposed annual revenue requirement (\$million, nominal)

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 \$246.1 million (\$nominal). This is higher than the 2019–20 ARR (unsmoothed) of \$234.5 million we determined. It is also \$5.0 million higher than the approved expected revenue for 2018–19. We then applied a profile of X factors to determine the expected revenue in subsequent years.

The Tasmanian Small Business Council raised a submission on TasNetworks' smoothing profile, noting that it is possible customers prefer the certainty of lower charges up front.<sup>6</sup> 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

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

<sup>&</sup>lt;sup>6</sup> Tasmanian Small Business Council, *TasNetworks transmission revenue and distribution regulatory proposal*, May 2018, p. 80.

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. This divergence aligns with our target band of 3 per cent. 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.<sup>7</sup> We will review this smoothing for the final decision.

#### 1.4.2 Shared assets

Distributors, such as TasNetworks, may use assets to provide both the standard control services we regulate and unregulated services. These assets are called 'shared assets'.<sup>8</sup> 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.<sup>9</sup>

The shared asset principles establish that use of share assets should be material before cost reductions are applied.<sup>10</sup> 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.<sup>11</sup>

TasNetworks submitted that its total revenue requirement is not subject to a shared asset adjustment because its forecast annual unregulated revenue from shared assets does not exceed the AER's materiality threshold.<sup>12</sup>

We consider TasNetworks' forecast unregulated revenues from shared assets for the 2019–24 regulatory control period are reasonable because they are comparable with its historical unregulated revenues from shared assets. However, TasNetworks' forecast unregulated revenues must be compared to the regulated revenues we determine, rather than those proposed by TasNetworks. Our draft decision sets lower expected revenues than TasNetworks' proposal, so we estimate that the unregulated revenues will be between 0.2 and 0.3 per cent of its expected revenues in each year of the 2019–24 regulatory control period. Hence, the materiality threshold is not met in

<sup>&</sup>lt;sup>7</sup> NER, cl. 6.5.9(b)(2).

<sup>&</sup>lt;sup>8</sup> NER, cl. 6.4.4.

<sup>&</sup>lt;sup>9</sup> AER, Shared asset guideline, November 2013.

<sup>&</sup>lt;sup>10</sup> NER, cl. 6.4.4(c)(3).

<sup>&</sup>lt;sup>11</sup> AER, *Shared asset guideline*, November 2013, p. 8.

<sup>&</sup>lt;sup>12</sup> TasNetworks, *Transmission and Distribution Regulatory Proposal 2019–2024*, January 2018, pp. 191 and 193.

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.<sup>13</sup> We will monitor TasNetworks' shared asset unregulated revenues for future regulatory control periods.

#### 1.4.3 Indicative average distribution price impact

Our draft 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 draft 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 draft 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 draft decision.

Figure 1.3 shows TasNetworks' indicative average price path over the period 2017–18 to 2023–24 in real 2018–19 dollar terms based on the expected revenues established in our draft decision compared to TasNetworks' proposed revenue requirement.

<sup>&</sup>lt;sup>13</sup> We will reassess the materiality of the forecast shared asset unregulated revenues for our final decision.

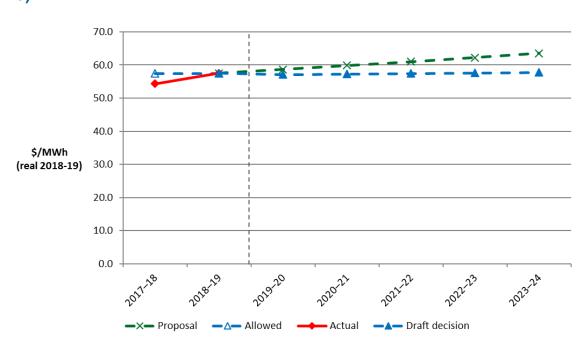


Figure 1.3 Indicative distribution price path for Tasmania (\$/MWh, 2018– 19)

We estimate that our draft decision on TasNetworks' annual expected revenue will result in an increase to average distribution charges by about 0.1 per cent per annum over the 2019–24 regulatory control period in real 2018–19 dollar terms.<sup>14</sup> This compares to the real average increase of approximately 2.0 per cent per annum proposed by TasNetworks over the 2019–24 regulatory control period. 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 1.4 displays in nominal terms the comparison of the revenue and price impacts of TasNetworks' proposal and our draft decision.

