Submission to the Australian Energy Regulator on the Draft Decision for the TasNetworks Distribution Determination 2017-19

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Consumer Challenge Panel

November 2016

Executive Summary

The Consumer Challenge Panel has been engaged in discussions surrounding network regulatory determinations since 2013 when the Panel was first established. Members of the Panel have also been engaged in these discussions prior to appointment to the Panel, in most cases for a significant number of years.

Throughout these processes, the Panel has consistently drawn attention to the impact of high prices on businesses and households including the particular impact these have on the lowest income households across our community. These households already face major cost of living pressures and because the high prices for essential services presents affordability issues, they are at high risk of losing unrestricted access to the basic and essential service of electricity.

The author has previously noted that the consumer engagement program was the first of its kind for TasNetworks Distribution in terms of its scope and breadth and that TasNetworks is to be commended for its decision to raise its level of engagement with customers. The author also wishes to acknowledge the continued openness and transparency with which TasNetworks has approached the Regulatory Determination. The author thanks TasNetworks for its ongoing efforts and willingness to engage with the Consumer Challenge Panel and other consumer interest groups.

As previously noted, the success of TasNetworks' consumer engagement program is evidenced by the willingness of the business to embrace the consumer view that cost is the greatest concern. This consumer view is no surprise, given the affordability issues experienced by many Tasmanians and the general state of the Tasmanian economy. Yet it is noteworthy that TasNetworks has recognised and prioritised this perspective in its Regulatory Proposal. It is evident that the AER Draft Decision is largely an acknowledgment of this.

While there have been some consumer submissions which sought improvements in TasNetworks' consumer engagement approach, the author commends TasNetworks for its willingness to achieve these improvements, particularly with respect to regional engagement.

This submission recognises that TasNetworks has proposed expenditure in line with consumer expectations and values. The author notes that the AER has undertaken detailed examination of the capital and operating expenditure proposals including the proposed significant increase in IT expenditure.

Finally, TasNetworks is to be commended for its opt-in approach to the new demand tariffs and the author supports the AER acceptance of this.

Contents

Executive Summary	ii
Introduction	
Expenditure Trends	
' IT and Communications	
TasNetworks Customer Engagement Program and Findings	11
Introduction	11
Consumer Submissions	11
Tariff Reform	12

Introduction

As a member of the Consumer Challenge Panel, the author thanks the AER for the opportunity to provide comment on the Draft Decision for the TasNetworks Distribution Determination 2017-19.

As described by the AER, the Consumer Challenge Panel "assists the AER to make better regulatory determinations by providing input on issues of importance to consumers. Regulatory determinations are technical and complex processes which can make it difficult for ordinary consumers to participate. The expert members of the CCP bring consumer perspectives to the AER to better balance the range of views considered as part of our decisions."

The objective of the CCP is to:

- Advise the AER on whether the network businesses' proposals are in the long term interests
 of consumers; and
- Advise the AER on the effectiveness of network businesses' engagement activities with their customers and how this is reflected in the development of their proposals.

Throughout the regulatory determination processes which have proceeded since late 2011, the Consumer Challenge Panel has consistently drawn attention to the following:

- Impacts of high prices on consumers;
- The way in which network proposals impact on safety and reliability;
- Whether the allowances for debt funding are reasonable;
- Whether the cost of equity is adequate;
- The role of benchmarking in the AER's determination of expenditure allowances;
- The role of incentive payment schemes, and;
- The varying level of effectiveness of network businesses' engagement with their customers according to the network.

Members of the Consumer Challenge Panel were active in discussions with TasNetworks in the lead up to the lodgement of the Regulatory Proposal. Members of the Panel including the author have met with TasNetworks on 4 occasions, including a day-long meeting with business representatives. We have attended as observers of a TasNetworks Stakeholder Engagement Workshop and have also met individually with the following organisations: Local Government Association of Tasmania, Tasmanian Council of Social Service, Anglicare Tasmania, Goanna Energy and Tasmanian Renewable Energy Alliance.

Members of the Consumer Challenge Panel engaged with the business extensively in the lead up to lodgement of the Regulatory Proposal. Members formed the view that an important role the Panel could play would be to provide early indications to the business of priorities and concerns. The author welcomed the decision by TasNetworks to revise its approach after the release of its Directions and Priorities. The author noted this was a sign of good faith in consumer values and perspectives, and commended TasNetworks for this demonstrated commitment to both considering and accommodating consumer feedback.

Members of the Consumer Challenge Panel have presented to two public forums on the TasNetworks Distribution Determination. One of these followed the release of the Regulatory Proposal, the other followed the release of the Draft Decision. During the latter forum, the author presented on some of the key issues outlined in this current submission and sought comments and feedback from participants.

Affordability Issues

As reported by the AER and illustrated in figure 1 below, Tasmania has among the highest electricity bills in the NEM (\$2544 on average for a middle income customer per annum).

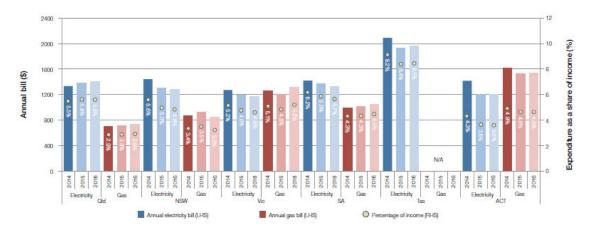


Figure 1: Annual electricity and gas bills, and as a share of benchmark low income household's disposable income (without concession) – jurisdiction specific 'low' consumption levels, June 2014, 2015 and 2016

(Source: AER Annual Performance Report 2015-16 at http://www.aer.gov.au/retail-markets/performance-reporting/aer-annual-report-on-the-performance-of-the-retail-energy-market-2015-16: p.52)

In Tasmania, customers experience a high rate of electricity charges (fourth highest in the NEM) and high energy use and less domestic use of gas leads to the high bills reported.¹

An indicator of energy hardship is the percentage of the Australian population who could not pay utility bills on time at some stage during the previous year. 12.1% of all Australian households were unable to pay their utility bills, mainly electricity, on time in 2014, due to insufficient income to pay the bill.²

Further, there are significant numbers of customers in debt and experiencing electricity disconnections in Tasmania. Table 1 below details the customer debt figures and figure 2 highlights the disconnection statistics.

