



TasNetworks Transmission Revenue & Distribution Regulatory Proposal 2019-20 to 2023-24

Submission

May 2018

Goanna Energy Consulting Pty Ltd ABN: 31 674 232 899

Acknowledgements & Disclaimer

This project was funded by Energy Consumers Australia

(<u>http://www.energyconsumersaustralia.com.au</u>) as part of its grants process for consumer advocacy projects and research projects for the benefit of consumers of electricity and natural gas. The views expressed in this document do not necessarily reflect the views of the Energy Consumers Australia. This document has been produced by Goanna Energy Consulting Pty Ltd for the Tasmanian Small Business Council (TSBC). However, the views expressed are those of the TSBC and not the consultants involved.

Unless otherwise stated any advice contained in this report is of a general nature only and has been prepared without taking into account any individual objectives, financial situations or particular needs. Those acting upon information contained in this report without first consulting with one of Goanna Energy Consulting Pty Ltd's advisors do so entirely at their own risk. Goanna Energy Consulting Pty Ltd gives no warranty in relation to the contents of this report, and the opinions contained therein.

To the extent permitted by law, Goanna Energy Consulting Pty Ltd exclude (and where the law does not permit an exclusion, limit to the extent permitted by law) all liability for any direct, indirect and consequential costs, losses, damages and expenses incurred in any way (including but not limited to that arising from negligence), connected with any use of or access to this report or any reliance on information contained in any part of this report.





May 2018

Submission Highlights & Key Messages

Themes	TasNetworks has adopted a generally positive approach in compiling its Regulatory Proposal including, placing a stated focus on easing network price pressures and undertaking detailed consumer consultations.
	Tasmanian small businesses, along with electricity consumers Australia wide, have suffered a significant increase in electricity prices since 2000, due especially to increases in network charges.
	That increase has caused significant stress to a number of TSBC members, reducing profitability and in some instances, contributing to businesses ceasing to operate, despite a recent levelling out.
	The TSBC believes that every opportunity to reduce electricity prices to small business must be taken, and this review is one such opportunity.
	There are several areas where the TSBC considers that AER and consumer scrutiny of TasNetworks' Proposal needs to be particularly strong.
Value of TasNetworks' combined regulatory asset base (RAB)	The value of TasNetworks' RAB increased dramatically over the period 2006 to 2014, from \$2.1 billion to \$3.1 billion in 2017 dollar terms, or by 48%, when actual demand was flat.
	The return earned on its assets and its allowance for asset depreciation has contributed significantly to Tasmanian electricity price increases.
	It is estimated that TasNetworks' assets are overvalued by \$750 million and that this adds \$150 per annum to consumer electricity bills. An asset write down would put an end to the overcharging.
	Any proposal for capital expenditure over the 2019-24 regulatory period should be considered against this background.
Capital expenditure (capex) – transmission	The TSBC wishes to see clear evidence that TasNetworks is seeking to increase the utilization of its existing transmission assets and deferring capex which would reduce transmission charges. The opportunity to do so is reflected in the current average remaining life of transmission assets, at 76%, well above what we would expect in a mature electricity network business. There is little evidence of this in the Proposal.
Contingent projects – second Bass Strait interconnector	The TSBC notes the very large expenditure associated with contingent transmission projects – \$935 million compared to a transmission RAB of \$1.42 billion as at July 2017 – and is particularly concerned that decisions about the second Bass Strait interconnector, involving an estimated capital cost of \$550 million, will find their way into the transmission RAB. Development of a business case for this is currently occurring without consumers being involved or made aware of the implications for prices.
Capital expenditure (capex) – distribution	TasNetworks' bid for distribution capex over the 2019-24 period would see a significant increase from the 2012-2019 levels, rising from an average of \$112 million per year to \$148 million per year (2019 dollars).
	The utilization rate of distribution assets has, however, fallen from a peak of 56 per cent in 2007 to 34 per cent in 2017. Demand is projected to be flat from 2019 to 2024; therefore asset utilization will continue to fall towards unsustainable levels.





May 2018

	Against this background, the TSBC questions the need for a further round of increased capex and expects the AER to significantly reduce the allowed expenditure.
	The TSBC does not accept that there is justification for significant IT expenditure and contends that major transformational expenditure, such as investments made by TasNetworks or its predecessor Aurora Energy in vegetation management and IT, should not be a recurring theme, funded by consumers more than once.
Operating expenditure – transmission and distribution	The TSBC contends that the year upon which to base future transmission opex should be 2016/17 and 2014-15 for distribution opex expenditure. This would lower the combined base year opex in 2019-20 by \$16.6 million and by \$83 million over the next regulatory period.
	Benchmarking of TasNetworks' efficiency reveals a mixed picture – transmission is a generally good performer, except in the efficiency of capex, but distribution is a laggard with recent welcome improvements having reversed. Overall, TasNetworks needs to improve but its Proposal on opex falls short even allowing for its welcome self-imposed efficiency factor and it has already conceded that its benchmark ranking will fall.
Rate of return (WACC) – transmission and distribution	We submit that a WACC of 4.76 per cent should be applied to both transmission and distribution assets, based on an assessment of the appropriate input parameters to the WACC calculation, on the basis that the systematic (or non-diversifiable) risks borne by investment in either group of assets is the same.
	TasNetworks has proposed 5.89 per cent, which would result in much higher prices.
Price impacts and cross- subsidies	While there are useful reductions in transmission prices in the Proposal, these are less important to small businesses. The main game is distribution prices, which account for three quarters of network charges and will increase by 4.5 per cent per annum (nominal) under TasNetworks' Proposal. This is unacceptable to the TSBC, especially at a time of concern about rising electricity prices.
	Moreover, it appears that the welcome reduction in distribution price cross- subsidies – a penalty on small business – seen in recent years will stall over the next five years, a matter of major concern to the TSBC.
Change, transformation and transition, and tariff reform	We consider there is a very real threat to the value of Tasmania's electricity network. A combination of continuing reductions in the cost of local generation and storage, and a lack of response to the desire of electricity consumers, including small business, to manage their electricity costs after a period of substantial price rises, is cause for concern.
	Developing the necessary Smartgrid infrastructure and appropriate tariffs should not be delayed and the relevant strategies should be in place and being implemented by the end of the 2023-24.





Executive Summary

The Tasmanian Small Business Council (TSBC) welcomes the opportunity to participate in the Australian Energy Regulator's (AER) reset of TasNetworks' transmission revenue and distribution regulatory determination for the period 2019-20 to 2023-24. We also welcome the opportunity to provide this submission on TasNetworks' Regulatory Proposal as an important step in the Determinations.

The TSBC wishes to acknowledge TasNetworks' positive approach in compiling its Tasmanian Transmission Revenue and Distribution Regulatory Proposal, including:

- application of an efficiency factor to opex;
- voluntarily reducing the transmission WACC by 0.25%;
- continuing to apply the AER WACC parameters when most other NSPs have sought higher ones;
- placing more of a focus on affordable network charges than other NSPs have been prepared to do;
- actively engaging with their customers; and
- responding to the feedback on their Directions & Priorities Paper with a number of modifications to revenue requirements.

The TSBC maintains, however, that there has been excessive asset investment in the past which, combined with what the TSBC sees as a higher than necessary allowed rate of return and ongoing business inefficiencies, leads to consumers paying electricity prices which are higher than they should be.

That situation can, and should be, addressed in the next regulatory period.

The TSBC believes that includes steps that lead further towards reducing prices to consumers than what TasNetworks has proposed, including measures such as working the existing grid assets harder, rather than investing more in new assets, thereby increasing utilization rates; limiting investment in new IT systems; and setting the baseline for operating expenditure (opex) at the 2014-15 level, rather than the 2017-18 level proposed and finding further efficiencies in opex, especially for the distribution network but not excluding transmission.

BACKGROUND

Tasmanian small businesses, along with electricity consumers Australia wide, have experienced a significant increase in electricity prices since 2000, due to increases in a range of supply chain costs, including network charges (see **Figure ES 1**).

That increase has caused significant stress to a number of TSBC members, reducing profitability and in some instances, contributing to businesses ceasing to operate, despite the recent limitation on wholesale price increases imposed by the Tasmanian Government and welcome reductions in network charges.

The TSBC therefore believes that every opportunity to reduce electricity prices to small business must be pursued with vigour, and this review of TasNetworks' Regulatory and Revenue Proposal 2019-24 is one such opportunity.







Figure ES 1: NEM electricity retail prices by State

Source: AEMO, Retail electricity price history and projected trends, September 2017

The TSBC sets that expectation against a background of a lack of competition at the wholesale and retail levels of the Tasmanian electricity market, which also contribute to electricity prices being higher than they would otherwise be.¹

There are five areas where the TSBC considers that TasNetworks' claims are excessive and should be reduced. as follows:

- The value of the combined regulatory asset base (RAB) •
- Capital expenditure transmission •
- Capital expenditure distribution
- Operating expenditure distribution •
- Rate of return (WACC) transmission and distribution •

CONSUMER CONSULTATION AND ENGAGEMENT

TasNetworks efforts in consumer engagement have been recognized by the AER's Consumer Challenge Panel representatives (CCP 13) as "overall, one of the best in the NEM, but need continuous improvement, as others are innovating and improving"².

² Consumer Challenge Panel, TasNetworks Public Forum presentation, www.aer.gov.au/system/files/TasNetworks%20-%20TasNetworks%20Public%20Forum%20Presentation%20-%2010%20April%202018.PDF





Tasmanian Small Business Council Uniting Small Business

¹ For example, Goanna Energy Consulting, Tasmanian Wholesale Electricity Market Study, A Report for the TSBC, January 2018 available at https://www.tsbc.org.au/wp-content/uploads/2018/02/Tasmanian-Wholesale-Electricity-Market-Study-Final-Report-March-2018.pdf.

The TSBC notes the CCP13 comments and TasNetworks' efforts on customer engagement, as reflected in chapters 3 (Customer Engagement), 7 (customer feedback, revenue capped services) and 17 (customer feedback, alternative controlled services) in its Transmission Revenue and Distribution Regulatory Proposal, and in its Tariff Structure Statement.

The TSBC has been included in TasNetworks' engagement, and acknowledges and welcomes its efforts.

In pursuit of continuous improvement, the TSBC suggests that TasNetworks efforts towards consumer engagement are currently in the "consult" stage, and to a lesser degree the "involve" stage, but not yet progressed to the collaborative stage, and the TSBC proposes that there are a number of steps which could be taken towards that objective.

The TSBC would like to see specific actions arising from consumer feedback, that is, references in the proposal to specific items demonstrating how customer feedback has translated to specific action, including reduced prices and/or better service.

CHANGE, TRANSFORMATION AND TRANSITION

The nature of the changes occurring in electricity consumer choices around generating and storing electricity at or near their homes and businesses will have a major (adverse) impact on the electricity costs of those consumers who are not willing or able to implement the related technologies. On the other hand, consumers who do adapt will benefit but networks will be challenged by the leakage of customers and lower network utilisation.

The TSBC acknowledges TasNetworks' adoption of Energy Networks Australia (ENA) and CSIRO's Electricity Networks Transformation Roadmap in developing TasNetworks' 2025 vision.

As we noted in our response to the Directions and Priorities Consultation Paper³, the TSBC is concerned at the pace of change at which TasNetworks is progressing towards its 2025 Vision. Unless the pace is quickened there is a risk that the rate at which customers adopt energy technologies which do not rely on the grid will outstrip TasNetworks' efforts to develop the cost effective grid technologies.

Should that occur, the rate of defection from the grid will accelerate, as will the rate of economic bypass identified by the head of the Australian Energy Market Operator⁴, which would be a "lose lose" situation, for customers, TasNetworks (and its shareholder the Tasmanian Government), and lead to higher prices for those customers who remain grid connected.

CAPITAL EXPENDITURE - TRANSMISSION

The TSBC notes that the value of the transmission RAB is projected to increase by \$160 million from \$1.467 billion to \$1.627 billion over the forthcoming regulatory period 2019-24⁵, in line with inflation, whilst demand is projected to continue to be flat.

⁵ TasNetworks Post Tax Revenue Model (PTRM)





³ <u>https://www.tasnetworks.com.au/TasNetworks/media/pdf/customer-</u>

engagement/Direction%20and%20Priorities%20submissions%202015/TSBC-Submission-TN-Directions-and-Priorities-Consultation-Paper.pdf

⁴ <u>www.smh.com.au/business/the-economy/i-m-truly-concerned-aemo-chief-warns-on-rooftop-solar-</u> 20180424-p4zbg0.html.

The TSBC wishes to see clear evidence that TasNetworks is seeking to increase the utilization of its existing assets and defer capital expenditure which would, in itself, reduce transmission charges. The opportunity to do so is reflected in the current average remaining life of transmission assets, at 76%, well above what the TSBC would expect in a mature electricity network business.

CAPITAL EXPENDITURE – DISTRIBUTION

TasNetworks bid for distribution capital expenditure over the next regulatory period 2019-24 would see a significant increase from the previous levels (2012-2019) as can be seen from Figure ES 2.



Figure ES 2: Average distribution capex (\$m, 2019)

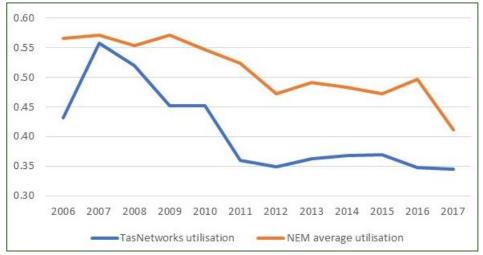
2007-12 Source: Goanna Energy Consulting from TasNetworks Regulatory Proposal – 2019-2024

That increased expenditure is proposed against a background of a continuing decline in the utilization rate of distribution assets as shown in Figure ES 3.

2012-17

2017-19

Figure ES 3: Distribution assets utilisation - TasNetworks and NEM



Source: Goanna Energy Consulting from AER RIN data



90 80

2003-07



2019-24

TasNetworks indicate that the increased expenditure is driven largely by the need to manage safety risks, including expenditure directed to pole staking and vegetation management, and Information Technology (IT).

The TSBC does not accept that there is justification for such increases., and contends that major transformational expenditure, such as investments made by TasNetworks (or its predecessor Aurora Energy) in the areas of vegetation management and IT, should not be a recurring theme, funded by consumers more than once.

The need for increased expenditure to support two way flows in the distribution network is acknowledged, however, that expenditure should be matched by demonstrable benefits, including reduced operating costs. In the absence of such benefits, there should be a re-examination of tariff structures to ensure the 'user pays' principle applies, to avoid burdening those consumers who do not benefit from new technologies with the associated costs.

CONTINGENT PROJECTS

In addition to the five issues discussed above, the TSBC is concerned that discussions related to contingent projects, in particular the second Bass Strait interconnector, are occurring without consumers being made aware of the implications for network, and thus retail, electricity prices.

ABC news reported on 24th November 2017 that a \$20 million business case study into a second Bass Strait electricity cable is to be jointly funded by the Federal and State governments and is to look at the route, capacity, cost and timeframe to build a second cable connecting Tasmania to the mainland. The TSBC understands that considerable resources, including those provided by TasNetworks, have been allocated to the task.

The expenditure included in TasNetworks' Regulatory and Revenue proposal is \$550 million, which would result in a 17% increase in TasNetworks' Regulatory Asset Base, with resulting flow on implications for return on and return of capital, plus annual operating costs. The resulting increase in network revenue would translate to an annual cost burden in the order of \$45 million per year.

The benefits would be largely invisible to consumers, but the impact on electricity prices would not be. The TSBC therefore requests that information concerning the impact on prices should be made public and become part of the public discussion around the merits or otherwise of a second interconnector.

OPERATING EXPENDITURE – TRANSMISSION & DISTRIBUTION

Viewed from the perspective of average expenditure over the period 2012-13 to 2017-18 (\$82.1 million), proposed average distribution operating expenditure (opex) per year for the 2019-24 period of \$85 million appears to be reasonable, and factoring in efficiency gains (as yet unidentified) is welcome.

The change in operating expenditure (opex) from the current regulatory period represents a modest real reduction of \$2.6 million (-0.4 per cent) for TasNetworks' combined network, made up of \$1.4 million (-0.7 per cent) for transmission and \$1.2 million (-0.3 per cent) for distribution. TasNetworks has now entered a phase of being satisfied with quite modest future reductions and its hunger for further efficiencies seems to have abated.





The TSBC contends that the year upon which to base transmission opex should be 2016-17 as providing the most efficient level of opex. This would lower the base year opex by some \$4.4 million compared to TasNetworks' proposed year (2017-18) and lower opex over the next regulatory period by \$22 million (other things being equal).

For distribution opex, we support the use of 2014-15 as the base year as this provides the lowest level of opex available. This is \$12.2 million lower than for 2017-18, the year proposed by TasNetworks and would lower opex over the next regulatory period by \$61 million (other things being equal). Alternatively, we would suggest that 2015-16 be used. This would still lower distribution opex by \$6.9 million, totalling \$34.5 million over the 2019-24 period.

We do not accept TasNetworks' argument that 2017-18 provides an efficient base year for opex, or that it is desirable to choose a common base year for both transmission and distribution. The choice of 2017-18 will result in unnecessary increases in opex that will outweigh any advantages of a common base year in terms of the likely impact on network charges.

The major contributors to category increases in opex are vegetation management and business services.

The TSBC does not believe that an increase in business services costs from those incurred over the 2014-15 year is warranted, given the efficiency gains which the merger of Aurora Energy (Distribution) and Transend to form TasNetworks in 2014 was intended to deliver.

The TSBC is similarly unconvinced that a large increase in vegetation management costs is warranted, given the significant investment which occurred during the 2004 to 2017 regulatory period involving capital and operating expenditure, in order to implement an enduring vegetation management strategy.

The TSBC expects that the AER will closely scrutinize the level of operating expenditure which TasNetworks seeks in those categories, as well as its choice of base year and the robustness of its proposed efficiencies.

RATE OF RETURN (WEIGHTED AVERAGE COST OF CAPITAL)

In July 2017, the Australian Energy Regulator (AER) initiated a review of the Rate of Return Guideline and introduced new process elements for the conduct of the review; one being the formation of a Consumer Reference Group (CRG), on which the TSBC is represented.

In February 2018, the COAG Energy Council agreed to make a number of changes to the National Electricity Law (NEL) and the National Gas Law (NGL) relating to the calculation of the rate of return on capital and the value of imputation credits used in economic regulatory decisions and released draft legislation to replace the Rate of Return Guideline with a Binding Instrument. The legislation foreshadows the repeal of the current Rules that guide the AER in making the Guideline, however, the TSBC expects that the Binding Rate of Return Instrument will closely reflect the revised Rate of Return Guideline.

The TSBC is of the view that it is likely that application of the revised Guideline or the Binding Rate of Return Instrument would result in a lower Rate of Return (WACC) than that calculated by TasNetworks (5.89% for both transmission and distribution).





May 2018

Five years after the adoption of the current ROR guideline, the existence of historically high returns for network companies on the one hand, alongside excess capacity, substantial decreases in consumption of network services and falling industry wide productivity, on the other, is clearly problematic. It is accepted that TasNetworks has performed somewhat better on some of these metrics but our concerns remain.

The TSBC contends that returns earned by network companies exceed efficient risk-adjusted returns by a substantial margin. Regulated entities as an asset class are therefore generating material excess returns, which means that regulated prices, including those paid by Tasmanian small business, are substantially in excess of efficient prices.

