Submission No 7

INQUIRY INTO ELECTRICITY SUPPLY, DEMAND AND PRICES IN NEW SOUTH WALES

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ADVOCACY CENTRE

Submission to the Select Committee Inquiry into Electricity Supply, Demand and Prices in NSW

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Introduction

The Public Interest Advocacy Centre

The Public Interest Advocacy Centre (PIAC) is an independent, non-profit legal centre based in New South Wales. Established in 1982, PIAC tackles systemic issues that have a significant impact upon disadvantaged and marginalised people. We ensure basic rights are enjoyed across the community through litigation, public policy development, communication and training.

Our work addresses issues such as:

- homelessness;
- access for people with disability to basic services like public transport, education and online services;
- Indigenous disadvantage;
- discrimination against people with mental health conditions;
- access to energy and water for low-income and vulnerable consumers;
- the exercise of police power;
- the rights of people in detention, including the right to proper medical care; and
- government accountability, including freedom of information.

PIAC is funded from a variety of sources. Core funding is provided by the NSW Public Purpose Fund and the Commonwealth and State Community Legal Services Program. PIAC also receives funding from the NSW Government for its Energy and Water Consumers Advocacy Program and from private law firm Allens for its Indigenous Justice Program. PIAC also generates income from project and case grants, seminars, donations and recovery of costs in legal actions.

Energy and Water Consumers' Advocacy Program

The Energy + Water Consumers' Advocacy Program (EWCAP) represents the interests of low-income and other residential consumers of electricity, gas and water in New South Wales, developing policy and advocating in energy and water markets. PIAC receives policy input to the program from a community-based reference group whose members include:

- Council of Social Service of NSW (NCOSS);
- Combined Pensioners and Superannuants Association of NSW;
- Ethnic Communities Council NSW;
- Salvation Army;
- Physical Disability Council NSW;
- Anglicare;
- Good Shepherd Microfinance;
- Financial Rights Legal Centre;
- Affiliated Residential Park Residents Association;
- Tenants Union; and
- Mission Australia.

Executive summary

PIAC welcomes the opportunity to provide our submission to the Select Committee's inquiry into Electricity supply, demand and prices in NSW.

The electricity price rises in July 2017 have highlighted the need for clearer and more transparent information for consumers. These increases follow years of successive price rises and point to systemic issues underlying the final prices paid by consumers in the National Electricity Market (NEM).

PIAC supports allowing consumers to make full use of competitive market offers and new technologies. However, this must not be a pre-requisite for receiving a fair and reasonable offer.

Until this decade, energy consumers could very broadly be categorised into 'haves' and 'have nots'; they could either afford energy, and the tools to limit their usage if they so desired, or they could not. Since then, deregulation, the emergence of competition, innovation (particularly in relation to behind-the-meter services), and the escalation of prices have created the need for consumers to also be classified in terms of their level of engagement with the energy market.

An engaged consumer may be able to minimise their energy bills through a combination of moving between retailers, behind-the-meter technologies, and accessing discounts. Conversely, a consumer that is not engaged is likely to consume more energy from the grid, purchased at a higher price by not accessing the cheapest deals.

PIAC acknowledges the value of measures such as the meeting that Minister Don Harwin, the NSW Minister for Energy and Utilities, had with major retailers in seeking to improve energy affordability for NSW consumers.

The National Energy Market (NEM) is undergoing transition. There are currently numerous planning obligations and documents for the NEM that consider various aspects of meeting future demand in a reliable and cost-effective manner. These obligations were largely created prior to the current transition and, due to this transition, it no longer makes sense to look at aspects of planning in isolation and a more 'whole-of-system' perspective is required as there is a much broader range of alternatives available to address planning issues.

PIAC stresses that the system must not be designed to keep the lights on at all costs. This is not a price-reliability trade-off that consumers would choose. It would be more appropriate to consider taking action where the Reliability Standard is likely to be breached over a number of successive years, in the interest of avoiding expensive investments with little long-term benefit.

Demand Management (DM) can offer a far more cost-effective and scalable alternative to large, centralised generation or network investment. DM solutions can often be implemented more quickly and have the potential to provide multiple benefit streams by offering services and cost-savings to generation dispatch, system security, transmission and distribution networks, as well as to retailers.

Therefore, in addition to reducing the electricity bills of participating customers, DM can reduce the total system costs of the NEM, which leads to cost savings for all consumers. PIAC strongly

supports measures to encourage demand-side participation in markets and considers that no market can be considered truly efficient or effective if it does not have optimal levels of demand-side as well as supply-side participation.

