



**South Australian Council of Social Service Submission  
to the Senate Select Committee Inquiry into Electricity Prices**

September 2012

*South Australian Council of Social Service Submission to the Senate Select Committee Inquiry into  
Electricity Prices*  
September 2012

ISBN 978-1-921982-16-3

First published in September 2012 by the  
South Australian Council of Social Service

47 King William Road  
Unley, SA, 5061 Australia  
Ph (08) 8305 4222  
Fax (08) 8272 9500  
Email: [sacoss@sacoss.org.au](mailto:sacoss@sacoss.org.au)  
Website: [www.sacoss.org.au](http://www.sacoss.org.au)

Written by Jo De Silva, South Australian Council of Social Service and Andrew Nance, St Kitts Associates.

© South Australian Council of Social Service, 2012

This publication is copyright. Apart from fair dealing for the purpose of private study, research, criticism or review, as permitted under the Copyright Act, no part may be reproduced by any process without written permission. Enquiries should be addressed to the Communications Officer, South Australian Council of Social Service.

## Executive Summary

In the current climate, there is no doubt that low income households are facing increasing cost of living pressures and many are struggling financially. Electricity prices are a significant part of these cost pressures and the South Australian Council of Social Service (SACOSS) believes that every effort should be made to ensure this essential service is affordable and that any price increases are kept to the minimum necessary.

The comparatively high price of electricity in South Australia has received significant public attention. For example, the Energy Users Association of Australia has reported that South Australia has the third highest household electricity prices in the world<sup>1</sup>. This is illustrated in Figure 1 below, which indicates that South Australian electricity prices rank only lower than Denmark and Germany in the world, as well as rank highest in Australia.

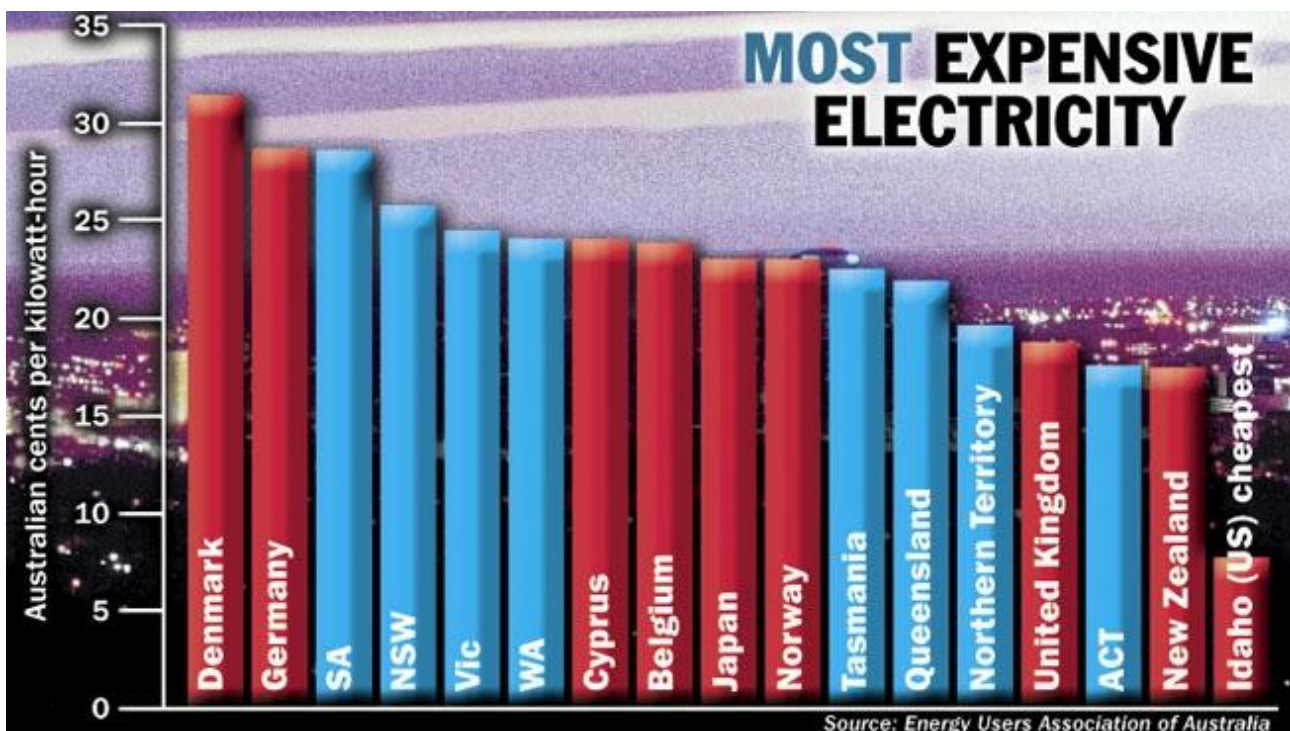


Figure 1: International comparison of household electricity prices

Source: Adelaide Advertiser 21/3/2012<sup>2</sup>

The SACOSS submission to the current Electricity Prices Inquiry considers the key causes of increasing electricity prices, with a South Australian focus. The two causes considered in detail in this submission are:

1. Growing peak demand
2. The limited ability of 'competition' to ensure efficient outcomes for consumers

In recognition of the major role that these causes play in increasing electricity prices, SACOSS proposes that the Senate Select Committee on Electricity Prices:

<sup>1</sup> Energy Users Association of Australia (2012) Electricity Prices in Australia: An International Comparison <http://www.euaa.com.au/wp-content/uploads/2012/04/FINAL-INTERNATIONAL-PRICE-COMPARISON-FOR-PUBLIC-RELEASE-19-MARCH-2012.pdf> (accessed 5 September, 2012)

<sup>2</sup> <http://www.adelaidenow.com.au/news/south-australia/power-prices-to-be-highest-in-the-world/story-e6frea83-1226305741810> (accessed 5 September, 2012)

- Focuses attention on increasing network costs and wholesale energy costs as the major costs driving electricity price increases.

At a national level, SACOSS also considers the following issues to be extremely relevant in the South Australian context:

- The incentive for network businesses to increase the size of the Regulated Asset Base (*considered in this submission under the heading “Network transmission and distribution investment decision making”*)
- The current consumer advocacy arrangements which operate to the disadvantage of consumers
- The nationwide differences and inconsistencies in concessions regimes

**SACOSS submits that the Senate Select Committee on Electricity Prices:**

1. Focuses attention on increasing network costs and wholesale energy costs as the major costs driving electricity price increases.
2. Strongly considers the issue of market power during the course of its Inquiry.
3. Supports a thorough and consumer-focussed inquiry into the structure of the South Australian energy market and the implications for competition and market power.
4. Endorses action by the Australian Government to both identify barriers to minimise the costs associated with increasing peak demand and develop measures to overcome the identified barriers.
5. Reviews the proposals contained in the AEMC Economic Regulation of Network Service Providers draft determination which relate to provision of some additional powers to the AER to exclude some expenditure from the Regulatory Asset Base.
6. Focuses attention on key aspects of regulatory design which may be contributing to inefficient network expenditure.
7. Meets with the National Energy Consumer Advocacy Body Working Group.
8. Affirms a view that the interests of consumers must be the dominant feature of all legislative and regulatory controls.
9. Notes the power imbalance that exists when one contrasts the resources available to industry to those available for advocacy on behalf of consumers.
10. Endorses the need for additional resources to be made available so as to ensure consumers’ interests can be properly represented at every level of sector activity.
11. Supports the establishment of cost reflective tariffs for public and social housing tenants in recognition of the fact that these consumers have limited capacity to generate peak demand associated with space cooling and are currently providing a cross-subsidy for those with greater capacity.
12. Supports the installation of meters in a statistically valid sample of public housing units at no cost to the customers, with a view to establishing a cost reflective tariff for this cohort.
13. Supports a national review of concessions.

## Contents

Executive Summary .....	i
Introduction .....	1
<i>Inquiry Terms of Reference</i> .....	2
Key causes of electricity price increases.....	3
<i>Summary</i> .....	7
Limited ability of 'competition' to ensure efficient outcomes for consumers .....	8
<i>Limited competition</i> .....	8
<i>Market Observations</i> .....	9
<i>Proposals</i> .....	11
Minimising the costs associated with increasing peak demand.....	12
Network transmission and distribution investment decision making .....	13
<i>Proposals</i> .....	13
Opportunities for improved customer advocacy and representation arrangements .....	14
<i>Proposals</i> .....	14
Peak demand and cost reflective pricing .....	15
<i>A cross-subsidy</i> .....	15
<i>Diverse load profiles of residential users</i> .....	15
<i>Public and social housing tenants</i> .....	16
<i>Proposals</i> .....	17
National Review of Concessions .....	19
<i>Proposals</i> .....	19

## Introduction

As the peak non-government representative body for the health and community services sector in South Australia, the South Australian Council of Social Service welcomes the opportunity to provide a submission to the Senate Select Committee Inquiry into Electricity Prices.

