



## **ACT Electricity Consumer Advocates Training Project 2004**

Report - SESSION 1 July 21<sup>st</sup>, 2004

*ACTCOSS would like to acknowledge the encouragement and support provided to this project by other training providers, in particular Andrew Nance of SACOSS and Jim Wellsmore of PIAC.*

### **Overview.**

The provision of electricity is going through seismic changes, as Australian states and Territories move into a "national" network that is designed to foster greater efficiency in the industry. In fact, what was seen for a long time as one industry has now been split into many, with generators, transmission networks, distributors and retailers now disaggregated from the older notions of electricity suppliers.

The ACT has moved to full retail contestability in electricity, although the amount of market penetration by new entrants is seen as minimal in the domestic-user market. The former statutory authority for water and electricity, ACTEW, is now several companies, and is a joint venture partner with AGL in electricity and gas provision.

The new energy landscape is quite different to when government owned monopolies were the norm. Victoria has completely deregulated its power industries, and Queensland has entered the grid, but decided not to introduce full retail contestability: and there are all manner of state-based oversight that are still operating.

It is important that the community sector, as consumers and advocates, understand and are able to articulate the needs of consumers in this changing environment. At the national level it has been recognized that there is a need for the development of knowledge and skills in the community sector to ensure that the needs of consumers, particularly those with little market power, are accurately conveyed to the national energy forums. As a consequence, ACTCOSS has been funded by the National Electricity Market Consumer Advocacy Panel (NEMCAP) provide training aimed at ensuring that the interests of consumers are articulated in community sector contributions to the National Electricity Market (NEM).

The first training session was held in Canberra on July 21<sup>st</sup>, 2004. ACTCOSS was able to bring to Canberra Andrea Sharam, former President of the Energy Action Group in Victoria and currently at Swinburne University. She was joined by Angela Savage, Policy Analyst with VCOSS and convener of VCOSS' working group on emergency relief.

## ACT Electricity Advocacy Training

Those who attended the first workshop were:

Lyn Griggs – PhD student at Canberra University studying electricity pricing

Anni Mather – Cool Communities Coordinator

Erica Steller – Cool Communities

Graeme Evans – Belconnen Community Service and ACTCOSS Board

Linda Hayden – Toora Women Inc

Anna John – ACTCOSS

Charlie Pahlman – ACTCOSS

Interest in the future sessions has been expressed by Care Financial Counseling Inc. and the Consumer Law Centre of the ACT, Havelock Housing Association, the ACT Tenants Union, the ACT Mental Health Consumer Network and COTA ACT.

### **Consumers, fuel poverty, and advocacy.**

Karen Nicholson (ACTCOSS Senior Policy officer and training coordinator) welcomed the participants and explained the background to the project. She then outlined the issues underlying the Canberra electricity market, particularly in respect of people living with disadvantage (See handouts attached). The number of cases coming before the Essential Services Consumer Council was discussed, including some discussion about the complications caused in advocating for water concessions for low income earners in rental properties when the water rates charges attach to the land, and aren't in the name of the tenant.

Andrea Sharam then provided a PowerPoint presentation that examined advocacy and the National Electricity Market.

The discussion was interactive, with participants comparing the Victorian experience to that of ACT low income households. The issues covered included:

- The types of protection needed by consumers in a market that seeks to sell an essential service;
- The concepts behind a market, including the economic theory of markets;
- The regulated nature of the current energy regime in the states and territories;
- How the market had already started segmenting customers into high value customers and undesirable consumers – creating the possibility of “redlining” or excluding the latter from participation, or forcing them into less than appropriate packages;
- This led to residual markets – the sub-prime market and last resort providers – many of these schemes have higher charges;
- Research into competition in electricity in Victoria: “*Power Failure: why Victorian households are not plugging into competition*”(2003) and “*Power, Markets and Exclusion*” (2004) – copies provided by Andrea;
- More research coming on competition between private rental and private energy utilities: outlines the ways people manage bills – reordering of household priorities, using credit and flexible payment options;
- Still problems with high standing charges and higher tariffs for last resort schemes and prepayment meters;
- While the market can provide lower prices for the HVCs, there are concerns about access to essential, reliable services that are affordable for people living with disadvantage;

- Objective of advocacy in the NEM is to secure an entitlement for low income and disadvantaged households;
- Need to recognize the different segments of the National Electricity Market and target messages, particularly concentrating on state/territory jurisdictions where concessions, CSOs and relief more likely to come from.

