FINAL DECISION
TasNetworks distribution determination
2017–18 to 2018–19

Attachment 16 – Alternative control services

April 2017

AUSTRALIAN ENERGY REGULATOR

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Note

This attachment forms part of the AER's final decision on TasNetworks' distribution determination for 2017–19. It should be read with all other parts of the final decision.

This final decision consists of an Overview and 8 attachments. As many issues were settled at the draft decision stage or required only minor updates we have not prepared final decision attachments for:

- Regulatory asset base
- Regulatory depreciation
- Capital expenditure
- Operating expenditure
- Corporate income tax
- Capital expenditure sharing scheme
- Service target performance incentive scheme
- Demand management incentive scheme
- Classification of services
- Pass through events
- Connection policy.

The AER's final decision on these matters is set out in the Overview. For ease of reference the remaining attachments have been numbered consistently with the attachment numbering in our draft decision.

The final decision therefore includes the following documents:

Overview

Attachment 1 – Annual revenue requirement

Attachment 3 – Rate of return

Attachment 4 – Value of imputation credits

Attachment 9 – Efficiency benefit sharing scheme

Attachment 14 – Control mechanisms

Attachment 16 – Alternative control services

Attachment 17 – Negotiated services framework and criteria

Attachment 19 – Tariff structure statement

Contents

Shortened forms

Shortened form	Extended form
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
augex	augmentation expenditure
capex	capital expenditure
CCP	Consumer Challenge Panel
CESS	capital expenditure sharing scheme
CPI	consumer price index
DRP	debt risk premium
DMIA	demand management innovation allowance
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
opex	operating expenditure
PPI	partial performance indicators
PTRM	post-tax revenue model
RAB	regulatory asset base
RBA	Reserve Bank of Australia
repex	replacement expenditure

Shortened form	Extended form
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
SLCAPM	Sharpe-Lintner capital asset pricing model
STPIS	service target performance incentive scheme
WACC	weighted average cost of capital

16 Alternative control services

Alternative control services are services provided by distributors to specific customers. They do not form part of the distribution use of system revenue allowance approved by us for each distributor. Rather, distributors recover the costs of providing alternative control services through a selection of prices with most charged on a ‘user pays’ basis.

In this attachment, we set out our final decision on the prices TasNetworks is allowed to charge customers for the provision of alternative control services (ancillary network services, public lighting and metering).

16.1 Ancillary network services

Ancillary network services share the common characteristic of being non-routine services provided to individual customers on an as requested basis. Ancillary network services are either grouped as 'fee based services' or 'quoted services' depending on the basis on which the service price is determined.

Fee based service prices are predetermined, based on the cost inputs and the average time taken to perform each service. These services tend to be homogenous in nature and scope, and can be costed in advance of supply with reasonable certainty.

By comparison, prices for quoted services are based on quantities of labour and materials, with the quantities dependent on a particular task. Prices for quoted services are determined at the time of a customer's enquiry and reflect the individual requirements of the customer and service requested. It is not possible to list prices for quoted services in this decision (any such list would only be for illustrative purposes).

16.1.1 Final decision

We accept TasNetworks' revised proposal for ancillary network services. We consider TasNetworks has addressed the concerns we raised in our draft decision. Our reasoning is set out below.

Appendix A contains our final decision on the prices TasNetworks can charge for ancillary network services for the first year of the 2017–19 regulatory control period. Table 16.4 sets out the final decision prices for fee based services and table 16.6 sets out the approved labour rates for quoted services. Table 16.5 sets out the quoted services. As stated in our draft decision, our final decision prices have been escalated into real 2017–18 dollar terms using the percentage changes in the annual Australian Bureau of Statistics (ABS) December quarter index.

Form of control

Our final decision is to apply price caps as the forms of control to ancillary network services. Figure 16.1 and figure 16.2 set out the control mechanism formulas for fee based and quoted services, respectively. They are consistent with our final framework and approach (final F&A).[1]

Form of control—fee based services

Under a price cap control mechanism, a schedule of prices are set for 2017–18 (set out in table 16.4 in appendix A) then for 2018–19 the prices for fee based services are determined by adjusting the previous year's prices by the formula in figure 16.1. The X factors in this formula adjust for annual labour price growth.