SACOSS believes in justice, opportunity and shared wealth for all South Australians. With a strong membership base representing a broad range of interests in the social services arena, our core activities include: analysing social policy and advocating on behalf of vulnerable and disadvantaged South Australians; providing independent information and commentary; and assisting the ongoing development of the health and community services sector.

As part of our concern and advocacy for vulnerable and disadvantaged South Australians, SACOSS considers electricity prices through the lens of their impacts on low income households. Electricity prices are a significant part of increasing cost of living pressures for this group. In South Australia, this is compounded by the fact that not only do South Australians have the highest prices in Australia but they are also facing the highest rate of increases (as illustrated in Figure 2 below).

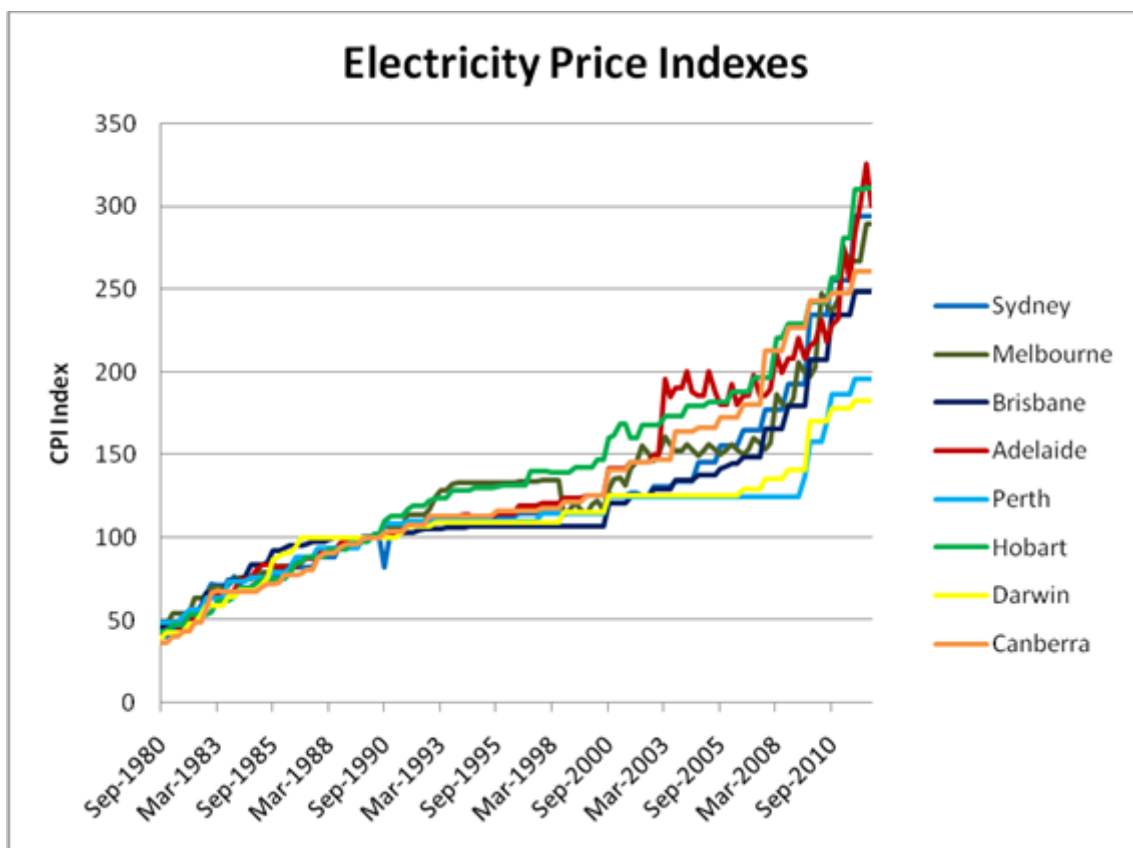


Figure 2: Electricity Price Indexes

Source: ABS (2012)<sup>3</sup>

SACOSS believes there are specific actions which can be taken to ensure this essential service is affordable and that any price increases are kept to the minimum necessary.

Given the significance of a unique set of jurisdictional factors, the main focus of the SACOSS submission is South Australian specific issues. Accordingly, SACOSS highlights the issues of peak

<sup>3</sup> ABS (2012), 6401.0 - Consumer Price Index, Australia, June Qtr 2012. Australian Bureau of Statistics, Canberra.

demand and limited competition by outlining opportunities for positive action to address these issues.

### ***Inquiry Terms of Reference***

The SACOSS Submission is a response to The Inquiry Terms of Reference, specifically 1a, 1b, 1dii and 1f, as briefly summarised below:

#### **1a Identification of the key causes of electricity price increases over recent years and those likely in the future**

The SACOSS view of key causes of electricity price rises in South Australia is that increasing network costs and wholesale energy costs are the major costs driving electricity price increases. Issues underlying these increases in costs fall under three major headings:

1. Peak demand
2. The limited ability of 'competition' to ensure efficient outcomes for consumers
3. The incentive for network businesses to increase the size of the Regulated Asset Base (*considered in this submission under the heading "Network transmission and distribution investment decision making"*)

#### **1b Legislative and regulatory arrangements and drivers in relation to network transmission and distribution investment decision making and the consequent impacts on electricity bills, and on the long term interests of consumers**

SACOSS is extremely concerned about network transmission and distribution investment decision making, particularly in relation to their consequent impact on electricity bills. This submission recognises that rising demand and ageing assets are factors that partially justify higher expenditure, while confirming that other factors such as regulatory design and regulatory conduct are also important determinants of higher expenditure.

#### **1d Investigation of mechanisms that could assist households and business to reduce their energy costs, including ii) the opportunities for improved customer advocacy and representation arrangements bringing together current diffuse consumer representation around the country**

SACOSS believes that current consumer advocacy arrangements operate to the severe disadvantage of consumers. There is very limited funding invested – especially when contrasted to the resources available to industry - in nurturing and supporting jurisdictional as well as national consumer advocacy and consequently, a clear lack of a both local and national voice for energy consumers. Moreover, given the very small funding pool currently available to support advocacy directed at protecting consumer interests, there are very limited means to ensure current advocacy efforts can be better coordinated at a national level.

#### **1f Any related matter**

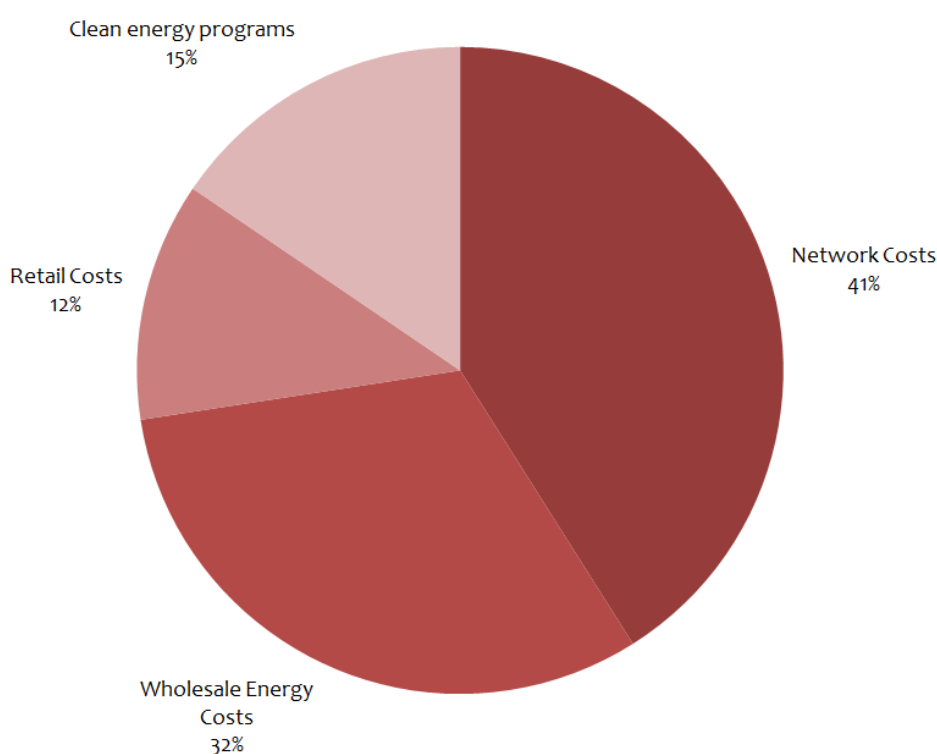
This submission explores the strong case which has emerged for the establishment of cost reflective tariffs for a select buying group of households: that of public and social housing tenants. While these consumers have limited capacity to generate peak demand associated with space cooling, they are currently providing a cross-subsidy for those with greater capacity.