Angela Savage then took the floor and presented a discussion on issues of fuel poverty based on the advocacy work of VCOSS. The issues covered included:

- The resolution of fuel poverty is multi-disciplinary, and cannot rely on consumer safety nets alone;
- Fuel poverty is a complex issue, and often involves other outcomes of poverty, such as poor quality housing stock, inefficient household appliances, life cycle changes and tariff structures; and
- It can also result in stress, ill health, humiliation and despair;

Angela then outlined a whole of Government fuel poverty alleviation strategy that VCOSS was promoting. This addressed retrofitting, regulation of tariff structures, concessions, incentives to encourage least-cost planning, and protection for consumers from disconnection for inability to pay (including protection from discriminatory provider of last resort schemes such as prepayment meters).

Part of the presentation was an interactive game, in which participants were grouped and presented with certain scenarios around fuel use. These then had to be presented in pictures, without the aid of words or numbers.

The scenarios included households where there were two full time employed residents who had energy efficient accommodation to a single parent household in social housing. Each scenario has four elements, providing a wide range of possible household types.

The task was enthusiastically undertaken, and the presentations showed a common understanding of energy issues. Of particular relevance was the amount of "invisible" consumption of energy and water by more affluent households where the members of that household are employed or out of the home during the day. The homes of people living with disadvantage are more likely to be occupied for most of the day, may have inefficient appliances and infrastructure, and household members may also need additional cooling or heating during the day. The conclusion reached was that these low income households are more likely to only be using enough energy to meet basic needs, while in more affluent households more of the energy use is discretionary.

There were issues in common between Victoria and ACT around exclusion, inability to meet basic needs with available income, and measures people take to ensure they stay connected to electricity. The ACT has been more active, in requiring properties to be energy rated before they can be sold – poor infrastructure and a lack of incentives for landlords and owners to make buildings energy efficient are two of the problems that beset low income households in both jurisdictions.

## ACT Electricity Advocacy Training

The group discussed the WEST Scheme, which in Canberra is being run by the YWCA. This scheme is the extension of a pilot program that worked with a small number of households who had sought relief from high energy bills through the Essential Services Consumer Council (ESCC) process. As well as developing payment options for the household, the ESCC referred them to the WEST scheme, which assisted with basic retrofitting and soft furnishings to improve the energy efficiency of the dwelling.

The issue of prepayment meters (PPMs) was also discussed, however these have not been proposed by energy companies in the ACT as yet. There was agreement from the social welfare advocates that the problems associated with PPMs would mean they could further disadvantage low income households.

The session wound up at 2pm.

ACT Energy Advocacy Training - Timetable and information sent to participants.



## **ACT Electricity Consumer Advocates Training Project 2004**

### **Timetable**

Each workshop is four hours duration, from 10am-2pm, with light lunch provided.

The workshops are being held in the  
Canberra Institute of Technology Board Room,  
Constitution Avenue,  
REID ACT 2612.

**PLEASE RSVP YOUR INTEREST BY COB WEDNESDAY, JUNE 30**

Numbers will be restricted by the venue, so registration is essential.

### Session 1: '**Introduction to utilities consumer advocacy**'

JULY 21, 2004.

- Introduction to the training program – Karen Nicholson
- Introduction to Electricity Consumer advocacy –Andrea Sharam (Former Victorian Utility Advocate and researcher) and Angela Savage (VCOSS)
- Introduction to electricity (& electricity bills) – Karen, Andrea and Angela.

The aim of the first session is to provide an overview of electricity issues for low income households, and to understand how community services can advocate for consumers and provide input into decisions that affect consumers.

### Session 2: '**Welcome to the National Electricity Market**'

AUGUST 18, 2004

- Introduction to the National Electricity market
- The regulatory regime & principles of economic regulation
- Who's who: Generators, Network Service Providers, Retailers, Regulators & more

The second session will provide an overview of the National Electricity Market and the factors that influence the various players in the market.

ACT Energy Advocacy Training - Timetable and information sent to participants.

### Session 3: **'Retail Electricity Prices –Building Block Approach'**

SEPTEMBER 22, 2004

- The 'price stack'. Understanding the building blocks that form retail prices.
- How we use it affects the price – peak demand issues in the ACT.
- Opportunities in each 'block' to reduce prices

The third session will build on session two, showing how various parts of the supply chain impact on pricing. There will also be discussion about energy cooperatives interstate and metering issues.

### Session 4: **'Non-price Outcomes'**

OCTOBER 27, 2004

- Consumer Protection Issues – the ICRC and the Ombudsman
- Retailers: Customer Codes and Hardship Policies – the ESCC

With the ACT retail electricity market slowly opening to competition, it is important that we are all conversant with the remedies available for people who have trouble meeting their household energy needs and with the mechanisms for ensuring that the energy industries are socially responsible and fair.

### Session 5: **'Building Advocacy'**

NOVEMBER 24, 2004

This session is being assisted by the ACTCOSS Sector Development Team, which has generously offered their training and advocacy skills.