Figure 16.1 Fee based ancillary network services formula

$$\bar{p}_t^i \geq p_t^i \qquad \text{i=1,...,n and t=1, 2}$$

$$\bar{p}_t^i = \bar{p}_{t-1}^i(1+\Delta CPI_t)(1-X_t^i)$$

Where:

$\bar{p}_t^i$ is the cap on the price of service i in year t

p_t^i is the price of service i in year t

$\bar{p}_{t-1}^i$ is the cap on the price of service i in year t–1

t is the regulatory year

ΔCPI_t is the annual percentage change in the ABS consumer price index (CPI) All Groups, Weighted Average of Eight Capital Cities[2] from the December quarter in year t–2 to the December quarter in year t–1, calculated using the following method:

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in regulatory year t–1

divided by

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in regulatory year t–2

minus one.

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1 AER, *Final framework and approach paper for TasNetworks Distribution—Regulatory control period commencing 1 July 2017*, July 2015, pp. 56–57.

2 If the ABS does not, or ceases to, publish the index, then CPI will mean an index which the AER considers is the best available alternative index.

For example, for 2018–19, year t–2 is the December quarter 2016 and year t–1 is the December quarter 2017.

X_t^i is the X factor for service i in year t. The X factor is zero for fee based services.

Our final F&A erroneously stated the X factor in this formula would incorporate annual adjustments for updates to the trailing cost of debt.[3] However, these services do not incorporate a cost of capital and therefore the X factors will not be updated in this manner. Rather, consistent with the price caps applied to these services in other jurisdictions, the X factors will adjust for annual labour price growth. TasNetworks did not propose any labour price growth adjustments for fee based services. We accepted this approach in our draft decision.[4]

Form of control—quoted services

Our final decision applies a price cap formula to determine the cost build-up of services that are priced on a 'quoted' basis.[5] Figure 16.2 sets out the price cap formula and table 16.6 in appendix A sets out the final decision 2017–18 labour rates for quoted services.

Figure 16.2 Quoted services formula

$$Price = Labour + Contractor\ Services + Materials$$

Where:

$Labour$ consists of all labour costs directly incurred in the provision of the service which may include labour on-costs, fleet on-costs and overheads. Labour is escalated annually by $(1+CPI_t)(1-X_t^i)$ where:

CPI_t is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities[6] from the December quarter in year t–2 to the December quarter in year t–1, calculated using the following method:

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in regulatory year t–1

divided by

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3 AER, *Final framework and approach paper for TasNetworks Distribution—Regulatory control period commencing 1 July 2017*, July 2015, p. 54.

4 AER, *Draft decision: TasNetworks distribution determination 2017–18 to 2018–19: Attachment 16 – Alternative control services*, September 2016, p. 8.

5 AER, *Final framework and approach paper for TasNetworks Distribution—Regulatory control period commencing 1 July 2017*, July 2015, pp. 56–57.

6 If the ABS does not, or ceases to, publish the index, then CPI will mean an index which the AER considers is the best available alternative index.

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in regulatory year t–2

minus one.

For example, for 2018–19, year t–2 is the December quarter 2016 and year t–1 is the December quarter 2017.

X_t^i is the X factor for service i in year t. The X factor is zero for quoted services.[7]

$Contractor\ Services$ reflect all costs associated with the use of external labour including overheads and any direct costs incurred. The contracted services charge applies the rates under existing contractual arrangements. Direct costs incurred are passed on to the customer.

$Materials$ reflect the cost of materials directly incurred in the provision of the service, material storage and logistics on-costs and overheads.

16.1.2 TasNetworks' revised proposal

TasNetworks' revised proposal did not accept our draft decision on the following:[8]

- implied administration labour rate
- premium service margins
- after hours services.

However, TasNetworks' revised proposal did accept our draft decision that the new design and construction services should be quoted services rather than fee based services as TasNetworks initially proposed.[9]

16.1.3 Assessment approach

Our final decision assessment approach is the same as our draft decision. We have also considered TasNetworks revised regulatory proposal.[10]

Our draft decision undertook a detailed assessment of TasNetworks' initial proposal by focussing on the key inputs used by TasNetworks in its cost build-up of proposed prices for ancillary network services.[11] In summary, our draft decision considered:

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7 The X factors applied in this formula adjust for annual labour price growth.

8 TasNetworks, *Tasmanian distribution revised regulatory proposal–Regulatory control period 1 July 2017 to 30 June 2019*, December 2016, pp. 24–27.