Quarter/Financial year	Residential electricity customers with debt	Average residential electricity debt (\$)	Small business electricity customers with debt	Average small business electricity debt (\$)
Sep-15	3529	701	242	1395
Dec 15	3583	569	257	1239
Mar 16	4605	754	220	802
Jun 16	3676	739	188	885

Table 1: Tasmania customer energy debt

Source: AER Retail Statistics at http://www.aer.gov.au/retail-markets/retail-statistics/tasmania-customer-energy-debt

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http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4159.0Explanatory%20Notes12014?OpenDocument

¹ AER (2015) Annual Performance Report

² ABS (2014) 4159.0 General Social Survey at

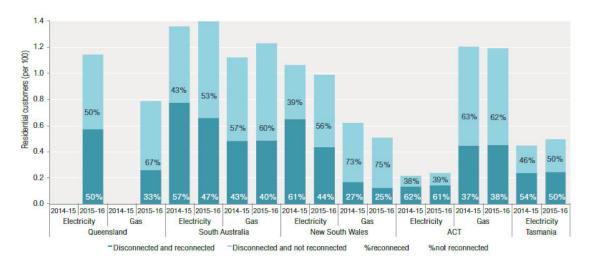


Figure 2: Residential customers disconnected for non-payment in 2014-15 and 2015-16 by jurisdiction *Source: AER Annual Performance Report 2015-16: p.33*

The AER has stated "we do not consider that the NEO would be advanced if prices are so high that large numbers of consumers are unable to afford the service." Energy hardship, debt and disconnection are indicators of lack of affordability.

As an essential service, electricity disconnection is the worst possible outcome for an energy consumer. The author's previous submission to the AER on the TasNetworks Distribution Determination outlined some of the impacts of disconnection. For example, the Public Interest Advocacy Centre has reported:

"Disconnection was disruptive to households, with a range of strategies deployed to cope with the situation, including using candles or lanterns, having cold showers/baths, and buying takeaway/prepared food. Those living in public housing were significantly more likely than others to take several courses of action to deal with the disconnection.

A range of impacts resulted from disconnection, most commonly anxiety and emotional disorders, loss of food and an inability to wash. These impacts were compounded the longer the disconnection."⁴

As previously reported, in Tasmania, the significant number of customers who are on low incomes heightens the threat of energy hardship, rising debt levels and disconnection. Tasmania has the highest population of people receiving the electricity concession (38.8% or 91,026 account holders⁵), with percentage of Tasmanian households who receive 50% or more of their income from

http://www.piac.asn.au/sites/default/files/publications/extras/13.04.14_final_report.pdf: p.ii

³ AER Issues Paper for NSW Distribution Determination at http://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/ausgrid-determination-2014-19/proposal: p.25

⁴ Public Interest Advocacy Centre (2013) Cut Off III at

⁵ Tasmanian Energy Regulatory (2015) Energy in Tasmania Performance Report 2014-15 at http://www.energyregulator.tas.gov.au/domino/otter.nsf/LookupFiles/Energy in Tasmania - Performance Report 2014-15.pdf; p.109 & p.112

Commonwealth Income Support payments at 29.2% in 2014. Compared with national rates, Tasmania has a higher unemployment rate, lower labour force participation rate and lower average weekly earnings. These factors compound the energy affordability problem facing many Tasmanians.

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⁶ ABS (2014) 6523.0 - Household Income and Wealth, Australia, 2013-14 at http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6523.02013-14?OpenDocument table 15.8 ⁷ ABS (2014) General Social Survey at http://www.abs.gov.au/ausstats/abs@.nsf/mf/4159.0#Anchor4

Expenditure Trends

The author has previously reviewed TasNetworks' actual and forecast expenditure for the current regulatory period as indicated below:

Activity	2012-13	2013-14	2014-15	2015-16	2016-17	Total
Capex total	109.1	120.5	106.7	125.7	133.3	595.3
Opex total	78.3	79.9	68.0	64.7	63.1	354.0
Total expenditure	187.4	200.4	174.7	190.4	196.4	949.3

 Table 2: Actual and forecast expenditure for the 2012-16 regulatory period (June 2017 \$m)

Source: TasNetworks

The author has previously⁸ compared capital and operating expenditure for the previous two regulatory periods to that proposed in the Regulatory Proposal and against the allowance as below:

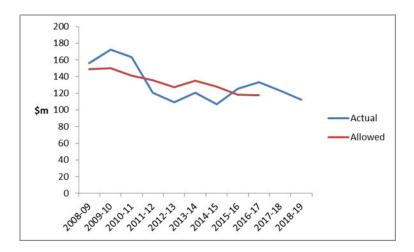


Figure 3: TasNetworks Capital Expenditure 2008-09 to 2018-19 (Note: Actual 2015-16 to 2016-17 is forecast and Actual 2017-18 to 2018-19 is as proposed in TasNetworks' Regulatory Proposal)

 8 Jo De Silva (2016) Submission to the AER on the TasNetworks Regulatory Proposal

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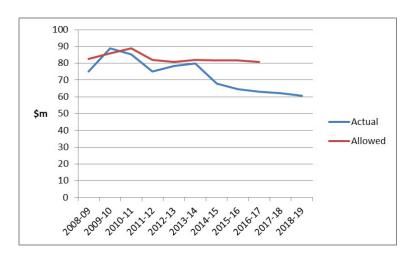


Figure 4: TasNetworks Operating Expenditure 2008-09 to 2018-19 (Note: Actual 2015-16 to 2016-17 is forecast and Actual 2017-18 to 2018-19 is as proposed in TasNetworks' Regulatory Proposal)

In its Draft Decision, the AER is proposing to allow a significant program of capital expenditure of \$235.62 million over two years:

Capex by category (June 2017 \$m)	2017/18	2018/19	Total over period
Augmentation	10.06	8.65	18.71
Connections	19.07	19.05	38.12
Replacement	52.69	45.69	98.38
Non-Network	18.6	16.8	35.4
Capitalised Overheads	22.76	22.24	45.00
Total	123.14	112.48	235.62

Table 3: Capital Expenditure for TasNetworks Proposed to be Allowed by the AER 2017-19 (\$m) (Source: AER)

In particular, the author notes the following significant expenditure:

- Forecast augex (\$18.7m)
- Forecast connections capex (\$38.12m)
- Replacement of poles, overhead conductor, underground cable, service lines, switchgear and transformers (\$77m)
- Asset Management Information System and Geographic Information Systems (\$8.7m)
- Ajilis (\$11.3m)

In its Draft Decision, the AER is proposing to accept TasNetworks' proposal for operating expenditure of \$123.1 million over two years:

Opex by category (June 2017 \$m)	2017/18	2018/19	Total over period
Emergency Field Operations	14.3	13.9	28.2
Maintenance and Vegetation Management	25.7	25.1	50.8
Distribution Asset Services	12.4	12.3	24.7
Business Services	7.9	7.6	15.5
'Other' Operating Expenditure	1.9	1.9	3.8
Total	62.3	60.8	123.1

Table 4: Operating Expenditure Proposed by TasNetworks 2017-19 (\$m) (Source: TasNetworks)

In particular, the author notes the following proposed significant expenditure:

- Maintenance and Vegetation Management (\$50.8m)
- Emergency Field Operations (\$28.2m)
- Distribution Asset Services (\$24.7m)
- Increase in access track and corridor maintenance (\$2.2m)
- Increase in inspection of overhead lines and structures (\$2.0m)
- Increase in low conductor span rectification (\$1.6m)

The author notes that the AER has undertake detailed analysis about the capex and opex forecasts. In relation to opex, the AER applied the 'base-step-trend' forecasting approach to develop their alternative estimate of efficient costs to compare against the business' proposal. The AER then accepted that the business' total opex forecast reasonably reflected the opex criteria. In relation to capex, the AER applied economic benchmarking, trend analysis, category analysis, predictive modelling and engineering review.

IT and Communications

Consumer submissions noted the doubling of expenditure on IT and communications in the current and forthcoming regulatory period compared with the allowance for 2012-16:

Category	Regulatory Allowance for 2012-13 to 2016-17	· · · · · · · · · · · · · · · · · · ·	Forecast expenditure for 2017-18 to 2021-22
IT and Communications	41.6	82.2	74.7

Table 5: IT and Communications Expenditure (\$m) (Source: AER)

While the doubling of expenditure in IT is not singular to TasNetworks, the author has previously noted that the pace and scale of the increase is significant. While the author has concerns about the proposed levels of IT capex, it is recognised that the appropriate level may be higher than that of the allowance for the 2012-16 period due to changes in the operating environment for TasNetworks, such as the merger with transmission and the introduction of smarter grids and additional regulatory obligations.

In the submission on the Regulatory Proposal, the author was concerned about the high levels of proposed IT capex over two periods, compared with the allowance for the period 2012-16 and suggested that proposed IT capex be closely scrutinised by the AER. The author recommended assessing forecast IT capex using both trend analysis and individual business cases. The author noted some concern that the proposed program is a large scale, complex and interdependent program of works which impacts broadly across core IT systems. Therefore, we recommended that the AER further assess the proposed program through individual project reviews, in particular of the Ajilis project.

The TasNetworks Regulatory Proposal describes Ajilis as "a business transformation project to replace a range of unsupported asset management and delivery platforms, and implement new asset management processes. This work is integrated with replacement and transformation of a number of related business applications and processes."

TasNetworks have described the investment need in the context of the merger of Transend Networks' transmission business and Aurora Energy's distribution business. TasNetworks state that they "inherited a number of core information applications that were at or near end of life, not supported, and heavily customised...Both Transend and Aurora had identified the need to upgrade and consolidate information technology platforms, given an increasingly complex energy market environment, increased reporting and benchmarking requirements, the number of unsupported applications and bespoke interfaces, and opportunities to improve processes and manage risks." ¹⁰ TasNetworks also state that the merger resulted in duplicate systems and processes.

TasNetworks' Asset Management Systems capex significantly varied over the 2012–17 regulatory control period, with relatively low expenditure in the first three years, and a significant increase in the last two years. This increase was driven by TasNetworks' business transformation project.

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⁹ RP page 81

¹⁰ Business Case page 4

Submissions on the Regulatory Proposal indicated some concern with this trend and requested detail examination by the AER

The AER reviewed the business case, and considers that:

- the need for the investment has been previously identified in the current regulatory control period;
- the options analysis was sufficiently granular in identifying the range of feasible options;
- project costs were subject to an open tender process, such that the AER is reasonably satisfied that TasNetworks' proposed costs are prudent and efficient; and
- the lowest cost feasible option was selected.

The author is satisfied that the AER has conducted this review with prudency and efficiency as primary considerations.

The author notes that the business case identifies that there is opex and capex required in 2017 and 2018. It also identified \$10.8 million "reduction in other costs (financial benefits)" over that period. The author recommends to the AER that it reviews how these savings have been accommodated, in the Regulatory Proposal and subsequently the Draft Decision.

TasNetworks Customer Engagement Program and Findings

Introduction

The author's previous submission to the AER on the TasNetworks Distribution Determination detailed TasNetworks' customer engagement program, *Voice of the Customers*, which was conducted as part of TasNetworks' Regulatory Proposal for 2017-19.

The author noted that the success of TasNetworks' consumer engagement program is evidenced by the willingness of the business to embrace the consumer view that cost is the greatest concern. This consumer view is no surprise, given the affordability issues experienced by many Tasmanians and the general state of the Tasmanian economy. Yet it was noteworthy that TasNetworks had recognised and prioritised this perspective in its Regulatory Proposal.