PIAC agrees with Minister Don Harwin, the NSW Minister for Energy and Utilities, that demand management is part of the new paradigm for meeting electricity demand.[1]

PIAC also considers that improvements could be made to the support mechanisms available to low-income and vulnerable consumers to help them afford energy services. Further, PIAC is concerned that the common practice of retailers, to provide discounts only when bills are paid by the due date has the same effect as an unjustifiably high late payment fee. Noting that consumers who consistently pay on time are much less likely to be the recipients of retailer support such as hardship plans, PIAC considers that pay-on-time discounts unfairly target low income and vulnerable consumers who generally miss out on these discounts.

Comments on the Terms of reference

(a) The reasons for recent large increases in price

NSW consumers have experienced a large and well-publicised increase in electricity prices in July 2017. The cause of this particular increase is largely attributed to an increase in the wholesale cost of generating electricity.

This latest rise follows years of increases, which points to a more systemic issue underlying the final prices paid by consumers. The retail bill is made up of different components:

- generation;
- network (both transmission and distribution);
- retail; and
- Government environmental programs.

Each component of the bill has various factors which determine the total cost passed on to consumers. Under the current framework, the retailer has discretion of how at least some of these costs are apportioned to individual consumers' bills – both how it is apportioned between different classes of customer and also how it is recovered through the fixed (c/day) and the variable (c/kWh) components of a retail bill.

Therefore, while the quantum of any price increase is important, the manner in which it is passed on to consumers is also important. These issues are discussed further below.

Lack of transparency of price changes

A key issue for consumers is difficulty accessing clear information about the retail offers available to them. For example, in announcing their price rises in June 2017, NSW retailers all reported the bill impacts on an 'average household'. While this is a simple concept, it does not assist individual consumers to compare specific retail offers and find the best deal for them. This is particularly

[1] Don Harwin, "Securing a reliable and responsive energy market" CEDA's Energy Series Lunch, 29 June 2017 < http://energyconsumersaustralia.com.au/wp-content/uploads/Minister-Harwin-Securing-a-reliable-and-responsive-energy-market.pdf >

true if the way information does not indicate how the price increases will be spread between volume and fixed charges.

PIAC found it difficult to identify and access information about recent retail price changes, such as the changes to the fixed and variable charges. Lack of information makes it difficult for consumers to manage their energy use and costs, and shop around for the best retail deal for them. This is particularly true for low income consumers, who are often the least likely to effectively engage with the complexities of the competitive retail market and for whom higher energy costs are of the most consequence.[2]

Passing on wholesale market cost increases to consumers

PIAC is concerned by the way retailers apportion bill increases to different tariff components, and the lack of transparency about this.

The increase in wholesale prices would be more efficiently reflected in retail offers through increases in volume-based (c/kWh) rather than fixed (c/day) charges. Wholesale energy cost is largely dependent on the volume of electricity used. Hence, using fixed (or supply) charges to recover this component is not a cost reflective way to pass through wholesale price increases, and is arguably unfair.

Increasing fixed charges is detrimental to consumers in two ways:

- firstly, a high fixed charge penalises low energy-use consumers by fixing a larger proportion of their bill. This has a particularly negative impact on low income and vulnerable consumers, who are overrepresented in the low energy-use group of consumers; and

- secondly, recovering wholesale cost increases through higher fixed charges (as distinct from higher energy charges) limits the ability of all consumers to manage their electricity costs through reducing their consumption from the grid. This ability is important for all consumers but is particularly so for low income and vulnerable consumers.[3]

PIAC submits that retailers should limit their wholesale price increases to volume charges.

(b) The impact of deregulation of electricity prices

Retail price deregulation has required consumers to become and remain engaged in the electricity market in order to receive a fair and reasonable price for their electricity. PIAC supports allowing engaged consumers to make full use of competitive market offers and new technologies to derive the most benefit for their electricity services. Indeed, there are many consumers who are willing and able to do this and PIAC supports making it easier for them.

However, this must not be a pre-requisite to receive a fair and reasonable offer.

2 NCOSS, *Turning off The Lights: The Cost of Living in NSW, June 2017*, 2017, 29.
3 NCOSS, *Turning off The Lights: The Cost of Living in NSW, June 2017*, 2017, 19.

Consumers and the changing energy market

Until this decade, energy consumers could very broadly be categorised into 'haves' and 'have nots'; they could either afford energy, and the tools to limit their usage if they so desired, or they could not.

Since then, deregulation, the emergence of competition, innovation (particularly in relation to behind-the-meter technology), and the escalation of energy prices have created the need for consumers to be thought of differently to just these two cohorts. In addition to social advantage, a consumer's level of engagement with the energy market now has a material impact on their energy outcomes.