Concessions are a vital form of income support for economically vulnerable people, yet it has become clear to SACOSS that the current system of concessions is not working. This submission considers the range of services for which concessions are provided, as well as the nationwide differences, and proposes a national review of concessions.

## Key causes of electricity price increases

When paying an electricity bill, users end up paying for different segments of the electricity system. For the average South Australian residential consumer (5000kWh per annum) paying in excess of \$1800 per annum on electricity, the final bill as at July 2012 is made up of GST and:

The costs of generating the electricity consumed	<b>32%</b>
The cost of transporting the electricity to the home	<b>41%</b>
The costs of retailing electricity	<b>12%</b>
The costs of carbon and clean energy initiatives	<b>15%</b>



**Figure 3: Components of an average Electricity Bill**

Network costs and Wholesale Energy costs are by far the largest segments, making up a total of 73% of the electricity bill.

Each segment is discussed in more detail below.

### **(a) Network Costs**

This is the combined costs of transmitting (in South Australia, ElectraNet and EIC, owners of the Murraylink Interconnector) AND distributing electricity (in South Australia, ETSA Utilities - SA Power Networks from Sep 3).

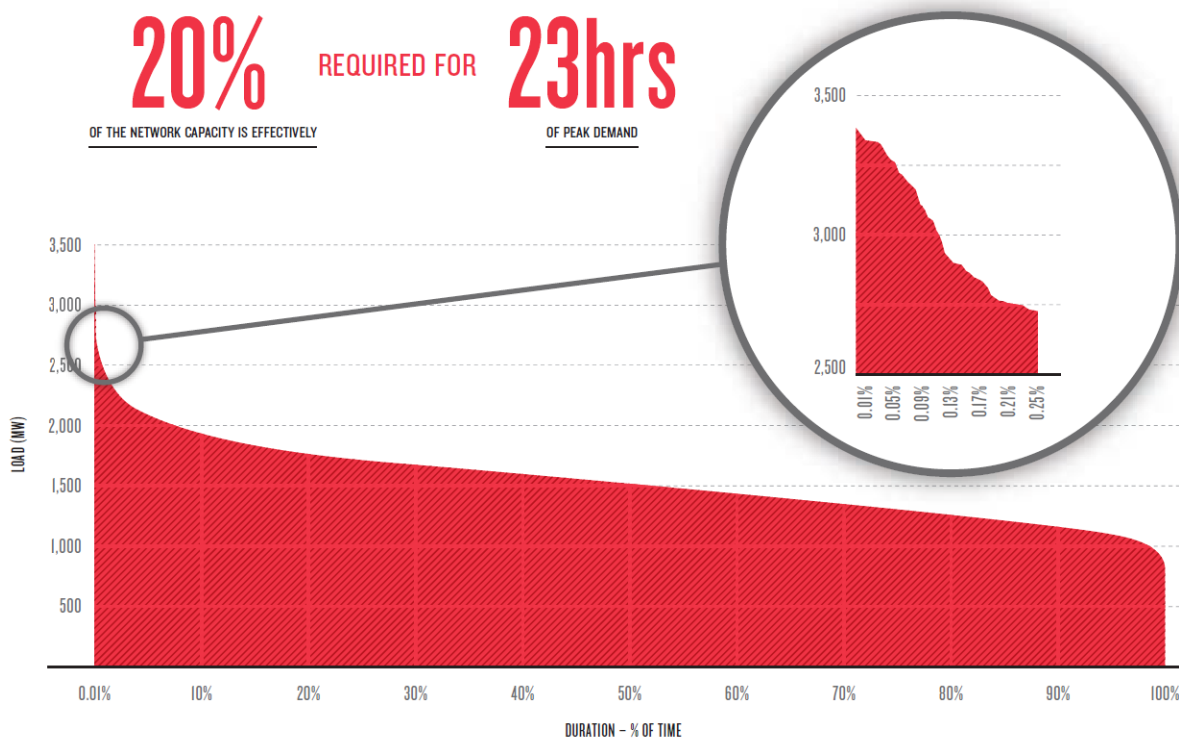
The key driver of costs is what is known as the RAB – the Regulatory Asset Base. This is the value assigned to the assets – poles, wires, transformers, substations – on which the businesses are guaranteed a regulated rate of return. The other key costs – operating costs have historically also risen in line with the RAB.



The businesses have every incentive to increase the size of their RAB. Once an approved investment is made, the RAB grows in value. Every dollar in the RAB is a guaranteed investment by the business.

The key drivers of investment are growth in (the location and timing of) demand and the need to refurbish or replace ageing or failed assets. Increasing demand can also lead to the premature failure of assets.

According to ETSA Utilities<sup>4</sup>, 20% of Network Capacity in South Australia is effectively required for just 23 hours of peak demand per annum.

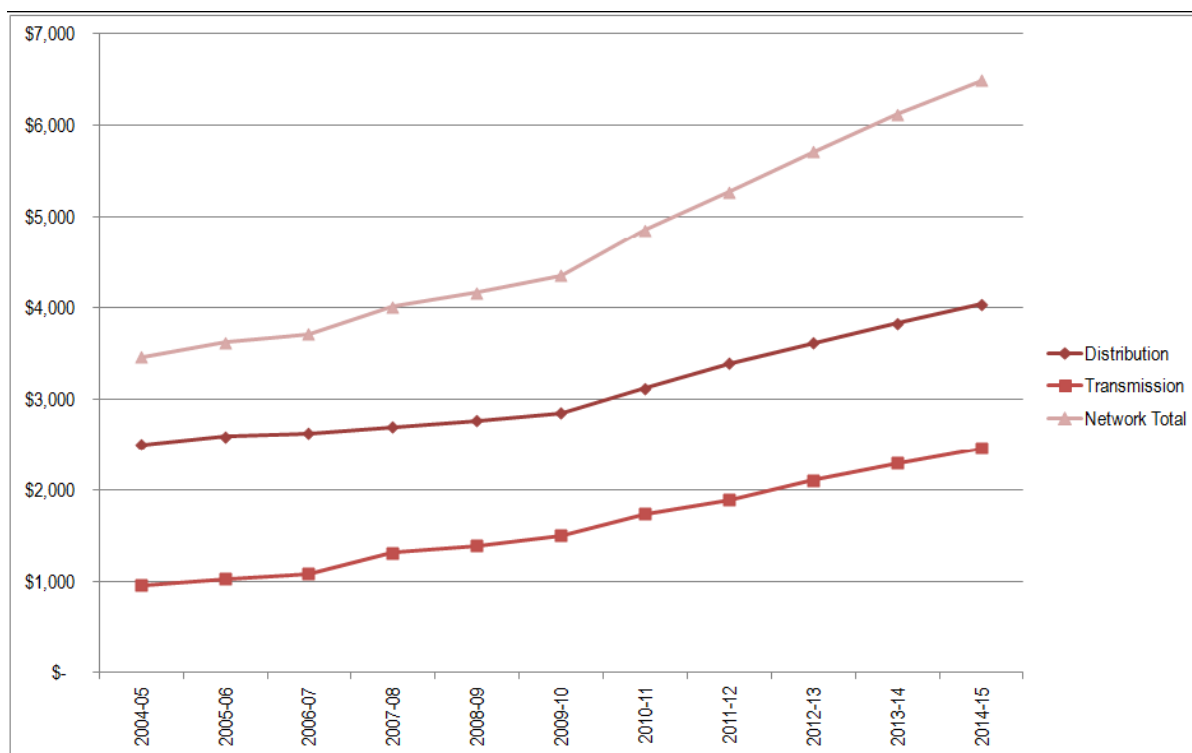


SOURCE: ETSA UTILITIES FROM AEMO DEMAND DATA FOR SA, 2011.