Of the 19 issues raised by the Consumer Challenge Panel in recent regulatory determinations, TasNetworks had positively addressed 17, partially addressed 1 and negatively addressed 1. This has been noted as an extremely encouraging result as it demonstrates that TasNetworks has adopted a consumer engagement approach which incorporated lessons and advice from earlier regulatory determinations in the current round of determinations.

Furthermore, it has been noted that of the above issues raised by the Consumer Challenge Panel, 12 directly relate to the AER Consumer Engagement Guideline for Network Service Providers. TasNetworks clearly provides a good case study of how to apply the Guidelines effectively and is to be commended for this.

Consumer Submissions

Two areas were identified by stakeholder submissions for improvement:

- Consumer concerns about "Cost of services" and "being unwilling to pay for higher reliability" need higher priority in *Voice of Customer Program;* and
- Focus groups need to include regional sessions.

The AER notes that TasNetworks intends to provide further opportunities for regional participation. The author raised this issue in the most recent public forum and TasNetworks noted the extent to which they have taken on board this feedback. The author is satisfied that this issue is being addressed.

In relation to the first dot point above, the author notes that the two highlighted consumer concerns were given priority in TasNetworks' Regulatory Proposal.

Tariff Reform

The AER Draft Decision adopts the TasNetworks proposal to introduce three cost reflective tariffs on an opt-in basis for the regulatory control period. The new tariffs will be:

- Residential time of use demand network tariff;
- Low Voltage commercial time of use demand network tariff; and
- Large Low Voltage time of use demand network tariff.

The previous submission to the AER on the TasNetworks Distribution Determination noted that TasNetworks are to be commended for offering these demand tariffs on an opt-in basis. As the customer impacts vary according to demand profile, there is inadequate information at present to determine who will benefit and who will be negatively affected by the new tariffs. Therefore, it is not possible to currently align complementary measures with the new tariffs. The plans for a tariff trial to occur during the regulatory control period are also to be commended. TasNetworks and their customers will be in a better position to make informed decisions once this trial has occurred.

The issue of opt-in versus mandated cost reflective tariffs was raised during the most recent public forum. The author commented about support for opt-in and involvement in consumer consultations about demand tariffs in South Australia in another role. The SACOSS Demand Tariffs – Report on Consumer Consultations has been attached as an appendix to this submission. This report details that:

"The overwhelming majority of residential focussed participants expressed concern about the design of a demand tariff, even where there was no price loaded in to the demand charge. It was indicated that the structure of the tariff combined with the reality of household living needs made it very difficult to gain any benefit from the tariff design. Participants strongly maintained that appliance use during peak times was largely out of their control, and they were generally using only what was needed at that time of the day or what they had little control over (e.g. children using electronic devices after school, charging of mobile phones, etc)." [p.12]

"Participants expressed the view that it was very difficult to minimise appliance use during peak times. Some indicated that it may be possible for a single person household to manage it but there was general agreement that this was extremely difficult in family situations. A strong concern was raised about the impact on carers and parents who are responsible for policing appliance use. There was a strong feeling that this could drive negative behaviours towards the person who was responsible in the household for the policing.

Concern was also expressed for consumers who currently already minimise their appliance use, particularly air conditioners and heaters in hot and cold weather. Participants generally agreed that as the demand tariff was complex to explain, the result might be that consumers increasingly ration their energy use for fear of increased energy bills." [p.15]

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¹¹ As Senior Policy Officer for the South Australian Council of Social Service.

The author raised the issue of extent of control at the most recent public forum and TasNetworks commented that time was needed to provide consumers with adequate tools and information to enable behaviour change where it is possible. The author supports these comments and notes the following from the SACOSS Report:

Participants from the workshops and focus groups placed significant emphasis on the importance of education about demand tariffs for the residential consumers. Whilst most participants could understand the rationale of demand tariffs and their potential impacts, as they were explained during the sessions, concerns about all consumers understanding this information were very strong. [p.16]

Appendix



Demand Tariffs: Report of Consumer Consultations

SACOSS Report October 2015 Demand Tariffs: Report of Consumer Consultations SACOSS Report October 2015

First published in October 2015 by the South Australian Council of Social Service

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Acknowledgements

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SACOSS also wish to acknowledge the consumers who participated in this research, for their highly valued conversations and willingness to participate.

Responsibility for all errors and omissions rests with SACOSS.

Executive Summary

In early October this year, SACOSS held a series of face to face consultations with consumers and consumer representatives to consider SA Power Networks' (SAPN) proposed demand tariffs. The aim of these consultations was to inform consumers of the proposed changes and to document their response. These consultations were supplemented by telephone interviews with business consumer representatives.

Participants in this research were provided a briefing about demand tariffs and informed of the following likely impacts of the proposed demand tariff arrangements on households and businesses:

- Approximately 50% of residential households will be worse off;
- The residential consumer price impact varies and can be as much as around a \$150 per annum increase on an annual electricity bill;
- Approximately 50% of businesses will be worse off and,
- Of those businesses whose annual usage is between 10,000 40,000kWh, 19% will face more than 50% increases.

Overall, the research found that there is limited support for the mandatory introduction of demand tariffs.

Consumer representatives understood the rationale behind a demand tariff arrangement but highlighted significant concerns with the current SAPN proposal and the potential for these arrangements to negatively impact their clients.

Whilst most consumers also understood the rationale behind demand tariffs, the majority did not want to change to a new tariff arrangement. 90% of participants did not support demand tariffs and 10% were undecided.

Business consumer representatives indicated that energy can be as much as 50% of costs for some businesses. They indicated that SAPN's proposals were a major impact on some small businesses and one representative indicated they could lead to some businesses closing, where the businesses were negatively impacted by 50% or more increases.

There was strong support for a voluntary opt in approach to new and revised demand tariffs.