9 TasNetworks, *Tasmanian distribution revised regulatory proposal–Regulatory control period 1 July 2017 to 30 June 2019*, December 2016, pp. 26–27.

10 TasNetworks, *Tasmanian distribution revised regulatory proposal–Regulatory control period 1 July 2017 to 30 June 2019*, December 2016, pp. 24–27.

11 AER, *Draft decision: TasNetworks distribution determination 2017–18 to 2018–19: Attachment 16 – Alternative control services*, September 2016, pp. 11–20.

- maximum labour rates we developed for TasNetworks. Our findings were informed by maximum labour rates we developed for our assessment of ancillary network services in other jurisdictions.
- since labour is the key input in determining an efficient level of prices for ancillary network services, we focused on comparing TasNetworks' proposed total labour rates against our maximum total labour rates
- the other material cost inputs which determine the final price for services, being:
    - proposed times taken to perform the services, and
    - escalators and allocators applied by TasNetworks.

As per section 16.1.4.1 of our draft decision, we developed maximum total labour rates for our TasNetworks assessment based on maximum total labour rates we developed for our assessment of ancillary network services in other jurisdictions.[12] Where TasNetworks' labour rates were lower than our maximum total labour rates, we accepted these lower rates as inputs for deriving ancillary network services prices. Where TasNetworks' proposed labour rates were higher, we applied our maximum total labour rates—which we consider are efficient— to determine ancillary network service prices. Our maximum total labour rates are set out in table 16.1.

Table 16.1 Maximum total labour rates

AER labour category	AER maximum total labour rates ($2017–18)
Administration	98.95
Technical	197.52
Engineer	191.17
Field worker	173.16
Senior engineer	247.36

Source: AER analysis.

Our assessment of the proposed times taken to perform the service as well as the escalators and allocators applied by TasNetworks is informed by benchmarking against similar inputs applied by other distributors.

16.1.4 Reasons for final decision

The following discusses the reasons for our final decision for each aspect raised in TasNetworks' revised proposal on ancillary network services.

[12] AER, *Draft decision: TasNetworks distribution determination 2017–18 to 2018–19: Attachment 16 – Alternative control services*, September 2016, pp. 11–15.

Implied administration labour rate

We accept TasNetworks' revised proposal that a modelling inconsistency in its initial proposal led to our draft decision consideration that the supervision and customer team costs in its fee based services model were inefficient.[13] TasNetworks has resolved this modelling inconsistency for its revised proposal. Our final decision accepts the revised proposal supervision and customer team costs as efficient.

Our draft decision did not accept the administration and customer team costs in TasNetworks' fee based services model as the underlying 'implied' administration labour rate exceeded the maximum total labour rate we considered to be efficient.[14] Consequently, we substituted in our efficient labour rate into the fee based services model which reduced TasNetworks' proposed fee based service prices.

In response to our draft decision, TasNetworks noted its actual administration labour rate is below the draft decision efficient labour rate.[15] However, a modelling inconsistency relating to its overhead allocations meant its initial proposal administration and customer team costs were higher than they should have been. Therefore, using the AER's draft decision method to calculate the 'implied' administration labour rate (dividing total cost by time spent on the service) resulted in the consideration that this labour rate was inefficient.

TasNetworks noted that while it had correctly attributed total overheads to ancillary reference services consistent with its cost allocation method, it had incorrectly attributed all overheads directly to the supervision and customer team costs.[16] Instead a smaller allocation should have been directly attributed to the supervision and customer team costs with the remainder attributed to services on an indirect basis.

TasNetworks' revised proposal has corrected the overhead allocations in its fee based services model which also demonstrates compliance that the underlying labour rate does not exceed the total maximum labour rate which we consider to be efficient.[17]

Premium service margins

We accept TasNetworks' revised proposal premium service margins which are applied to fee based services performed outside of 'normal scheduling'.

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13 TasNetworks, *Tasmanian distribution revised regulatory proposal–Regulatory control period 1 July 2017 to 30 June 2019*, December 2016, p. 25.

14 AER, *Draft decision, TasNetworks distribution determination 2017–18 to 2018–19: Attachment 16–Alternative control services*, September 2016, p. 16.

15 TasNetworks, *Tasmanian distribution revised regulatory proposal–Regulatory control period 1 July 2017 to 30 June 2019*, December 2016, p. 26.