## Table 1.4Comparison of revenue and price impacts of TasNetworks'proposal and the AER's draft decision (\$nominal)

|                                  | 2018–19 | 2019–20 | 2020–21 | 2021–22 | 2022–23 | 2023–24 |
|----------------------------------|---------|---------|---------|---------|---------|---------|
| AER draft decision               |         |         |         |         |         |         |
| Revenue (\$million)              | 241.0   | 246.1   | 253.7   | 261.4   | 269.4   | 277.7   |
| Price path (\$/MWh) <sup>a</sup> | 57.4    | 58.5    | 60.1    | 61.8    | 63.5    | 65.2    |

Source: AER analysis.

<sup>&</sup>lt;sup>14</sup> In nominal terms we estimate average distribution charges to increase by 2.6 per cent per annum, compared to an increase of 4.5 per cent proposed by TasNetworks. This amount reflects an expected inflation rate of 2.45 per cent per annum as determined in this draft decision.

| Revenue (change)                 |       | 2.1%  | 3.1%  | 3.1%  | 3.1%  | 3.1%  |
|----------------------------------|-------|-------|-------|-------|-------|-------|
| Price path (change)              | 1.8%  | 2.8%  | 2.8%  | 2.7%  | 2.7%  |       |
| TasNetworks proposal             |       |       |       |       |       |       |
| Revenue (\$ million)             | 241.6 | 252.9 | 265.1 | 277.9 | 291.3 | 305.4 |
| Price path (\$/MWh) <sup>a</sup> | 57.6  | 60.1  | 62.8  | 65.7  | 68.6  | 71.7  |
| Revenue (change)                 |       | 4.7%  | 4.8%  | 4.8%  | 4.8%  | 4.8%  |
| Price path (change)              |       | 4.4%  | 4.5%  | 4.5%  | 4.5%  | 4.5%  |

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 draft decision primarily relates to the transmission charges for prescribed transmission services. We also made a draft decision for TasNetworks' distribution determination for the 2019–24 regulatory control period which relates to the distribution charges for standard control services. The expected impact on electricity bills discussed in this section reflects the combined impact of both draft decisions.

TasNetworks' transmission and distribution charges represent approximately:

- 46 per cent on average for residential customers' annual electricity bill in Tasmania<sup>15</sup>
- 43 per cent on average for small business customers' annual electricity bill in Tasmania.<sup>16</sup>

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

<sup>&</sup>lt;sup>15</sup> This can be broken down to 12 per cent and 34 per cent for transmission and distribution proportions of the annual customer bill respectively; AEMC, 2017 Residential electricity price trends – Tasmanian information sheet, December 2017, p. 2; AER analysis.

<sup>&</sup>lt;sup>16</sup> 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.

draft decision on the core network charges only. However, this does not imply that other components will remain unchanged across the regulatory control period.<sup>17</sup>

Based on this approach, we expect that the networks component of the average annual residential electricity bill in 2019–20 would decrease by about \$11 (\$nominal) from the 2018–19 level, followed by average annual increases of \$23 (\$nominal) over the remaining years of the 2019–24 regulatory control period (2020–24).<sup>18</sup> By comparison, had we accepted TasNetworks' proposals, the networks component of the average residential electricity bill in 2019–20 would increase by about \$22 (\$nominal) from the 2018–19 level, followed by average annual increases of \$27 (\$nominal) over the remaining years of the 2019–24 period (2020–24).<sup>19</sup>

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 \$35 (\$nominal) from the 2018–19 level, followed by average annual increases of \$72 (\$nominal) over the remaining years of the 2019–24 regulatory control period (2020–24).<sup>20</sup> By comparison, had we accepted TasNetworks' proposals, the average small business electricity bill in 2019–20 would increase by about \$70 (\$nominal) from the 2018–19 level, followed by average annual increases of \$86 (\$nominal) over the remaining years of the 2019–24 period (2020–24).<sup>21</sup>

Our estimated impact on TasNetworks' customers is based on an average annual electricity usage of around 7500 kWh for residential households<sup>22</sup> and 23700 kWh for small businesses.<sup>23</sup> 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.