An engaged consumer may be able to minimise their energy bills through a combination of moving between retailers (retail churn), behind-the-meter technologies, and ongoing engagement in the form of paying their bills on time to access discounts. Conversely, a consumer that is not engaged, or is financially disadvantaged, is likely to consume more energy from the grid, which is purchased from a retailer to whom they pay a higher price by not accessing the cheapest deals.

Considering that the levels of engagement and advantage are not mutually inclusive, PIAC considers that consumers should be thought of in four cohorts for the purposes of consumer protections and promoting competition that works for all consumers.

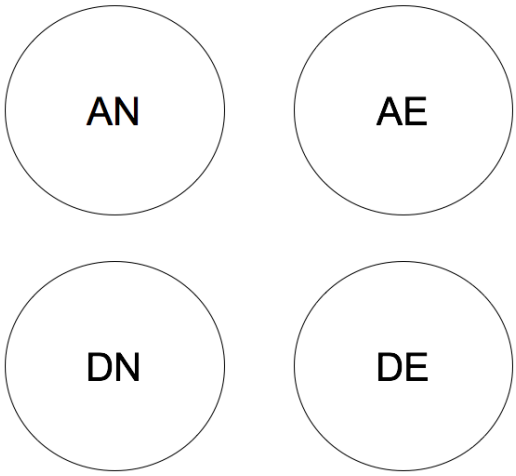

Figure 1: Current consumer cohorts

Advantaged/able, not engaged (AN)

This consumer cohort is disengaged from the energy market. While they do experience the detriment of disengagement through suboptimal retail contracts, their relative social advantage means that they are usually able to absorb the financial detriment associated with these contracts. On the other hand, while these consumers are more able to absorb the detriment associated with their lack of engagement, they are still being punished with inefficiently high bills in a way their engaged counterparts are not. Many are also at risk of falling into the DN cohort if their circumstances change, and consumer protections need to cater to this risk.

Disadvantaged/vulnerable, not engaged (DN)

This consumer cohort is likely to have the worst energy outcomes. The combination of energy market disengagement and relative social disadvantage means that these consumers are unable or unlikely to take advantage of new energy technology or beneficial market contracts from energy retailers. They may use large volumes of high-priced energy that they are unable to afford. Competition frameworks should support them having the opportunity to benefit from engagement, but it is critical that supporting frameworks, including protections and concessions, should not require them to be engaged or assume that is an option for them. The goal should be to move people from the DN cohort to the AN cohort, while giving them the opportunity to move to the AE (or at least the DE) cohort but not obliging them to do so.

Advantaged/able, engaged (AE)

This energy consumer cohort is the only one broadly getting good outcomes today. The combination of energy market engagement and relative social advantage means these consumers choose, and can afford, to be adopters of energy technology such as solar PV, energy storage and demand management systems. Furthermore, their engagement with energy means they are likely to be on retail energy market contracts that enable them to most effectively use this technology. Competitive opportunities for these consumers should be encouraged, while recognising they are, by and large, least at risk of disadvantage.

Disadvantaged/vulnerable, engaged (DE)

While this cohort still requires similar support to the DN cohort, their willingness to engage means they are able to ameliorate some impacts of social disadvantage through engagement with the energy market. The goal for this group should be giving them the same opportunities to benefit from competition in the same way that the AE cohort have, while affording them the protections available to the DN cohort.

Customers and their (lack of) interaction with the market

As noted above, many Australian consumers are currently unable to make properly informed choices about their interaction with the retail electricity market. PIAC considers that the retail market has consistently failed to facilitate informed choices by consumers, resulting in what has been called a 'confusopoly'. It is low income and vulnerable consumers, particularly those that are not engaged, that are the most affected by this failure.

The survey conducted by Newgate Research for the AEMC's *2016 Competition Review,* amongst other studies and reviews, supports PIAC's concern about the lack of customer interaction with the retail electricity market. While over 90% of those surveyed in NEM states with retail competition were aware of their ability to change retailers, less than one third of respondents had done so in the past twelve months.[4]

This ineffective interaction is particularly relevant for disadvantaged and vulnerable consumers, who include some of those least able to engage, and are least able to afford higher electricity costs.

[4] AEMC, *2016 Retail Competition Review*, 2016, pg. 2.

The concerns and difficulties of vulnerable and low-income households point to a failure of the retail electricity market to enable effective interaction by customers who are most in need of the benefits of competition.

Penalising consumers' lack of engagement

In addition to the lack of transparency that makes it difficult for consumers to make informed choices in the retail electricity market, consumers are punished for a lack of engagement. Given the AEMC estimates that half of all consumers have not changed their electricity deal in five years[5], it appears that large parts of the community fall into this category.