The TSBC submits that a WACC of 4.76% should be applied for both transmission and distribution assets, on the basis that the systematic (or non-diversifiable) risks borne by investment in either group of assets is the same. The calculation of that outcome, using the parameter values suggested in this submission, compared to TasNetworks calculation for distribution assets, is shown in **Table ES 1**.

Component	Debt	Equity
Proportion of capital	60%	40%
	х	х
Cost	5.00	4.40
	=	=
Contribution	3.0	1.76
WACC	4.	76

Table ES 1: Weighted Average Cost of Capital

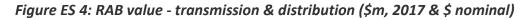
Source: Goanna Energy Consulting

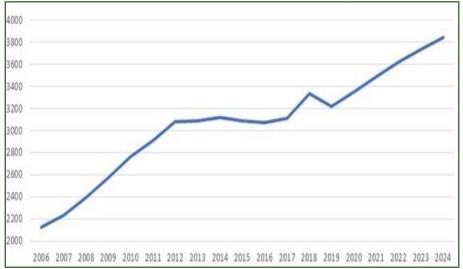
REGULATORY ASSET BASE (RAB)

The growth in TasNetworks' combined business RAB from 2006 to 2024, the end of the next regulatory period, is evident from **Figure ES 4**.





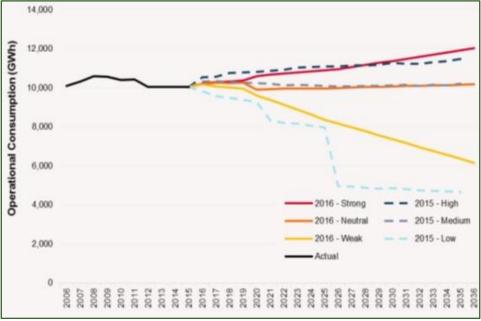




Note: TasNetworks Regulatory Proposal – 2019-2024 values discounted from \$2019 to \$2017. Source: AER RIN data to 2017, TasNetworks Regulatory Proposal, 2018-2024.

But demand over that period has been and is projected to be flat (Figure ES 5).

Figure ES 5: NEM demand actual and forecasts



Source: TasNetworks, Transmission Regulatory and Distribution Regulatory Proposal, 2019-2024, p. 71.

The period from 2006 to 2014 was one which involved massive capital expenditure, averaging \$127.5 million per year on the basis of demand forecasts which proved to be grossly inflated (a situation not unique to TasNetworks).





The resulting over-investment translates to consumers paying more than they should for the transmission services they receive, given that around 50% of network charges are derived from the value of the RAB multiplied by the allowed WACC (rate of return) and depreciation. The over investment can be expected to be corrected over time, however, the combination of a revenue cap and the roll forward (asset) model means consumers, including small business, pay "up front" for any over-investment and will be doing so for a long time.

Tasmanian electricity consumers, including small business, are paying for the over-investment and will continue to do so for the remaining life of the relevant assets, at around 40 years.

We note the recent report from the Grattan Institute, which found that TasNetworks' RAB was overvalued by \$750 million due mainly to poor demand forecasts leading to excessive capex in the past. This has resulted in smaller Tasmanian consumers paying \$150 per annum more for their electricity (on average). The Institute recommended that assets be written down by this amount and network charges reduced accordingly. It further recommended that TasNetworks be privatised subsequent to this. Alternatively, the Tasmanian Government should provide an annual rebate to Tasmanian consumers equal to the write down. We support the Grattan Institute's approach in principle and urge the AER and Tasmanian Government to fully consider it.

Meanwhile, the TSBC contends that all bids for capital expenditure by TasNetworks should be scrutinized against the overinvestment which occurred from 2006 to 2014, with a view to not simply holding capex, but reducing it.

ECONOMIC BENCHMARKING

TasNetworks' benchmarks first among NEM transmission networks, which is pleasing, although its performance deteriorated by 3 per cent in 2016.⁶ Capex has made a negative trend contribution over the past eleven years, whilst opex made a positive contribution, which has recently turned negative. TasNetworks has work to do over the next regulatory period but their Proposal falls short.

TasNetworks' distribution network has consistently benchmarked at, or near, the bottom of DNSPs'. This is partly, but not completely, explained by certain factors peculiar to its network. For capex, TasNetworks also ranks bottom of the pack and its performance has declined markedly over the period covered. For opex, TasNetworks distribution performs better but remains in upper mid-pack, with an improving trend overall, although there was a significant 7 per cent decline in 2016. TasNetworks has warned that its benchmark performance may deteriorate in future.

TasNetworks has undertaken its own benchmarking study, which we welcome, and focused more on Tasmanian issues. However, we are disappointed that its study contains few supporting metrics, shows a lack of ambition and is generally negative about the value of benchmarking as a regulatory tool. We would prefer that it adopted a more aggressive approach.

Overall, the benchmarking results suggest that TasNetworks' performance is reasonable in some areas but that it has work to do in others. Its Proposal does not seem up to this task.

⁶ Measured in terms of Multilateral Total Factor Productivity (MTFP), a measure of outputs relative to inputs.





Tasmanian Small Business Council Uniting Small Business

REGULATED REVENUE

There are factors pulling forecast transmission revenue down but, on the other hand, there are factors pushing distribution revenue up resulting in only a slight decline for the business. Given that TasNetworks operates in a more-or-less stagnant market this is a concern.

The expenditure cuts of the previous regulatory period that fuelled revenue outcomes have been replaced by a real increase in average annual revenues for distribution of 7 per cent from its previous determination. This turnaround is of concern. Meanwhile, past and future capex programs in both networks are feeding into an increasing RAB, which is raising revenue.

We note that there are numerous risks to TasNetworks' revenue forecasts. Some of these could be highly significant, e.g., contingent projects, and force revenue, followed by network charges up significantly if they come to fruition.

INDICATIVE NETWORK PRICES & CROSS-SUBSIDIES

Whilst we welcome the expected $\frac{3}{2}$ per cent decline in small business electricity prices due to falls in transmission prices expected over the next five years, we do not welcome the 1.7 per cent per annum expected increase in distribution prices, which will overwhelm the former.

We are also alarmed at the apparent stalling in the removal of the cross-subsidy that small business currently pays in its distribution tariffs. This follows a period in which good progress was made in removing the cross-subsidy. We note that this is contrary to the public position of TasNetworks in supporting removal. The AER needs to ensure that further progress is made over 2019-24.

LEGACY METERS ISSUE

TasNetworks' has proposed accelerated depreciation for its meters that will be stranded assets due to the introduction of metering competition and advanced meters. This will increase annual metering costs by between \$9.29 and \$24.85 per annum per meter at a time of high electricity prices. The AER must carefully assess this proposal. In a competitive market, assets stranded by new technology or changed policies would have to be written off and the shareholder face the costs. Moreover, allowing TasNetworks' Proposal would have customers pay twice for essentially the same thing and be contrary to the expectation that advanced meters will lower electricity costs.

TARIFF STRATEGY

The TSBC supports much of the tariff reform strategy of TasNetworks, albeit with some caveats. We particularly support the removal of cross-subsidies that penalise small business. The slow progress in removing these, including over the next regulatory period, is a major disappointment to the TSBC.

The TSBC view is also that an increase in fixed charges will stifle consumer responses to price signals and limit demand side response.

On the other hand, we welcome the focus on Distributed Energy Resources (DER) in the tariff strategy. However, waiting until 2050 to save customers an average of \$414 per year from DER is far too long. TasNetworks needs to speed up DER tariff reform.





Contents

A	cknowle	edger	nents & Disclaimer	1
Sι	ıbmissio	on Hi	ghlights & Key Messages	2
Ex	ecutive	Sum	imary	4
1	Intro	oduct	ion	18
	1.1	Back	ground to Small Business and the TSBC	18
	1.2	TSBC	C's Interest in TasNetworks' Proposal	18
	1.3	Fore	casts – Demand, Energy and Customer Connection	19
2	Cons	sume	r Consultation and Engagement	22
3	Char	nge, T	Fransformation and Transition	28
4	Capi	tal Ex	xpenditure (Capex)	32
	4.1	Tran	ismission Capex	32
	4.1.1	L	General observations	32
	4.1.2	2	Projected capital expenditure	34
	4.2	Com	ments on Elements of Proposed Transmission Capex	35
	4.2.1	L	Augmentation capex	35
	4.2.2	2	Information technology	36
	4.2.3	3	Contingent projects	36
	4.3	Distr	ribution Capex	39
	4.3.1	L	General observations	39
	4.4	Com	ments on Elements of Proposed Distribution Capex	42
	4.4.1	L	Renewal capex	42
	4.4.2	2	Information technology	43
	4.5	Tota	Il Capital Expenditure and RAB	46
	4.6	Tota	ll IT Expenditure	46
5	Ope	rating	g & Maintenance Expenditure (Opex)	50
	5.1	Ovei	rview	50
	5.2	Ope	x Forecasting Approach	50
	5.3	Tran	ismission Opex	51
	5.3.1	L	Internally imposed efficiency factor	51
	5.3.2	2	Base year costs	51
	5.3.3	3	Step changes	52
	5.3.4	1	Output growth	52
	5.3.5	5	Real price escalators	52
	5.3.6	5	Productivity growth	52





	5.3.	7	Other assumptions	52
!	5.4	Dist	ribution Opex	53
	5.4.	1	Base year costs	54
	5.4.	2	Step changes	55
	5.4.	3	Output growth	55
	5.4.	4	Real price escalators	55
	5.4.	5	Productivity growth	56
	5.4.	6	Other assumptions	56
6	Wei	ghteo	Average Cost of Capital (WACC)	58
(6.1	The	Rate of Return Guideline	58
(6.2	The	Allowed Rate of Return Objective (ARORO)	58
(6.3	CAP	M Parameter Values	62
	6.3.	1	Equity beta	63
	6.3.	2	Market risk premium (MRP)	63
	6.3.	3	Cost of debt	63
	6.3.	4	Gamma	63
(6.4	WAG	CC - Allowed Rate of Return (AROR) Outcome	64
7	Reg	ulato	ry Asset Base	66
	7.1	Dist	ribution	66
	7.2	Tran	smission	66
	7.3	Is Th	ere a Case to Reduce TasNetworks' RAB?	68
8	Ecoi	nomio	Benchmarking of TasNetworks' Performance	72
8	8.1	Ben	chmarking Results	72
	8.1.	1	AER benchmarking results	72
	8.1.	2	TasNetworks' benchmarking	73
9	Reg	ulate	d Revenue	76
(9.1	Net	vork Revenue	76
(9.2	Tran	smission Revenue	76
(9.3	Dist	ribution Revenue	77
(9.4	Risk	s to Revenue Outcomes	77
10	In	ndicat	ive Network Prices	80
	10.1	Tran	smission Prices	80
	10.2	Dist	ibution Prices	80
	10.3	Com	bined Network Prices	80
	10.4	Rem	oving Cross-subsidies	80
11	0	ther	ssues	83
	11.1	Corp	oorate Income Tax	83





11.2	Pass Through8	3
11.3	Legacy Meters Issue	4
12	Tariff Strategy	7

Table of Figures

Figure ES 1: NEM electricity retail prices by State	5
Figure ES 2: Average distribution capex (\$m, 2019)	7
Figure ES 3: Distribution assets utilisation - TasNetworks and NEM	7
Figure ES 4: RAB value - transmission & distribution (\$m, 2017 & \$ nominal)	11
Figure ES 5: NEM demand actual and forecasts	11
Figure 1: Consumers already having or considering solar and storage installations	29

Figure 1: Consumers already having or considering solar and storage installations	
Figure 2: Transmission assets RAB value (June 2017 \$000)	33
Figure 3: AEMO's forecast energy consumption on the Tasmanian network	33
Figure 4: Capital expenditure - transmission assets	34
Figure 5: Overview of actual and forecast transmission capital expenditure (June 2019 \$m)	35
Figure 6: Distribution assets RAB (\$000 June 17)	40
Figure 7: Distribution assets - utilisation	40
Figure 8: Distribution assets - RAB v utilisation	41
Figure 9: TasNetworks distribution asset performance	41
Figure 10: Average distribution capex (\$m 2019)	42
Figure 11: RAB value - transmission and distribution (\$m, 2017)	46
Figure 12: Total NEM capex, 2017 (\$m)	60
Figure 13: TasNetworks proposed capex, transmission & distribution	60
Figure 14: NEM RAB values by State, 2006 to 2016	62
Figure 15: Retail electricity prices vs CPI & wages, 2007 to 2017	
Figure 16: Projected RAB growth for distribution (\$m, 2018-19)	66
Figure 17: Projected transmission RAB (\$m, June 2019)	67
Figure 18: Impact of inflated RAB on Customer Bills	
Figure 19: Average annual total network charges for distribution customers (\$, June 2019)	81

Table of Tables

Table ES 1: Weighted Average Cost of Capital 10

Table 1: TasNetworks response to TSBC Submission on Directions and Priorities Consultatio	n Paper
	24
Table 2: Data management and information systems capex	37
Table 3: Distribution IT capex	45
Table 4: Transmission and distribution IT capex	47
Table 5: TSBC's preferred WACC	64
Table 6: Service charges applicable to some tariffs	87

Table of Boxes

Box 1: TasNetworks' customer engagement framework	23
Box 2: Examples of TasNetworks' response to customer feedback	23
Box 3: TSBC comments on its engagement with TasNetworks	26
Box 4: TasNetworks' tariff strategy development consultation	89







INTRODUCTION





Tasmanian Small Business Council Uniting Small Business

1 Introduction

This document is the Tasmanian Small Business Council's (TSBC) submission on TasNetworks' Regulatory Proposal for its transmission and distribution networks for the regulatory period 2019-20 to 2023-24. The TSBC welcomes the opportunity to participate in the Australian Energy Regulator's (AER) regulatory reset of TasNetworks' transmission and distribution network for the period 2019-20 to 2023-24. We also welcome the opportunity to provide this submission on TasNetworks' Regulatory Proposal as an important step in the Determinations.

1.1 BACKGROUND TO SMALL BUSINESS AND THE TSBC

Small business is the 'engine room' of the Tasmanian economy. There are more than 37,000 small businesses in Tasmania, 30,000 of which are employers, employing over 70,000 full and part-time people. Numerically, they make up in excess of 96 per cent of all businesses in Tasmania and the sector provides more than half of the State's private sector employment. Understanding the small business sector, its aspirations and needs is of vital importance to the enterprises themselves, as well as Government and regulators, as decision-maker. The resources to address the future needs of the state can only come from the generation of new wealth and healthy, vibrant small businesses are critical to this.

The Tasmanian Small Business Council (TSBC) is an "association of [small business] associations", each of which represents their market grouped industry sector. The TSBC seeks to provide the representative voice of small business in Tasmania. The TSBC's role in facilitating meetings of and forums for these trade associations, whose members are predominately small businesses, is paramount to providing informed insights and advice to governments and regulators.

An obvious difficulty for owners of small and micro businesses is the absolute necessity to spend their time working "in the business", while those with larger numbers of employees take a more managerial role and begin to spend some of their time working "on the business". Small business is therefore even more reliant on groups such as the TSBC to develop and put forward informed policy positions to Government and regulators that truly represent their interests.

1.2 TSBC'S INTEREST IN TASNETWORKS' PROPOSAL

Around 37,000 businesses are connected to the Tasmanian electricity network.

Electricity is a major input cost to small business and also a key enabler for every small business – the cost, quality and reliability of electricity supply materially impacts the health of every small business and the vibrancy of the Tasmanian small business sector.

Tasmanian small businesses have a need for competitively priced electricity that contributes to their competitive advantage. Competitors for Tasmanian small businesses include larger players in the local market, inter-state firms providing goods and services in Tasmania and international businesses (where they sell into export markets or compete against imports).

Many of the competitors of Tasmanian small businesses have access to cheaper energy and to competitive energy offers. Tasmanian small businesses therefore suffer a disadvantage in these respects and the TSBC actively supports policy and regulatory steps to help redress this. Having access to a reliable supply of network services at prices that truly reflect efficient costs and therefore





Tasmanian Small Business Council Uniting Small Business contribute to the provision of competitively priced electricity to Tasmanian businesses is important to the health of the small business sector and the Tasmanian economy.

Across the small business sector overall, electricity is a middle sized cost of production, typically making up between 3-5 per cent of total costs, although within some sectors, such as Tasmanian Independent Retailers, agricultural pursuits such as diary and irrigation, and some manufacturing firms, it can be substantially more. This, in itself, makes electricity important. However, its importance to small businesses in Tasmania is elevated by:

- The need to have access to a reliable source of supply, as many small businesses are heavily dependent on a continuous supply of electricity;
- The fact that some small businesses have energy costs well in excess of the average and, for them, access to competitively priced energy is particularly important;
- The large increases seen in Tasmanian electricity prices particularly over the period from 2009 to 2013, which has had a significant impact on small businesses. Many have been compelled to absorb those cost increases and to reduce profitability, due to the very competitive markets in which they operate and cannot access competing electricity suppliers due to a lack of retail competition, making their competitive disadvantage worse;
- The over-investment in electricity network assets which occurred over the period 2009 to 2013, which was one of the main drivers for electricity price increases over that period, with a resulting need for TasNetworks to limit its ongoing capital expenditure programs until the over-investment is wound out, which could take decades; and
- The increasing competitiveness of standalone (on site) electricity production compared to grid sourced electricity, with price implications for grid sourced electricity if grid defection rates accelerate.

We also note that small business, commercial and industrial customers, comprise approximately 15 per cent of the distribution system's customer base, but consume approximately 54 per cent of the electricity delivered by the distribution network. On this basis, TasNetworks should also have a strong interest in ensuring that its prices and operations support the electricity needs of its small business customers. If they depart the network, or reduce their reliance on it due to excessive charges or more competitive by-pass options, TasNetworks revenue base could be materially impacted.

Small business, like all Tasmanian electricity customers, has a significant investment in the Tasmanian electricity network (grid) by way of past and ongoing contributions to its maintenance and augmentation, through the electricity charges it pays for.

Tasmanian small business wishes to see the value of the electricity network assets maintained, and in fact enhanced, which would be the case if it is adapted to suit the technology requirements of customers into the future, in a "SmartGrid" world.

1.3 FORECASTS – DEMAND, ENERGY AND CUSTOMER CONNECTION

Given that forecasts of demand, energy consumption and customer connections are important drivers for expenditure and price outcomes for TasNetworks' transmission and distribution





networks, we provide the following observations on the forecasts provided in the TasNetworks' Proposal:

- The transmission load and generation connection forecasts are rather opaque. The "unprecedented numbers of connection enquiries from new wind generation and solar in Tasmania" reported by TasNetworks ought to provide a reasonable basis for forecasting generation connections. The unknown nature of the second interconnector and its significant impact on the Tasmanian network, should it go ahead, is noted, as is its status as a contingent project outside the forecasts in this Proposal.
- The forecast for Basic Residential connections to increase steadily over the forthcoming regulatory period to around 2,800 connections per annum is at a high level compared to previous years and may not be sustained, based on past trends and what is currently known about future drivers of such connections.
- Complex Residential connections are forecast to increase steadily over the forthcoming regulatory period, returning to levels observed prior to 2013, and the same comment applies as for Basic Residential connections, based on past trends and what is currently known about future drivers.
- Both Basic and complex commercial connections are forecast to increase steadily over the forthcoming regulatory period, but this may not be sustained given recent past experience, their recent depressed levels and what is currently known about the drivers for commercial activity in Tasmania. A lower forecast for complex commercial connections may be more realistic.