- Advocacy and Consumer Participation.
- Strategic review of training program and issues covered
- What are the key issues for the community sector?
- Suggestions for a way forward

ACTCOSS has capacity to convene a sixth forum in 2005 to progress the issues that are raised during the training sessions, or to provide further training and information as identified by the group.

**ACT Council of Social Service Inc  
Electricity Consumer Advocates Training Project 2004**

**Session 1 – Introduction – Pre-reading**

***The following short story is an extract from an essay written by Andrew Nance of SACOSS for John Spoehr's 'Power Politics' (Wakefield Press, 2003) – its aim is to introduce the 'unit' of the electricity market – the kilowatt-hour.***

**A short, but eventful, life.**

You've just got home from work, the air-conditioner's on; you've just grabbed a drink for yourself and the kids from the fridge and some frozen left-overs from the freezer. You would have heard the fridge's compressor cut in if the kids hadn't already made their way to the TV. Anyway, you pop the left-overs in the microwave and sit down to open the mail.

*Electricity bill again? How much? Used how many units? When? What are they?*

Well, the unit is a unit of energy and its real name is the kilowatt-hour.

*A kilowatt-hour eh? How much is that?*

Well, twenty minutes or so after walking in the door you just bought and used another one. Congratulations. It only cost you about 20 cents and they probably threw in a kilogram or so of greenhouse gas for free – not a bad deal.

*Twenty minutes? That's not that long, there's a few of them in a day. No wonder it adds up over a quarter.*

And, of course, we all know it does.

The kilowatt hour. They're great little things, you can buy them from your electricity retailer (probably AGL) and get them to do all sorts of stuff; cool your home, run your computer, keep your beer cold and your food fresh, give you light at night, some people even use them to get a hot shower, cook their food and heat water for the dishes.

If you are trying to understand the 'power crisis' and all the debate surrounding it, it may be useful to try to relate to the ubiquitous kilowatt-hour a bit more first. To help with this we're going to have a look at the life-cycle of one kilowatt-hour in particular. It was the one that lived that mere 20 minutes for us before.

We remember him fondly ... we call him 'Killa'.

Killa's history can be traced back millions of years. Way back then he was probably a tree – through the magic of photosynthesis he was able to trap the energy of the sun and convert it into 'bio-energy'. Somehow he became buried, squashed and underwent the long, slow and arduous transformation into coal.

This fossilised life was pretty uneventful until a series of man-made explosions released him for a series of new adventures. Killa was in for more pain though as he was scooped up, beaten up, scrubbed, crushed and, finally, burnt. Reincarnated

as a small amount of superheated steam, he was bashed against the blade of a turbine to help spin an electric generator. Two of Killa's mates were lost, wasted as heat, but for Killa, the lucky one-in-three that makes it, this lead to the incarnation we knew so briefly. That neat, compact little packet of **electric energy** produced by one of the generators at, in this case, Northern Power Station.

As soon as you turned on the air conditioner, the electricity began to flow – like water from a pipe. Meanwhile, the generator at the Power Station was busy pushing Killa and several of his other mates into the other end of the pipe – just like a massive water pump. The generator charged about six cents at the market for Killa. That was the going rate at the National Electricity Market, the NEM, the only market in town.

The only way Killa can get to your place is on the Transmission and Distribution Network (the poles and wires bit). It's fast but a bit dangerous, like all roads. Some say one in ten go missing, lost, gone, never heard from again. Some disappear in the cables, some in the switchgear, some in the transformers. Killa's a bit nervous but quietly confident.

But you've got to pay to go on the network and there's plenty of meters along the way tracking Killa's every move. Retailer to the rescue - they'll make sure the toll is paid - you can fix them up later. The toll for Killa is about nine cents – two for the Transmission business, ElectraNet, seven for the Distribution business ETSU-Utilities.

So, the journey has begun. Killa leaves the substation at Northern at high voltage - around 275,000 volts – necessary to squeeze all of Killa's mates in as well. This drops to around 66,000 volts as Killa gets closer to town and the mates disperse. Then it's down to 11,000 volts as Killa reaches your neighbourhood and again to about 415 Volts when Killa reaches your street. By the time Killa comes up your driveway, the familiar 240 volts applies.

The appropriately named kilowatt-hour meter in the meter box at your home flags his arrival – and advises AGL to add Killa to the list of kilowatt-hours you've bought this quarter and to add a final toll of about two cents. From here Killa is painlessly divided into the different circuits in your home – a piece is used to run the fridge, TV and microwave, another piece for lights and, maybe, another piece for the element in your hot water system or stove. Each of these devices uses their piece of Killa in a different way – heat, light, motion – whatever you want.

Fortunately, or unfortunately, depending on your point of view, the story of Killa and others like him just plain happens – all you've got to do is pay.