**Figure 4: Network Capacity and Peak Demand in South Australia**

To illustrate this further, the following figure shows the growth in the regulatory asset base since 2004-5 and projections from AER Regulatory Documents (preliminary analysis only):

<sup>4</sup> ETSA Utilities (2012) *Annual Report*  
[http://etsautilities.com.au/centric/about\\_us/corporate\\_information/annual\\_reports.jsp](http://etsautilities.com.au/centric/about_us/corporate_information/annual_reports.jsp)



**Figure 5: South Australian Electricity Network Service Providers Regulatory Asset Bases**

**Source:** St Kitts Associates

These sunk costs are recouped from network users.

**(b) Wholesale Energy Costs**

These costs include wholesale pool costs as well as the cost of ‘risk management’ in the forward contract market.

South Australia generates around 50% of its electricity from Natural Gas. Around 60% of the gas delivered to South Australia from the Cooper and Otway Basins is used in electricity generation. The price of electricity in SA is strongly linked to the price of Gas.

Wholesale costs are also influenced by the level of competition in the market. South Australia’s entire fleet of gas generators is owned by the four largest electricity retailers: AGL, Origin, TRUenergy and International Power/GDF Suez (Simply Energy).

With the coal-fired power stations of Port Augusta now closed except for summer, South Australia is effectively a hybrid wind, solar and gas-fired power system.

There is evidence of the exercise of ‘market power’<sup>5</sup> and limitations on competition. The peakiness in demand creates opportunities for the exercise of market power.

Wholesale costs are also heavily influenced by the peakiness of demand.

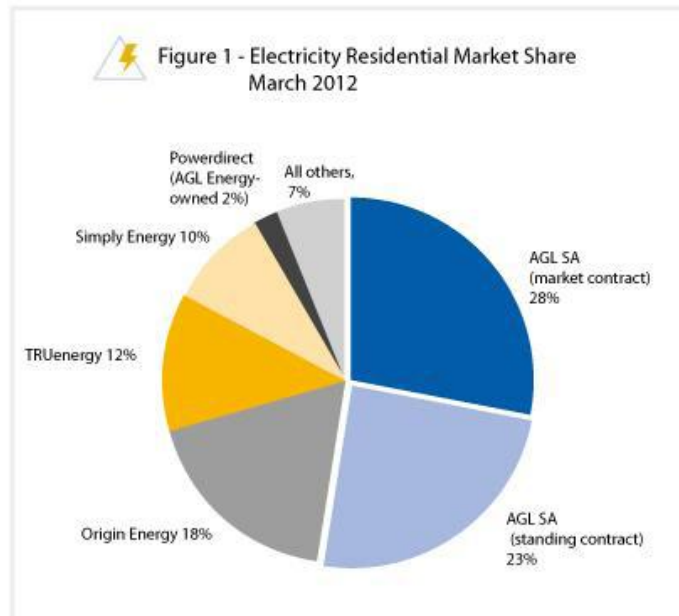
**(c) Retail Costs:**

Retailers are also responsible for buying electricity in the wholesale market (see above, including managing the risk of volatile prices) as well as provide billing and administrative functions.

<sup>5</sup> Power exercised with the purpose or effect of increasing wholesale spot and contract prices

The retail market is exposed to competition and it is competition that will ensure that this component of costs is kept down. However, in South Australia the residential retail market is dominated by four businesses.

These same four businesses dominate gas sales and electricity generation.



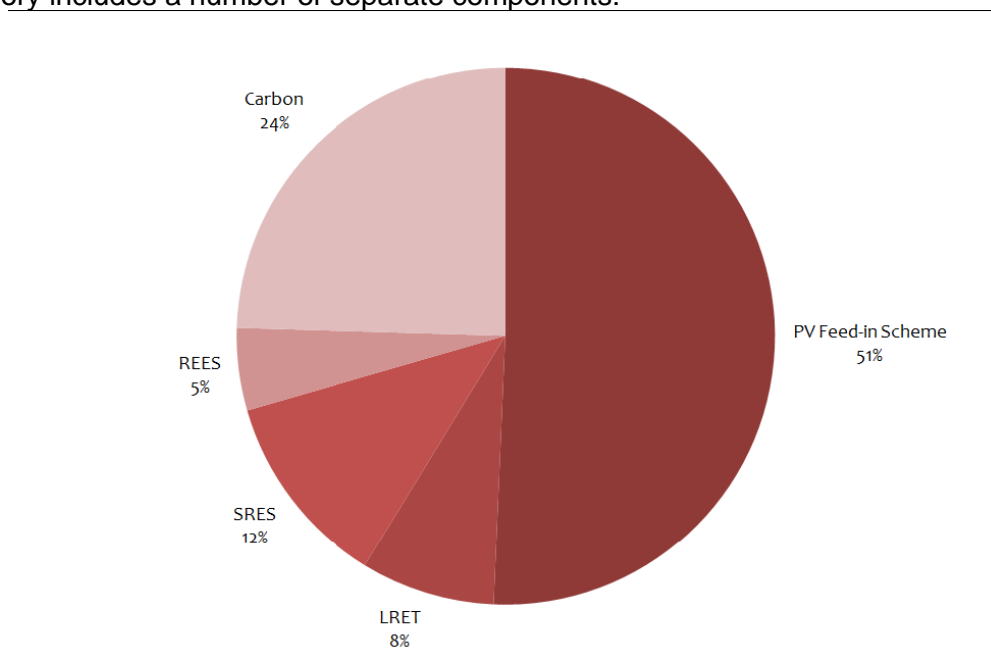
**Figure 6: Electricity Residential Market Share in South Australia, March 2012**

**Source: ESCOSA Quarterly Statistical Reports<sup>6</sup>**

SACOSS believes competition in South Australia is limited.

**(d) Clean Energy Initiatives:**

This category includes a number of separate components:



**Figure 7: Components of Clean Energy Program Costs**

<sup>6</sup> [www.escosa.sa.gov.au/Content.aspx?p=354](http://www.escosa.sa.gov.au/Content.aspx?p=354)

In South Australia, payments under the solar feed-in scheme (via ETSA Utilities' network charges) dominate this category in 2012-13 but will fall back next year to be more like the carbon price. SRES and LRET are the two parts of the Enhanced National Mandatory Renewable Energy Target (RET). SRES will fall away as the multiplier for solar systems is would back. LRET will grow as Australia ramps up to 20% renewables nationally by 2020. Contrary to much of the sensationalist commentary on the carbon tax, the actual contribution of the carbon price to rising electricity prices is relatively small.

It is reasonable to expect this whole category to fall back from 15% to closer to 10% in coming years. SACOSS considers that 10% is a reasonable upper limit for a market-wide premium to green the electricity supply chain. However, SACOSS is concerned that this is not affordable for every consumer and is keen to see that the most vulnerable of consumers are relieved from the obligation of making this contribution.

### **Summary**

The above consideration of key causes of electricity price rises in South Australia illustrates that increasing network costs and wholesale energy costs are the major costs driving electricity price increases.

As discussed, issues underlying these increases in costs are summarised under three major headings:

1. The limited ability of 'competition' to ensure efficient outcomes for consumers
2. The incentive for network businesses to increase the size of the Regulated Asset Base (*considered in this submission under the heading "Network transmission and distribution investment decision making"*)
3. Peak demand

SACOSS will address each of these issues in this submission.

## Limited ability of 'competition' to ensure efficient outcomes for consumers

While the South Australian market, particularly for small consumers, has limited competition, the concentration of the main players in a relatively small market with interconnection that is often constrained at peak times, results in an environment where market power has the potential to be exercised<sup>7</sup>. The 'economic withholding' of capacity in the region by Torrens Island Power Station (TIPS) and more recently by Northern/Playford has been well documented as has their pivotal positions in the regional generation market.

### **Limited competition**

The following is intended to paint a picture of vertical integration in the SA region of the NEM through a focus on the five main downstream entities in South Australia. These five players are:

- AGL Energy
- Origin Energy
- International Power – GDF Suez and their retail arm Simply Energy
- TRUenergy
- Alinta Energy

Noting that:

- Alinta Energy Retail Sales (AERS) is a recent entrant to the retail energy market having been granted a retail license by ESCOSA in 2011, the four main players occupy 94% of the residential electricity retail sector;
- The same four players occupy the entire market in the residential Gas sector; and
- in the generation market the five own or control the entire dispatchable generation fleet, 56% of the state's wind capacity (MW) and 92% of all generation sales (MWh).