In summary, there are a number of aspects of TasNetworks' forecasts that seem to indicate doubt around the probability of realisation. Given the important impact of these forecasts on expenditures and prices, the AER should rigorously test the robustness of the forecasts before accepting them and substituting its own (lower) ones as necessary.





May 2018



CONSUMER CONSULTATION





Tasmanian Small Business Council Uniting Small Business

2 Consumer Consultation and Engagement

An important component of any AER regulatory determination nowadays is the consumer consultation and engagement process undertaken by network businesses like TasNetworks. The Rules allow the AER to adjust (downwards) a network businesses' revenue if this process is inadequate, although this has not happened to date.

TasNetworks efforts in consumer engagement have been recognized by the AER's Consumer Challenge Panel representatives (CCP 13) as "overall, one of the best in the NEM, but need continuous improvement, as others are innovating and improving."⁷

The TSBC notes the CCP13 comments and TasNetworks' efforts on customer engagement, as reflected in chapters 3 (Customer Engagement), 7 (customer feedback, revenue capped services) and 17 (customer feedback, alternative controlled services) in its Revenue and Distribution Regulatory Proposal, and in its Tariff Structure Statement.

The TSBC acknowledges and welcomes TasNetworks' efforts.

We also note TasNetworks' customer engagement framework, as described on its website and reproduced in **Box 1** below.

In pursuit of continuous improvement, the TSBC suggests that TasNetworks efforts towards consumer engagement are currently in the 'consult' stage, and to a lesser degree the 'involve' stage, but not yet progressed to the collaborative stage, and the TSBC proposes that there are a number of steps which could be taken towards continuous improvement, as suggested by CCP 13.

The TSBC would like to see specific actions arising from consumer feedback, that is, references in the proposal to specific items demonstrating how customer feedback has translated to specific action. The AER guideline – "Consumer Engagement Guideline for Network Service Providers, November 2013" includes, for example:

"We expect service providers to articulate the outcomes of their consumer engagement processes and how they measure the success of those processes. If service providers genuinely engage with consumers on significant issues, they should be able to draw on that information and use it, for example, to help explain the reasoning behind expenditure proposals. Service providers could report the following information, for example:

- evidence that the service provider heard from a comprehensive cross-section of consumers. Such reports should include consumer feedback, engagement activity summaries (the scope and objective of each activity), and whether the activities achieved their respective objectives.
- how the service provider considered consumer input and whether that input influenced the business and/or an expenditure proposal (and why). If consumers did exert influence, then the service provider should explain how."

⁷ Consumer Challenge Panel, TasNetworks Public Forum presentation, <u>www.aer.gov.au/system/files/TasNetworks%20-%20TasNetworks%20Public%20Forum%20Presentation%20-%2010%20April%202018.PDF</u>.





Box 1: TasNetworks' customer engagement framework

with balanced and objective information to assist in understanding the problem, alternatives, opportunities b/or solutions. feedback on analysis, alternatives and/or decisions. customers throughout the process to ensure that customer concerns and aspitations are consistently understandod and considered. customers in each aspect of the decision, including that customer concerns and aspitatons are consistently understandod and considered. customers in each aspect of the decision, including that customer concerns and aspitatons are preferred solution. making in the hat of our customers Promise to our Customers We will keep you informed, listen and acknowledge concerns and provide feedback on how customer input influenced the decision. We will work with you to ensure your concerns and insues are directly reflected in alternatives we develop and provide feedback. We will look to you for discustomer input influenced the decision. We will look to you for decisions where possible to the maximum extent. We will implement you decide.	propriate level of customer Public Participation Spectru	Imework defines the different leve participation that should be used run (IAP2). Five levels of public part s not always possible to provide cu	when undertaking community ticipation are identified and range	consultation on particular issue ge from inform to empower. Ta g role ie: on safety issues.	s. The framework is based on th	e International Association
Engagement Goal To provide our customers with balanced and objective information to assist in understanding the problem, alternatives, opportunities for solutions. To obtain customer feedback on analysis, alternatives and/or decisions. To work directly with our customers in each aspect of the decision, including the decision, including the decision. To place final decisions and approximations are consistently understanding the problem, alternatives, opportunities for solutions. To work directly with our customers and aspect of the decision, including the decision, including the decision, including the decision. To place final decisions and approximations are consistently understood and considered. To partner with our customers and approximations are consistently understood and considered. To partner with our customers and approximations are consistently understood and considered. We will keep you informed, listen and acknowledge concerns and provide feedback on how customer input influenced the decision. We will look to you for direct dy wile and innovation in formulating solutions in faiternatives we develop and provide feedback on how customer input influenced the decision. We will look to you for direct dy wile concerns and will incorporate your recommendations into decisions where possible to the maximum extent. We will incorporate your recommendations into decisions where possible to the maximum extent. Delegated decisie Customer Engagement Tools Fact sheets Newspaper/TV/radio Focus Groups Community Forums Workshops Consumer Engagement Advisory committees Contracts/Legal Delegated decisie	Customer	Inform:	Consult	Involve:	Collaborate:	Empower:
our Customers listen and acknowledge concerns and provide feedback now customer input influenced the decision. ensure your concerns and lisues are directly reflected and provide feedback on how customer input influenced the decision. direct advice and innovation in formulating solutions in formulating solutions on how customer input influenced the decision. direct advice and innovation in formulating solutions on how customer input influenced the decision. direct advice and innovation in formulating solutions on how customer input influenced the decision. direct advice and innovation in formulating solutions decisions where possible to the maximum extent. Customer Engagement Tools Fact sheets Newspaper/TV/radio Focus Groups Community Forums Workshops Consumer Engagement Consumer Engagement Advisory committees Contracts/Legal Delegated decision		with balanced and objective information to assist in understanding the problem, alternatives, opportunities	feedback on analysis, alternatives and/or	customers throughout the process to ensure that customer concerns and aspirations are consistently understood	customers in each aspect of the decision, including the development of alternatives and the identification of the	To place final decision making in the hands of our customers.
Engagement Tools Newspaper/TV/radio Community Forums Consumer Engagement Contracts/Legal		We will keep you informed.	listen and acknowledge concerns and provide feedback on how customer input influenced the	ensure your concerns and issues are directly reflected in alternatives we develop and provide feedback on how customer input	direct advice and innovation in formulating solutions and will incorporate your recommendations into decisions where possible	We will implement what you decide.
Social Media Trade Nights Customer charter Surveys Brochures		Newspaper/TV/radio Letters/Customer cards Social Media Customer charter	Community Forums Public Meetings Trade Nights	Consumer Engagement	Contracts/Legal	Delegated decisions

Source: TasNetworks website at <u>https://www.tasnetworks.com.au/TasNetworks/media/pdf/customer-engagement/TasNetworks-Customer-Engagement-Framework-v1.pdf</u>.

The TSBC observes that TasNetworks' responses to customer feedback through its engagement activities sometimes but not always result in a favourable outcome from a customer perspective.

Two examples are in **Box 2** below.

Box 2: Examples of TasNetworks' response to customer feedback

Favourable response

Issue – Delivering services for the lowest sustainable cost (Proposal, p 80). Customer feedback – Customers continue to reinforce the expectation that we continue to operate our business as efficiently as possible, to drive good outcomes for customers today and into the future.

TasNetworks' Response – various, but including "This package of measures will reduce transmission and distribution revenues, in nominal terms over the forthcoming regulatory period, by \$29.8 million and \$28.4 million respectively compared to our provisional Revenue Proposal plans".

That is a useful demonstration of listening to and acting on customer feedback.





May 2018

Unfavourable response

Issue – Metering services (Proposal, p 199)

Customer feedback – Some stakeholders expressed concern regarding the increase in metering charges resulting from accelerating the depreciation of the metering RAB. These stakeholders noted that the increase in metering charges may present difficulties for people on low incomes who are already struggling with electricity prices and cost of living pressures.

TasNetworks' response – We are proposing to fully recover our regulated metering capital costs by June 2024.

The TSBC suggests that this response is not in keeping with the concerns of TasNetworks' customers who are most exposed to the increased charges.

The TSBC notes the point made by CCP 13 in its presentation to the public form⁸, at slide 6, as follows:

Directions and Priorities Paper (August 2017) –key opportunity for consumer input but how well have the changes since been explained?

The TSBC responded to TasNetworks' Directions and Priorities consultation Paper⁹ and made several requests for additional information to be provided in the Proposal. An extract of some of those requests and the TasNetworks response is provided in **Table 1** below.

Table 1: TasNetworks response to TSBC Submission on Directions and Priorities Consultation Paper

Suggested	Response in the proposal
The TSBC suggests that TasNetworks' revenue proposal should provide details of community based network performance (reliability) and that incentive schemes should be based on that	Not included and not responded to
performance	
The TSBC wishes to understand more fully the drivers for the reduction in (transmission) operating costs and the long term implications/benefits of the reduction in asset services expenditure	Not in the proposal – numeric detail only in the RIN template 1 but no supporting explanation

⁸ Consumer Challenge Panel, TasNetworks Public Forum presentation,

engagement/Direction%20and%20Priorities%20submissions%202015/TSBC-Submission-TN-Directions-and-Priorities-Consultation-Paper.pdf





www.aer.gov.au/system/files/TasNetworks%20-%20TasNetworks%20Public%20Forum%20Presentation%20-% 2010%20April%202018.PDF

⁹ www.tasnetworks.com.au/TasNetworks/media/pdf/customer-

We look forward to understanding more about this projection (i.e., advanced meter take-up) from the Revenue Proposal.	Some detail included, but not about the slow pace of advanced meter take up.
There is no evidence of where the \$28 billion benefits proposed in the <i>Smart Grid Smart City</i> report or the ENA's forecast of avoided capex (\$1.4 billion by 2024) is reflected in TasNetworks' forecasts	Not included and not responded to
The TSBC seeks to understand in more detail (from the Revenue Proposal when it is released) how TasNetworks is positioning itself to deal with a range of foreseeable future outcomes in order to avoid price shocks or service degradation in the event of a significant change to the existing "steady state" environment.	Not included and not responded to

The TSBC suggests the above responses suggest there is scope for improvement in the overall engagement process.

In **Box 3** on the next page, the TSBC also provides the following comments regarding its own engagement with TasNetworks on this Determination to date.

In summary, the TSBC recognizes and acknowledges TasNetworks' efforts in consumer engagement, and suggests there are opportunities to increase the value that engagement. The TSBC would be happy to work directly with TasNetworks to achieve that increased value.





Box 3: TSBC comments on its engagement with TasNetworks

Positive feedback

Consultation & engagement in general

- Improvements noted in accessibility of key staff.
- Improvement noted in response times to queries, particularly at junior and midmanagement levels.
- Increased relevance of material provided.
- Increased depth and breadth of topics.
- Improvements to "open door" attitude, including leadership by example from senior management.
- Active involvement from mid management level through to CEO and including the Chairman at the public forum.

In summary, TasNetworks' attitude to engagement has observably improved.

Information dissemination

- Improvements noted in the frequency, quality and timeliness of information.
- Active Involvement from junior level through to CEO.

Innovation

• TasNetworks is seeking to use a range of inputs, and is sponsoring market research, workshops, and one on one surveys.

Opportunities for improvement

Administration, recording and reporting

- There have been instances of consumer proposals not being progressed when they don't align with TasNetworks' objectives (for example the consumer proposal to have a "no regrets" policy for consumers willing to trial new tariffs was not recorded in the relevant meeting minutes, until reminded to do so).
- Consumer proposals which are not explored or taken up, without any feedback as to why.

The TSBC suggests that those behaviours lead to scepticism, with the risk that consumers feel that what has been promoted as engagement and consultation is then seen as little more than infomercials and advertorials or 'going through the motions'.

Lack of evidence of the effect of consumer influence on actual outcomes.

• There is little real evidence of consumer inputs and perspectives being represented in actual outcomes or changes (as noted above in the comments relating to the TSBC feedback on certain aspects of the Directions and Priorities Consultation Paper).





May 2018



INDUSTRY CHANGE





3 Change, Transformation and Transition

The nature of the changes occurring in electricity consumer choices around generating and storing electricity at or near their homes and businesses will have a major impact on the prices paid by those consumers who are not willing or able to implement the related technologies.

The Sydney Morning Herald, 25 April 2018¹⁰ contained the following report:

"The rise of rooftop solar has helped drive down electricity costs for many Australians but the head of the energy market operator warns those still on the grid have been punished with higher prices.

"I am truly concerned over the issue of an economic bypass," Audrey Zibelman, the head of the Australian Energy Market Operator, said at a Centre for Independent Studies event this week.

"We do not want to invite an economic bypass," she said, "creating the haves and the have-nots."

As electricity networks – the poles and wires – still require a fixed, per customer contribution to recover their capital, each electricity user is meant to pay an equal share. However, when people defect from the grid by installing rooftop solar it increases the proportional costs for those who still rely solely on grid power for their electricity.

Ms Zibelman raised concerns over the number of Australians defecting from the grid. While she supports the rising levels of solar rooftop installations and the increase in renewable energy, she said it was important Australians remained connected to the grid so that excess energy could be utilised and the power network better managed as the energy sector undergoes a massive transition from its old one-way power system to a multi-directional energy network.

"What's happening in the power industry is that the cost of distributed energy resources are coming down as they have the opportunity to use storage and solar, but we would like them to stay part of the overall system so we can use them to help manage the system," she said.

"I think the fact that someone can leave the system because they can rely on their own resources is a good thing for an individual but it isn't for the rest of us, because it means you have a smaller pot of people to maintain the system.

"The concern is, when the system becomes uneconomic to individuals and they bypass it then it creates a disruption that's hard for us to manage it."

Ms Zibelman said solar had not eliminated peak load on the network rather moved it to later in the day, from the afternoon to later at night, but with better management of the system the energy could be utilised throughout the day.

"The objective ... is how to make the energy system we have more economical. It is one system and we want to work in the best way possible," she said.

¹⁰ www.smh.com.au/business/the-economy/i-m-truly-concerned-aemo-chief-warns-on-rooftop-solar-20180424-p4zbg0.html





May 2018

The head of energy transmission company TransGrid, Paul Italiano, said the rise of rooftop solar was paving the way for the future but there needed to be tariff reform to better reflect how energy was being used in each home.

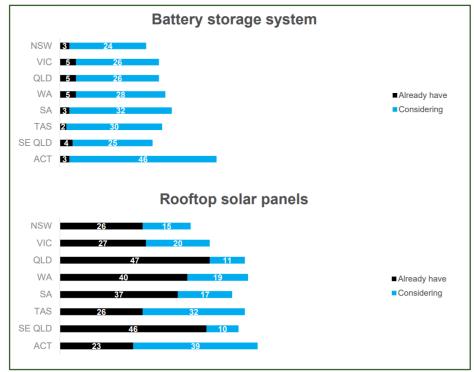
"The people this impacts the most is anyone who lives in rental or high-density housing, or lacks the financial means to pay for it," Mr Italiano said.

"Typically, the most vulnerable have the least flexibility."

Further, the ACCC commented recently:

"However, the vast majority of consumers are still on a standard tariff comprised of a fixed daily charge and a variable usage charge, and most retail products and marketing are focused on pay on time discounts. This dynamic suggests that for the majority of customers, retail innovation has not delivered substantial improvements that help them manage their usage or materially improve the way they access energy."¹¹

In keeping with the trend of investment in battery storage identified in figure 5 of TasNetworks' Tariff Structure Statement, (Regulatory Control Period 1 July 2019 to 30 June 2024), the Energy Consumers Australia Energy Consumer Sentiment Survey December 2017 asked "Which of the following are you intending to purchase for your home in the next 12 months?"¹², with the response represented at **Figure 1** below.





Source: Energy Consumers Australia, Energy Consumer Sentiment Survey, December 2017.

http://energyconsumersaustralia.com.au/publication/energy-consumer-sentiment-survey-findings-december-2017/.





¹¹ ACCC, Retail Electricity Pricing Inquiry, Preliminary Report, 22 September 2017, p. 101.

¹² Energy Consumers Australia, *Energy Consumer Sentiment Survey, Dec 2017,* p. 30 available at http://energy.consumersaustralia.com.au/publication/energy-consumer.sentiment-survey-findings-de

Despite the relatively poor performance of solar generation in Tasmania compared to mainland states, Tasmanian small businesses are represented in the survey results shown at **Figure 1** and many are actively exploring local generation and off grid options.

The TSBC considers the comments by the AEMO CEO and the ACCC noted above are indicative of a very real threat to value of Tasmania's electricity network. A combination of the continuing reduction in the cost of local generation and storage, and a lack of response to the desire of electricity consumers, including small business, to manage their electricity costs after a period of substantial price rises, is cause for concern.

The TSBC endorses TasNetworks' adoption of the Energy Networks Australia (ENA) and CSIRO's Electricity Networks Transformation Roadmap in developing the TasNetworks vision for 2025.

As we noted in our response to the Directions and Priorities Consultation Paper¹³, the TSBC is concerned at the pace of change at which TasNetworks is progressing towards its 2025 Vision.

The *SmartGrid SmartCity* study ¹⁴ was a \$100 million Federal government initiative which reported in July 2014 and included a range of studies and trials around SmartGrid deployment, including advanced metering technology and tariff trials.

A key outcome of the study was the publication of findings and documentation of insights learned from implementing smart grids during the trial period.15

The TSBC is of the view that accessing the results and learnings from the *SmartGrid SmartCity* trial or similar would enable TasNetworks to accelerate deployment of the technologies necessary to progress to its 2025 Vision. Applying the *SmartGrid SmartCity* learnings, refining as necessary, and progressing to implementation at a more rapid pace than is currently the case, would be useful.

Unless the pace is quickened there is a risk that the rate at which customers adopt energy technologies which do not involve a reliance on the grid outstrips TasNetworks' efforts to develop the corresponding grid technologies.

Should that occur, the rate of defection from the grid will accelerate, as will the rate of economic bypass identified by the head of the Australian Energy Market Operator, as noted above, which would be a "lose lose" situation, for customers, TasNetworks and its shareholder, the Tasmanian Government, and would lead to higher prices for those customers who remain grid connected.

engagement/Direction%20and%20Priorities%20submissions%202015/TSBC-Submission-TN-Directions-and-Priorities-Consultation-Paper.pdf

http://webarchive.nla.gov.au/gov/20160615043625/http://www.industry.gov.au/Energy/Programmes/Smart GridSmartCity/Pages/AdditionalInformation.aspx





¹³ <u>https://www.tasnetworks.com.au/TasNetworks/media/pdf/customer-</u>

¹⁴ <u>http://smartcitiesappg.com/wp-content/uploads/PDF/SmartGrid.pdf</u> ¹⁵

May 2018

4







Tasmanian Small Business Council Uniting Small Business

4 Capital Expenditure (Capex)

In this section we comment on TasNetworks' capex proposals for both transmission and distribution.

4.1 TRANSMISSION CAPEX

We turn firstly to the capex proposals for the transmission network.

4.1.1 General observations

Increases in the value of regulatory asset bases (RABs)across the NEM, and the flow on effects into the prices consumers pay for electricity, have been the subject of intense scrutiny over the last 12 months and have been the subject of a range of commentary and reporting, including by the ACCC (Retail Electricity Pricing Inquiry, 2017), and the Grattan Institute (Down to the Wire, March 2018). Increases in the value of network RABs has contributed materially to electricity price increases over the period 2006 to the present.