The standard practice of retailers is to default customers onto expensive standing offers, without discounts, at the end of their market offer contracts. Therefore, consumers who do not engage in the competitive retail market are at risk of paying more than they need to for essential energy services. On top of this, retailers invest more on marketing, research and providing discounts to gain customers than to existing customers who have not attempted to seek out a better retail deal because they are loyal or less engaged. These costs are then borne by the less engaged customers.

These factors disproportionately impact disadvantaged and vulnerable consumers. These consumers are often least able to effectively engage with the complexities of the competitive retail market and also experience the greatest impact from unnecessarily high prices for essential energy services.[6]

Retailers themselves have identified these issues, with AGL chief executive noting that "We reward disloyalty... The bulk of my customers that are not disloyal never hear from me... and are totally uninformed about what's in their own best interests."[7]

PIAC contends that more could be done to help consumers transition to reasonable offers, in particular at the end of market contract periods. Further, PIAC submits that retailers should provide better deals for end-of-contract consumers by retaining a discount and providing better information about contracts ending.

Impact of 'Win-back' marketing on effective competition

Customer 'win-back' is the practice of an incumbent retailer, on becoming aware that another retailer has acquired their customer through market customer transfer processes, contacting that customer and offering to match or better the deal offered by the new retailer. This typically occurs during the cooling off period on the new contract, so there is no penalty for the consumer cancelling the new contract.

On the surface, 'win-back' appears to offer an immediate benefit to the customer in question, in the form of a cheaper energy contract. However, the practice appears to drive up the cost of customer acquisition for new retailers, at best making it hard for them obtain a viable market

5 AEMC, *2016 Retail Competition Review*, 2016, pg. 65.
6 AEMC, *2016 Retail Competition Review*, 2016, pg. 29.
7 Andy Vesey quoted in: Ben Potter, "Big Power neglects best customers, AGL boss says", *Australian Financial Review*, 2016, <http://www.afr.com/news/big-power-neglects-best-customers-agl-boss-says-20160823-gqzbgu>.

share, and at worst deterring them from entering the market altogether. As the same time, the cost of customer retention for the incumbent retailer is relatively low.

PIAC is concerned that the marketing practice of customer 'win-back' limits the ability for new retailers to enter the market, resulting in less effective competition in the longer term.

(c) Inefficient pricing by retailers

While PIAC is not aware of cases of collusion by retailers in setting and recovering electricity costs from consumers, it is becoming evident that retailers are able to recover excessive profits.

Retail profits are inefficient

Retailers incur a range of costs in supplying electricity to customers, including

- wholesale generation costs (typically comprising some degree of direct spot market exposure offset by some combination of financial hedges, vertical integration and distributed energy sources such as rooftop solar);
- network loss factors which vary by location;
- network use of service (NUOS), including DUOS and TUOS charges;
- clean energy incentives, including renewable energy target and energy efficiency targets;
- metering costs;
- market and other fees;
- the cost of community service obligations such as hardship programs; and
- business operating costs.

It is reasonable to expect retailers to pass such efficient costs on to customers, along with a reasonable and sustainable profit margin.

However, there is a long-standing concern in the community and among consumer advocates that the retail margins in the NSW electricity market are considerably higher than is an efficient recovery of costs.[8]

For example, economic consultancy Carbon + Energy Markets (CME) recently analysed NEM retail markets comparing deregulated markets in Victoria, New South Wales, South Australia and Queensland with the regulated retail markets in the Australian Capital Territory and the United Kingdom.[9] While noting the difficulty of identifying precise profit margins, CME reported that retail electricity prices tend to be considerably higher in deregulated markets than those where regulators set the prices.

This concern is mirrored in the work of the Grattan Institute, who reviewed retail markets in the NEM, finding that "profit margins appear to be higher than in other sectors – and more than double the margin that regulators considered fair when they set retail electricity prices".[10]

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8 For instance, PIAC, *A competitive market to benefit* all, 2016;

9 Carbon + Energy Markets, *Australia's retail electricity markets*, 2016.

10 Tony Wood and David Blowers, "Price Shock: is the retail electricity market failing consumers?" *Grattan Institute Report No. 2017-04*, 2017, pg. 3.

Regulated energy prices are notionally set to an efficient level. Considering the marked difference between standing offer prices and discounted market offers in deregulated markets, and the high retail profits in deregulated markets, it appears that margins associated with standing offer prices in deregulated markets are the least efficient of all retail energy products.

As well as being inefficient, PIAC argues that this is also unfair. The higher standing offer prices have most impact on particular consumer cohorts who are either on standing offers or market offers with pay-on-time discounts that default to standing offer prices.

If deregulated retail markets in the NEM are not delivering fair and efficient prices, clearly the benefits of competition are not being felt by many consumers. PIAC considers that it is important to investigate why this is the case.