Contents

Acknowledgements	i
Executive Summary	ii
Introduction	1
Tariff Reform	2
Current Tariffs	2
Demand Tariffs	3
SAPN's Tariffs for Business	3
SAPN's Tariff for Residential Consumers	4
Expected Outcomes for Residential Consumers	5
Consumer Consultation	7
Methodology	7
Research Approach	7
Overview of Consumer Themes	11
Consumer Themes	12
Fear of the Design	12
Impacts on Organisations and Businesses	12
Summer Shocks	13
It Works for Some	13
Lack of Trust	14
Behavioural Responses	14
Complexity of the Market	15
Education	16
Measures to Support the Introduction of Demand Tariffs	18

Introduction

The South Australian Council of Social Service is the peak non-government representative body for health and community services in South Australia, and has a vision of Justice, Opportunity and Shared Wealth for all South Australians.

SACOSS has a long-standing interest in the delivery of essential services. Our research shows that the cost of basic necessities like electricity impacts greatly and disproportionately on vulnerable and disadvantaged people.

Over the past five years, the spotlight has been on the increasing prices consumers are paying for their electricity. The public discourse has focused on the significant increases to prices and the concerning impacts this has had on household and business budgets. Running concurrently to this is a major shift in the interest consumers have taken in engaging with the causes of increased prices and the potential solutions.

A major component of electricity bills is the network charge, the cost of physically supplying electricity to households and businesses and accounts for approximately 40% of average residential bills.¹ Changes to how SA Power Networks' (SAPN) charge consumers the network component are currently in review and are the result of regulatory changes made by the Australian Energy Market Commission.²

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¹ St Vincent de Paul Society 2015, *South Australian Energy Prices July 2015*, https://www.vinnies.org.au/icms docs/225203 SA Energy Prices July 2015.pdf,p. 29.

² AEMC 2015, Distribution Network Pricing Arrangements, http://www.aemc.gov.au/Rule-Changes/Distribution-Network-Pricing-Arrangements#.

Tariff Reform

Cost reflective tariffs are being developed and implemented by distribution businesses across Australia in response to a decision by the Australian Energy Market Commission (AEMC). By more closely aligning the charges for electricity consumption with the costs of electricity consumption, the AEMC argue that the fairness and efficiency of the electricity distribution system can be improved.

The AEMC have set a new pricing objective for distribution businesses so prices reflect the efficient costs of providing network services to each consumer. Distribution businesses must comply with four new pricing principles to achieve this objective:

- Each network tariff must be based on the long run marginal cost of providing the service;
- Distortions to price signals that encourage efficient use of the network by consumers must be minimal;
- Network businesses must consider the impact on consumers of changes in network prices and develop price structures that are able to be understood by consumers, and;
- In general, network tariffs must comply with any jurisdictional pricing obligations imposed by state or territory governments.

Current Tariffs

In general, most consumers are currently charged via an inclining block tariff. This is reflected in the picture below:

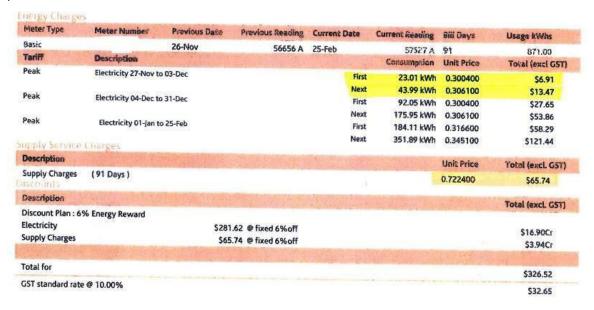


Figure 1: Excerpt from Energy Bill

The picture is an excerpt from an energy bill. The orange highlighted figures represent the supply charge, which is also referred to as the fixed component of the bill. In this example, the supply charge for the billing period of 91 days is \$65.74. The yellow highlighted sections are the variable components of the bill and are a usage or consumption charge. These are generally charged in blocks, with the unit price of the "first" block being cheaper than the "next" or second block.

Demand Tariffs

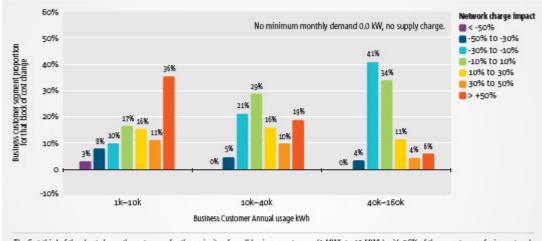
Demand tariffs generally include supply and usage components, with an additional component known as the demand charge. This is charged by the highest level of usage within a given time period. St Vincent de Paul have explained this in terms of appliances – the more appliances a consumer has on in a given period, the higher their demand charge will be.

SAPN's Tariffs for Business

Of SAPN's large customers, virtually all 5,000 business customers are already on cost reflective tariffs. SAPN is currently consulting about the design and pace of change for introduction of demand tariffs for SAPN's 95,000 small business customers.

The table below indicates the impact of cost reflective tariffs on SAPN small business customers. Those in red are businesses facing increases of 50% or more.

Figure 8 Small business customer sample showing impact of cost reflective network charge saving vs current charge. Network changes are about half of retail electricity costs.



The first third of the chart shows the outcomes for the majority of small business customers (1 MWh to 10 MWh) with 36% of these customers facing network charge in a eases above 50%. This implies very high amounts of demand being used at peak times without a commensurate use of energy at other times. The second third shows the outcomes for sampled customers in the 10 MWh to 40 MWh pa category. 19% of these customers would incur a 50% or higher network charge in a ease under the current proposal. For customers using 40 MWh to 160 MWh, the number of customers that would incur an increase in network charges above 50% is 6%. Note that we are reviewing such charges to ensure that such increases reflect price signals that are warranted.

The chart also shows the spread of customers receiving other levels of price increases or reductions. Larger small business customers fare better on average than the smallest business customers with these current pricing proposals.

Table 1: Small Business Customers in SA Under Cost Reflective Charges

(Source: SA Power Networks http://talkingpower.com.au/wordpress/wp-content/uploads/Electricity-Tariff-Reform_Screen-FINAL.pdf: p.13)

SAPN's Tariff for Residential Consumers

In South Australia, SAPN is still developing its range of cost reflective tariffs. During 2012/13, SAPN commenced a small scale pilot of capacity pricing for small customers equipped with interval meters. The trial incentivised participants to manage their demand during summer in the afternoon/early evening peak period. The trial resulted in the introduction in 2014/15 of the opt-in residential monthly demand tariff.