In the case of TasNetworks and its predecessor, Transend Networks, the increase in the RAB for transmission assets between 2006 (\$979 million) and 2017 (\$1.421 billion) amounted to \$442 million, as shown in **Figure 2**.

Over the current regulatory period, 2014-15 to 2018-19, the value of TasNetworks' transmission RAB is projected to remain relatively stable, with a closing RAB value at 30 June 2019 of \$1.467 billion in nominal terms.

By the end of the regulatory period which is the subject of this submission, June 2024, the value of the RAB for transmission assets, excluding contingent projects, is projected to be \$1.626 billion in nominal terms after allowing for inflation at 2.45% annually (source – TasNetworks document TN103, PTRM model).

The past growth in the value of TasNetworks' transmission assets is shown in Figure 2.

Over the period 2006 to 2017, peak demand, actual and forecast, as shown **Figure 3**, was virtually flat from 2009, after rising until 2008.

The period from 2006 to 2014 was one which involved massive capital expenditure, averaging \$127.5 million per year (TasNetworks Transmission Revenue and Distribution Regulatory Proposal, 2019–2024, p. 87), on the basis of grossly overestimated demand forecasts.

The resulting over-investment translates to consumers paying more than they should for the transmission services they receive, given that around 50% of network charges are derived from the value of the RAB multiplied by the allowed WACC (rate of return) and depreciation. The over investment can be expected to be corrected over time, however the combination of a revenue cap and the roll forward (asset) model means consumers, including small business, pay "up front" for any overinvestment.

Tasmanian electricity consumers, including small business, are paying for the overinvestment and will continue to do so for the remaining life of the relevant assets, at around 40 years.





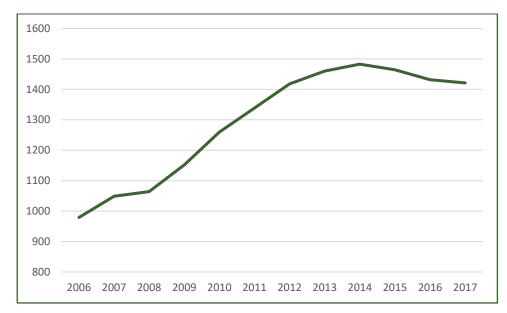
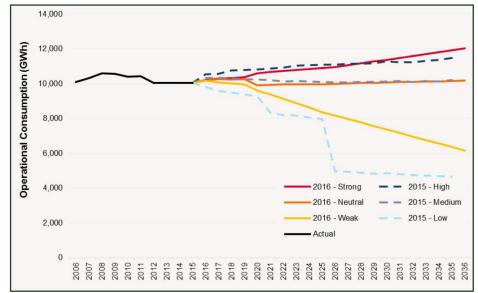


Figure 2: Transmission assets RAB value (June 2017 \$000)

Source: Goanna Energy Consulting from AER RIN data

Figure 3: AEMO's forecast energy consumption on the Tasmanian network



Source: TasNetworks Transmission Revenue and Distribution Regulatory Proposal, 2019-2024, p. 71.

The TSBC notes the average remaining life of transmission assets of 76% (TasNetworks Transmission Revenue and Distribution Regulatory Proposal, 2019 – 2024,.p83), against an expected remaining average life of closer to 50% for a business managing a mature portfolio of electricity transmission assets.





May 2018

TasNetworks' capital expenditure requirements over the 2019-2024 regulatory period need to be assessed against that background. The TSBC expects that the previous over-investment provides considerable scope for a winding back of capital expenditure programs, continuing the trend evident from 2011.

The TSBC notes the downward trend in transmission capex actual expenditure from 2012 (see **Figure 4**), to a level of less than half the allowed depreciation in 2014-15 and 2015-16, and also notes the substantial gap between capex which was approved (and incorporated into network charges) versus actual capex spend during the current regulatory period (2014 to 2019).

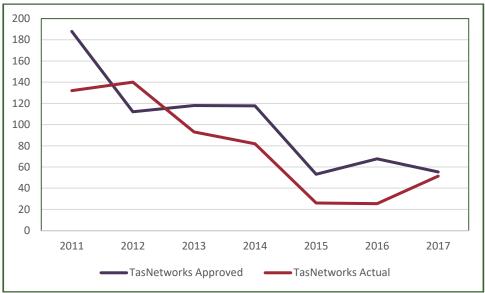


Figure 4: Capital expenditure - transmission assets

Source: Goanna Energy Consulting from AER RIN data

4.1.2 Projected capital expenditure

Over the 2019-20 to 2023-24 regulatory period, transmission capex is projected to be \$260.6 million (June 2019 \$ terms), compared to regulatory depreciation of \$313 million and capex of \$211.3 million for the current (2014 to 2019) regulatory period (shown in **Figure 5**).

The TSBC notes the significant shift from development expenditure (connection and augmentation) over the period 2009 to 2014 compared to the current 2014 to 2019 and forthcoming 2019 to 2024 periods.

The TSBC would expect to see a relatively stable level of repex (renewal or replacement expenditure) in a mature network business, however that is not the case for TasNetworks, with expenditure varying from around \$13 million in 2015-16 to over \$50 million in 2021-22.

The reason for, and the appropriateness of, that variation is a matter which the TSBC believes should be the subject of careful scrutiny by the AER when making its determination.





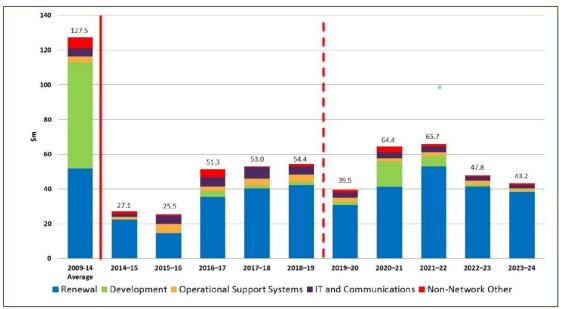


Figure 5: Overview of actual and forecast transmission capital expenditure (June 2019 \$m)

The TSBC notes that the value of the transmission RAB is projected to increase by \$160 million from \$1.467 billion to \$1.627 billion over the forthcoming regulatory period 2019-24¹⁶, roughly in line with inflation.

There is no evidence that TasNetworks is seeking to increase the utilization of its existing assets and defer capital expenditure, which would, in itself, reduce transmission charges. The opportunity to do so is reflected in the current average remaining life of transmission assets, at 76%

4.2 COMMENTS ON ELEMENTS OF PROPOSED TRANSMISSION CAPEX

We comment below on the main elements of the TasNetworks' transmission capex proposal – augmentation, information technology (IT) and contingent projects.

4.2.1 Augmentation capex

The TSBC is not able to access information which would enable it to make a judgement about the utilisation of transmission assets but suggests that total demand served by the transmission system compared to the total value of transmission assets provides an approximate guide.

Figure 2 and **Figure 3** above provide a guide to the change in the utilisation rate of TasNetworks' transmission assets, which would be expected to show a substantial reduction over the period 2006 to 2024 (inverse to the increase in asset values).

The TSBC expects therefore that the need for augmentation capex in the period 2019 to 2024 would be close to zero, which accords with the 2019 to 2024 proposed augmentation capital expenditure, with the exception of the dynamic reactive power device at the Georgetown substation, to be constructed over the 2020-21 and 2021-22 financial years.

¹⁶ TasNetworks Post Tax Revenue Model (PTRM).





Source: TasNetworks Transmission Revenue and Distribution Regulatory Proposal, 2019 – 2024, Figure 8.3

The TSBC notes that the associated \$15 million (approximate) expenditure will be subject to the AER's Regulatory Investment Test (transmission – RITT). The TSBC understands that the main beneficiaries of that expenditure would be Hydro Tasmania, the Bell Bay aluminium smelter and Basslink. The benefit to TasNetworks' broader customer base would be minimal. In undertaking the RITT analysis the AER should determine an appropriate apportionment of costs that recognises the 'beneficiary pays' principle.

4.2.2 Information technology

Proposed transmission capital expenditure includes investments in network control, asset management systems and IT and communications, all of which are part of a broader classification of data management and information systems. Expenditure according to that classification is shown in **Table 2**.

As shown in **Table 2** on the next page, proposed capital expenditure over the five years 2019 to 2024 is \$24.9 million, which compares to \$42.0 million for the period 2009 to 2014 and \$40.0 million for the period 2014 to 2019.

The reduction shown over the three periods is welcome, however it is appropriate to consider capital expenditure in this category for TasNetworks' transmission and distribution businesses together, on the basis that one driver for merging the distribution component of Aurora Energy with Transend Networks to form TasNetworks was the synergies between the two businesses and a reduction in operating and capital expenditure – "Further efficiency gains will be achieved over time as the new company rationalises duplicate systems and finds better ways of delivering services to its customers"¹⁷.

It is therefore appropriate to consider expenditure on data management and information systems for transmission and distribution businesses combined. This is included in the section dealing with distribution capex at Section 4.3

4.2.3 Contingent projects

The TSBC's submission¹⁸ on TasNetworks' Direction and Priorities Consultation Paper (August 2017) commented:

The TSBC notes the number and scale of transmission contingent capital projects (p19) totalling \$768M, and the trigger events which would need to occur before any of those projects moved from being contingent to part of the capital expenditure program.

The TSBC suggests the trigger of passing the AER's Regulated Investment Test should include an analysis of costs and quantifiable financial benefits which will accrue to each section of the Tasmanian electricity customer base, and that the project approval process should ensure that audited benefits exceed costs for any approved project.

engagement/Direction%20and%20Priorities%20submissions%202015/TSBC-Submission-TN-Directions-and-Priorities-Consultation-Paper.pdf.





 ¹⁷ Tasmanian Transmission Revenue Proposal, Regulatory control period 1 July 2014 – 30 June 2019, p. 87.
¹⁸ <u>https://www.tasnetworks.com.au/TasNetworks/media/pdf/customer-</u>

Transmission IT capex													
	2009-14	2014/15	2015/16	2016/17	2017/18	2018/19	2014-2019	2019/20	2020/21	2021/22	2022/23	2023/24	2019-2024
Network control	9.0	0.5	3.4	0.8	1.9	2.4	9.0	0.9	0.5	0.7	0.7	0.4	3.2
AMS	<u>9.0</u>	<u>1.1</u>	<u>1.6</u>	<u>1.6</u>	<u>2.0</u>	<u>1.7</u>	<u>8.0</u>	<u>1.8</u>	<u>1.5</u>	<u>1.4</u>	<u>1.5</u>	<u>1.0</u>	<u>7.2</u>
Operational support	18.0	1.6	5.0	2.4	3.9	4.1	17.0	2.7	2.0	2.1	2.2	1.4	10.4
IT & comms	24.0	1.7	4.6	5.4	6.5	4.8	23.0	3.0	3.5	3.0	2.7	2.3	14.5
Total transmission IT	42.0	3.3	9.6	7.8	10.4	8.9	40.0	5.7	5.5	5.1	4.9	3.7	24.9

Table 2: Data management and information systems capex

Source: TasNetworks Transmission Revenue and Distribution Regulatory Proposal, 2019 - 2024





The Transmission Revenue and Distribution Proposal includes updated financial information concerning the contingent projects, plus an additional fifth project, North West 220kV redevelopment, with an estimated cost of \$80 million.

The total estimated cost of the five contingent projects is now \$938 million, and TasNetworks' share of the cost of a second interconnector has already increased by nearly \$100 million, from \$458 million to \$550 million.

The capex value of contingent projects represents close to 60% of TasNetworks' transmission RAB projected as at June 2024 of \$1,626 billion, and, assuming they were all incorporated into the RAB, could conceivably increase TasNetworks' transmission revenues and charges by a similar percentage, that is around \$90 million per year, based on projected smoothed transmission revenue requirements of around \$154 million per year.¹⁹

It is the TSBC's understanding that all five contingent projects are driven primarily by generation development. The TSBC therefore expects that the RIT-T process will identify the relevant beneficiaries and allocate costs accordingly.

The first of the contingent projects listed in the Transmission Revenue and Distribution Proposal, involving an estimated capital cost of \$1.1 billion, with 50% or \$550 million to be borne by TasNetworks (with an annual operating cost of \$8.35 million, assuming similar cost sharing outcome), is a second Bass Strait interconnector.

The TSBC notes the reference in the Transmission Revenue and Distribution Proposal to the April 2017 study by Dr John Tamblyn²⁰ into the feasibility of a second interconnector. The report recommends at page 72):

... the Tasmanian Government develop a detailed business case for a second Tasmanian interconnector when ongoing monitoring establishes that one or more of the following preconditions has been met:

- 1. The Australian Energy Market Operator, in consultation with Hydro Tasmania and TasNetworks, concludes in a future National Transmission Network Development Plan that a second interconnector would produce significant positive net market benefits under most plausible scenarios.
- 2. Additional interconnection is approved for construction between South Australia and the eastern states.
- 3. A material reduction occurs in Tasmanian electricity demand.

TasNetworks' suggest at page 106 of the Transmission Revenue and Distribution Proposal that:

The proposed trigger event for the AER's assessment of this project as a regulated transmission service would be:

- 1(a) Successful completion of a RIT-T; or
- 1(b) A decision by a government, governments(s) or regulatory body that results in a requirement for a second Bass Strait interconnector.

²⁰ Feasibility of a second Tasmanian Interconnector, Final study, Dr John Tamblyn, April 2017





¹⁹ TasNetworks Transmission Revenue and Distribution Regulatory Proposal, 2019 – 2024, p. 187.

2. TasNetworks Board approval to proceed with the project subject to the AER amending the revenue determination pursuant to the Rules.

The TSBC notes with concern the difference between Dr Tamblyn's pre-conditions and the proposed trigger events, on the basis that trigger event 1(b) could be subject to political whim, rather demonstration of genuine benefits to consumers.

ABC news reported on 24th November 2017 that a \$20 million business case study into a second Bass Strait electricity cable is to be jointly funded by the Federal and State governments and is to look at the route, capacity, cost and timeframe to build a second cable connecting Tasmania to the mainland. The TSBC understands that considerable resources, including those provided by TasNetworks, have already been allocated to the task.

The expenditure included in TasNetworks' Regulatory and Revenue proposal is \$550 million, which would result in a 17% increase in TasNetworks' Regulatory Asset Base, with resulting flow on implications for return on and return of capital, plus annual operating costs.

The resulting increase in network revenue would translate to an annual cost burden in the order of \$45 million per year.

The benefits would be largely invisible to consumers, but the impact on electricity prices would not be. The TSBC therefore requests that information concerning the impact on prices should be made public and become part of the public discussion around the merits or otherwise of a second interconnector.

That information would include:

- Updating figures 9, 10, 15.4 and 15.5 in the Transmission Revenue and Distribution Proposal document (pages 19, 20, 189 and 190) to include the projected impact of including contingent project 1, based on a 50% cost sharing arrangement;
- Updating figures 9, 10, 15.4 and 15.5 in the Transmission Revenue and Distribution Proposal document (pages 19, 20, 189 and 190) to include the projected impact of all contingent projects;
- In addition to the average price impacts as presented, identifying the cost impact (network charges) to small business customers; and
- Extending the information presented as discussed above to any regulatory periods where capital expenditure related to the contingent projects will be incurred.

4.3 DISTRIBUTION CAPEX

In this section we discuss the TasNetworks capex forecasts for its distribution network, commencing with some general observations, before turning to some specific parts of the proposal.

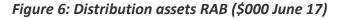
4.3.1 General observations

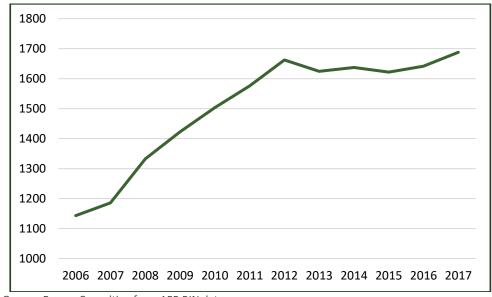
A noted in Section 4.1 above, increases in the value of network RABs has contributed materially to electricity price increases over the period 2004 to the present.

In the case of TasNetworks and its predecessor, Aurora Energy Networks, the increase in the RAB for distribution assets over the period 2006 (\$1.143 billion) to 2017 (\$1,688 billion) amounted to \$545 million, as shown in **Figure 6** below:









Source: Goanna Energy Consulting from AER RIN data

Over that period, total demand was relatively flat, as noted at **Figure 3** above.

Asset utilisation across TasNetworks' distribution assets has therefore fallen considerably in ten years, from 56% in 2007 to 34% in 2017, and has fallen at a greater rate than other networks in the NEM, as shown in **Figure 7** below.

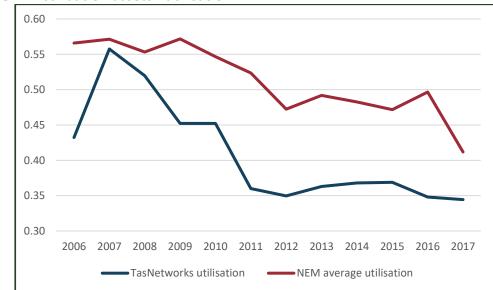


Figure 7: Distribution assets - utilisation

Source: Goanna Energy Consulting from AER RIN data

TasNetworks' RAB value of distribution assets compared to utilisation rate is shown in **Figure 8** below.





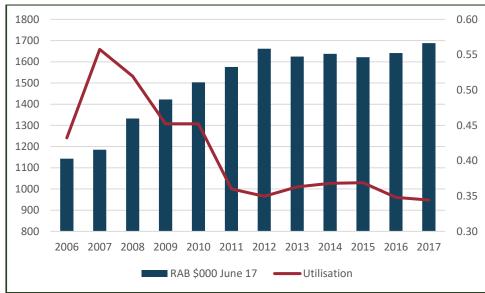


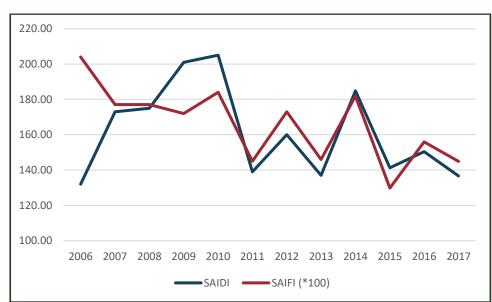
Figure 8: Distribution assets - RAB v utilisation

Source: Goanna Energy Consulting from AER RIN data

The TSBC contends that, similar to transmission assets, there has been a massive over investment in distribution assets, between the period 2009 to 2012, with no corresponding increase in service experienced by electricity consumers. Total demand until 2008 was increasing, but declined and then flattened from that point.

Distribution network performance for the period 2006 to 2017 improved slightly, as can be seen in **Figure 9** but that improvement does not reflect the corresponding increase in asset values.

Figure 9: TasNetworks distribution asset performance



Source: Goanna Energy Consulting from AER RIN data





TasNetworks Regulatory Proposal, 2019-20 to 2023-24

It is with considerable concern therefore that the TSBC notes a further round of large increases in distribution capital expenditure, with a total spend of \$738.8 million requested over the five years of the 2019-2024 Regulatory Proposal, compared to actual and forecast expenditure for the preceding five years, 2014-15 to 20218-19, of \$569.2 million, an increase of \$169.6 million when forecast demand is flat.

The capital expenditure profile for TasNetworks' distribution assets is represented in **Figure 10** below.