16 TasNetworks, *Tasmanian distribution revised regulatory proposal–Regulatory control period 1 July 2017 to 30 June 2019*, December 2016, p. 26.

17 TasNetworks, *RTN002_Alternative Control - Revised fee based services model*, December 2016.

Our draft decision did not accept TasNetworks' initial proposal premium service margins as we considered insufficient evidence was provided to support the levels of margins proposed.[18] As we had no reliable substitute, we removed the margins from TasNetworks' fee based services model which reduced its fee based service prices.

In response to our draft decision, TasNetworks identified higher costs incurred for services performed outside normal scheduling.[19] Where it was not possible to derive precise cost estimates, TasNetworks acknowledged it exercised judgement rather than reliance on hard data. It noted it would improve its data capture and quality to assist in the ongoing refinement of establishing its fee based services prices.[20]

We accept TasNetworks incurs additional costs in providing services outside normal scheduling. While TasNetworks has exercised some judgement at times, we consider it has undertaken its best endeavours to address our draft decision concerns and to calculate premium service margins that are more cost reflective. Therefore, we accept the revised proposal margins. A comparison of TasNetworks' proposed margins is set out in table 16.2.

Table 16.2 TasNetworks proposed premium service margins

Premium service	Initial proposal margin	Revised proposal margin
Non-scheduled visit	25 per cent	10 per cent
After hours	50 per cent	10 per cent
Same day premium	100 per cent	5 per cent

Source: TasNetworks, *TN058 - Fee based services fees model*, January 2016; TasNetworks, *RTN002_Alternative Control - Revised fee based services model*, December 2016.

After hours services

We accept TasNetworks' revised proposal for after hours fee based services. We consider the proposed increase travel and back office times more accurately reflect the costs incurred for providing these services than was allowed in our draft decision.

Our draft decision considered that TasNetworks' proposed task times of 240 minutes (including travel time) to perform its after hours services were overstated and therefore not efficient.[21] Consequently we substituted in the highest time taken for the particular

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18 AER, *Draft decision, TasNetworks distribution determination 2017–18 to 2018–19: Attachment 16–Alternative control services*, September 2016, pp. 16–17.

19 TasNetworks, *Tasmanian distribution revised regulatory proposal–Regulatory control period 1 July 2017 to 30 June 2019*, December 2016, p. 25.

20 TasNetworks, *Tasmanian distribution revised regulatory proposal–Regulatory control period 1 July 2017 to 30 June 2019*, December 2016, p. 26.

21 AER, *Draft decision, TasNetworks distribution determination 2017–18 to 2018–19: Attachment 16–Alternative control services*, September 2016, pp. 16–17.

service during business hours which we considered efficient. We also applied an increase to the labour costs for these services to recognise that labour costs for after hours services are higher than those incurred during business hours.

TasNetworks largely accepted our draft decision. However, it considered the travel time for after hour services should be increased universally to 60 minutes as there are no efficiencies gained for after hour services given the relatively low number provided.[22] TasNetworks considered a travel time of 30 minutes each way from relevant depots would be necessary to cover the whole of Tasmania.

We accept the proposed increase in travel time to 60 minutes. We acknowledge there are unlikely to be any efficiencies in scheduling after hours services given the relatively low historic number of after hours services provided (less than five per annum). Given TasNetworks' network layout, we consider 30 minute travel time each way reasonable.

TasNetworks also noted that further investigation into its back office services identified that after hour services require additional calls and follow ups with clients and crews than is required for services undertaken during normal scheduling.[23] Therefore it proposed an increase to 16 minutes for back office times for after hours services.

We accept the proposed increase in back office times for after hours services. We consider 16 minutes a reasonable time to undertake these tasks and it is lower than benchmark back office times incurred by other distributors.[24]

New design and construction services

TasNetworks accepted our draft decision that its new design and construction services should be quoted services rather than as fee based services.[25]

16.2 Public lighting

16.2.1 Final decision

We accept TasNetworks' revised proposal for public lighting. The charges for the operation and maintenance of public lighting are set out in appendix B.

Form of control mechanism

Our final decision applies price caps for individual public lighting services as the form of control. This means a schedule of prices is set for the first year. For the following

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22 TasNetworks, *RTN002_Alternative Control - Revised fee based services model*, December 2016.

23 TasNetworks, *RTN002_Alternative Control - Revised fee based services model*, December 2016.

24 For example, see: AER, *Preliminary decision, Jemena distribution determination 2016 to 2020: Attachment 16–Alternative control services*, October 2015, p. 18.