Potential for cross-subsidisation between generation and retail

Many of the largest retailers in the NEM also own generation assets (i.e., they are vertically integrated). This was noted by Rod Sims, Chair of the ACCC, in his address to the National Press Club where he noted that "the retail electricity market is also highly concentrated, with three players (Origin, AGL and Energy Australia) with over 70% of customers. The next largest two players, taking shares in most states to around 90%, are also vertically integrated."[11]

Potentially, such vertically integrated businesses could shift cost recovery from the more competitive generation market to the retail customer market. If this were occurring, it may ultimately lead to these businesses earning higher profit margins at the expense of customers through both a higher retail component and through distorted generation prices.

Such cross-subsidisation could allow the partnered generator to bid a lower price than it would otherwise be able to do. While this may lower wholesale prices in the short term, it would do so artificially by pricing out other generation that actually has lower operating costs. In an ideal wholesale generation market, cheaper generation would enter the market and out-compete higher-cost generation, leading to lower average wholesale prices that are passed on to consumers. By contrast, cross-subsidising generation with retail would allow higher-cost generators remain competitive, which distorts the market signals for new generation investment and may delay or even prevent investment in new, lower-cost generation. This prevents the benefits of sustained lower costs being realised by consumers.

Potential for cross-subsidisation between geographic regions

Many retailers, in particular the largest retailers, have customers spread across multiple distribution networks and jurisdictions. The costs incurred in supplying customers in different locations often differ markedly. Network charges for consumers in regional networks that cover remote areas can be around double those in capital cities. Essential Energy acknowledges this as a key challenge in NSW, stating that the large size and low population of their network area means they have higher distribution charges than other Australian networks.[12]

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11 Rod Sims, "Shining a light: Australia's gas and electricity affordability problem" speech to the National Press Club, 20 September 2017 < https://www.accc.gov.au/speech/shining-a-light-australia%E2%80%99s-gas-and-electricity-affordability-problem>.

12 Essential Energy, *Discussion Paper – Summary: For our 2019-24 regulatory proposal*, May 2017, 3, <http://www.woolcott.com.au/EssentialEnergy/StakeholderEngagementSummaryDiscussionPaperFinal.pdf>.

It is well understood that wholesale prices can differ widely between regions, but there can also be a marked variance in network loss factors within regions. This effectively means the wholesale energy costs for retailers is lower for consumers in metropolitan areas than it is in regional, and particularly more remote, locations.

Where retailers have customers across multiple jurisdictions and networks, there is the potential they may be unfairly distributing costs between them. To some extent, it may be appropriate for retailers to shield customers from some of these variations by managing these within the retail business. In the short term, this would likely result in some customers temporarily cross-subsidising others by a small amount, which should ultimately average out.

However, this cross-subsidisation would be unacceptable if it resulted in higher-than-efficient prices for some customers in the long term. This might occur if the differences in prices charged in certain regions were based, for example, on the relative level of competition or the likelihood of a consumer to switch retailers rather than any inherent difference in cost to provide electricity services. This could be considered Ramsey Pricing, and be contrary to many electricity reforms to introduce more cost-reflective prices and send better price signals to consumers.

Bundling of offers

PIAC understands that bundling electricity with other services, such as gas, is becoming more common. Having one retailer for multiple services is convenient, and by bundling both services with the same provider, the resulting economies of scale could be passed on to consumers through lower overall bills.

However, PIAC understands that bundling is, at times, less cost effective for consumers than accessing the best electricity and gas deals separately. In part, this may be because retailers with the lowest cost to supply one fuel source may not have a low cost to supply another.

Consumers may tend to bundle on the assumption that they are getting a better deal. Given the difficulties of effectively comparing different retail offers, bundling may pose an additional complication - comparing a bundled deal against two separate deals for electricity and gas services may be complicated.

In PIAC's view, it is important that consumers with bundled energy deals are given accurate and understandable information so that they avoid paying more than necessary.

(d) The effectiveness or impact of the current regulatory standards

Since 2014, NSW retail energy prices have been un-regulated. However, there is still a regulatory framework that places obligations and limitations on market participants to try and ensure that only efficient costs are recovered from electricity consumers.

The most onerous regulation falls on the natural monopolies in the electricity supply chain: network service providers. Because they are not subject to competitive forces, both transmission and distribution network service providers are subject to revenue regulation. These businesses have the amount of revenue they can recover from consumers set by the AER every five years. In general, this is an effective way of ensuring inefficient network costs are not recovered from consumers.

There are also regulations and obligations placed on retailers to ensure consumers receive fair and affordable electricity offers.

Despite these regulatory objectives, there is ample and growing evidence that the market is not working for many consumers in NSW. For instance, NCOSS recently found that many households are struggling with energy costs that already exceed their capacity to pay.[13] Furthermore, analysts from the Grattan Institute and Carbon + Energy Markets have found energy retailers to be making excessively high profits.[14] That energy companies are making inefficiently high profits while consumers suffer through high prices indicates that de-regulated energy prices have not been in the interests of NSW consumers.