The TSBC can see no justification for the scale of the proposed 2019-24 distribution capital expenditure program. At an average of \$160.8 million per year, that level of expenditure is \$44.1 million per year above the average annual depreciation allowance, on an already over-inflated RAB. An efficient level of asset replacement would be expected to be no more than the allowed depreciation.

The value of the distribution RAB is projected to increase by \$459 million from \$1.756 billion to \$2.215 billion (nominal dollars) when demand is expected to be flat.

Electricity consumers will therefore face an increase in network charges as a result of the costs of return on and return of the additional RAB value, in the absence of offsetting reductions in either operating expense or the allowed rate of return.

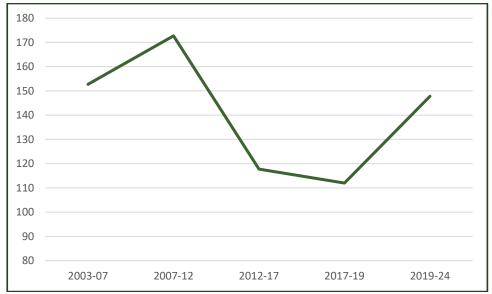


Figure 10: Average distribution capex (\$m 2019)

4.4 COMMENTS ON ELEMENTS OF PROPOSED DISTRIBUTION CAPEX

In this section, we comment on some specific elements of the distribution capex forecasts, namely renewal capex and IT.

4.4.1 Renewal capex





Source: Goanna Energy Consulting from AER RIN data

TasNetworks Regulatory Proposal, 2019-20 to 2023-24

Against the background of the significant increase in the distribution RAB over the period 2009 to 2013, the TSBC questions the need for a further round of increased renewal (replacement) expenditure over the 2019-24 period. The requested spend over that period is \$463 million, compared to the previous five year period spend of \$302.1 million, an increase of 53%.

TasNetworks suggest the increase is driven by the need to manage safety risks, including expenditure directed to pole staking and vegetation management.

The need for significant capital expenditure in vegetation management is of concern given that previous regulatory determinations have included expenditure to upgrade vegetation management practices and move from a "trimming" regime to a strategically managed "cutting" regime, involving significant up front expenditure in order to reduce annual maintenance costs²¹.

Consumers should not be expected to pay more than once for the transition from ad hoc to strategically managed maintenance regimes.

Given the degree of over investment already evident in the distribution asset base, the TSBC does not believe the increase in replacement capex as proposed can be justified, and expects the AER to significantly reduce the allowed expenditure.

4.4.2 Information technology

As noted at section 4.2.2, the TSBC considers it is appropriate to consider investments in network control, asset management systems, IT and communications as part of a broader classification of data management and information systems.

For the distribution business, related capital expenditure is as shown below in **Table 3** for the current and forthcoming regulatory periods.

The TSBC notes that distribution IT capital expenditure proposed for 2019-24, at \$125.9 million, has increased by \$15.4 million, from \$110.3 million in the previous regulatory period, an increase of 14%.

IT and comms expenditure is proposed to increase by 32% from an already high \$78.5 million.

The TSBC notes a previous reference to IT expenditure in Aurora Energy's Regulatory Proposal 2012–2017. At page 121:

"Aurora had developed a comprehensive schedule of projects based on business requirements derived from the Aurora IT Strategy 2009 – 2012 and the Marchment Hill IT Strategy Review (Marchment Hill Review). Built from the "bottom-up", this "organic" program of work, comprising 130 plus projects, was analysed and reviewed by external consultants, paying specific attention to the impact on Aurora's enterprise architecture. Enterprise Architects Pty Ltd (Enterprise Architects) was engaged by Aurora to perform this architectural analysis and to develop its enterprise architecture based IT strategy for Aurora's distribution business.

...... A total of \$46.3 million (\$2009-10 excluding escalations and overheads) is forecast to be required within this category spread over 10 line items across one

https://www.aer.gov.au/system/files/AE038%20-%20Management%20Plan%202011%20-%20Vegetation%20 Management.pdf.





²¹ For example,

overall subcategory; IT and communications. This expenditure profile varies moderately throughout the Regulatory Control Period".

Aurora and TasNetworks have between them invested in several changes to IT platforms. The TSBC contends that consumers should not be expected to pay more than once for major changes in strategic direction related to IT infrastructure. Such changes invariably accompany changes in relevant senior executives or occur as a result of mergers, acquisitions or disaggregation.

Judicious selection of IT platforms results in deployment of systems which are capable of being continuously upgraded over an extended period (twenty years), without the disruption and cost which accompanies replacement of entire platforms, particularly tier 1 enterprise systems.





Table 3: Distribution IT capex

Distribution IT capex												
	2014/15	2015/16	2016/17	2017/18	2018/19	2014-2019	2019/20	2020/21	2021/22	2022/23	2023/24	2019-2024
Network control	3.8	2	0.8	3.3	2	11.9	0.8	0.8	0.8	0.5	2.4	5.3
AMS	<u>0.7</u>	<u>1.3</u>	<u>2.3</u>	<u>12.9</u>	<u>2.9</u>	20.1	<u>3.9</u>	<u>3.5</u>	<u>3.6</u>	<u>3.6</u>	<u>2.2</u>	16.8
Operational support	4.5	3.3	3.1	16.2	4.9	32.0	4.7	4.3	4.4	4.1	4.6	22.1
IT & comms	7	19.4	24.8	15	12.3	78.5	20.7	16.4	10.4	27	29.3	103.8
Total distribution IT	11.5	22.7	27.9	31.2	17.2	110.5	25.4	20.7	14.8	31.1	33.9	125.9

Source: TasNetworks Transmission Revenue and Distribution Regulatory Proposal, 2019-2024







4.5 TOTAL CAPITAL EXPENDITURE AND RAB

The illustrative transmission and distribution combined RAB values, from 2006 to 2017, (\$2017) and from 2018 to 2024 (\$2019 nominal), are shown below in **Figure 11**.

The increase in the value of the combined RABs over that period is over \$1.5 billion, or around 75%.

The increase in the value of the RAB is locked in - with return on and return of capital making up around 50% of network charges, which in themselves make up around 50% of consumer electricity bills.

The implications of the scale of that increase to Tasmanian electricity consumers, with demand essentially flat across the entire period, are obvious, and of themselves would contribute, all other elements of electricity prices remaining the same, to a 25% increase in electricity prices.

In the event that one of the contingent projects noted above, the second interconnector, with a cost to TasNetworks currently estimated at \$550 million, were to proceed, the value of the total TasNetworks RAB will have doubled since 2006, with demand still flat, and the price implications for electricity consumers even more dramatically negative than they already are.

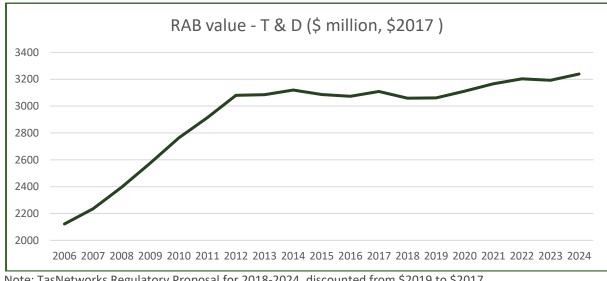


Figure 11: RAB value - transmission and distribution (\$m, 2017)

Note: TasNetworks Regulatory Proposal for 2018-2024, discounted from \$2019 to \$2017. Source: AER RIN data to 2017, TasNetworks PTRM 2018 to 2024

4.6 TOTAL IT EXPENDITURE

Total IT expenditure for transmission and distribution combined is expected to be \$150.5 million in the current regulatory period, and \$150.8 million in the 2019-24 regulatory period, a total of \$301.3 million over ten years, as shown in **Table 4** on the following page.

Expenditure on "IT and comms" across the two periods is proposed to be \$219.8 million.





Table 4: Transmission and distribution IT capex

Transmission IT capex													
	2009-14	2014/15	2015/16	2016/17	2017/18	2018/19	2014-2019	2019/20	2020/21	2021/22	2022/23	2023/24	2019-2024
Network control	9.0	0.5	3.4	0.8	1.9	2.4	9.0	0.9	0.5	0.7	0.7	0.4	3.2
AMS	<u>9.0</u>	<u>1.1</u>	<u>1.6</u>	<u>1.6</u>	2.0	<u>1.7</u>	<u>8.0</u>	<u>1.8</u>	<u>1.5</u>	<u>1.4</u>	<u>1.5</u>	<u>1.0</u>	<u>7.2</u>
Operational support	18.0	1.6	5.0	2.4	3.9	4.1	17.0	2.7	2.0	2.1	2.2	1.4	10.4
IT & comms	24.0	1.7	4.6	5.4	6.5	4.8	23.0	3.0	3.5	3.0	2.7	2.3	14.5
Total transmission IT	42.0	3.3	9.6	7.8	10.4	8.9	40.0	5.7	5.5	5.1	4.9	3.7	24.9
Distribution IT capex													
		2014/15	2015/16	2016/17	2017/18	2018/19	2014-2019	2019/20	2020/21	2021/22	2022/23	2023/24	2019-2024
Network control		3.8	2	0.8	3.3	2	11.9	0.8	0.8	0.8	0.5	2.4	5.3
AMS		<u>0.7</u>	<u>1.3</u>	2.3	<u>12.9</u>	<u>2.9</u>	<u>20.1</u>	<u>3.9</u>	3.5	<u>3.6</u>	<u>3.6</u>	2.2	<u>16.8</u>
Operational support		4.5	3.3	3.1	16.2	4.9	32.0	4.7	4.3	4.4	4.1	4.6	22.1
IT & comms		7	19.4	24.8	15	12.3	78.5	20.7	16.4	10.4	27	29.3	103.8
Total distribution IT		11.5	22.7	27.9	31.2	17.2	110.5	25.4	20.7	14.8	31.1	33.9	125.9
Total TansNetworks IT							150.5						150.8

Source: TasNetworks Transmission Revenue and Distribution Regulatory Proposal, 2019-2024





For asset management systems (AMS), expenditure of \$28.1 million from 2014-19 will be followed by a further \$24 million from 2019-24.

The TSBC contends that it is not possible to justify the level of expenditure proposed at more \$1,000 per customer over ten years, given TasNetworks' very small customer base of around 250,000, and urges the AER to scrutinise the proposed expenditure with the assistance of experts competent in the field, in order to determine an appropriate amount for consumers to pay on the basis that systems are fit for purpose and have not been the subject of poor management decisions, for which consumers should not bear the costs.













5 Operating & Maintenance Expenditure (Opex)

We comment below on TasNetworks' operating and maintenance expenditure (opex) forecasts.

5.1 OVERVIEW

TasNetworks is proposing a combined total opex of \$593 million (\$ 2019) for its forthcoming regulatory period (compared to \$595.6 million expected in the current regulatory periods). This comprises \$187.1 million for its transmission network (compared to \$188.5 million expected in the current regulatory period) and \$405.9 million for its distribution network (compared to \$407.1 million expected in the current regulatory period). The change from the current regulatory period represents a modest real reduction of \$2.6 million (-0.4 per cent) for its combined network, made up of \$1.4 million (-0.7 per cent) for transmission and \$1.2 million (-0.3 per cent) for distribution.

Whilst the modest reductions are welcome and demonstrate an ongoing commitment by TasNetworks to reduce its opex, in our view, they are not as challenging as they could be. Furthermore, it is apparent from Figures 9.3 (transmission) and 9.5 (distribution) in TasNetworks' Proposal that, following a period of useful reductions in opex, TasNetworks has now entered a phase of being satisfied with quite modest future reductions.

The TSBC remains concerned at the substantial size of TasNetworks' opex proposals for both transmission and distribution and the impact they will have on network prices over the forthcoming regulatory period. We note TasNetworks' comments that their proposal contains no ambits claim and that they are the lowest expenditure consistent with the ongoing reliability and security of its networks, but have remaining doubts about the veracity of these claims. We believe it is imperative that the AER robustly and thoroughly test TasNetworks' opex proposals before approving them.

TasNetworks' opex for both transmission and distribution seems to have reached a plateau, notwithstanding some further modest falls forecast over the next regulatory period. On a *prima facie* basis alone, this is of concern to the TSBC as it indicates that TasNetworks appears to no longer be pursuing opex efficiencies to the same extent. Their hunger for efficiency seems to have abated.

At a general level, we remain concerned that certain aspects of the current regulatory regime and the way the AER administers it are not well placed to deliver the most efficient and prudent opex outcomes for network businesses such as TasNetworks. This is a matter of significant concern as it leads to network prices that are higher than they should be, bearing in mind also the significant concern in the Tasmanian community about rising electricity prices. We elaborate on this and comment further below on specific aspects of the TasNetworks' opex proposals.

5.2 OPEX FORECASTING APPROACH

The AER's preferred approach to forecasting opex is the so-called 'base-step-trend' method. TasNetworks has applied this method to its opex forecasts for both transmission and distribution. We have concerns with this approach and its ability to deliver the lowest sustainable level of opex. One important concern is that the approach is meant to reveal TasNetworks' efficient level of opex through the choice of a base year that represents this. However, this relies on the initial level of opex chosen being efficient and it is not clear to us that this is the case. All that can be said in favour of the approach is that it contains some incentives, along with mechanisms such as the Efficiency





Benefits Sharing Scheme (EBSS), for TasNetworks to reduce its opex to a more efficient level over time and for consumers to share in the benefits of this.

In this regards, we note with some concern that the further reductions in TasNetworks' opex over the next regulatory period, both for transmission and distribution, are due principally to internal decisions by TasNetworks to include efficiencies or forego expenditure that have nothing to do with the AER's approach. It can be seen from Figures 9.3 (transmission) and 9.5 (distribution) of the Proposal that if TasNetworks had not included these additional efficiencies and strictly applied the AER methodology, then its transmission opex forecast would have been \$4.5 million (or 2.5 per cent) higher and its distribution opex forecast \$19 million (or 4.7 per cent) higher.

We comment elsewhere in this submission on certain other aspects of the application of the method to TasNetworks' proposals.

5.3 TRANSMISSION OPEX

We comment below on the key aspects of TasNetworks' transmission opex forecasts.

5.3.1 Internally imposed efficiency factor

TasNetworks has imposed an additional real efficiency factor in its transmission opex of 0.5 per cent in 2020-21, followed by 1 per cent in the following three years. Its Proposal says that this is "in response to customer concerns regarding affordability." Whilst we welcome this as a positive contribution to lowering its costs and responding to the concerns of its customers, it is not clear why TasNetworks settled on these numbers, nor why it imposed a lower efficiency factor in 2020-21 and no efficiency factor in 2019-20? We would therefore both urge the AER to closely examine the size and timing of the TasNetworks efficiency factor and TasNetworks to explain the detail behind how it was determined. The impact of the factor in reducing opex is useful but perhaps not as significant as it could be.

5.3.2 Base year costs

We note that TasNetworks previously proposed 2016-17 as an appropriate base year for its transmission opex in its Forecasting Methodology, but is now proposing that 2017-18 be used. It says that this is because 2017-18 falls within the current transmission and distribution determinations, whereas 2016-17 does not, and is the most recent year and therefore best reflects its future recurrent opex. However, we also note that actual transmission opex for 2017-18 is expected to be \$4.4 million higher than the actual outcome for 2016-17 and therefore provides a higher base level of opex for the forecasts. Other things being equal, this would increase transmission opex over the next regulatory period by \$22 million.

Earlier on we expressed our concerns about the choice of a base year in setting an efficient level of opex and TasNetworks' decision to change its base year highlights the types of impacts that can occur through the choice of a base year. The AER should closely examine TasNetworks' choice, its reasoning and its impacts on the level of forecast opex.

TasNetworks has outlined the following reasons for its choice of 2017-18 (our response is in italics):

- It is the most recent actual reported operating expenditure that will be available at the time of the AER's final decision.
 - \circ $\;$ Whilst this is true, this alone should not determine the year chosen.





- It is representative of its underlying operating conditions.
 - This is not to say that 2016-17 is not also representative and TasNetworks initially chose this year.
- Its selection is consistent with the design of the incentive mechanisms, which provides a constant incentive to deliver efficiency savings.
 - Presumably 2016-17 also does this and from a lower base.

We note that TasNetworks is not proposing any non-recurrent costs, zero-based forecasts or adjustments in the forthcoming regulatory period. Hence, these do not impact its transmission opex forecasts.

5.3.3 Step changes

TasNetworks is not proposing any step changes in its opex forecasts for transmission, but appears to have left open the door to do so. Its Proposal mentions the need to undertake a Regulatory Investment Test (RIT-T) for its contingent transmission projects. We believe that TasNetworks should be more transparent and indicate what this might cost and that opex should only increase to the extent that Tasmanian electricity consumers will benefit from such projects.²²

5.3.4 Output growth

TasNetworks has applied the AER's econometric model to determine this factor with a modest \$0.79 million impact on transmission opex over the term of the next regulatory period. In light of the relatively small impact we do not comment further.

5.3.5 Real price escalators

TasNetworks has proposed real price escalators of CPI for non-labour and slightly above CPI for labour for both transmission capex and opex. They have a relatively modest \$3.5 million (real) impact on total business opex over the next regulatory period, but we expect that the AER will carefully scrutinise the reasons behind the increases.

5.3.6 Productivity growth

We note that any productivity growth included to reflect 'catch up' to the efficiency frontier will only become a consideration if the AER adjusts the base year chosen by TasNetworks, whilst the impact of economies of scale due to output growth is already captured in the growth factor discussed above. TasNetworks' efficiency improvement targets were discussed earlier.

5.3.7 Other assumptions

TasNetworks has included a number of additional assumption in is opex forecasts, namely, that its base year opex is efficient, that the historic relationship between asset growth and operating expenditure will continue, that its provisions account holds static and that forecast productivity improvements and resulting cost efficiencies are achieved. It notes that if these do not eventuate there could be a material impact on opex, by which we read TasNetworks to mean that it could increase above its forecasts (although the opposite is also theoretically possible, though far less likely based on historical experience). Any such increases would be of concern to the TSBC and TasNetworks should be prepared to inform and consult with consumers if significant increases occur.

²² The Proposal also mentions the System Security Market Frameworks Review and the Inertia Rule change and similar reasoning applies to these.





TasNetworks Regulatory Proposal, 2019-20 to 2023-24

In relation to the continuation of the historic relationship between asset growth and operating expenditure, we note that the TasNetworks Proposal is anticipating significant changes in technology and consumer preferences over the next regulatory period and beyond. However, it is not clear from the Proposal how this could impact on this assumption. Given what TasNetworks is anticipating, it should explain how this assumption will be impacted and clarify some of the uncertainty.

Given that TasNetworks has chosen to impose an efficiency factor in its opex forecasts, which we assume to be based on robust analysis, this should reduce forecast productivity improvements and cost efficiencies as a source of uncertainty in its opex forecasts.

We commented on the base year assumption earlier in this section.

5.4 DISTRIBUTION OPEX

We note that distribution opex increased substantially in 2016-17 by \$24 million, or 31 per cent, compared to the previous year. TasNetworks' Proposal says that:

"Our increased expenditure has been necessary to address emerging risks on our distribution network, such as the bushfire risks posed by vegetation, especially in light of experiences interstate." (p.149)

We recognise that bushfires can present a significant risk not only to the network but also to life and property, and support the need to ensure that these risks are well managed. Nevertheless, we believe that TasNetworks needs to provide further supporting information to the AER and its customers on why such a significant increase in opex was justified. Moreover, it is of concern to the TSBC that, whilst Maintenance and Vegetation Management opex has fallen since 2016-17, it remains more than \$10 million higher than its historical trend level over the entire forthcoming regulatory period.