25 TasNetworks, *Tasmanian distribution revised regulatory proposal–Regulatory control period 1 July 2017 to 30 June 2019*, December 2016, pp. 26–27.

years the previous year's prices are adjusted by CPI and an X factor. The control mechanism formula is set out below:

$$\bar{p}_t^i \geq p_t^i \qquad \text{i=1,...,n and t=1,…2}$$

$$\bar{p}_t^i = \bar{p}_{t-1}^i \times (1 + \Delta CPI_t) \times (1 - X_t^i)$$

Where:

$\bar{p}_t^i$ is the cap on the price of service *i* in year *t*

p_t^i is the price of service *i* in year *t*. The initial value is to be decided in the determination.

$\bar{p}_{t-1}^i$ is the cap on the price of service *i* in year *t*

t is the regulatory year

ΔCPI_t is the annual percentage change in the ABS consumer price index (CPI) All Groups, Weighted Average of Eight Capital Cities[26] from the December quarter in year t–2 to the December quarter in year t–1, calculated using the following method:

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in regulatory year t–1

divided by

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in regulatory year t–2

minus one.

For example, for 2018–19, year t–2 is the December quarter 2016 and year t–1 is the December quarter 2017.

X_t^i are the values set out in the public lighting decision model and for 2018–19 is set at -0.62 per cent.

16.2.2 TasNetworks' revised proposal

TasNetworks accepts our draft decision for public lighting.

16.2.3 Reasons for final decision

[26] If the ABS does not, or ceases to, publish the index, then CPI will mean an index which the AER considers is the best available alternative index.

The Consumer Challenge Panel's David Headberry stated that TasNetworks has not demonstrated that its public lighting prices are reflective of its costs.[27]

We consider that TasNetworks' public lighting proposal has demonstrated that it is reflective of its costs and that the existing pricing approach is appropriate.

Across the NEM distributors typically apply the same prices for public lighting across different regions. TasNetworks only has around 46,000 public lights across Tasmania, a relatively small number that we do not consider justifying breaking down the costs into different regions. This would require additional administrative cost allocations by TasNetworks that may not result in substantial improvements in cost reflectivity.

The submission[28] refers to 100w sodium vapour light being $43.64 p.a. and the 400w sodium vapour light being $47.67 p.a. in the draft decision. These prices are, however, actually cents per day. They correspond to annual prices of $159.31 and $174.03 respectively. The main driver of the difference in these costs is the difference in the Luminaire Unit prices.

TasNetworks' public lighting model provides a build-up and breakdown of all of the components and costs that make up the published public lighting prices.

Public lighting costs do not tend to vary significantly across Tasmania's different regions. Whilst there will be additional costs involved in servicing public lights in more remote regions, there are also savings compared to the traffic management costs involved in servicing public lights in more built up urban areas.

If the costs were further disaggregated by Tasmanian region, or urban compared to rural, it is not expected that this would result in any significant change in prices. To attempt to break prices down further would increase TasNetworks' administrative costs without providing any substantial improvement in cost reflectivity to customers.

We do not consider setting prices by region will result in any significant changes in prices in Tasmania. The AER's experience across the NEM in public lighting is also that proposals to implement differential costs by location have not been supported by the majority of local council stakeholders.

Final public lighting prices are set out in Appendix B.

16.3 Metering

We are responsible for the economic regulation of regulated metering services provided by TasNetworks. As set out in our draft decision, TasNetworks only provides regulated type 6 metering services.[29] Therefore, our final decision sets out a charging structure and control mechanism relating to type 6 metering only.

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27 David Headberry, Consumer Challenge Panel Submission, 25 November 2016, p.36-37.

28 David Headberry, Consumer Challenge Panel Submission, 25 November 2016, p.36-37.

29 AER, *Draft decision: TasNetworks distribution determination 2017–18 to 2018–19: Attachment 16 – Alternative control services*, September 2016, p. 25; TasNetworks, *Response to AER information request #1*, 29 February 2016, p. 7.

16.3.1 Final decision

TasNetworks accepted our draft decision.[30] Therefore, our final decision has only updated the inputs in TasNetworks' metering model to reflect actual metering capital expenditure in 2015-16, our final decision weighted average cost of capital and the most recent CPI escalation. The final decision first year of the 2017–19 regulatory control period metering prices resulting from these input updates are set out in appendix C.