It can be demonstrated that the vertically integrated generator-retailer (or 'gentailer' model) is the dominant form of market participant and exists in concentrations that, in other markets, would trigger concerns over the level of competition present, as the following analysis demonstrates.

The relevant market shares are shown in the following table (Table 1 data has been sourced from ESCOSA, AER and AEMO). The table also calculates a Herfindahl-Hirschman Index (HHI) for each sector. CEG (2012) describes the HHI as:

*"... calculated by adding the sum of the squares of the market shares of each firm within the market. Markets with higher HHIs are considered to be more likely to suffer from weaker competition, although whether this is the case will depend on a wide range of other factors impacting competition. The ACCC's Merger Guidelines state that the ACCC will be less likely to identify competition concerns when the HHI is less than 2000."*<sup>8</sup>

---

<sup>7</sup> In this context, 'Market power' refers to power exercised with the purpose or effect of increasing wholesale spot and contract prices remains a key issue in South Australia.

<sup>8</sup> CEG (2012) Barriers to energy into electricity generation at [www.aemc.gov.au/Media/docs/CEG-Report-ece57d9c-399c-4724-b5f0-a6ba319dca83-0.PDF](http://www.aemc.gov.au/Media/docs/CEG-Report-ece57d9c-399c-4724-b5f0-a6ba319dca83-0.PDF) p.30. The ACCC's merger guidelines are available here:

[www.accc.gov.au/content/index.phtml/itemId/809866](http://www.accc.gov.au/content/index.phtml/itemId/809866): "... As part of its overall assessment of a merger, the ACCC will take into account the HHI, as a preliminary indicator of the likelihood that the merger will raise competition concerns requiring more extensive analysis." ACCC (2008) p.37

	Small Customer Market Share (2010-11)	Dispatchable MW	Wind MW	Total GWh Generated
AGL	55%	36%	36%	24%
Origin Energy	19%	13%	0%	11%
TRUenergy	12%	6%	15%	3%
Simply	8%	23%	4%	22%
Alinta Energy	0%	21%	0%	32%
HHI	3555	2509	1567	2241

**Table 1: Electricity Market Concentrations, SA Region 2010-11**

### **Market Observations**

To validate the structural potential for the exercise of market power, the AER's State of The Energy Market 2011 makes a number of relevant observations regarding AGL's "strategic" behaviour at both the high and low ends of the pool price range<sup>9</sup>:

*"Periods of sustained high demand and strategic withholding of generation capacity by AGL Energy contributed to three years of very high average spot prices in South Australia, from 2007 – 08 to 2009 – 10."*<sup>10</sup>

*"At \$42 per MWh, the average spot price in South Australia for 2010 – 11 was almost 50 per cent lower than in 2009 – 10. The price exceeded \$5000 per MWh in nine trading intervals, down significantly on the previous year (figure 1.9). A mild summer, with only a few days above 40 degrees, affected this outcome. Another contributing factor was South Australia's 177 trading intervals with negative prices in 2010 – 11, up from 86 in the previous year and the highest annual number ever recorded for any region. Wind generators sometimes bid negative prices to ensure dispatch, relying on the value of the renewable energy certificates they earn to cover their costs. But several instances of prices near the – \$1000 market floor were driven by AGL Energy rebidding large amounts of capacity at times of high wind generation and low demand. The negative prices caused other generators, including wind farms, to shut down."*<sup>11</sup>

*"...repeated instances of negative prices increase volatility, which may discourage entry by competing independent generators and retailers."*<sup>12</sup>

Further, SACOSS recently commissioned work by energy consultants Carbon Market Economics that makes some important observations about the spot and contract markets in South Australia<sup>13</sup>. In summary, CME has found that South Australia's higher than average volume-weighted spot prices can be attributed to a small number of high priced events and, in turn, these high priced events can be traced to periods not of scarcity of supply but of the economic withholding of capacity of un-hedged pivotal generators. The implication of these findings are that both spot and

<sup>9</sup> AER (2011) State of the Energy Market – 2011 <http://www.aer.gov.au/node/6311>

<sup>10</sup> AER (2011) p.13.

<sup>11</sup> AER (2011) p.36.

<sup>12</sup> AER (2011) p.14.

<sup>13</sup> CME (2012) *Electricity Standing Contract – Wholesale Cost Investigation* at <http://www.escosa.sa.gov.au/library/120727-ElectricityStandingContractWEC-DiscussionPaperSubmission-SACOSS-CMEAdvice.pdf> (accessed 7 September, 2012).

contract prices for the Jan-Mar quarter (referred to as Q1) are the principal determinants of the wholesale energy costs of retailers in SA. And, further, that the South Australian market structure (a concentration of vertically integrated generator-retailers) allows these prices to sit above what a more competitive supply-demand balance might provide.

SACOSS has also reflected on the AEMC’s perspective in the Review of the Effectiveness of Competition in Electricity and Gas Retail Markets in South Australia – First Final Report. Appendix E discusses Vertical Integration in general at Section E.1.1.3 and AGL and Torrens Island in particular in E.1.1.4 where the AEMC examines the argument that wholesale market power was being leveraged into retailing<sup>14</sup>. The AEMC dismissed the argument:

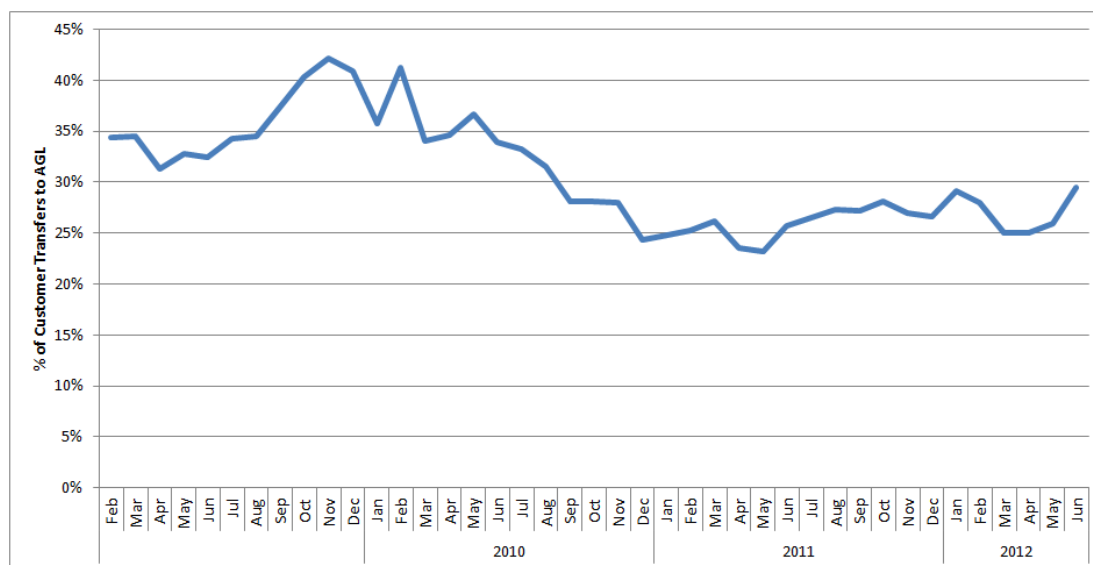
*“ ... the argument is not supported by actual market outcomes as AGL’s discounts off the standing contract price are not as high as the discounts available under its competitors’ market offers. In addition, AGL’s customer share has been decreasing since the start of FRC thereby reducing the number of customers from which it can recoup its losses.”<sup>15</sup>*

And;

*“The assumption also rests on the ability to create and sustain barriers to entry or expansion by other, potentially competing retailers.”<sup>16</sup>*

Noting that this was written in 2008, it is now possible to revisit these market outcomes.

