

**Submission**

On the  
**Essential Services Commission**

From the  
**Energy Action Group Inc**

Friday 29<sup>th</sup> September

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## **Background to the Energy Action Group Inc**

The Energy Action Group Inc (EAG) is a non-profit, membership based advocacy organisation that represents the energy and water needs of Victorian households and small business. In addition the EAG endorses environmentally sustainable development (ESD) principles in the utility sectors. The EAG started in 1977 as the SECV Action Group lobbying for improved customer and credit practices by the former State Electricity Commission of Victoria (SECV). Soon after it incorporated gas into its mandate. The group was funded by the Cain and Kirner Governments between 1982 and 1993. The Kennett Government withdrew funding in 1993. Water and small business customers were included in the objectives of the organisation in 1996. The EAG has developed a robust understanding of the reforms to the gas and electricity sectors. EAG sits on the Office of the Regulator-General's Customer Consultative Committee, convenes the *Customer Energy Coalition* (a coalition of energy users: domestic, commercial and industrial), and represents millions of electricity customers in the national electricity market on the National Electricity Market Settlement and Transfers (NEMSAT) committee.

EAG agrees with the Government's proposition that a key priority to should be to improve services to all Victorians, and the rationale given<sup>1</sup>. Energy and water are essential services that, in terms of households, are procured in order to provide heating, cooking, light, and health. Water is the most basic human necessity. These are not commodities in the normal sense as it is largely non-discretionary spending. Research has demonstrated that demand for these services is more inelastic for poorer households, and comprises a greater proportion of household expenditure. It should also be kept in mind that these services play a greater role in the welfare of children, and that the end users of such services include children who cannot be regarded as 'consumers' or customers' who have entered into any kind of contract.

The EAG does not wish to make comments in regard to the oversight of industries other than gas and electricity. Ports, grain elevators, and public transport do not fall within scope of the organisations mandate. Whilst water is within the aims and objectives of EAG, limited resources has meant the organisation is unable to bring the kind of expertise it has on electricity and gas to bear on water issues.

These limited resources also mean that this submission will not be as detailed as EAG would prefer. EAG would be happy, as we have indicated to Government on innumerable occasions be happy to discuss the issues in more detail.

## **The Essential Services Commission Consultation Paper**

The *consultation paper* invites commentary on a wide range of issues, having painted a very broad brush picture of the existing arrangements. Readers are presented with a

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<sup>1</sup> S1.2 Importance of utility services, & S1.3 Rationale for government regulation, Essential Services Commission Consultation Paper

series of generic and largely theoretical type questions. For example, should there be a single regulator or several commissioners?

The Government also sets out its own policy goals only in a generic sense: the Government has “economic”, “social”, “regional” and “environmental” objectives which are to deliver “improve[d] services”.

The EAG welcomes the opportunity for review of the regulatory arrangements of Victorian utilities. It is timely and indeed absolutely essential. The paper however, is problematic as it is a review of the ‘form’ rather than the ‘substance’ of regulation. It is not a review that sets out to establish the effectiveness, the equity or the sustainability of the current arrangements. For example, it does not explain the Government’s goal of ‘regional development’ and seek to find out whether or not services are presently delivered that meet that do or can this desired outcome. Maybe this is the intention of some later stage in the consultation process but solutions can only be mooted if the problems are known and understood.

There has been little effort to officially evaluate current arrangements. For example, the electricity industry Tariff Order, a new and largely theory based set of objectives has never be officially analysed. Theory was put into practice but there has been a follow up cost/benefit analysis.

*Is the proposed role of the ESC primarily as an economic regulator appropriate?*

Following on from above the consultation paper does not even ask whether the form of economic regulation is relevant. In the absence of any explicit discussion on the current form of economic regulation (and possible alternatives) the paper avoids the most fundamental issues that belie the regulatory framework.

The objective of the delivering positive economic, social and environmental outcomes in the utility sector is also compromised by the lack of coordination with other reviews. The Electricity Distribution Pricing Review (EDPR) was concluded prior to any outcome on the ESC. That is, a five year re-set of distribution prices has occurred virtually making it impossible to revisit a raft of fundamental issues that should have been the bread and butter issues for the ESC.

The same criticism is applicable for the review of Security of Supply, the Victorian Greenhouse Strategy, and Full Retail Contestability (FRC). To some extent these reviews and processes have excluded some stakeholders, eg customer groups have been refused participation in the development of the deemed and standing offers for FRC.

In attempting to overhaul the current arrangements, Government will need to address:

- The order of decision-making required and the need to overcome lack of policy coordination;
- Most of the arrangements for the electricity and gas sectors do not prioritise or empower the customer. The first objective of regulation should be deliver benefits

to users. The UK Parliament came to this conclusion in its review of electricity regulation in the UK.