The low voltage residential monthly demand tariff has been available to eligible residential customers taking supply at less than 1kV since 1 July 2014. Customers on this tariff require a Type 1-5 NEM compliant meter read at least monthly:

"Metered energy consumption is charged at a single rate. The maximum kW demand (measured over a half hour interval) between 4pm and 9pm on any day in the month is used to bill the monthly

demand. A higher price applies for the five summer months (November to March) than the winter months (April to October)."³

In its Regulatory Proposal 2015-20, SAPN had proposed to require new customers and customers who alter their supply arrangements to utilise the monthly demand tariff from 1 July 2017. SAPN estimates this will be 35,000 customers per annum plus there is an estimated additional 40-60,000 network/retail initiated meter changes.

Expected Outcomes for Residential Consumers

From 1 July 2015, distribution businesses will be required to develop network prices that are cost reflective and send efficient pricing signals to consumers.

Moving to network prices that better reflect the way that consumers use network services will result in some consumers facing lower network prices and some consumers facing higher network prices than under current price structures. While the majority of consumers are expected to benefit from these changes though lower network prices in the medium to longer term, the key factors that will decide how much consumers pay will be their individual load profiles and the value they place on using energy at different times.

There are considerable differences between how individual consumers choose to use energy. Two households might look the same, with similar incomes and the same family size, but because of the appliances they have and the different lifestyles they lead they may have very different load profiles, i.e. the amount of electricity they use at different times of the day.

5

³ SA Power Networks (2015) SA Power Networks Annual Pricing Proposal 2014-2015 at http://www.aer.gov.au/sites/default/files/SA%20Power%20Networks%20Distribution%E2%80%942014%E2%80%9315%20Revised%20annual%20network%20pricing%20proposal.pdf : p.21.

The following table indicates a range of indicative price impacts for residential consumers⁴:

Low consumption Low demand -\$9	Medium consumption Low demand -\$10	High consumption Low demand -\$9
Low consumption Medium demand +\$50	Medium consumption Medium demand -\$2 +\$16 (PV)	High consumption Medium demand +\$13 +\$54 (PV)
Low consumption High demand N/A	Medium consumption High demand +\$98 +\$64 (PV)	High consumption High demand +\$140

Table 1: Residential Demand Tariff Outcome (per annum)

(Source: Derived from SA Power Networks data)

 $^{^{\}rm 4}$ The prices are indicative and the distributional impacts change when the tariff changes.

Consumer Consultation

In early October this year, SACOSS held a series of face to face consultations with consumers and consumer representatives to consider SAPNs' proposed demand tariffs. The aim of these consultations was to inform consumers of the proposed changes and to document their response. These consultations were supplemented by telephone interviews with business consumer representatives.

Methodology

40 people participated in a workshop or focus group facilitated by SACOSS. St Vincent de Paul presented on demand tariffs and their implications. A representative from SAPN attended each workshop and focus group as an observer.

Two workshops were held for consumer representatives with attendance from a diverse range of community organisations such as Consumers SA, Good Shepherd Microfinance, Uniting Communities, UCWB, The Salvation Army, St Vincent de Paul and SA Financial Counsellors Association.

Two focus groups were held for consumers who are clients of a local provider of social health and wellbeing services. As the research was targeted at investigating consumer responses to the design of a demand tariff and likely behavioural responses, SACOSS determined that population sampling was not required for the research purpose.

In addition to the workshops and focus groups, telephone interviews were conducted with three business consumer representatives.

Research Approach

To collect the views of consumers and consumer representatives during the workshops and focus groups, a number of research techniques were used:

- St Vincent de Paul provided presentations on demand tariffs and their implications;
- Discussions were facilitated by SACOSS, with key insights being recorded, and;
- Quantitative analysis for support of initiatives was conducted through a 'hands raised' count in the focus group sessions.

Participants of the workshops and focus groups were informed that:

- The SAPN demand tariff proposal could see consumers paying a higher, same or lower amount on their electricity bills;
- The proposed changes are not definite and will not commence until 2017 at the earliest,
 and:
- The introduction of the changes will be gradual, so it is anticipated that not everyone will be impacted immediately.

Participants were given the opportunity to look at the current arrangements for electricity charges. An example of an electricity bill (Appendix A) was provided to participants and explanations were given about the supply charge and the usage charge and how these are calculated.

Participants were then informed about how the proposed demand tariff arrangement would work. This arrangement was explained as follows:

- Consumers would still be charged a supply and consumption charge, however a 3rd component would be added to the bill the demand charge;
- A demand charge essentially measures how many appliances are used at once. So a higher demand will occur for example when a consumer has an air conditioner, washing machine and oven running at the same time;
- The higher the demand, the higher the bill;
- Demand is charged according to the time of year and is higher in the peak period, November to March and lower in the shoulder period, April to October;
- Demand is measured in kilowatts and consumers will be charged for their demand each month;
- Within a month consumers are charged for the highest demand over a half hour period between 4-9pm. Consumers need to be careful about appliance use during these times.

A visual diagram of the relationship between multiple appliance usage in summer and SA's peak demand on the electricity infrastructure was presented by St Vincent de Paul to illustrate the rationale behind demand tariffs and the possible impacts of consumer behaviour.

Participants were provided with a case study of a residential consumer (Appendix B) and a discussion of the property type, features, electricity profile, load characteristics and residential demand tariff

outcome took place. Participants were asked if anyone fits the case study situation and if there is capacity to shift demand. Participants were also asked to consider the impacts of a \$50/month increase in summer and how this would affect household budgets.

Participants were provided with a business case study (Appendix C) and a discussion of the business type, electricity type, load characteristics and demand tariff outcome took place. Participants were asked the following questions:

- Is it likely the business could shift their load?
- Is electricity likely to be a major expense for the business?
- What are the economic consequences for the business if this were to go ahead; can the business absorb the costs?
- What are the economic consequences for SA is this was to go ahead?