(e) Options for future government oversight and re-regulation of electricity prices

There are currently a number of processes under way to try to improve the regulatory standards for electricity, particularly in the retail space. For example, the AEMC is currently considering a proposal to change the National Energy Retail Rules to require retailers to notify their customers when their period of fixed benefits such as discounted usage rates ends. The AER is also working to provide better information about retail energy contracts to consumers through ongoing improvement to its Energy Made Easy comparison website. Both of these processes will give consumers better information with which to make decisions about their electricity supply and help them avoid unnecessarily high bills.

In addition to options to strengthen the current regulatory framework, regulation of electricity prices is an option which should be considered if current or amended market approaches do not deliver consumer benefits.

PIAC appreciates that regulation can be a significant intervention in a market, and emphasises that it can take a number of forms which are more flexible, and lower in risk, than the traditional approach of a single government- or regulator-determined price which is applied to all consumers (often at the expense of a consumer's ability to choose between different providers and offers).

For instance, it may include one or more of:

- setting a maximum price that retailers can offer (reflecting the near-efficient cost of supplying electricity and mindful of affordability for different classes of consumer) but still allowing competition through retail offers below this level and/or additional features such as solar feed-in tariffs.

- more prescription to allow for more consistent comparison of offers, from the same retailer and between different retailers, such as common price structures, terminology and conditions around available discounts. Excessive prescription in price structure can, however, have perverse consequences of placing upward pressure on prices, as has been observed in the UK.

[13] NCOSS, *Turning off The Lights: The Cost of Living in NSW, June 2017*, 2017, pg. 29.

[14] Tony Wood and David Blowers, "Price Shock: is the retail electricity market failing consumers?" *Grattan Institute Report No. 2017-04*, 2017; Carbon + Energy Markets, *Australia's retail electricity markets*, 2016.

- more transparency of the cost breakdown of the retail component of the bill make visible what consumers are paying for and highlighting where excessive profits are being made off consumers.

- restrictions on anti-competitive practices such as 'win-back' marketing which is discussed earlier in this submission.

(f) Adequacy of planning to meet future electricity demand

There are currently numerous planning obligations and documents for the NEM that look at various aspects of meeting future demand in a reliable and cost-effective manner. These obligations were created prior to the current transition in the NEM. Due to this transition, however, it no longer makes sense to look at aspects of planning in isolation and a more 'whole-of-system' perspective is required as new technologies and preferences mean that there are a much broader range of alternatives available to address planning issues.

In the NEM, there is a Reliability Standard for supply which stipulates that the NEM should be planned so that up to 0.002% of demand each year could be unmet. It is important to note that this is a non-zero value as it reflects the fact that at some point the cost of increasing reliability outweighs the benefit consumers receive.

The application of the reliability standard has been highly subjective. In PIAC's view, the approach of considering this standard as a value that should not be breached in any given year or jurisdiction is unlikely to be conducive to outcomes that reflect a price-reliability trade-off that consumers would choose. It would be more appropriate to consider taking action only where the standard is likely to be breached over a number of successive years, in the interest of avoiding expensive investments that provide little appreciable long-term benefit.

Another way of understanding the impact on consumers of the price-reliability trade-off with respect to planning of generation capacity is to consider the broader customer experience with outages. The following diagram is taken from AEMO's submission to the Finkel review, with numbers derived from the AEMC extreme weather events review.

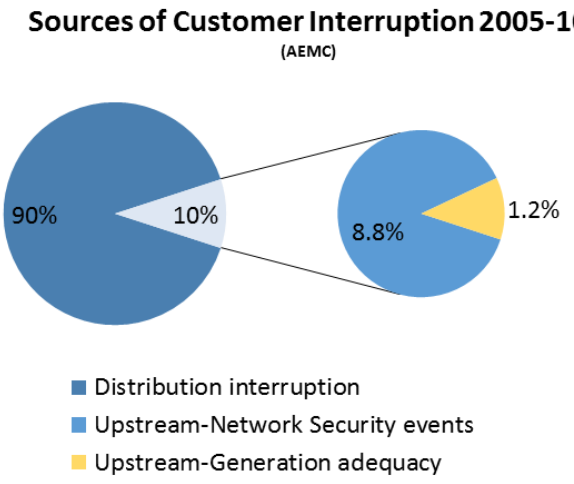

Figure 2: Sources of customer interruptions (Source: AEMO)

It illustrates that, historically, supply interruptions for distribution connected customers have mostly originated in their distribution network, with a smaller number in the transmission system, and a negligible portion as a result of generation shortfalls.