Firstly, it is apparent that AGL and its wholly owned Powerdirect are able to offer market contracts at significant discounts to the standing contract that are highly competitive with other retailers. As an example, Figure 9 plots market transfer data that shows that AGL has been able to be competitive enough to ensure that over 25% of all small customers market transfers have been back to them (AEMO only published disaggregated data from 2009)



**Figure 9: Percentage of small customer transfers to AGL**

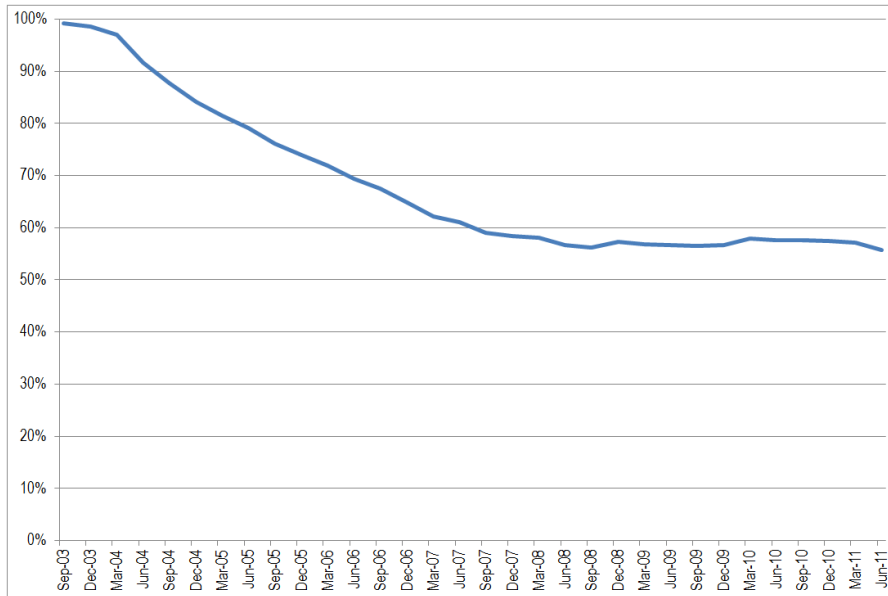
**Source: AEMO statistics for Tier 1 retailer in SA**

Secondly, the combined AGL/Powerdirect market share has held virtually constant since 2008 at just over 55% of the small customer market as shown in the following chart derived from ESCOSA data:

<sup>14</sup> AEMC (2008) *Review of the Effectiveness of Competition in Electricity and Gas Retail Markets in South Australia – First Final Report* [www.aemc.gov.au/Media/docs/First Final Report - Appendices-f166c14f-d1da-4307-b738-31706b886415-0.pdf](http://www.aemc.gov.au/Media/docs/First%20Final%20Report%20-%20Appendices-f166c14f-d1da-4307-b738-31706b886415-0.pdf)

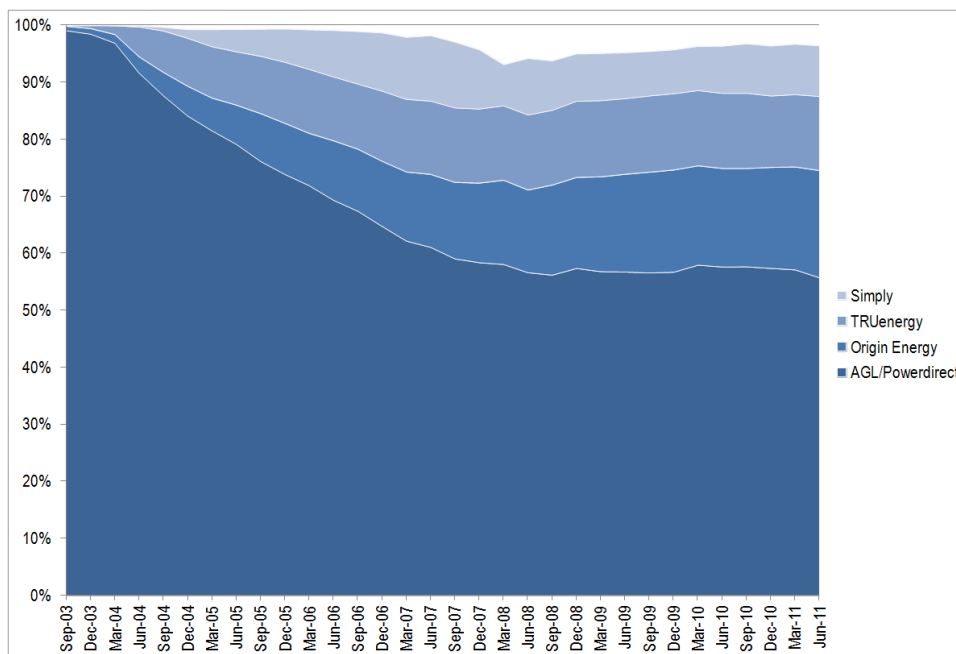
<sup>15</sup> AEMC (2008) p.147.

<sup>16</sup> AEMC (2008) p.147.



**Figure 10 – AGL/Powerdirect combined retail market share (small customers, SA Region)**

Thirdly, the assumption about the barriers to entry or expansion by others is of course discussed at length in the CEG report but also illustrated in the following time series of small customer market shares:



**Figure 11: Small Customer Market Shares, SA region 2003-11**

It is clear in Figure 11 that the four gentailers dominate the market and that, since 2008, the combined market share of the other, smaller retailers is in fact shrinking.

### Proposals

SACOSS proposes that the Senate Select Committee on Electricity Prices:

1. Strongly considers the issue of market power during the course of its Inquiry;
2. Supports a thorough and consumer interest focussed inquiry into the structure of the South Australian energy market and the implications for competition and market power.



## **Minimising the costs associated with increasing peak demand**

According to the Draft Energy White Paper (2011), an important factor contributing to rising prices “is the need to build additional capacity in energy infrastructure to meet growth in peak demand”<sup>17</sup>. SACOSS supports this view. Indeed, SACOSS believes that the costs to meet peak demand are a market wide issue, as electricity retailers pay for increased network and generation costs, and the rising retail prices are passed through to consumers.

In the Draft Energy White Paper, the Australian Government has signaled that it will lead work in identifying barriers to “minimise the costs associated with increasing peak demand”<sup>18</sup>. The Australian Government has also signaled that it will “develop effective and efficient measures to overcome identified barriers”<sup>19</sup>. SACOSS welcomes the willingness of the Australian Government to address this issue.

### **Proposals**

SACOSS proposes that the Senate Select Committee on Electricity Prices:

1. Endorses action by the Australian Government to both identify barriers to minimise the costs associated with increasing peak demand and develop measures to overcome the identified barriers.

---

<sup>17</sup> Department of Resources, Energy and Tourism (2011) Draft Energy White Paper 2011: Strengthening the Foundations for Australia’s energy future at <http://www.ret.gov.au/energy/Documents/ewp/draft-ewp-2011/Draft-EWP.pdf> p.171.

<sup>18</sup> DRET (2011) p.196.

<sup>19</sup> DRET (2011) p.196.

## Network transmission and distribution investment decision making

SACOSS has been extremely concerned about network transmission and distribution investment decision making, particularly in relation to their consequent impact on electricity bills. This has been heightened by awareness of the Australian Energy Regulator's comments that:

*"...the current restrictions on an objective assessment of the efficiency or the necessity of expenditure proposed by electricity businesses is causing consumers to pay more than they should for a safe and reliable supply of electricity services"<sup>20</sup>.*

In addition, SACOSS is familiar with the research by Carbon + Market Economics which provides evidence that there is a problem with setting of efficient expenditure allowances as experienced by consumers<sup>21</sup>:

*"The evidence in both Mountain and Littlechild (2010) and Mountain (2011) recognises that rising demand and ageing assets are factors that in some cases have justified higher expenditure. But their point is that other factors (regulatory design, regulatory conduct and ownership) also seem to explain higher expenditure"<sup>22</sup>.*

### Proposals

SACOSS is aware that the AEMC's draft determination for the Economic Regulation of Network Service Providers proposes some additional powers to the AER to exclude some expenditure from the Regulatory Asset Base. SACOSS proposes that the Senate Select Committee on Electricity Prices:

1. Reviews the proposals contained in the AEMC Economic Regulation of Network Service Providers draft determination which relate to provision of some additional powers to the AER to exclude some expenditure from the Regulatory Asset Base.

In light of the evidence based concerns being raised about regulatory design and its possible role in contributing to higher expenditure, SACOSS also proposes that the Senate Select Committee on Electricity Prices:

2. Focuses attention on key aspects of regulatory design which may be contributing to inefficient expenditure.

---

<sup>20</sup> Andrew Reeves (2011) "Rule change proposal: energy network regulation reform" at <http://www.aemc.gov.au/Media/docs/AER%20Cover%20Letter-4c8f06be-e9ad-4f22-b51e-850b1d3f1dcf-0.PDF> (accessed 3 September, 2012).