In finishing, one clear definition is required. This is the difference between a kilowatt and a kilowatt-hour (or megawatt and megawatt-hour). A kilowatt, expressed as kW, is a measure of power - the RATE at which electricity is produced or consumed. A 1kW array of solar panels (about five square metres) in full sun will produce electricity at a rate of 1000 Watts (1kW). The typical household iron will consume electricity at about the same rate. If this production or consumption continues at the same rate for an hour – the total AMOUNT of electric energy produced or consumed is one kilowatt-hour (expressed as kWh). Returning to the water analogy, it's the same difference as between flow RATE (say, litres per minute) and VOLUME (litres).





## **The Canberra Electricity Market.**

***The following information was gathered from the ACT Government's Sustainability Report, ICRC, ESCC and ACTCOSS documents.***

*ICRC – Independent Competition and Regulatory Commission – [www.icrc.act.gov.au](http://www.icrc.act.gov.au)*

*ESCC – Essential Services Consumer Council*

*mWh – megawatt hour – unit of bulk electricity*

*ACTPLA – ACT Planning and Land Authority*

- The average ACT household consumes almost a third more electricity per annum than the national average – 3.8mWh compared with 2.6mWh;
- Because of our lack of energy intensive industries, we do consume less across the board – 7.8mWh compared to the national average of 9mWh (ACT Sustainability Office);
- ActewAGL services 135,000 customers for electricity services and 85,000 for gas. It also provides the water and wastewater services for Canberra and Queanbeyan;
- Over the 10 years to 2002-03, per capita consumption of electricity has risen at an average rate just under 1% per annum. Over that same period the ACT's population grew by 27,000 people, and the ACT is following the national trend of more, but smaller households;
- Around 8.5% of ACT residents live with poverty and are more likely to be in lone parent or single person households, living in social housing and be dependent on income support. They also spend proportionately more on housing, fuel and power than national averages;
- Despite a 4.3% adoption of green energy by households, the majority of Canberra's electricity is still sourced from coal powered generators;
- In 1996 data released by ACTEW and referred to by the ESCC, domestic customers made up 91% of all customers, but only consumed 45% of the energy sold;
- At the present time, the ICRC is not looking at alternate metering technologies – however this is on the national agenda and will, no doubt, be addressed in time;
- The ICRC currently lists ActewAGL Distribution as the only distributor licensee in the ACT: there are 12 existing licensees for energy supply (retail) and one licence pending (ICRC website);
- ACTEW was a monopoly supplier in the past, but Origin Energy and Country Energy are gaining some profile in the area;
- The ICRC is the regulator for the ACT, with technical regulation provided by ACTPLA and complaints handling by the ESCC; and
- The framework for regulation of utilities comes from the Utilities Act 2000, which is currently being reviewed by the ACT Treasury.

## **2 The structure of the market**

Australia's electricity industry has undergone significant structural change over the past ten years, including full privatisation in the Victorian market and the introduction of full retail contestability in the New South Wales, Victorian, South Australian and Australian Capital Territory markets.

The ACT electricity industry comprises the following key players:

- generators . who make electricity and sell it to retailers through the wholesale market
- transmission network service providers (TNSP) . who convey electricity along the high voltage network
- distribution network service providers (DNSP) . who convey electricity from the transmission systems to individuals via a lower voltage network
- retailers . who buy electricity from generators in the wholesale market and sell electricity to consumers.

The introduction of a national electricity code and subsequent national electricity market has meant that generators and retailers now participate in the wholesale market administered by the National Electricity Market Management Company Limited. All customers in the ACT purchase electricity from a retail electricity company.

Large transmission networks carry the electricity from the generators to distribution networks, which distribute it to retail customers. Electricity retailers bill consumers for an amount of money for using each individual service, as shown in Box 2.1.

ActewAGL is a capital intensive business. It recovers costs through network tariffs and other fees charged for the use of the network. Network tariffs comprise:

- distribution use of system (DUOS) charges, which are paid by retailers, who pass them on to the final consumer as part of the retail price of electricity
- transmission use of system (TUOS) charges, which ActewAGL pays to the transmission network service providers, and then passes on to retailers, who in turn pass them on to final customers
- other fees, including a range of miscellaneous service and monopoly fees, such as meter testing and design certification.

Box 2.1 also shows the cost attributable to each sector on a small customer's electricity bill. This paper is focused on the 37% of the bill attributed to the charges levied by the distribution service provider for the use of the distribution network.

**Box 2.1 Electricity industry structure**

*(Information presented as a line with clip art diagrams of the following market participants)*

Electricity generator

High voltage transmission

Retailers Consumers

Distribution network

**Breakdown of a typical bill for a domestic customer**

*(Presented as a pie chart with the following information)*

Retail cost 9%

Transmission use of system charges 8%

Energy costs 46%

Distribution use of system charges 37%