Table 1.5 shows our estimated impact of our draft decision and TasNetworks' proposal on the average annual electricity bills for residential and small business customers in Tasmania over the 2019–24 regulatory control period.

<sup>&</sup>lt;sup>17</sup> It also assumes that actual energy delivered will equal the forecast adopted in our draft 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 2017 AEMC price trends report for Tasmania forecasts the networks component making up an increasingly higher proportion of the total customer bills; AEMC, 2017 Residential electricity price trends – Tasmanian information sheet, December 2017, p. 2.

<sup>&</sup>lt;sup>18</sup> This equates to a 0.6 per cent decrease in the average residential customer's total electricity bill in 2019–20, followed by average annual increases of 1.2 per cent in the remaining years of the 2019–24 period.

<sup>&</sup>lt;sup>19</sup> This equates to a 1.2 per cent increase in the average residential customer's total electricity bill in 2019–20, followed by average annual increases of 1.4 per cent in the remaining years of the 2019–24 period.

<sup>&</sup>lt;sup>20</sup> This equates to a 0.5 per cent decrease in the average small business' total bill in 2019–20, followed by average annual increases of 1.1 per cent in the remaining regulatory years.

<sup>&</sup>lt;sup>21</sup> This equates to a 1.1 per cent increase 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.

<sup>&</sup>lt;sup>22</sup> This reflects the average annual consumption for residential customers using tariffs 31 and 41 in Tasmania. OTTER, *Typical electricity customers 2017*, April 2017, p. 4.

<sup>&</sup>lt;sup>23</sup> This reflects the average annual consumption for small business customers using tariff 22 in Tasmania. OTTER, *Typical electricity customers 2017*, April 2017, p. 4.

# Table 1.5Estimated impact of TasNetworks' revenue proposal and theAER's draft decision on average annual electricity bills for the 2019–24regulatory control period—combined transmission and distribution (\$nominal)

|                            | 2018–19           | 2019–20     | 2020–21   | 2021–22   | 2022–23   | 2023–24    |
|----------------------------|-------------------|-------------|-----------|-----------|-----------|------------|
| AER draft decision         |                   |             |           |           |           |            |
| Residential annual bill    | 1916ª             | 1905        | 1927      | 1948      | 1970      | 1996       |
| Annual change <sup>c</sup> |                   | -11 (-0.6%) | 22 (1.1%) | 21 (1.1%) | 22 (1.1%) | 26 (1.3%)  |
| Small business annual bill | 6485 <sup>b</sup> | 6450        | 6520      | 6587      | 6656      | 6739       |
| Annual change <sup>c</sup> |                   | -35 (-0.5%) | 69 (1.1%) | 68 (1%)   | 69 (1%)   | 83 (1.2%)  |
| TasNetworks' proposal      |                   |             |           |           |           |            |
| Residential annual bill    | 1916ª             | 1938        | 1963      | 1988      | 2015      | 2047       |
| Annual change <sup>c</sup> |                   | 22 (1.2%)   | 25 (1.3%) | 25 (1.3%) | 27 (1.3%) | 32 (1.6%)  |
| Small business annual bill | 6485 <sup>b</sup> | 6555        | 6633      | 6713      | 6798      | 6898       |
| Annual change <sup>c</sup> |                   | 70 (1.1%)   | 78 (1.2%) | 80 (1.2%) | 84 (1.2%) | 101 (1.5%) |

Source: AER analysis; AEMC, 2017 Residential electricity price trends – Tasmanian information sheet, December 2017; TasNetworks, Post Tax Revenue Model (PTRM) Transmission, January 2018; TasNetworks, Post Tax Revenue Model (PTRM) Distribution, January 2018; and TasNetworks, Response to information request #037 – Indicative bill impact information source, January 2018.

(a) Based on tariff 31 and tariff 41 standing offers at 1 July 2018 from <u>Aurora Energy</u> for an average residential customer's consumption of 7500 kWh (3400 kWh and 4100 kWh allocated to each tariff respectively) per year.

(b) Based on tariff 22 standing offers at 1 July 2018 from <u>Aurora Energy</u> for an average small business customer in South Australia consuming 23700 kWh of electricity per year.

(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.