Form of control mechanism

Our final decision applies price caps as the form of control for individual type 6 metering services. This means a schedule of prices is set for the first year (set out in appendix C. For the following years the previous year's prices are adjusted by CPI and an X factor. The control mechanism formula is set out below:

$$\bar{p}_t^i \geq p_t^i \qquad \text{i=1,...,n and t=1,…2}$$

$$\bar{p}_t^i = \bar{p}_{t-1}^i \times (1 + \Delta CPI_t) \times (1 - X_t^i)$$

Where:

$\bar{p}_t^i$ is the cap on the price of service *i* in year *t*

p_t^i is the price of service *i* in year *t*. The initial value is to be decided in the determination.

$\bar{p}_{t-1}^i$ is the cap on the price of service *i* in year *t*

t is the regulatory year

ΔCPI_t is the annual percentage change in the ABS consumer price index (CPI) All Groups, Weighted Average of Eight Capital Cities[31] from the December quarter in year t–2 to the December quarter in year t–1, calculated using the following method:

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in regulatory year t–1

divided by

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in regulatory year t–2

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30 TasNetworks, *Tasmanian distribution revised regulatory proposal–Regulatory control period 1 July 2017 to 30 June 2019*, December 2016, p. 24.

31 If the ABS does not, or ceases to, publish the index, then CPI will mean an index which the AER considers is the best available alternative index.

minus one.

For example, for 2018–19, year t–2 is the December quarter 2016 and year t–1 is the December quarter 2017.

X_t^i is the values set out in table 16.3.

Table 16.3 X factor for annual metering charges

	2018–19
X factor (non–capital component)	0.0
X factor (capital component)	0.0

Source: AER analysis.

16.3.2 TasNetworks' revised proposal

TasNetworks' accepted our draft decision on metering.[32]

[32] TasNetworks, *Tasmanian distribution revised regulatory proposal–Regulatory control period 1 July 2017 to 30 June 2019*, December 2016, p. 24.

A Ancillary network services prices

Table 16.4 Fee based ancillary network service prices for 2017–18, AER final decision ($2017–18)

Fee based service	Final decision prices
Energisation, de-energisation, re-energisation and special reads	
Site visit – no appointment	59.53
Site visit – non-scheduled visit	131.59
Site visit – same day premium service	222.84
Site visit – after hours	350.32
Site visit – credit action or site issues	138.47
Site visit – credit action pillar box/pole top	248.47
Site visit – current transformer (CT) metering	129.03
Site visit – pillar box/pole top	248.47
Site visit – pillar box/pole top wasted visit	148.13
Transfer of retailer	0.00
Meter alteration	
Tariff alteration – single phase	139.88
Tariff alteration – multi phase	183.33
Adjust time clock	81.24
Install pulse outputs	129.03
Remove meter – single phase	139.88
Remove meter – multi phase	183.33
Meter alteration – after hours visit	429.47
Meter alteration – wasted visit	85.58
Meter test	
Meter test – single phase	215.91
Meter test – multi phase	411.38
Meter test – current transformer (CT)	454.83
Meter test – after hours	825.24
Meter test – wasted visit	85.58
Supply abolishment	
Remove service and meters	260.72

Fee based service	Final decision prices
Supply abolishment – after hours	655.77
Supply abolishment – wasted visit	169.51
Truck tee-up	
Tee-up/appointment	146.27
Tee-up/appointment – after hours	655.77
Tee-up/appointment – no truck – after hours	350.32
Tee-up/appointment – wasted visit	95.94
Miscellaneous services	
Open turret	137.77
Data download	276.20
Alteration to unmetered supply	213.28
Meter relocation	165.69
Miscellaneous services	125.19
Miscellaneous services – after hours	559.33
Miscellaneous services – wasted visit	100.01
Connection establishment charges	
Overhead service, single span – single phase	551.02
Overhead service, single span – multi phase	777.13
Underground service in turret/cabinet – single phase	180.57
Underground service in turret/cabinet – multi phase	226.46
Underground service with pole mounted fuse – single phase	422.33
Underground service with pole mounted fuse – multi phase	530.44
Basic connection – after hours	1010.36
Connection establishment – wasted visit	154.43
Renewable energy connection	
Modify existing connection for micro embedded generation – single phase	171.17
Modify existing connection for micro embedded generation – multi phase	214.61
Renewable energy connection – after hours	809.11
Renewable energy – wasted visit	116.87
Temporary disconnection charges	
Disconnect/reconnect overhead service for facia repairs – single phase	322.67
Disconnect/connect overhead service for facia repairs – multi phase	413.89