Participants were told the following likely impacts of the proposed demand tariff arrangements on households and businesses:

- Approximately 50% of residential households will be worse off;
- Approximately 50% of businesses will be worse off and;
- Of those businesses whose annual usage is between 10,000 40,000kWh, 19% will face more than 50% increases.

A discussion on the reasons behind why the changes to current tariff arrangements may go ahead took place and participants were informed that:

- Demand tariffs better reflect underlying costs and incentivise consumers to reduce their demand at peak times, and:
- Consumers may be able to reduce their overall bills by shifting their demand, in which case bills will come down.

Participants were then asked if they thought the benefits are outweighed by the costs and is it important for consumers to understand what the price impacts are if they shift their demand?

Workshops:

Following information sharing, participants were asked:

1. How will communication with clients go regarding the changes to tariff arrangements?

- 2. What do you think about SAPN's reasoning that the introduction of the proposed demand tariff arrangements will decrease costs for consumers in the future?
- 3. Is the loading up of a bill problematic for clients?

Focus groups:

Following information sharing, participants were asked:

- 1. Do you want to change to a new tariff arrangement?
- 2. Do you support demand tariffs?
- 3. What do you think about SAPN's reasoning that the introduction of the proposed demand tariff arrangements will decrease costs for consumers in the future?

Finally, workshop and focus group participants were also asked to consider a range of measures that SAPN could implement alongside the introduction of demand tariffs. These are outlined in the final section of this report.

Interviews:

Business consumer representatives were provided with an overview of discussion during the workshops and focus groups. Interviews explored business attitudes to SAPN's proposals as well as measures to support the introduction of demand tariffs. Interviews with business representatives did not comprehensively explore the residential demand tariff and hence this report reflects only consumer and consumer representative perspectives on the residential demand tariff issues.

Overview of Consumer Themes

Overall, there is limited support for the mandatory introduction of demand tariffs.

Consumer representatives understood the rationale behind a demand tariff arrangement but highlighted significant concerns with the current SAPN proposal and the potential for these arrangements to negatively impact their clients.

Whilst most consumers also understood the rationale behind demand tariffs, the majority did not want to change to a new tariff arrangement. 90% of participants did not support demand tariffs and 10% were undecided.

Business consumer representatives indicated that energy can be as much as 50% of costs for some businesses. They indicated that SAPN's proposals were a major impact on some small businesses and one representative indicated they could lead to some businesses closing, where the businesses were negatively impacted by 50% or more increases.

Consumer Themes

Across the three participant activities, seven key themes emerged from participant responses as outlined below:

Fear of the Design

The overwhelming majority of residential focussed participants expressed concern about the design of a demand tariff, even where there was no price loaded in to the demand charge. It was indicated that the structure of the tariff combined with the reality of household living needs made it very difficult to gain any benefit from the tariff design. Participants strongly maintained that appliance use during peak times was largely out of their control, and they were generally using only what was needed at that time of the day or what they had little control over (e.g. children using electronic devices after school, charging of mobile phones, etc).

Strong concern was also raised about the issue of residential demand being charged for the highest single use during a half hour period. Participants were alarmed at the prospect of having to pay a demand charge which may have been incurred by appliance use during one single time event.

The following issues were directly raised by participants:

- Strong concern for vulnerable households;
- Proposed practice of charging for a month where demand could be reached in 1 x ½ hour session seems unfair;
- Medical heating and cooling concession is inadequate to account for electricity use during peak times;
- The design is scary never mind about the prices, and;
- Majority of consumers did not support demand tariffs in the current form proposed but were more receptive if they had the choice of staying with current or moving to new arrangements and with more options available if the decision to move was made.

Impacts on Organisations and Businesses

Participants universally expressed strong concern about the impact of the proposed tariffs on organisations and businesses. There was heated discussion about negative economic growth, employment and price of goods impacts. It was agreed that the changes should not go ahead if they

were to have the significant negative impact that is currently anticipated. Although it was recognised by residential consumers that some businesses would be better off as a result of the proposed changes, the cost of some businesses potentially closing or putting up prices was seen as far outweighing the gain. The serious economic situation of South Australia was recognised by all participants and participants were generally opposed to any tariff changes which would exacerbate negative economic outcomes.

Business consumer representatives indicated that energy can be as much as 50% of costs for some businesses. They indicated that SAPN's proposals were a major impact on some small businesses and one representative indicated they could lead to some businesses closing, where the businesses were negatively impacted by 50% or more increases.

The following issues were directly raised by participants:

- Huge concerns for how businesses will be affected, especially the potential for unemployment to increase as businesses close their doors;
- Concern about state economic growth;
- Capacity of Not for profit sector to pay increased charges. Higher running costs means less staff, and;
- Concern over higher prices being charged by businesses to cover increased power costs.

Summer Shocks

The seasonal impacts of a residential demand tariff were explained to consumers and consumer representatives to indicate that there are likely to be significant summer bill increases for some households, relative to non-summer bills. Participants were asked to indicate whether they thought this would present issues for them or their clients. There was consensus that increased bills during summer would present issues for low income and vulnerable households, including those on Centrelink payments and families with children due to the Christmas period.

It Works for Some

Consumer and consumer representative participants were presented with a scenario of some consumers moving to a demand tariff while the majority remained on the current inclining block tariff. The presentation posited that those who moved to a demand tariff would both benefit from the tariff and be likely to take advantage of the cheaper energy during non-peak times. It was put

that this would lower costs for the network while enabling it to maintain its revenue. These participants universally agreed that this was a highly desirable scenario.

The following issues were directly raised by participants:

- Not all consumers need to change for the community to be rewarded, and;
- Not all consumers need to make the transition to demand tariffs for the overall peak to decrease.

Lack of Trust

A section of the workshop and focus group discussions was centred on the justifications for the proposed changes. It was put to the participants that if SAPN costs could be reduced by reduced demand at peak times, then electricity prices could come down. There was overwhelming scepticism about this proposition and participants unanimously doubted that reduced prices would be an outcome of the new demand tariffs. This suggested a significant break down in trust between participants and SAPN.