<sup>21</sup> Carbon + Market Economics (2011) as reproduced in *Uniting Care Australia Response to AEMC Network Rule Change* at <http://www.aemc.gov.au/Media/docs/UnitingCare-Australia---120509-from-USB-51153210-0380-4fc7-9d1e-2e53ef79f180-0.pdf> (accessed 3 September, 2012).

<sup>22</sup> Carbon + Market Economics (2011) p. 37.

## **Opportunities for improved customer advocacy and representation arrangements**

SACOSS believes that currently limited funding for consumer advocacy arrangements operate to the disadvantage of consumers. While there are some resources available for advocacy on behalf of energy consumers these are miniscule relative to the resources available to industry and there currently are few mechanisms to ensure there is strong well-resourced and coordinated national voice for energy consumers.

In practice industry and corporations working across the sector are able to individually and collectively draw on a vast range of resources, to conduct wide ranging supportive research, to build technical and non-technical expertise, to engage in a wide range of legal processes that are available to challenge legislative and regulatory controls, and to fund extensive campaigning direct lobbying activities so as to ensure the interests of the industry are well understood and addressed.

In seeking to address this seemingly chronic imbalance of power and influence, SACOSS is represented on an eight member Working Group established by five lead agencies in the community sector (Australian Council of Social Service, Consumers Utility Advocacy Centre, Consumer Action Law Centre, Alternative Technology Association and Public Interest Advocacy Centre). The Working Group is charged with identifying an appropriate governance model for a national energy consumer advocacy body.

The establishing members have corresponded with the Minister for Energy and Resources and Chair of the Standing Council on Energy and Resources (SCER) Hon Martin Ferguson MP during the process of establishing the Working Group. Minister Ferguson has supported the establishment of this Working Group.

The Working Group will identify an appropriate governance model for a national energy consumer advocacy organisation, develop a business plan, and provide an implementation proposal for the consideration of the SCER. This group is being funded by the Consumer Advocacy Panel.

### ***Proposals***

SACOSS proposes that the Senate Select Committee on Electricity Prices:

1. Meets with the National Energy Consumer Advocacy Body Working Group.
2. Affirms a view that the interests of consumers must be the dominant feature of all legislative and regulatory controls.
3. Notes the power imbalance that exists when one contrasts the resources available to industry to those available for advocacy on behalf of consumers.
4. Endorses the need for additional resources to be made available so as to ensure consumers' interests can be properly represented at every level of sector activity.

## Peak demand and cost reflective pricing

The South Australian region of the market exhibits the most 'peaky' demand profile in the NEM and given that this is a significant contributor to historically higher costs in SA compared to other regions, has been an area of ongoing interest and activity by SACOSS. This section will examine the strong case which has emerged for the establishment of cost reflective tariffs for a select buying group of households: that of public and social housing tenants. While these consumers have limited capacity to generate peak demand associated with space cooling, they are currently providing a cross-subsidy for those with greater capacity.

### ***A cross-subsidy***

There is a close correlation between electricity demand and temperature for the residential sector in South Australia. South Australia has a 'peaky' climate and the small customer load profile very closely follows the need for cooling in summer. Thus the energy service of space cooling is the primary causal factor behind the peak demand phenomenon and the efficiency of the market can be assessed in terms of how it allocates the cost of meeting this end-use.

The extent of the peak demand phenomenon is usually illustrated by a region's Load Factor – the ratio between actual energy consumed and what could have been consumed if the peak demand had been sustained all year. For the SA Net System Load Profile (NSLP), the 12 month rolling average is poor (around 32% although it has been below 30%).

Currently the cost of cooling capacity is borne, in part, by all small consumers whether or not they directly contribute to the demand. The cost of providing electricity for the space cooling load is relatively high since it requires significant capital intensive capacity (MW) but consumes relatively small amounts of energy (and therefore small sales volume). The real cost of this electricity is then spread across all customers in the class.

However, not all consumers contribute to the 'peaky' demand profile equally. The Australian Government's Draft Energy White Paper (DRET, 2011) makes reference to the apparent cross-subsidy that exists within the 'small customer' cohort. The Draft Energy White Paper asserts that a key factor behind the growth in peak demand is inefficient pricing structures that are not cost reflective and that this<sup>23</sup>:

*“ ... results in some consumers paying more than they should, and effectively cross subsidising those who are driving the growth in peak demand.”*

The document expands on this somewhat when it states:

*“This means that the less well off, who generally do not run multiple air conditioners and television sets, are cross subsidising those consumers who do.”*

The extent of the above mentioned cross-subsidy is largely a function of the difference between load factors of the small consumers – that is; the NSLP. Preliminary analysis of the South Australian situation suggests that savings in the order of 10-20% are plausible if the cohort has a load factor in the range 45%-50% compared to the balance of households around the 30-35% range. ETSA Utilities are currently collecting data in order to better understand the diversity of load profiles of residential customers. SACOSS is represented on the ETSA Utilities Reference Group for this work.

### ***Diverse load profiles of residential users***

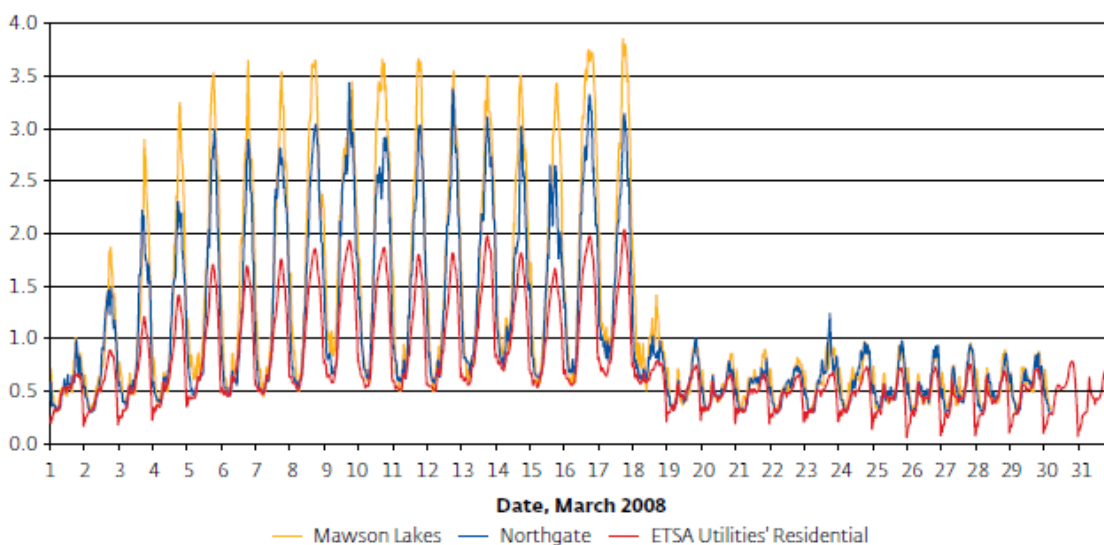
The ETSA Utilities work builds on their observations from the Adelaide Heat Wave of January 2008 (15 days above 35°C). As shown on the following chart from the ETSA Utilities Regulatory

---

<sup>23</sup> DRET (2011) *Draft Energy White Paper* <http://www.ret.gov.au/energy/Documents/ewp/draft-ewp-2011/Draft-EWP.pdf> p. xxii (Accessed 4 September, 2012).

Proposal 2010-15 to the AER (released in 2009), the electrical demands vary significantly from one suburb to the next<sup>24</sup>.

Figure 5.6: Residential loading in summer 2008<sup>(1,2)</sup>



Notes:

(1) Residential demand per customer (kW)—March 2008.

(2) Mawson Lakes requires 3.8kW; Northgate 3.4kW; and ETSA Utilities' residential (average) requires 2.0kW capacity.

Figure 8: Residential loading in summer 2008

Source: ETSA Utilities (2009)

The above profile (Figure 8) shows the diversified electrical demand from a sample of houses from two of Adelaide's newer residential developments (Mawson Lakes and Northgate) compared to the state-wide residential average during an extended heatwave (15 days above 35°C) in March 2008. The figure illustrates the almost 2:1 contribution from newer housing compared to the older housing stock during the heat wave and the almost indistinguishable average consumption during milder weather (the rest of the month).