Fee based service	Final decision prices
Temporary disconnect/reconnect – after hours	852.57
Temporary disconnect/reconnect – wasted visit	185.85
Basic connection alteration	
Connection alteration – overhead single phase	322.67
Connection alteration – overhead multi phase	413.89
Connection of new consumer mains to an existing installation – underground single phase to turret or pole	225.21
Connection of new consumer mains to an existing installation – underground multi phase to turret or pole	275.55
Augment single phase overhead service to multi phase supply	845.55
Augment multi phase overhead service to single phase supply	619.44
Augment single phase overhead service to underground supply (turret)	392.32
Augment multi phase overhead service to underground supply (turret)	483.53
Augment single phase overhead service to underground supply (pole)	490.75
Augment multi phase overhead service to underground supply (pole)	598.84
Basic connection alteration – after hours	1082.17
Basic connection – wasted visit	174.45

Source: AER analysis; TasNetworks, *RTN002_Alternative Control - Revised fee based services model*, December 2016, AER, Final decision - TasNetworks fee based services model - April 2017.

Table 16.5 TasNetworks' quoted services, AER final decision

Quoted service group	Service name	Description
New design and construction fees		
	Standard application fee	Administrative costs of application assessment
	Application fee – Customer choice	Connection assessment costs and preparation of specifications for a customer choice project
	Design cost – Design audit fee (small)– minimum service	Audit of a design incorporating low or high voltage elements
	Design cost – Design audit fee (large) – minimum service	Audit of a design incorporating high voltage and low voltage elements
	Design cost – Design audit fee (major) – minimum service	Audit of a design incorporating high voltage, low voltage and substation elements
	Design cost – Design audit fee (small)– maximum service	Audit of a design incorporating low or high voltage elements including a site visit
	Design cost – Design audit fee (large) – maximum service	Audit of a design incorporating high voltage and low voltage elements including a site visit

Quoted service group	Service name	Description
	Design cost – Design audit fee (major) – maximum service	Audit of a design incorporating high voltage, low voltage and substation elements including a site visit
	Construction cost – Construction audit fee (small) – minimum service	Audit of low or high voltage construction with 1-3 project audit gates
	Construction cost – Construction audit fee (large) – minimum service	Audit of high voltage and low voltage construction with 1-3 project audit gates
	Construction cost – Construction audit fee (major) – minimum service	Audit of high voltage, low voltage and substation construction with 1-3 project audit gates
	Construction cost – Construction audit fee (small) – maximum service	Audit of low or high voltage construction with 5-7 project audit gates
	Construction cost – Construction audit fee (large) – maximum service	Audit of high voltage and low voltage construction with 5-7 project audit gates
	Construction cost – Construction audit fee (major) – maximum service	Audit of high voltage, low voltage and substation construction with 5-7 project audit gates
Non-standard services		
		Removal or relocation of TasNetworks' assets at a customer's request (for example, the Tasmanian Government) request
		Services provided at a higher standard than the standard service, due to a customer's request
		Provision of public lighting schemes
		Provision of overhead and underground subdivisions for developers
		Design work for a new connection
		Relocation of assets at the request of a third party
		Services that are provided through a non-standard process at a customer's request (for example, more frequent meter reading)

Source: AER analysis; TasNetworks, *Tasmanian distribution regulatory proposal—Regulatory control period 1 July 2017 to 30 June 2019*, 29 January 2016, p. 147; TasNetworks, *Indicative pricing schedule: Regulatory control period 1 July 2017 to 30 June 2019*, January 2016.

Table 16.6 Quoted service hourly labour rates for 2017–18, AER final decision ($2017–18)

Labour type	AER final decision
Cable joiner	60.56
Customer connections – commercial metering	63.09
Customer connections – service crew	62.13
Designer	70.05

Labour type	AER final decision
Distribution electrical technician	62.25
Distribution linesman	56.35
Distribution linesman – live line	63.38
Distribution operator	69.65
Electrical inspector	58.32
Field service co-ordinator	72.38
Labourer – overhead	48.42
Meter reader	48.23
Pole tester	50.22
Project manager	86.06

Source: AER analysis; TasNetworks, *Indicative pricing schedule: Regulatory control period 1 July 2017 to 30 June 2019*, January 2016.