We welcome that TasNetworks' has expressed its belief that distribution operating expenditure can return to lower levels. We note its comment that it is striving to deliver the required efficiency improvements over both the course of the remainder of the current and the forthcoming regulatory period, and also note its view that it will take time to further reduce opex without compromising network safety and performance. However, it is noteworthy that there is no evidence of further reductions over the entire next regulatory period, with Maintenance and Vegetation Management opex remaining at a level substantially above its historical trend. TasNetworks needs to explain this outcome more fully so that we can understand the reasons behind it and show more evidence that its belief of lower future opex is actually being realised.

Whilst TasNetworks has stated that the increase in 2016-17 was at the expense of its shareholder, not its customers, this is not the case for the ongoing higher level of this category of opex, which will be paid for by customers through DUoS charges. In our view, TasNetworks needs to show a greater level of transparency and accountability to its customers on this matter.

We comment below on the key aspects of TasNetworks' distribution opex forecasts.





5.4.1 Base year costs

TasNetworks has proposed that 2017-18 should be used as the base year for its distribution opex forecasts. They argue that (our response is in italics below each point):

- It is the most recent year available for this determination.
 - This is true but it is not the only factor that should be taken into account in setting a base year. In our view, it is more important for the base year to reflect the lowest possible starting point for the opex forecasts.
- It will be efficient as it is lower than its actual expenditure for 2016-17.
 - We note that opex in 2016-17 was, however, still very high. On this basis, 2014-15 or 2015-16 would set a more efficient base for TasNetworks' distribution opex. In fact, 2017-18 by TasNetworks' own admission still reflects the impact of the higher opex costs incurred in 2016-17, which TasNetworks has said will be reduced over time. On this basis alone, the distribution opex incurred for 2017-18 is not efficient.
- It is consistent with the design of the incentive mechanisms, which provides a constant incentive to deliver efficiency savings.
 - The same can be said for our alternative choices for the base year, such as 2014-15 or 2015-16.
- It is representative of their underlying operating conditions for the current and forthcoming regulatory periods.
 - The same can be said for our alternative choices for the base year, such as 2014-15 or 2015-16.
- It is important that the same base year should be chosen for transmission and distribution, as resources in the merged business are able to migrate between the two networks in response to particular needs and to drive efficient allocation of resources. If a different base year were chosen for each network, the allocation of costs would not be considered from the same starting point and the resulting total operating expenditure allowance may be materially higher or lower than the total operating expenditure requirements of the merged business.
 - We do not concur with this point. Whilst it might be desirable to use the same year for both transmission and distribution, we do not believe that this is essential. We do not agree with the TasNetworks' Proposal that distortions that could result from the choice of different years for each of its networks will be significant. In fact, the choice of a common base year that involved one side of the business having a higher than necessary level of opex is far more likely to distort resource choices and would have the added disadvantage of imposing higher costs on consumers. This appears to be the case for TasNetworks' preferred choice of 2017-18, especially as distribution opex in 2016-17 was still materially higher than trend.

We therefore have concerns with TasNetworks' proposed use of 2017-18 as a base year for its opex forecasts and would prefer that 2014-15 be used or as a less preferred alternative, 2015-16.²³ We

²³ TasNetworks' Proposal says that they do not regard the lower level of opex expenditure in 2014-15 to be sustainable, arguing that it would expose customers and the broader community to unacceptable reliability





note that this would provide a base year for distribution opex some \$7-12 million lower than 2017-18.

We note that TasNetworks is not proposing any non-recurrent or other operating costs in the forthcoming regulatory period. Hence, these do not impact its distribution opex forecasts.

However, TasNetworks is proposing to deduct three zero-based items from its opex amounting to \$7 million per annum in each year of the next regulatory period. These are its Guaranteed Service Level (GSL) allowance (\$2.9 million per annum), the Electrical Safety levy (\$4 million per annum) and its NEM levy (\$0.6 million per annum). We note that these are essentially pass through amounts, which we strongly urge should reflect only efficient and prudent costs, although the latter two are imposed externally to this Determination.

5.4.2 Step changes

TasNetworks has forecast four step changes for its distribution opex in the next regulatory period totalling \$2.6 million per annum in each year of the period. Our comments are as follows:

- We do not support the inclusion of \$1.2 million per annum for additional ring fencing obligations on the basis that TasNetworks has proposed to absorb the costs of some other obligations (amounting to 50 per cent of these costs overall) and it is not immediately obvious why ring fencing is treated differently?
- It is proposing \$1 million per annum for increased expenditure on voltage management due to additional distributed generation. It is not clear why this is not being charged to the distributed generation causing these costs?
- TasNetworks have identified a demand management project that will enable it to defer the replacement of an aging transformer. This step change will increase its operating expenditure by a small amount (\$0.2 million per annum), but they say that the net effect of this demand management initiative is to deliver savings to customers. We support such initiatives and welcome TasNetworks' inclusion of it on the basis of overall savings. We would welcome TasNetworks proposing other such initiatives if possible.

5.4.3 Output growth

TasNetworks is forecasting annual output growth of between 0.34 to 0.39 per cent over each year of the next regulatory period, with a cumulative cost impact of \$4 million. This approach is based on forecast growth in ratcheted maximum demand, customer numbers and circuit length. We note the relatively modest growth rate although the cumulative impact on opex is material and the robustness of the output growth forecasts and their costs should be established by the AER.

5.4.4 Real price escalators

TasNetworks has proposed real price escalators of CPI for non-labour and slightly above CPI for labour for both distribution capex and opex. We commented on this in the transmission opex section above (Section 5.3.5).

and safety risks. However, they do not elaborate on why they draw this conclusion and do not comment on whether they consider this would also be the case for the somewhat higher opex expended in 2015-16.





5.4.5 Productivity growth

TasNetworks is proposing to apply the same internally imposed efficiency factor to its distribution opex as for its transmission opex, that is, 0.5 per cent in 2020-21 followed by 1.0 per cent per annum in each of the following three years. Our comments in relation to this and its productivity growth forecasts for transmission opex made in Section 5.3.6 therefore also apply to its distribution opex.

5.4.6 Other assumptions

TasNetworks uses essentially that same other assumptions for distribution as it does for transmission. We addressed our issues on these in relation to transmission (Section 5.3.7) and the same points apply in relation to the distribution opex forecasts.





6







6 Weighted Average Cost of Capital (WACC)

In this section we respond to TasNetworks' Regulatory Proposal for transmission and distribution on the rate of return, as measured by the Weighted Average Cost of Capital (WACC). We discuss the AER's Rate of Return Guideline, the Allowed Rate of Return Objective, the WACC parameters equity beta, market risk premium, cost of debt and *gamma*, and the overall WACC outcome.

6.1 THE RATE OF RETURN GUIDELINE

In July 2017 the Australian Energy Regulator (AER) initiated a review of the Rate of Return Guideline and introduced new process elements for the conduct of the review; one being the formation of a Consumer Reference Group (CRG), on which the TSBC is represented.

In deciding to form the CRG the AER noted "we recognize that the decisions we make and the actions we take in performing our regulatory roles and other activities affect a wide range of individuals, businesses and organisations."²⁴ The Review is occurring in an environment of increasing energy prices that could be described as an 'affordability crisis.' The impact has been particularly severe on low-income households, young families and energy intensive businesses including agriculture, manufacturing and catering. Increasing network charges have been a significant contributor to these unsustainable prices.

The AER's latest timetable indicates that the revised guideline will be published on 17th December 2018.

Concurrently, the COAG Energy Council in February 2018 released draft legislation to replace the Rate of Return Guideline with a Binding Instrument. The legislation foreshadows the repeal of the current Rules that guide the AER in making the Guideline, however the TSBC expects that the Binding Rate of Return Instrument will closely reflect the revised Rate of Return Guideline.

The TSBC notes that TasNetworks has applied for and been granted an amendment to the NER such that the current, December 2013, Rate of Return Guideline will apply to the determination applicable to its Transmission Revenue and Distribution Regulatory proposal. The TSBC understands however that the binding Rate of Return Legislation²⁵, currently in draft form, will apply.

The TSBC is of the view that it is likely that application of the Binding Rate of Return Instrument would result in a lower Rate of Return (WACC) than that calculated by TasNetworks (5.89% for both transmission and distribution).

6.2 THE ALLOWED RATE OF RETURN OBJECTIVE (ARORO)

The allowed rate of return objective is:

"...that the rate of return for a [regulated network] is to be commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk

²⁵<u>http://www.coagenergycouncil.gov.au/sites/prod.energycouncil/files/publications/documents/Draft%20legi</u> <u>slation%20to%20create%20a%20binding%20rate%20of%20return%20instrument.pdf</u>





²⁴ AER, *Position Paper*, November 2017, p. 30.

as that which applies to the [service provider] in respect of the provision of [regulated services]."²⁶

In its Rate of Return Issues Paper (October 2017) the AER indicates at page 10:

"A good estimate of the rate of return is necessary to promote efficient prices in the long term interests of consumers. If the rate of return is set too low, the network business may not be able to attract sufficient funds to be able to make the required investments in the network and reliability may decline. Alternatively, if the rate of return of return is set too high, the network business may seek to spend too much and consumers will pay inefficiently high prices."²⁷

The ARORO seeks to ensure that the returns provided to regulated networks are sufficient to ensure an efficient level of investment, but no more.

The TSBC contends that there are currently no measures in place as part of the existing regulatory framework to test whether or not the ARORO is being achieved. That is, there is no ex poste assessment of the actual rates of return achieved compared to the ex ante allowed rate of return and the actual level of investment which flows from the allowed rate of return.

As a consequence, any errors in regulatory decisions on the allowed rate of return provided to network companies will be locked in, with actual returns (Rate of Return, RoR) actually achieved forming part of the market evidence on which future regulatory determinations are based, thereby perpetuating and reinforcing the errors.

The absence of data for actual returns achieved by regulated networks and the related investment levels appears to both contribute to, and be an effect of, a reliance on the explanatory and predictive power of the AER's preferred capital pricing theory, using the Capital asset Pricing Model (CAPM). As a result, the AER assumes but does not test whether its regulation of standard control/reference services is effective in constraining sector returns consistent with the ARORO and the relevant revenue and pricing principles.

Across the NEM, total capex expenditure has fallen significantly from the high levels experienced from 2011 to 2014 (see **Figure 12**).

While networks generally have reduced augex due to low growth in peak demand (the key driver of augex), the level of repex and IT capex is generally growing. This implies that the current level of RoR is too high and could be reduced.

TasNetworks proposed capital expenditure program demonstrates the general trend (see Figure 13).

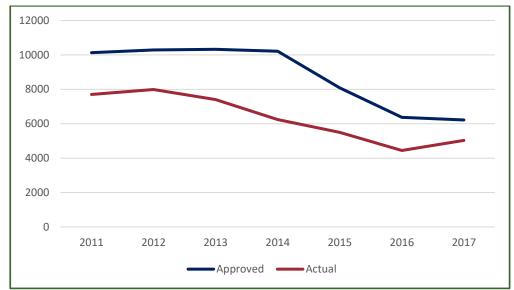
²⁶ NER, cl. 6.5.2(c) and cl. 6A.6.2(c); NGR, r. 87(3).

²⁷ AER Rate of Return Issues Paper, October 2017, p. 10.

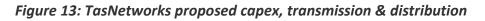


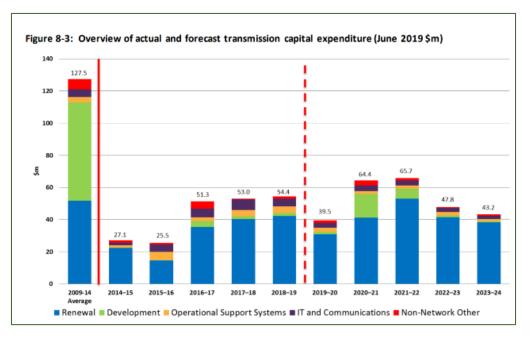


Figure 12: Total NEM capex, 2017 (\$m)



Source: Goanna Energy Consulting from AER RIN data



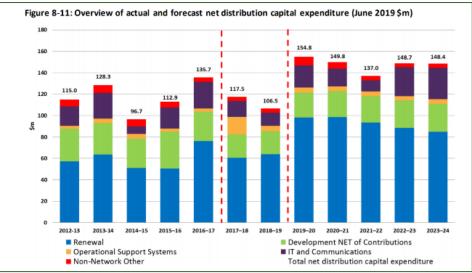






TasNetworks Regulatory Proposal, 2019-20 to 2023-24

May 2018



Source: TasNetworks Tasmanian Transmission Revenue and Distribution Regulatory Proposal, January 2018

In its November 2017 preliminary report on electricity prices the ACCC noted:

"As network operators receive a guaranteed return on their assets, there is an incentive to invest in more assets which can lead to over-investment if the rate of return is set too high. Further, network operators are less likely to seek alternatives to investing in new assets if there are no incentive schemes in place to reduce investment."²⁸

The propensity by network companies to over invest is reflected in the total value of regulated asset bases, as shown in **Figure 14** below.

Five years after the adoption of the current ROR guideline, the existence of historically high returns for network companies on the one hand, alongside excess capacity, substantial decreases in consumption of network services and falling industry wide productivity, on the other, is clearly anomalous. This outcome is a result of the regulatory framework in total. The decisions in the present ROR Guideline are a material contributing factor.

Present ROR outcomes – and hence the content of the Guideline itself –are inconsistent with the AROR objective, the National Energy Objectives and the RRPs in the National Energy Laws. While there is variation within the sector, for the typical regulated entity (Benchmark Efficient Financing Entity, BEFE) in the typical year, returns exceed efficient risk-adjusted returns by a substantial margin. Regulated entities as an asset class are therefore generating material excess returns.

This means regulated prices are substantially in excess of efficient prices, taking into account systematic risk. Increases in regulated electricity entity prices constitute around two thirds of total price increases over the last decade. Retail electricity prices have increased by around double the rate of inflation since the current regulatory framework was put in place, as shown in **Figure 15** below.

²⁸ ACCC, *Retail Electricity Inquiry, Preliminary Report*, 13 November 2017, p. 111.





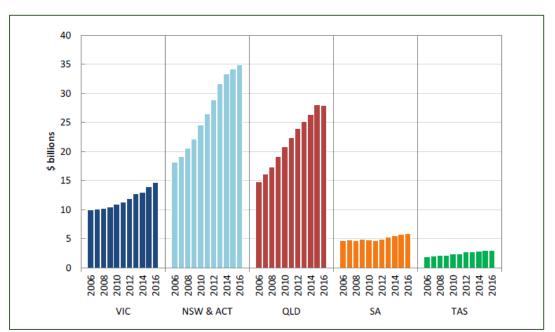
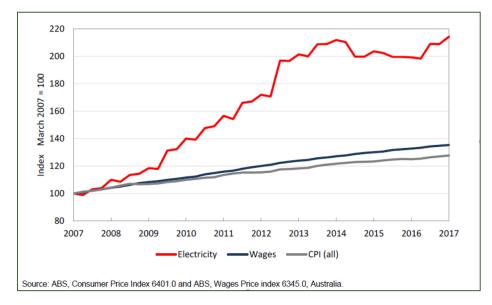


Figure 14: NEM RAB values by State, 2006 to 2016

Source: AER economic benchmarking RIN responses

Figure 15: Retail electricity prices vs CPI & wages, 2007 to 2017



Source: ABS, Consumer Price Index 6401.0 and ABS, Wages Price Index 6345.0, Australia

6.3 CAPM PARAMETER VALUES

The allowed rate of return applies to the assets used to provide regulated services. These assets, subject to the regulatory regime and the revenue and pricing principles, provide a relatively stable set of future returns. In determining the rate of return the AER needs to reflect on the extent to which the networks are insulated from economy wide (systematic) risks.





6.3.1 Equity beta

The AER has, in determinations since 2013, relied on estimates of beta from a small number of currently and previously listed firms, giving more weight to this estimate than other suggestions such as international energy networks or other domestic infrastructure firms, in accordance with expert advice.

Given recent sales of these entities, resulting in RAB multiples in the range of 1.3 to 1.6, it is reasonable to assume that the asset risk is higher for the unregulated parts of the business and for the realisation of efficiency improvements than it is for the regulated asset. Adjusting for this beta bias would move the observed AER range from (0.4 to 0.7) to (0.2 to 0.5).

The TSBC suggests the AER should choose a value below the midpoint of this range, commensurate with TasNetworks' low systematic risk exposure, in line with other network businesses.

6.3.2 Market risk premium (MRP)

The data on the Market Risk Premium (MRP) has not fundamentally changed since the introduction of the 2013 ROR Guideline. However, the TSBC is of the view that less weight should be afforded to the Dividend Growth Model, thus favouring an MRP of 5.5 or 6 percent.

6.3.3 Cost of debt

The TSBC supports the continuation of the AER's approach to the transition to the trailing average for return on debt. However we suggest that some adjustments should be made to the process to choose the values for the following reasons:

- Corporate debt is typically raised over shorter periods (and hence lower rates) than the ten year tenor assumed.
- The current approach assumes the efficient business (BEFE) has a BBB+ rating but the estimation is in fact derived from a broad BBB rating.
- Rates actually paid by networks generally, and TasNetworks specifically (due to its status as a State owned entity) are lower than the rate a credit rating of BBB+ would suggest.

The TSBC suggests the AER should calculate a fixed discount factor to reflect these three biases to subtract from the estimate derived from available market data to be applied each year.

6.3.4 Gamma

The TSBC has considered the approach to the utilisation of imputation tax credits that would be expected from an efficient financing structure and concludes that *gamma* (γ) could be close to 1, based on the following:

- An assumption that the utilisation rate of imputation credits (Θ) is 100 per cent. That is, TasNetworks is using the most efficient source of finance, that being Australian investors entitled to make use of imputation credits;
- A distribution rate based on what TasNetworks would be expected to distribute based on the value of the RAB, depreciation and any necessary new investment in the RAB. If the value of new and replacement assets is I, and the value of depreciation is D, then a reasonable retention amount on the RAB is





May 2018

TasNetworks' profit on the RAB will be RAB * WACC. Therefore the retention ratio will be:

Therefore a reasonable payout ratio is:

(1 – ((I – D)/(RAB * WACC)).

If that is greater than 1 then it can be assumed that the ratio equals 1, on the basis that any excess payout is unlikely to attract imputation credits, and therefore not affect γ ;

If that is < 1 (unlikely given the nature of TasNetworks' assets) then γ would be equal to the payout ratio, assuming a Θ = 1.

The TSBC suggests the AER recognise the inherent inconsistency of observed tax data and make its decision on the basis of the rate that is consistent with efficient costs.

6.4 WACC - ALLOWED RATE OF RETURN (AROR) OUTCOME

The TSBC submits that a WACC of 4.76% should be applied for both transmission and distribution assets, on the basis that the systematic (or non-diversifiable) risks borne by investment in either group of assets is the same. The calculation of that outcome, using the parameter values outlined above, compared to TasNetworks calculation for distribution assets, is as follows in **Table 5**. This compares to TasNetworks' calculation 5.89%. Application of this WACC would significantly reduce network charges for all Tasmanian electricity consumers, including small businesses.