The following issues were directly raised by participants:

- The value proposition for consumers is not apparent;
- People will not trust that SAPN will lower costs in the future and there is a high degree of scepticism from consumers;
- No trust from participants with the proposition that SAPN's revenue will come down and hence bills will come down in the future;
- Trust between SAPN and consumers needs to be built via rewards;
- There needs to be a mechanism for SAPN to report back to consumers, and;
- SAPN needs to clarify if average load profiling with current accumulation meters will be used.

Behavioural Responses

The argument that the residential demand tariff would drive behaviour change was explored during the workshops and focus groups. The expectations about consumer behaviour under a demand tariff were generally considered to be out of step with the reality of how consumers would behave in practice.

Participants expressed the view that it was very difficult to minimise appliance use during peak times. Some indicated that it may be possible for a single person household to manage it but there was general agreement that this was extremely difficult in family situations. A strong concern was raised about the impact on carers and parents who are responsible for policing appliance use. There was a strong feeling that this could drive negative behaviours towards the person who was responsible in the household for the policing.

Concern was also expressed for consumers who currently already minimise their appliance use, particularly air conditioners and heaters in hot and cold weather. Participants generally agreed that as the demand tariff was complex to explain, the result might be that consumers increasingly ration their energy use for fear of increased energy bills.

Consumer representatives raised the issue of how challenging it is to encourage behavioural change amongst their client base.

The following issues were directly raised by participants:

- Behavioural change for clients is very challenging
 - Poor housing stock, changing consumption behaviours is not realistic;
- Could lead to increased energy rationing and fear of costs;
- It's hard to budget on a budget;
- High bills is not always enough to change behaviour;
- Empower clients to get control of consumption;
- Mixed response to being asked about minimising consumption between 4pm 9pm
 - Single person household may be able to manage it
 - Very difficult for families, working households, consumers with health issues;
- Flexibility of consumers to respond is difficult;
- The need to develop new behaviours in new houses, depending upon appliances, and;
- Pressure on people in caring and parenting roles.

Complexity of the Market

Complexity of the energy market continues to be a significant concern for residential consumers and residential consumer representatives. Feedback from both groups indicates the current tariff design is not well understood. Adding a demand tariff component to residential consumer bills is likely to

exacerbate this, particularly as the interplay between supply, usage and demand charges is not easily understood.

Complexity is a barrier for consumers to respond to demand tariffs in a way that delivers benefits. Some participants also expressed the view that as the SAPN proposal only covers network charges, the responses from energy retailers potentially adds another dimension of complexity to consumer bills.

Further concern was also expressed about whether specific groups could actively engage in a complex market. These groups included young people leaving home, new entrants to the market, people moving from interstate, new arrivals to Australia and members of culturally and linguistically diverse communities.

The following issues were directly raised by participants:

- Community understanding of existing arrangements is not there;
- Young people leaving home, new arrivals to Australia, new people in the market and people moving from other states may not understand the complexity of the market;
- Adding demand tariffs to bills will make reading bills even more complicated;
- The interplay between supply, usage and demand charges will be complex;
- Network charges are one component of bills and it is not known how retailers will respond;
- Complex costings are hard for clients;
- People may not have the capacity to understand the associated issues and may be unable to respond to demand tariffs in a way that delivers a benefit;
- The community is diverse, and;
- Pricing is hard to understand.

Education

Participants from the workshops and focus groups placed significant emphasis on the importance of education about demand tariffs for the residential consumers. Whilst most participants could understand the rationale of demand tariffs and their potential impacts, as they were explained during the sessions, concerns about all consumers understanding this information were very strong.

Consumer representatives raised questions regarding who would take responsibility for educating the community about demand tariffs and also stated that adequate resources must be allocated to all education programs and processes, including the production of program materials.

The following issues were directly raised by participants:

- While understanding the rationale behind the theory of demand tariffs, significant concerns were raised about all consumers understanding them;
- Responsibility for and adequate resourcing of education are needed, and;
- Educative processes will be critical especially when consumers are able to sign up for solar and battery arrangements.

Measures to Support the Introduction of Demand Tariffs

The following measures were put to the participants to assess their support:

- 1. Voluntary opt in for new and revised tariffs, with a commitment from SAPN that opt in will remain.
- 2. A suite of tariff options (time of use; capacity; demand; inclining block; peak, shoulder and off peak).
- 3. Phased in approach i.e. 20% cost reflective and 80% inclining block for the first year.
- 4. In home devices (i.e. the glowing Orb which goes red when your demand is too high).
- 5. Trial periods.
- 6. Threshold limit (rather than demand being charged in blocks, there would be a threshold above which demand would start to be charged).
- 7. Ghost billing (allows consumers to see a tangible comparison between current tariff structures and costs and demand tariffs, so consumers could see how they would fare before they commit to a demand tariff).
- 8. Support for limiting demand tariffs to business days only, excluding public holidays and weekends.

Whilst all of the options were positively supported, the highest degree of support was for a voluntary opt in for new and revised tariffs. Consumer participants strongly indicated a high degree of fear and apprehension about the residential demand tariff and were very sceptical about behaviour modification to reduce demand being easy or possible. There was a strong feeling that residential consumers would like to remain on an inclining block tariff.

However, consumers could see some of the positive outcomes of a demand tariff and were much more willing to consider it under a voluntary opt in approach. Participants considered that under an opt in approach, trial periods and ghost billing had appeal as then consumers could make informed decisions about whether a demand tariff was right for them.

Business consumer representatives were favourable towards a voluntary opt in approach coupled with ghost billing. Information during an opt in period was seen as vital in ensuring that businesses could make informed decisions about which tariff was most suitable for them.

There was strong support for the residential demand tariff not to apply during public holidays.

The following issues were directly raised by participants:

- How much electricity can I use where it is affordable? How much can I use before I go above, need cut off points?, and;
- Visibility of real time demand levels is critical.