### Public and social housing tenants

SACOSS has formed the view that a cohort such as public housing tenants has less capacity to generate cooling demand than the average household due to having dwellings with smaller than average floor areas, lower penetration of air-conditioning and smaller air-conditioners when they do. This group of some 50,000 households are likely to have an aggregate load factor in the 45-50% range implying that their load profile may be materially cheaper to supply than the NSLP (noting that *some* households in this cohort may in fact have poor load factors but that the aggregate, diversified patterns of consumption is materially different to the NSLP).

The average public housing tenant spends around 20% less than the average household<sup>25</sup> but still has electricity bills in excess of \$1200 per annum. They often receive the energy concession of \$157.50 which covers around 13% of the average bill. If cost reflective retail and network pricing meant a further 10-20% cost reduction could be realised, it would have an impact akin to a doubling of the concession for those that have it, and giving a 'concession' to those that currently don't receive it. This implies that it is an opportunity worth pursuing.

<sup>24</sup> ETSA Utilities (2009) at <http://www.aer.gov.au/node/4>

<sup>25</sup> For example, see ABS 4618.4 October 2004 Domestic Use of Water and Energy South Australia and ABS Household Expenditure Survey Cat No 6530 Table 15: TENURE AND LANDLORD TYPE, Household expenditure, South Australia

However, if the price to access this new settlement profile was a smart meter as per the Victorian AMI Rollout, where the cost of meter provision and data handling is in the order of \$100 per annum and rising, the potential net benefit to the vulnerable consumer is eroded back to something providing a much less convincing case for change.

SACOSS believes that such a customer cohort does not need to be individually smart-metered in order to establish a bespoke load profile for market settlement. The application is a corollary of the current arrangement for off-peak controlled load supply (off-peak hot water) where a sample of some 200 meters in representative locations is used to determine a separate controlled load profile for the SA Region.

The Australian Energy Market Commission (AEMC) DSP3 Power of Choice Directions Paper makes a brief reference to such an opportunity:

*“Given the limitations in the metering platform, there may be a case for trying to develop consumption profiles which more accurately reflect the consumption patterns of different types of consumers”<sup>26</sup>*

It is the SACOSS view that a case is emerging for the establishment of cost reflective tariffs for a buying group of households with good load profiles and with this load profile established by a representative sample of dwellings rather than the expense of individual smart meters. If the load profile is established with an accompanying network tariff, then the retail supply to the group could be competitively tendered.

It is also the SACOSS view that the most prospective cohort is the tenants of public and social housing. The reasons for this are the combination of having, as a group, established their limited capacity to pay and, by the nature of their housing arrangements, have limited capacity to consume. The small number of landlords and their asset management practices mean it can be assured that this cooling capacity will not change significantly over time. This group is likely to be quite price inelastic due to the likely absence of much discretionary consumption. In short, this cohort should have a good and stable load factor – representing a lower risk load profile to a retailer than the NSLP.

The connection to the small number of landlords should also minimise Customer Acquisition and Retention (CAR) costs for retailers. Likewise, the high proportion of benefit recipients means that Centrepay is likely to have high uptake, lowering the risks to a prospective retailer. Similarly, the higher probability of receiving the energy concession (which is paid directly to retailers by the South Australian Government) should mean a stable baseline cash flow for a retailer as well.

The AEMC’s DSP3 Power of Choice Directions Paper states:

*“We are seeking stakeholder views on whether further consideration on developing load profiles which could better support DSP is warranted. However, the issue of load profiling appears to only be fully resolvable if interval meters are available for all consumers.”<sup>27</sup>*

SACOSS strongly proposes that there is merit in pursuing load profiling using a representative sample of meters as a more cost effective way of enhancing economic efficiency than a roll-out of interval meters.

## **Proposals**

SACOSS proposes that the Senate Select Committee on Electricity Prices:

1. Supports the establishment of cost reflective tariffs for public and social housing tenants in recognition of the fact that these consumers have limited capacity to generate peak

---

<sup>26</sup> AEMC (2012) *DSP3 Power of Choice Directions Paper* <http://www.aemc.gov.au/Media/docs/EPR-0022-Power-of-choice-review---Directions-Paper-FINAL-for-publication-pdf-92ab8df4-d019-4e39-9d77-c0fb0c7407de-3.PDF> (Accessed 4 September, 2012) p.152.

<sup>27</sup> AEMC (2012) p.159.

demand associated with space cooling and are currently providing a cross-subsidy for those with greater capacity.

In line with the Oakley Greenwood (2012) report commissioned by the Australian Energy Market Commission, SACOSS further proposes that:

*“Consideration should be given to installing meters in a statistically valid sample of public housing units at no cost to the customers. This would allow determination of whether this group has a different load profile from the NSLP and whether that profile entails a lower or higher cost to serve.”<sup>28</sup>*

---

<sup>28</sup> Oakley Greenwood (2012) *The potential for a revised approach to profiling to encourage greater levels of DSP among non-interval read residential consumers* <http://www.aemc.gov.au/Media/docs/Oakley-Greenwood-Report---Potential-for-revised-approach-for-load-profiling-for-non-interval-read-consumers-d92edc78-d52b-41da-a790-161a6b7ac78b-0.pdf> p. 18.



## National Review of Concessions

SACOSS produces quarterly *Cost of Living Updates* tracking the impact on vulnerable and disadvantaged South Australians of rising prices for necessities. In October 2011 we invited business, government, academic and community sector leaders to a working Summit to seek to identify key ways to address cost of living issues.

The keynote speaker for the Summit was the then Chair of the Social Inclusion Board, Ms Patricia Faulkner, and this was followed by six concurrent workshops exploring the key cost of living issues of housing, utilities, food, income support, health, and transport. Each Summit delegate was asked to bring to the workshop one proposal at federal, state and community level that would make a substantial difference in alleviating cost of living pressures, particularly for low income households. The list of proposals, including those which gained consensus, is contained in a Post Summit Report (available at [www.sacoss.org.au](http://www.sacoss.org.au)).

One of the clearest messages to come out of the Summit was the need to review the concessions system. Concessions are provided on a range of services, often by state governments, to ensure that low income households have access to the basic necessities of modern life (such as electricity and water, public transport) as well as for bills like council rates and government levies (such as the South Australian Emergency Services levy). Such concessions are a vital form of income support for economically vulnerable people, yet it was clear from the Summit discussions that the system is not working. In the Utilities Workshop, *nobody* thought the concession system is working – industry because their hardship programs are under increased demand pressure, consumer advocates because the system is inadequate, government representatives because of their budget pressures, and academics because of issues of targeting and coverage. Concerns were also raised in both the Income Support and Transport Workshops about the adequacy of concessions.

Issues of national differences and inconsistencies were raised in the Transport and Utilities Workshops, and, while concessions are predominantly state government concerns, an important query was raised on whether the introduction of a national energy market means energy concessions still properly belong with states or should there be a national concession system to match the national market?

### **Proposals**

Given the range of concerns expressed, the magnitude of proposals—such as moving energy concessions to the federal sphere—and the explicit proposal from the Utilities Workshop for the development of a national concessions framework (for consistent principles that guarantee essential access to essential utilities), **SACOSS is proposing that there should be a national review of concessions.**

We are aware that previous concession reviews have been done, but we believe that a fresh look is called for, given developments like the national energy market and the rapid rise of prices of some key goods and services covered by concessions. Such a review could be done or auspiced by the Social Inclusion Board, or could be done by an external body (such as the Productivity Commission).

The purpose of the review would be to advise on a system of concessions which, as part of the income support system, would ensure vulnerable and disadvantaged people have access to basic goods and services.

We envisage that such a review would include consideration of:

- The adequacy of concessions, in terms of:
  - the amounts available for various concessions, and how and whether they are keeping pace with rising prices;
  - the eligibility criteria for various concessions;



- the list of things for which concessions are available (for example, in a modern society, is internet access a basic necessity for which concessions might be available?).
- Cross-border issues including:
  - the consistency of concessions levels between different jurisdictions and ensuring that all systems provide a basic minimum of support for vulnerable and disadvantaged people;
  - the transferability of eligibility (for example, examine the need to have a different transport concession card in different states).
- The appropriate jurisdiction for different types of concessions (for example, whether in a national energy market it would be appropriate for responsibilities for energy concessions to be with the Federal Government – and what revenue implications and trade-offs this may entail).

In making this proposal, we note Recommendation 8.1 of the Productivity Commission's Report on *Australia's Urban Water Sector* (2011) which recommended a similar review of concessions on utility services. Our proposal expands this to a review of all concessions and puts it more clearly in the context of the broader income support system for vulnerable and disadvantaged people.