B Public Lighting charges

Table 16.7 Public Lighting Charges, Final decision ($ nominal)

Light Type	2017-18 (cents per light per day) Customer Owned[33]	2017-18 (cents per light per day) TasNetworks Owned[34]
32W Compact Fluorescent	17.770	35.128
42W Compact Fluorescent	17.770	35.153
42W Compact Fluorescent - Bottom Pole Entry	17.770	35.153
2x24W Compact Fluorescent	18.085	35.467
1x20W Fluorescent	17.738	36.806
1x40W Fluorescent	17.757	35.672
2x20W Fluorescent	18.022	37.089
2x24W Fluorescent	17.867	37.041
T5 Fluorescent 2 x 24W	18.022	37.089
20 Fluorescent 1X20FL	17.738	36.806
2x40W Fluorescent	18.059	35.973
3x40W Fluorescent	21.858	45.238
4x20 Fluorescent	18.589	37.655
4x40W Fluorescent	22.159	46.692
100W Sodium Vapour	22.000	44.393
150W Sodium Vapour	21.996	46.694
250W Sodium Vapour	22.126	47.809
250W Sodium Vapour - Flood Light	22.126	51.816
400W Sodium Vapour	22.170	48.651
400W Sodium Vapour - Flood Light	22.170	51.295
70W Sodium Vapour	17.977	34.993
100W Incandescent	21.074	40.935
60W Incandescent	17.576	31.974
18W LED	12.043	33.488

[33] Customer made contributions for the capital cost and TasNetworks provide the operation and maintenance only for the lights.

[34] TasNetworks provides capital and operations and maintenance for the lights.

25W LED	12.043	33.488
18W LED Decorative - Bottom Pole Entry	12.043	46.896
18W LED Decorative - Side Entry	12.043	46.896
18W LED Decorative - Top Entry	12.043	46.896
25W LED Decorative - Bottom Pole Entry	12.043	46.896
25W LED Decorative - Side Entry	12.043	46.896
25W LED Decorative - Top Entry	12.043	46.896
30W LED	12.043	33.488
88 LED Light	12.043	33.488
100W Metal Halide	21.997	44.544
150W Metal Halide	22.140	47.261
250W Metal Halide	22.140	48.104
400W Metal Halide	22.828	53.376
70W Metal Halide	18.481	33.817
250W Metal Halide - Flood Light	22.140	53.523
400W Metal Halide - Flood Light	22.828	53.376
125W Mercury Vapour	21.109	44.261
250W Mercury Vapour	21.109	44.728
400W Mercury Vapour	21.259	46.842
50W Mercury Vapour	17.640	32.688
80W Mercury Vapour Art decorative	17.608	49.313
80W Mercury Vapour	17.608	32.689

C Metering prices

Table 16.8 Final decision metering charges (nominal, cents per day)

		2017-18
Business LV – Single phase	Capital	3.302
	Non–capital	2.994
Business LV – Multi phase	Capital	6.605
	Non–capital	5.989
Business LV – CT meters	Capital	8.541
	Non–capital	7.744
Domestic LV – Single phase	Capital	3.192
	Non–capital	2.894
Domestic LV –Multi phase	Capital	6.624
	Non–capital	6.006
Domestic LV - CT meters	Capital	8.198
	Non–capital	7.432
Other meters	Capital	5.829
	Non–capital	5.285

Source: AER analysis.

Note: Prices for 2018–19 will be adjusted for actual CPI during the AER's annual pricing approval process.

Table 16.9 Final decision on X factors for metering charges (per cent)

	2018–19
X factor (non–capital component)	0.0
X factor (capital component)	0.0

Source: AER analysis.

Table 16.10 Indicative annual metering charges ($ nominal)

	2017–18
Business LV – Single phase	22.98
Business LV - Multiple phase	45.97
Business LV –CT meters	59.44
Domestic LV – Single phase	22.21
Domestic LV – Multiple phase	46.10

	2017–18
Domestic LV – CT meters	57.05
Other meters	40.57

Source: AER analysis.

Note: The prices in Table 16.10 are indicative only. When setting metering charges, the AER will use the prices in Table 16.8 and the X factors in Table 16.9. The prices in Table 16.10 include both the capital and non–capital component.