While maintaining system reliability and security is clearly important, this does suggest that even a significant increase in generator and transmission outages might have relatively little appreciable impact on these consumers. It also suggests that spending billions of dollars to improve reliability in generation and transmission may not bring commensurate benefits for these users.

PIAC is deeply concerned that, if full regard to the cost impacts and consumer expectations is not given in developing new reliability measures, the NEM will end up with a gold-plated wholesale market.

By way of comparison: with respect to distribution outages that constitute the majority of supply interruptions, consumers in regional NSW are voicing that they are satisfied with their levels of reliability, are more concerned about affordability, and they are prepared to accept lower reliability as a way of controlling costs.

The role of demand management

Demand Management (DM) can offer a far more cost-effective, flexible and scalable alternative to large, centralised generation or network investments. DM solutions can often be implemented more quickly than these other generation or network investments.

DM has the potential to provide multiple benefit streams by offering services and cost-savings to generation dispatch, system security, transmission and distribution networks, as well as to retailers. Therefore, in addition to reducing the electricity bill component of participating customers, it can reduce the total system costs of the NEM which leads to cost savings for all consumers.

When compared to energy markets with effective mechanisms for demand response,[15] the amount of demand response in the NEM is trivial. The involuntary load curtailment that blacked out some South Australian households in summer 16/17, made necessary by generator failures on the day, could have been avoided if just 100 MW (3% of the South Australian load) was voluntarily turned off. By comparison, more than 10% of Western Australia's wholesale market capacity comes from demand response, as it is allowed to participate directly in the wholesale market.

PIAC agrees with Minister Don Harwin, the NSW Minister for Energy and Utilities, who highlight the role of DM in meeting electricity demand: “our old paradigm was based upon a notion of a baseload of energy demand being supplied by large thermal generators, and then a peak. Over the coming decades, this will change. This new paradigm is about better forecasting demand,

[15] For example, over 10% of the WA energy market’s capacity is sourced from demand response.

factoring in intermittent sources, and then balancing the rest though dispatch and demand management."[16]

PIAC strongly supports measures to encourage demand-side participation in markets – this includes not only the wholesale spot market, but also the various ancillary markets which already exist in the NEM and ensuring they are able to participate in any new markets which develop in the future.

PIAC's contention is that no market can be considered truly efficient or effective if it does not have optimal levels of demand-side participation, illustrated by the table below.

Stage in supply chain	Wholesale and system operation	Transmission	Distribution	Retail	Customer (behind the meter)
Role of DR	• Alternative to expensive generation to meet peak demand • Provide system security • Provide ancillary services	• Avoid or defer capital investment • Cost effective alternative to expensive interconnection investment	• Avoid or defer capital investment • Provide power quality support	• Manage wholesale market exposure • Manage retail market exposure	• Reduce consumers' electricity costs • Provide backup supply during outage
Necessary reforms or outcomes	• Demand Response Mechanism (that is independent of retailers) • 5 minute settlement	• Offering DR to consumers • Provide products to allow consumers to self-select their cost-reliability level • Ringfencing arrangements and network incentives to support DR	• Offering DR to consumers • Network tariffs for DR • Provide products to allow consumers to self-select their cost-reliability level • Ringfencing arrangements and network incentives to support DR	• Pass on network tariffs and products for DR • Provide products to allow consumers to self-select their cost-reliability level • Offer retail DR products for wholesale price arbitrage	• Consumers are able to self-select cost-reliability trade-off • Allow aggregation of individual consumers to provide DR portfolio
Essential	Coordination of services and products to overcome split-incentives and barriers to efficient use of DR				

Figure 3 - The role of demand response in each part of the energy market and system

(g) Adequacy of programs to assist low income earners and the impact of additional fees such as late payment fees

Concessions

Energy concessions play a crucial role in supporting low-income households. However, the current flat concession rates do not match a household's energy use, particularly as household sizes vary. For example, larger families with lower income, or those living in regional areas with higher network costs, are not assessed based on their living circumstances.

16 Don Harwin, "Securing a reliable and responsive energy market" CEDA's Energy Series Lunch, 29 June 2017 < http://energyconsumersaustralia.com.au/wp-content/uploads/Minister-Harwin-Securing-a-reliable-and-responsive-energy-market.pdf >.

PIAC recommends a shift towards a percentage-based primary concession to simplify application processes and provide greater clarity for customers. Greater promotion of available support by all sectors is also needed.

EAPA vouchers

Energy Account Payment Assistance (EAPA) vouchers provide an important safety net to consumers who experience one–off or occasional hardship and assist with the avoidance of a build-up of debt. However, not all consumers are aware of the availability of EAPA vouchers and they require contact with a community service provider to deem the person eligible and provide them with the voucher.