Component	Debt	Equity				
Proportion of capital	60%	40%				
	Х	Х				
Cost	5.00	4.40				
	=	=				
Contribution	3.0	1.76				
WACC	4.76					

Table 5: TSBC's preferred WACC

Source: Goanna Energy Consulting













7 Regulatory Asset Base

Information about TasNetworks' Regulatory Asset Base (RAB) for both distribution and transmission is discussed in this section. Additional discussion is in the capex section (Section 4).

7.1 DISTRIBUTION

Figure 16 below, taken from the AER's Issues Paper on TasNetworks' Proposal, shows the growth in TasNetworks' distribution RAB. It can be seen that there has been significant growth in the real value of TasNetworks' distribution RAB since 2012-13 and that further substantial growth is forecast over the next regulatory period. The actual RAB through 2012-13 to 2014-15 was also substantially above the AER's forecasts, although it has tracked more closely to these forecasts since. In real terms, TasNetworks' distribution RAB is forecast to grow by a further \$147 million, or 8.1 per cent, over the forthcoming regulatory period, reflecting capex spending planned for the period, as well as past capex spending that has previously been rolled into the RAB.

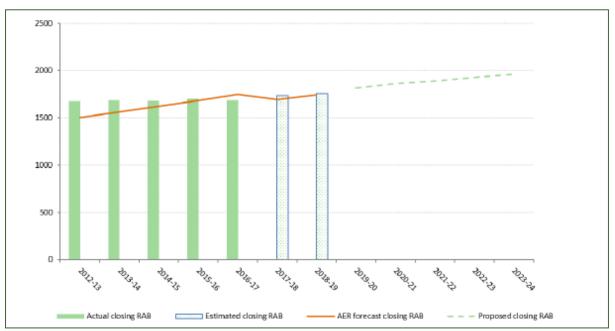


Figure 16: Projected RAB growth for distribution (\$m, 2018-19)

This growth in the distribution RAB is a concern to the TSBC given that growth in TasNetworks' distribution output has been minimal, its network usage in decline and its service levels more-or-less stationary. There is, however, a flow through into higher revenue, paid for as higher distribution prices by small business with little added benefit for this.

7.2 TRANSMISSION

Figure 17 below, taken from the AER's Issues Paper on TasNetworks' Proposal, shows the historical change in TasNetworks' transmission RAB. Although always tracking below the AER's forecasts,

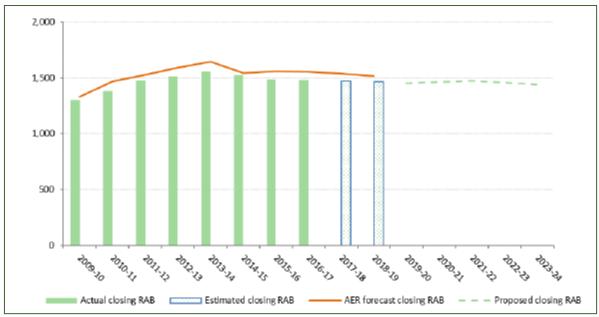




Source: AER, Issues Paper, p. 23.

TasNetworks Regulatory Proposal, 2019-20 to 2023-24

TasNetworks' transmission RAB grew at a significant pace from 2009-10 to 2013-14, reflecting the significant capex (augex and repex) approved by the AER for the transmission network, based especially around growth forecasts that did not materialise. This significant increase in capex, some of which was arguably unnecessary or ahead of time, has since been rolled into the RAB and continues to impact TasNetworks' transmission revenue and prices. Small business is materially impacted through higher transmission charges that include stranded or underutilised assets. The ongoing impact of this is a matter of serious concern to the TSBC. The flattening of capex since then is welcome, albeit a case of 'too little, too late'.





Looking ahead to the next regulatory period, TasNetworks is forecasting a small real decline of \$12.7 million in the value of its RAB, albeit interspersed with small annual increases in 2020-21 and 2021-22. This trend is welcome.

A word of caution should be added, however as, if all of TasNetworks' contingent projects for transmission came to fruition, it would swamp this small decline in the RAB. As the AER points out in its Issues Paper:

"TasNetworks has proposed five contingent projects estimated at over \$938 million, or more than three times TasNetworks' proposed capex. Should all these contingent projects proceed, they would increase TasNetworks' transmission RAB by more than 60 per cent." (AER, Issues Paper p. 23)

The impact of such a large increase in TasNetworks' transmission revenues on its transmission charges would be a matter of serious concern to the TSBC. If these projects come to pass, it is vital that they are robustly assessed by TasNetworks and the AER to ensure that they deliver benefits to





Source: AER, Issues Paper, p. 24.

consumers commensurate with their substantial costs and that the 'beneficiary pays' principle is applied.²⁹

7.3 IS THERE A CASE TO REDUCE TASNETWORKS' RAB?

A recent Grattan Institute Report entitled, *Down to the Wire: A sustainable electricity network for Australia*³⁰, has presented significant evidence that inappropriately set reliability standards and unrealised demand forecasts, have led to a lengthy period of excessive capex spending from AER regulatory determinations across the NEM. These impacts were found to be most pronounced in jurisdictions where electricity networks were in Government ownership. Overall, the Grattan analysis estimated that network assets had been overvalued by up to \$20 billion, with significant consequences like unnecessarily high network revenues, which have since and will continue for some time, to substantially elevate network prices.

In relation to TasNetworks, Grattan found that unrealistically high demand growth forecasts (i.e., customer numbers and maximum demand) and to a lesser extent increased reliability standards resulted in excessive capex with the outcome that TasNetworks' transmission RAB is overvalued by up to 65 per cent (\$516 million) and its distribution RAB by 19 per cent (\$235 million), a total for the business of \$751 million. The impact on residential and business tariff customers in Tasmania is shown in the **Figure 18** below taken from the Grattan report's technical supplement (Tasmania is highlighted).³¹

The Grattan report argues that this situation is unreasonable and unsustainable, that the State Governments that own (or owned) the networks bear responsibility and that corrective action is necessary to relieve the cost impacts on consumers. It notes that overvaluation is a key contributor to electricity affordability problems in Tasmania and that the resulting excessive network prices will cause consumers to increasingly by-pass the grid, which will force remaining consumers to pay even higher network prices, thus causing more to leave the network and creating a potential 'death spiral'. The report argues that the Tasmanian State Government should therefore write down the value of TasNetworks' assets by an amount of up to \$750 million and then privatise the business.

It further suggests that if governments consider a large write-down of assets too politically difficult, a rebate to consumers that depreciates over time (as the assets do) would have the same effect, but would be vulnerable to political intervention and the changing priorities of governments over time.

The issues raised in the Grattan report are of serious concern to the TSBC. They provide strong *prima facie* evidence that Tasmanian consumers are paying far too much for their electricity and have been doing so for some time without any corrective action. Moreover, they suggest that the Tasmanian Government (mainly past Governments), as the owner of TasNetworks, is responsible for this outcome but has failed to act to correct its impacts on consumers. (In saying this, we acknowledge that the current Tasmanian Government has taken some steps intended to protect Tasmanian consumers from some of the other causes of high electricity prices, such as high wholesale costs and has generally placed a priority on keeping electricity prices affordable and

³¹ See Grattan Institute, *Down to the wire: Technical supplement* at <u>https://grattan.edu.au/report/down-to-the-wire/</u>





²⁹ We note that the AER is currently undertaking a review of its Regulatory Investment Test – Transmission (RIT-T), which is used to assess such projects. In our view, rigorous assessment to ensure that benefits to consumers significantly outweigh costs, a transparent and well understood process and consultation with impacted consumers are essential to the application of the RIT-T.

³⁰ See <u>https://grattan.edu.au/report/down-to-the-wire/</u>

TasNetworks Regulatory Proposal, 2019-20 to 2023-24

May 2018

competitive.) The report also says that regulators, including the AER and the regime they administer, share some of the blame as they approved the excessive capex and the regulatory regime did not allow for *ex-post* scrutiny of expenditure, so over-investment was rolled directly into RABs without question.³²

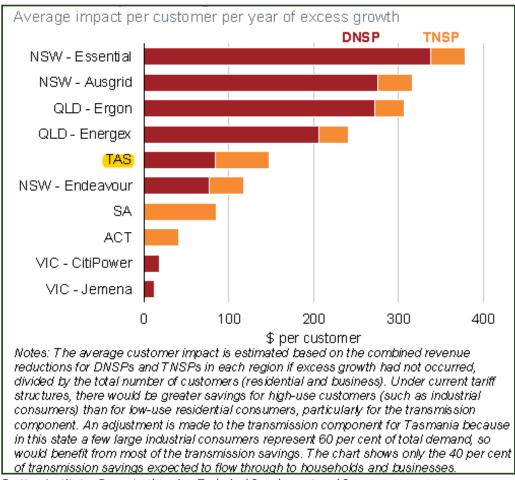


Figure 18: Impact of inflated RAB on Customer Bills

Source: Grattan Institute, Down to the wire, Technical Supplement, p. 16.

The TSBC suggests there is a strong case to reduce the value of TasNetworks' RAB, but recognizes that all of the ramifications of this would need to be considered.

The TSBC is strongly of the view, however, that in the absence of such a decision, TasNetworks capital expenditure program must be constrained so that there is a material and measurable increase in the utilization rate of its assets and the current, widening trend gap between utilization rate and RAB value (as shown at figure 8) is reversed and that trend maintained over subsequent regulatory periods.

³² We note with a degree of alarm the comments in the Grattan Report that: "Before 2006, regulators could 'optimise' (reset) the RAB. But this power was removed because of concern at the time that network businesses would under-invest in infrastructure. The very high levels of capex that followed indicate that, while removal of 'RAB optimisation' did its job, the regulatory framework lost an important tool for ensuring efficient network expenditure." (p. 28)





The main objective should be to recognise the impact that TasNetworks' overvalued RAB has had on network charges and to begin compensating consumers for this through lower electricity charges as soon as possible.

In the meantime, we would welcome the AER's comments on the issues raised in the Grattan report and its implications for the current determination and the regulatory regime more broadly. Does the AER agree with the methodology and estimates of the Grattan Institute? Is there anything that can be done within the present regulatory regime to reverse with the outcome? If so, does the AER intend to include such action in its determination for TasNetworks? Does the regulatory regime need to be amended to prevent further incidents of this type in future?





May 2018

8

Economic Benchmarking





8 Economic Benchmarking of TasNetworks' Performance

The National Electricity Rules (NER) require the AER to have regard to economic benchmarking in assessing TasNetworks' expenditure proposals (capex and opex). The TSBC strongly supports the application of economic benchmarking to assist in the important task of assessing TasNetworks' expenditure proposals, as well as its efficiency and productivity as a network business. This includes historical trends of how TasNetworks' efficiency and productivity has changed over time and how it compares to other transmission and distribution businesses.

The benchmarking data which the AER places in the public domain is of great benefit to the TSBC in allowing us to better understand how TasNetworks is performing and why, and whether it is undergoing ongoing improvements. We feel that benchmarking information helps us to better assess TasNetworks' performance and participate more meaningfully in this Determination. Naturally, benchmarking is not a panacea and has some shortcomings that need to be kept in mind, but in our view, consumers are far better placed with this information than without it.

8.1 BENCHMARKING RESULTS

The AER has recently published its transmission and distribution economic benchmarking reports,³³ which include data for the eleven year period, 2006 to 2016, and additional analysis and developments (especially for the transmission benchmarks) that make the information even more useful to consumer representatives. We have considered the AER's latest reports in preparing this submission. We have also considered TasNetworks' economic benchmarking report,³⁴ which is based on the AER's work, but which places this in a more Tasmanian context. Overall, we consider the TasNetworks benchmarking report to be a useful addition to the information on TasNetworks' benchmarks and welcome that TasNetworks has published it.

8.1.1 AER benchmarking results

Turning to the AER's reports, these show mixed results for TasNetworks.

In terms of the transmission multilateral total factor productivity (MTFP) score, TasNetworks' ranks first among the NEM TNSPs, which is pleasing, although its performance deteriorated by 3 per cent in 2016. However, the introduction of a new output specification for transmission MTFP by the AER has lowered TasNetworks' score and places it closer to the pack. We note that its previous position was more of an outlier that made it more difficult to compare TasNetworks to other TNSPs due to the nature of the former output specification (which favoured TasNetworks). We also note with a degree of concern that TasNetworks' transmission capex has made a negative trend contribution to MTFP over the eleven years of data, whilst opex made a useful positive contribution, but has recently turned negative. This indicates that TasNetworks has some work to do in these areas over the next regulatory period and their capex and opex forecasts can be seen in this light.

³⁴<u>https://www.tasnetworks.com.au/TasNetworks/WebParts/TasNetworks/EWP/RR19Download.ashx?d=1254</u> <u>3&m=v</u>





³³ <u>https://www.aer.gov.au/networks-pipelines/network-performance/annual-benchmarking-report-</u> <u>distribution-and-transmission-2017</u>

TasNetworks Regulatory Proposal, 2019-20 to 2023-24

TasNetworks' distribution network has consistently ranked at, or near, the bottom of DNSPs' MTFP. We accept that certain Operating Environment Factors (OEF) to do with TasNetworks' distribution network help to explain this, but these factors alone are unlikely to provide a satisfactory explanation. It is entirely possible that, even allowing for these, TasNetworks' distribution network would still benchmark poorly. TasNetworks' performance improved in 2014 and 2015 but deteriorated in 2016.

These results combined with our comments below on TasNetworks' capex and opex productivity suggest that there are some reasons to be concerned about the benchmarking outcomes and likely future trends.

The AER also publishes indices of the distribution multilateral partial factor productivity (MPFP) score for capex and opex. For capex MPFP, TasNetworks also ranks bottom of the pack and its performance has declined markedly over the period 2006-16, by over 10 per cent. TasNetworks' capex forecast for the forthcoming regulatory period shows little sign of abating and, on this basis alone, improvements in its MPFP performance over the next five years remains problematic.

For opex, TasNetworks' distribution network performs a little better but still remains in the upper part of mid-pack, albeit with an improving ranking. Following strong trend declines in productivity for the period to 2012, its opex productivity improved significantly, although there was a significant -7 per cent decline in 2016.³⁵ Again, whilst OEFs can be used to explain some of TasNetworks' opex MPFP performance, an ongoing lack of efficiency is also likely to be a factor. We acknowledge that TasNetworks has taken steps to improve its opex efficiency in the recent past, but as pointed out earlier, its opex forecasts for the forthcoming period involve modest reductions and its MPFP could well see further deterioration. This is not pleasing and suggests that consumers, including small business, will continue to be pay for inefficiencies in TasNetworks' distribution opex.

The AER also applies a set of econometric models to help it determine and efficient opex for TasNetworks' distribution, which include adjustment for OEFs. The average outcome over the 2006-16 period shows TasNetworks mid-pack, even with the OEFs taken into account.

8.1.2 TasNetworks' benchmarking

TasNetworks' benchmarking report provides some useful additional information, particularly helping to place its operations and benchmarking performance more within a Tasmanian context. We accept that some of the issues raised by TasNetworks are legitimate to consider in the context of benchmarking results. It is possible that taking some of these factors into account would improve TasNetworks' benchmarking rankings somewhat. It is also possible that other factors that other networks would raise could have the opposite impact on TasNetworks' ranking.

In general, we are not attracted to the inclusion of a large range of OEFs in economic benchmarking as this can detract significantly from its value as tool for comparison and assessment of the efficiency of network businesses.

Assessing some of TasNetworks' points is made more difficult by the lack of clear and comprehensive metrics to support them. It also needs to be kept in mind that benchmarking is not used prescriptively by the AER and, as a relatively recent regulatory development in Australia, is still being refined and improved.

³⁵ TasNetworks explain this as due to the unavoidable need to significantly increase expenditure on bushfire mitigation and vegetation management, which should return to lower levels over time.





TasNetworks Regulatory Proposal, 2019-20 to 2023-24

May 2018

It is disappointing, however, that TasNetworks has used its benchmarking report to question the application of benchmarking. It is also disappointing that TasNetworks has used its report to express the view that there will be limits to how much it can improve its productivity in future and to create an expectation that its ranking could deteriorate. We would prefer that it respond positively to the challenge of economic benchmarking and use the results of benchmarking to help it focus on improving its future performance.





TasNetworks Regulatory Proposal, 2019-20 to 2023-24

May 2018

9

Regulated Revenue





9 Regulated Revenue

Below we comment on various aspects of TasNetworks' Proposal in terms of the transmission, distribution and total network revenue outcomes for standard control services for the forthcoming regulatory period.

9.1 NETWORK REVENUE

According to TasNetworks' Proposal, total revenue for its network is expected to decline slightly by \$6.4 million in real terms (in total revenue of over \$2,000 billion over the 5 year regulatory period). This is welcome but represents a very small reduction in a basically stagnant network.

On the one hand, there are factors pulling the transmission revenue down. On the other hand, there are factors pushing forecast distribution revenue upwards. We comment on the drivers in each case in separate sections below.

From a small business perspective, this growth in total revenue, albeit quite modest, is still of potential concern.

9.2 TRANSMISSION REVENUE

There is a small reduction in (unsmoothed) annual nominal transmission revenue from an expected \$177.7 million in 2018-19 (the last year of the current regulatory period) to \$174.5 million in 2023-24 (the last year of the next regulatory period). In smoothed terms, the reduction is more pronounced going from \$172.9 million down to \$151.6 million, although this comes at the expense of higher revenue in the first two years of the next regulatory period compared to the unsmoothed outcome. The AER points out in its Issues Paper that TasNetworks is proposing a real 17 per cent decrease in average annual revenues from its previous determination. This decline is welcome.

The key drivers for the (unsmoothed) transmission revenue outcomes over the next regulatory period are the return on capital, opex and (to a lesser extent) regulatory depreciation.

Unsmoothed revenue attributed to the return on capital reduces significantly in the first year of the next regulatory period, but increases steadily thereafter. This outcome is heavily influenced by declines in the WACC parameters compared to the current regulatory period, such as lower interest rates, which are essentially exogenous to TasNetworks and also TasNetworks' decision to reduce its transmission WACC by 0.25 per cent, to the same level as for its distribution network.

Regulatory depreciation revenue outcomes follow a similar pattern to the rate of return.

The increased revenue attributed to both the WACC and regulatory depreciation after 2019-20 reflects transmission capex proposed by TasNetworks. Capex spending will find its way into the RAB, impacting revenue attributable to the rate of return and depreciation, and increase future transmission prices.

Opex is also a key driver of transmission revenue outcomes. As mentioned in the opex section of this submission (Section 5.3), TasNetworks' decision to apply an efficiency factor to its opex forecasts makes a useful contribution to reducing opex spending over the next regulatory period and places some additional downward pressure on its transmission revenues.





In its approach to revenue smoothing for transmission, TasNetworks has made a call that lower transmission revenues in the final year of the regulatory period is to be preferred, as it "delivers a steady reduction in transmission charges over the period, while delivering an acceptable price path for our distribution customers." This is a judgement call by TasNetworks, but it is possible that some customers may prefer the certainty of lower transmission charges up front and given risk factors discussed in Section 9.4 below. The approach also delivers the greater certainty of a front-end revenue increase to TasNetworks, albeit with lower revenues to follow later on.

9.3 DISTRIBUTION REVENUE

Distribution revenue (nominal, unsmoothed) is forecast to increase significantly from \$245.3 million in 2019-20 to \$309.0 million in 2023-24, an increase of \$63.7 million (or 26 per cent). In smoothed terms the increase is by \$52.5 million (21 per cent) from \$252.9 million to \$305.4 million.