Whilst certain groups in the community are aware of EAPA vouchers and are comfortable contacting community service providers, with the increasing cost of energy, increasing numbers of households are undergoing energy stress and poverty and these consumers may be less aware of the availability of EAPA vouchers to assist them through periods of hardship.

PIAC urges analysis of changing trends in energy hardship to ensure supporting frameworks to address energy affordability are targeted correctly, being mindful of the four different cohorts of consumers identified earlier in this submission. This includes promoting the existence of support to people with mental illness, the working poor and people undergoing rent and mortgage stress.

Hardship programs

Households who are experiencing hardship benefit from active retailer engagement where both parties develop solutions to address and minimise consumer debt.

Retailer hardship programs provide an important protection for consumers, as long as the repayment plans agreed to are affordable and realistic for the household in need, and that the consumer can sustain the repayments, without forgoing other essential needs.

The AER's Sustainable Payment Plans Framework provides appropriate guidance for retailers to deal respectfully and realistically with households in hardship. PIAC encourages all retailers to abide by the framework voluntarily, and failing that, that following the Framework be made mandatory.

Support for embedded network and off-grid customers

Although PIAC has concerns about the effectiveness of retail competition for consumers in the current retail market, if it is working effectively, retail competition has the potential to provide considerable benefits.

PIAC is concerned about the protections for consumers who receive their energy services in alternative ways, including embedded network and off-grid consumers. Competitive tension between retailers ought to drive lower costs for consumers and encourage innovation in their offers. Further, allowing customers choice in their retailer and retail offer may allow them to select a retail offer which best suits their particular needs. Access to retail competition is important, wherever it does not compromise a more efficient price for a consumer, but access to the right supporting frameworks is important regardless.

Many embedded network and off-grid consumers lack access to retail arrangements including choice of retailer and retail offer. With that they lose other protections including access to hardship programs and repayment plans, access to rebates and EAPA vouchers, strict procedures around disconnections, including protections for people reliant on life support equipment, as well as access to dispute resolution processes through the Electricity and Water Ombudsman NSW (EWON).

If a consumer has behind the meter generation and storage on their premises but has retained their grid-connection, the consequences of a failure of their system will not involve losing access to essential electricity services. It will likely involve higher electricity bills for a period as a greater portion of their energy usage is supplied through their network connection rather than from their behind the meter system. By contrast, in the case where a consumer has gone completely off-grid and foregone their connection to the network, the consequences of the Stand-Alone Power System (SAPS) failing are considerably more severe. If there is no backup generator as part of the SAPS, it may mean losing access to essential electricity services for a week or more while awaiting repair or replacement. Even if there is a backup generator which will allow for some electricity services to be provided, it can involve hundreds of dollars in fuel costs per week and may be limited in operation by the capacity of the generator or its noisy and polluting nature.

Consumers who transition to off-grid supply must only do so with full awareness of the implications so they are able to make a fully-informed choice or are appropriately protected from these costs.

Pay-on-time discounts act as an excessive late fee

Aside from retail profit margins being high (as discussed earlier in this submission), PIAC is concerned for a group of customers that a particular approach to cost recovery may target: the structure of pay on time discounts and its impact on consumers who are unable to pay their bills by the due date.

Low income and vulnerable consumers often have trouble paying electricity and other bills on time. Therefore, they may miss out on the discount and pay more than they can afford, and arguably more than is fair and efficient, for their energy services. This can then push them further into financial hardship.

PIAC is concerned that the common practice of retailers to provide discounts only when bills are paid by the due date has the effect of an unjustifiably high late payment fee. Noting that consumers who consistently pay on time are much less likely to be the recipients of retailer support such as hardship plans, PIAC considers that pay-on-time discounts unfairly target low income and vulnerable consumers who often miss out on these discounts.

PIAC seriously doubts that the difference between discounted price available to consumers who pay on time and the full price in the absence of a discount – which is often 20-30% of the consumption charge on a consumer's bill – accurately reflects the additional costs faced by the retailer as the result of a customer not paying on the due date of a bill.

If the difference is not reflective of costs to retailers associated with late payment, this is not efficient, and, in PIAC's view, is highly unfair.

If the difference is cost-reflective, the practice of pay on time discounts may in effect push the cost of hardship and support programs back onto the same cohort of consumers who most need that support.

In either case, this may lock some consumers into financial stress, imposes a burden on the consumers who can least afford it, and act as a penalty for those who are less engaged or simply have difficulty paying on time.

Further engagement

PIAC would welcome the opportunity to discuss the issues considered herein in more depth. For any queries please contact Energy Team Leader, Craig Memery at cmemery@piac.asn.au or on (02) 8898 6522.