The AER Issues Paper points out that TasNetworks proposed significant distribution expenditure reductions for the 2017-19 regulatory period but, for the forthcoming regulatory period, it is proposing a real increase in average annual revenues for distribution of 7 per cent from its previous determination. This turnaround is of concern to the TSBC.

The key drivers are (in order of importance) opex, regulatory depreciation and the rate of return. This is offset to some extent by a negative efficiency carryover due mainly to TasNetworks' overspending its opex allowance in 2016-17 (discussed in the opex section of this submission – Section 5.4). The impact of these three drivers, which were discussed earlier in this submission, on the significant increase in distribution revenue, is of concern to the TSBC.

Similar to transmission, in distribution there are initial reductions in (unsmoothed) revenue attributable to the WACC and depreciation followed by increases in later years of the next regulatory period. The increased revenue attributed to the WACC after 2019-20 would reflect distribution capex proposed by TasNetworks. Capex spending will find its way into the RAB, which is forecast to increase by 8 per cent in real terms, impacting revenue attributable to the rate of return and depreciation, and increase future distribution prices.

As with transmission, although less pronounced, the impact of smoothing is to front end higher revenue in the first three years of the next regulatory period with smoothing lowering revenue in the last two years. Again, it is possible that some customers may prefer the certainty of lower distribution charges up front, with small business sometimes preferring 'a dollar in the hand, rather than two in the bush' and given risk factors discussed in the next section. The approach also delivers the greater certainty of a front-end revenue increase to TasNetworks, albeit with lower revenues to follow later on.

9.4 RISKS TO REVENUE OUTCOMES

TasNetworks' Proposal mentions certain risks to its revenue forecasts, including:

- That the AER will update the allowed return on debt for transmission and distribution for each year within the forthcoming regulatory period.
- That service performance in any year may vary from target, resulting in penalties or bonuses.





- That actual transmission and distribution revenue recovery each year may vary from the allowance, which may lead to the need for adjustments in subsequent years.
- That contingent projects (which are significant and discussed in Section 4.2.3) and pass through events may lead to additional costs being approved by the AER.
- For transmission, Tasmanian customers are affected annually by intra-regional settlements residue payments and inter-regional charging between Tasmania and Victoria.

In addition, there are a range of other uncertainties, such as those impacting the opex forecasts discussed earlier in this submission (see Section 5), that could impact revenue and flow through into prices.

The TSBC is concerned with the impact that such uncertainties can have on network prices for its members in what is a regulated monopoly service that should be characterised by a high degree of predictability in prices over a five year period. We note with special concern the risks associated with TasNetworks' significant list of contingent projects, which could dramatically increase revenue (and network prices) if they come to fruition. We suggest that the AER use its regulatory powers to try to minimise price uncertainty as far as possible.





10

INDICATIVE PRICES





10 Indicative Network Prices

In this section we comment on the impact of TasNetworks' Proposal on its indicative network prices.

10.1 TRANSMISSION PRICES

The AER Issues Paper comments that it expects TasNetworks' transmission charges to decline steadily over the next regulatory period, with real prices set to decline by 5.6 per cent. Whilst transmission charges make up only around one-quarter of small business network charges (and around one-eighth of their total bill), this would still be a welcome outcome (around a $\frac{2}{3}$ per cent decline) for Tasmanian small businesses, often struggling with their electricity bills.

10.2 DISTRIBUTION PRICES

In contrast to the transmission price outcome, according to the AER Issues Paper, TasNetworks' distribution proposal entails annual price increases of 4.5 per cent nominal (2 per cent real) over the forthcoming regulatory period. This is a matter of significant concern to the TSBC. Given the distribution prices make up about three-quarters of network charges for small business (or around three-eighths of their total electricity costs), it would increase electricity prices for small business by about 1.7 per cent per annum).

We also note that price increases appear to be inconsistent with the tenor of the feedback TasNetworks obtained from its customer engagement for this Determination. This emphasised the importance of affordable prices to customers, whereas this outcome is serving to make them less affordable through distribution price increases well above the CPI. It also emphasised that although customers want a reliable supply, they are not prepared to pay more for improvement in reliability. By way of contrast, the distribution price outcome appears to involve higher prices for essentially the same reliability.

10.3 COMBINED NETWORK PRICES

The AER expect TasNetworks' total network charges to be 1.8 per cent higher at the end of the next regulatory control period in real terms. The path of these total annual network charges, which combine transmission and distribution costs, is shown in **Figure 19** below taken from the TasNetworks' Proposal.

10.4 REMOVING CROSS-SUBSIDIES

Aside from our concern that **Figure 19** shows an overall increase in small business network costs over the next regulatory period – driven by increases in distribution charges – it raises a matter of potentially serious concern to the TSBC. The AER and TasNetworks would be aware of the endeavours being made by regulators and network businesses to introduce more cost reflectivity into distribution prices. In Tasmania an important component of this is the removal of inefficient cross-subsidies, including a cross-subsidy from the main small business network tariff (TAS22) to other tariffs, including the heating tariffs.³⁶ The figure shows the significant progress that has been

³⁶ An analysis of these cross-subsidies and their impacts is contained in a 2016 report by Goanna Energy Consulting entitled, *Cross-subsidies in Tasmanian Electricity Tariffs – impacts on Small Business*, which was





made in reducing this cross-subsidy over the past few years as this explains the main reason for the significant reduction and convergence shown in small business compared to residential network costs.

We are therefore alarmed to see that there appears to be no further progress being made in this direction over the entire forthcoming regulatory period with the difference between total charges for small business and residential consumers stalled. We believe that this is a serious matter requiring further investigation by the AER and would be interested to hear from TasNetworks about it.

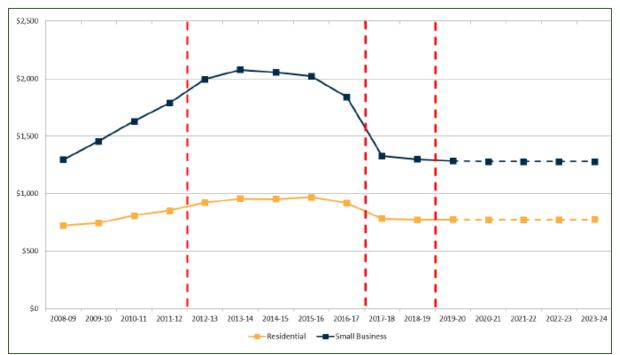


Figure 19: Average annual total network charges for distribution customers (\$, June 2019)

Source, TasNetworks, Regulatory Proposal, 2019-20 to 2024/25, p. 190.

Disappointingly, the progress that can be made in removing such legacy cross-subsidies in network charges and in actioning more cost reflective electricity prices in general, is also being thwarted by the slow pace with which Aurora Energy is approaching the reform of its retail tariffs.

Meanwhile, the Tasmanian Government has acted to protect Tasmanian electricity consumers on regulated retail tariffs from large increases in wholesale costs by capping regulated prices at no higher than CPI for 2017-18. It is now expected to soon legislate to extend this arrangement for a further three years until the end of 2020-21. Whilst we welcomed the initial intervention given it prevented electricity prices for small business going up significantly, there are elements of extending the cap that concern us, including that it could prove to be a further impediment to removing cross-subsidies.

commissioned by the TSBC and is available at <u>https://www.tsbc.org.au/wp-content/uploads/2016/11/Cross-</u> Subsidies-in-Tasmanian-Electricity-Tariffs-and-Small-Business-Oct-....pdf.







OTHER ISSUES





11 Other Issues

In this section of the submission we address a number of other significant issues for small business consumers in Tasmania, namely, corporate income tax treatment, TasNetworks' pass-through proposals and the legacy meters issue.

11.1 CORPORATE INCOME TAX

We note that TasNetworks has adopted a *gamma* of 0.4 in its transmission and distribution Proposal, which is consistent with the AER's current Rate of Return Guideline. We also note the AER's comments in its Issues Paper that this Guideline is currently under review and that its approach to and value of *gamma* may change as a result, which could then be applied to TasNetworks' transmission and distribution determinations. Hopefully, this will become clearer by the time of the Draft Determinations.

In Section 6.3.4 of this submission, we commented on the gamma in detail.

11.2 PASS THROUGH

As a general point, we have significant concerns about the inclusion of pass throughs in regulatory determinations for electricity networks, even allowing for the protections intended to both keep them to a minimum and ensure that they only reflect efficient costs. We do not believe that pass through events are consistent with intent of the regulatory regime to mimic the outcomes that would be seen if networks operated in a competitive market. In an unregulated competitive market any pass throughs would be limited to unforeseen costs to the extent that competition allowed.

Moreover, regulatory pass throughs tend to be heavily influenced by the information advantages held by the regulated networks and are therefore heavily biased towards upward adjustments in costs (with cost reductions far less common). This creates a further regulatory risk for electricity consumers.

In addition, the Rules only permit regulated networks to apply for pass throughs, further entrenching their asymmetrical nature.

Whilst the Rules dictate that the AER must consider TasNetworks' pass through proposals, it should keep the above factors in mind when doing so.

TasNetworks has proposed three additional pass through events for both transmission and distribution as part of its regulatory Proposal. We comment on these below.

In relation to TasNetworks' proposal to include insurance cap events, terrorism events and natural disaster events, we note that the AER will have to consider the level of insurance that an efficient and prudent NSP would obtain and only pass through costs above this. This requirement is important in terms of the containment of pass through costs, but the simplicity and ease of assessing it is not immediately obvious. Small business does not want to bear added costs from this uncertainty.

In relation to terrorism and natural disaster events, we note that a declaration is required by the relevant government. As the Tasmanian Government owns TasNetworks, there is some potential





for conflicts of interest to arise, which the AER will need to be mindful of. Small business does not want to bear added costs from any conflicts of interest.

In relation to natural disaster events, we note that the event cannot be a consequence of the acts or omissions of TasNetworks to be approved as a pass through. This is as it should be.

It is also not clear from the Proposal whether TasNetworks has procured insurance to cover the events it seeks specific pass through cover for and, if it has, whether the level is prudent and efficient. The AER should establish this and inform consumers of the result before agreeing to TasNetworks' proposal. Small business does not want to bear added costs from any decisions by TasNetworks to 'underinsure'. The Tasmanian Government should bear such costs.

Should TasNetworks apply for any pass throughs during the next regulatory period, we expect that the AER will thoroughly and rigorously assess these requests to ensure they are compliant and contain only efficient costs.

11.3 LEGACY METERS ISSUE

We note that TasNetworks' metering proposal involves a capital component of \$60.4 million over the next regulatory period with total revenue of \$92.2 million, a substantial amount equal to around one-third of its total revenue for standard control distribution services.³⁷

We have concerns about TasNetworks' proposal to accelerate the depreciation of its existing fleet of Type 6 meters over the next regulatory period so that they are fully depreciated by the end of 2023-24. TasNetworks' link this to the introduction of metering competition in Tasmania, which has seen Aurora Energy take over the role of metering provider from 1 December 2017. Our concerns relate to:

- The estimated cost of the proposal, which will increase standard meter prices by 49 per cent or \$9.29 per annum, at a time of community concern about high electricity prices.³⁸ Moreover, it would be contrary to the expectation that advanced meters will lower electricity costs.
- In addition, TasNetworks say in their Proposal (p. 202) that "a small number of customers [will be] paying up to an additional \$24.85 per annum per metering register for more complex metering." (Our parenthesis) It is unclear who these customers are but it is possible that they include small businesses. If so, our concerns would be heightened due to the significantly higher costs involved. We seek clarification from TasNetworks and the AER about whether small businesses are involved and to what extent?
- Previous TasNetworks metering strategies proposed a roll-out of advanced metering infrastructure.³⁹ Had that occurred, consumers would not now be asked to pay for the installation of outdated metering technology.⁴⁰ Under TasNetworks' current proposal, customers will effectively be forced to pay twice for assets that essentially do the same thing

³⁹ Aurora Energy, **2012-2017 Regulatory Proposal -** MANAGEMENT STRATEGY, NETWORK METERING, DOCUMENT NUMBER: NW-#30161864-V3, DATE: 13 MAY 2011.





³⁷ This includes a rate of return building block totalling \$8.1 million and regulatory depreciation of \$44.7 million.

³⁸ If customers switch to a competitive advanced metering service provider, the customer will continue to pay the capital component but will not pay the non-capital (opex) charge.

– once by way of the meters installed by TasNetworks and again when new meters are installed by Aurora. This is not acceptable to the TSBC as customers are in no way responsible for the installation of past meters and any associated shortcomings.⁴¹

 More in the realm of principal, we note that this is essentially a regulatory issue arising from a change in technology (following a new pro-competitive policy) that will see TasNetworks' role changed and its existing fleet of meters become stranded assets. In a competitive market, which the regulatory regime is intended to mimic, a firm finding itself in possession of out-dated technology would likely be forced to write this off immediately (a cost to be borne by its shareholders, not its customers). The regulatory imposition of an accelerated depreciation charge would simply not be possible. We seek the same treatment for TasNetworks, with its shareholder to bear the costs of its stranded metering assets.

We recognise that the significance of this issue to the overall base of affected customers will depend on the rate of replacement of existing meters and note that Aurora has indicated that it will only be installing new meters where the old ones are faulty, where electrical work is undertaken or where there is a new connection. This limited approach is also likely to delay the access customers have to the services the new meters can provide, including tariff reform and makes TasNetworks' accelerated depreciation proposal additionally problematic.

⁴¹ We understand that some of TasNetworks' Type 6 accumulation meters have only been installed recently, notwithstanding the known changes in metering arrangements and that in 2008, Aurora received capital funding to roll out advanced meters over a ten year period.





12

TARIFF STRATEGY





12 Tariff Strategy

As indicated in its response to the Directions and Priorities Consultation Paper, the TSBC is supportive of TasNetworks' approach to tariff reform and notes the following points:

- Moving to cost reflective network tariffs and eliminating existing cross subsidies, which penalise small business, is supported;
- The proposed transition time to wind out existing subsidies is too long;
- The move to demand based tariffs is supported, noting that small business customers need quality information about the basis on which they are being charged and how they can reduce their charges;
- In order to result in changes to consumption, the impact of price signals must be sufficiently large to change consumption behaviour; and
- Any increase in fixed charges is contrary to the objective of using pricing signals to bring about changes in consumption.

The TSBC wishes to reinforce those points and notes that for some business tariffs, proposed increases in the service charge are well in excess of inflation, contrary to its expectations. In Section 10.4 we expressed our concerns about the apparent lack of progress in removing small business tariff cross-subsidies in the TasNetworks Proposal.

Table 6 below provides a comparison of the service charges applicable to some tariffs, comparing the 2016-17 rate to the 2023-24 rate, in nominal dollars. The percentage increase over that period is well in excess of CPI, which at 2.5% per year over that period would result in an increase of 22 percent.

Table 6: Service charges applicable to some tariffs

Tariff	2016-17	2023-24	% change
TASSDM	186.788	399.718	114.00
TAS82	244.704	395.893	61.78
TAS94	48.844	75.298	75.30

Source: TasNetworks, Tariff Structure Statement, Regulatory Control Period 1 July 2019 to 30 June 2024 and TasNetworks, Annual Distribution Pricing Proposal 1 July 2016 – 30 June 2017

The TSBC view that an increase in the level of fixed charges serves to stifle potential consumer responses to price signals and to limit demand side response opportunities has not changed.

As noted in this submission at Section 3 on change, transformation and transition, the TSBC is concerned to see that every possible action is taken by TasNetworks, Aurora Energy, Hydro Tasmania and their shareholder, the Tasmanian Government ,to ensure that the value of the very large investment in electricity network assets is at least maintained, and preferably enhanced.

Ensuring that the value proposition to customers of remaining on the grid exceeds that of investing in off grid technologies and leaving the grid should be a priority for TasNetworks.





The TSBC is therefore pleased to note TasNetworks' focus on distributed energy resources (DER) in its Tariff Strategy Statement.

The network tariff structures associated with DER, together with appropriately structured feed in tariffs, has the potential to provide incentives for consumers to remain grid connected, rather than incentives for them to leave the grid.

At the same time, any additional costs of upgrading and operating the network to cater for two way energy flows should not be borne by customers who do not receive a benefit from that investment.

On the contrary, in the joint media release for the Electricity Transformation Roadmap⁴², the Energy Networks Association and the CSIRO indicated:

"The landmark joint study, the Electricity Network Transformation Roadmap, identifies measures to pay customers with solar and storage for benefits to the grid and save all customers an average of \$414 per year by 2050."

TasNetworks Tarff Strategy Statement indicates at page13:

"With solar panels – and battery storage – becoming more affordable, a key part of our distribution pricing strategy over the five year period covered by this TSS will be developing a greater understanding of how DER can be deployed in ways that benefit, rather than disadvantage, the network and other customers who do not have DER ... "

The TSBC is of the view that developing the necessary understanding cannot be delayed until the end of the 2019-24 regulatory period. By that time, the TSBC contends that the relevant strategies must be in place and being implemented, with a view to capturing the \$414 per year noted above.

A key risk in achieving that objective is that electricity customers do not receive price signals which are sufficiently clear and with sufficient financial incentives to encourage the required response.

To that end the TSBC is concerned at the following statements in the Tariff Structure Statement (bold emphasis is the TSBC's):

"TasNetworks plans to begin billing retailers serving residential and small business customers on a cost reflective basis during the 2029-34 regulatory period. **Whether those prices are passed on to the customer will then become a matter for the retailer to decide**" (p. 33)

... and ...

"**If retailers take up this network tariff offering**, it will provide for customers who currently have access to the Grandfathered Feed-in-Tariff (FiT) or Transitional FiT Rate with alternative tariffs to consider as they transition to the lower Fair and Reasonable FiT arrangements" (p. 15)

Noting the regulatory and corporate separation between TasNetworks and Aurora, the TSBC believes it is essential for the shareholder of those companies (the Tasmanian Government) to ensure there is a joint engagement to ensure that network tariff reform translates to retail tariff

⁴²<u>http://www.energynetworks.com.au/sites/default/files/06122016 embargoed media release cr value for</u> <u>energy customers in network transformation.pdf</u>.





reform and that the results of that engagement are regularly reported and form part of any regulatory proposals.

Box 4 below, from page 36 of the Tariff Structure Statement, identifies what the TSBC believes is an appropriate forum to ensure that the critical issue of effectively signalling networks is progressed, and that relevant discussions should be extended to ensure that both feed-in-tariffs and network tariffs are included in the discussions.

Box 4: TasNetworks' tariff strategy development consultation

Our customers have told us they expect us to engage with our owner, the State Government, as well as with electricity retailers, to ensure that more cost reflective network pricing is offered to Tasmanian customers in future regulatory periods. Electricity retailers, in particular, have an important role to play in supporting network pricing reform, by ensuring that cost reflective network pricing signals are preserved in the electricity prices seen by all customers, rather than being bundled up as part of the delivered cost of electricity.

For the new network tariffs to achieve the objective of effectively signalling network costs, the price signal must be visible to customers. To that end, we will continue to:

- participate in the monthly joint pricing meetings convened by the Office of the Tasmanian Economic Regulator (OTTER); and
- provide quarterly updates to the State Government about the content of PRWG meetings.

We will continue to engage with Government and retailers to advance network tariff reform in Tasmania, in the interests of all our customers.

Source: TasNetworks, TSS, p.36.

As previously indicated, the TSBC is of the view that "hastening slowly" is not an option which can be contemplated.

End of document





Copyright © 2018 Goanna Energy Consulting Pty Ltd