- That not only are retailers, distributors and generators rewarded for volume of sales but for **constraints** – this has fundamental ramifications for security of supply, greenhouse responses, the quality of supply and pricing. The constraint incentives should be removed.
- The Victorian regulatory framework contains a severe asymmetry of information and resources between the supply side and the demand side;
- The NEM regulatory framework contains a severe asymmetry of information and resources between the supply side and the demand side;
- Lack of publicly available and digestible information about the market and regulated entities is economically and politically unsustainable.

The issue of information disclosure should be explored thoroughly in this review. One small example hopefully can express why a change of direction is required.

Victorian distribution businesses (DBs) complain of too much regulation, of the ORG ‘micro-managing them’ etc. One area of the DB operations is their performance in regard to outages and surges. The DBs undergo ‘competition by comparison’ (remembering these are monopolies). The DBs were required by ORG to submit data, this data is mediated by ORG and published. Clearly competition by comparison was not working as there has been a great deal community concern about outages prompting a special investigation by ORG. In contrast the Federal Electricity Regulatory Commission (FERC)—the Federal regulatory agency in the USA issued a ruling that mandated that the same systems that the DBs use to monitor and management their system for outages be utilised to provide the public with real time information about outages and surges. That is, live internet access to the monitoring systems. FERC said this was essential for competition and to address the severe information asymmetry between suppliers and their customers. It also means the DB cannot ‘manage’ their data for public consumption or game the regulator. It means the regulator does not have to engage in intrusive, expensive regulation.

In Victoria we have a regulatory framework that insists that natural monopolies who earn a regulated rate of return can be cloaked in secrecy. We have competition by comparison but are able only to compare limited data that is provided essentially via self-regulation.

#### Omnibus regulation?

In the many years that EAG has been advocating for household energy users, we have never heard any suggestion that a regulator should become a ‘one stop shop’ or ‘omnibus’ regulator in the way it is described in the paper. We regard the proposition as nonsense. However, the current framework has been criticised at length because it does not include an environmental mandate, and pushes social obligations onto government.

The Government’s agenda is to pursue ‘environmentally sustainable development’ (ESD) principles in the utility sector. This means that the form of economic regulation must address environmental criteria. That is, that there be a recognition of the role various

forms of economic regulation have in producing positive or negative environmental outcomes. Of central concern is Greenhouse gas emissions. Greenhouse gas emissions are an externality arising from electricity consumption. Pricing, tariff design, allowable revenue are just a few of the direct economic regulatory factors that affect consumption.

Environment, especially the problem of greenhouse gas emissions should not be separate from economic regulation in the utility sector because one produces the other. The relationship is well understood and measures to deal with it such as ‘least cost planning’<sup>2</sup> (LCP) are central to orthodox economic regulation in many countries. More about the issue of consumption below.

Likewise, community service obligations - or social needs – are not really separate from the service delivery. Further explanation is below.

What is being suggested by insistence that environment and social issues be included in the regulatory framework is for policy *integration*, rather than a continuation of the artificial compartmentalisation that currently exists.

The rest of this submission will address

1. Economic regulation of the distribution businesses
2. Environment
3. Social issues
4. Full retail contestability
5. Generation and security of supply
6. Gas Market System Operating Rules
7. Consumer representation

## **1. Economic Regulation of Electricity Distribution Businesses (DBs)**

The five Victorian distribution businesses are profit maximising firms. They are also natural monopolies. Their revenue strategies will reflect the opportunities, the disincentives and deficiencies of the Victorian Tariff Order, and related legislative framework. This framework was informed by the desire of the Kennett Government to maximise the sale price of each of the businesses. As an insider to the reform process Robert Booth puts it succinctly as:

“Emphasis...was to be placed on ensuring the commercial attractiveness of each of the entities sold – providing so-called ‘revenue certainty’ – for as long as possible. Customer interests were to be become secondary”<sup>3</sup>

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<sup>2</sup> We note that the ALP policy position for the election was to adopt least cost planning , **Bright Ideas: Labor’s vision for Energy**

<sup>3</sup> Robert Booth, 2000, **Warring Tribes: The Story of Power Development in Australia**, The Bardak Group, West Perth

The Victorian regime guarantees the DBs profits. An explanation follows below, but before going onto that, this decision to maximize sale prices in this way exacerbated the natural tendency of monopolies to over exploit customers and game regulators. Coupled with 'light-handed regulation' such over exploitation has virtually been assured. For a Government reviewing these arrangements there should be a great of concern about electricity prices being higher than necessary, about appropriateness of investment, about performance, and growth in consumption. It would also want to see the integration of social and environmental objectives as these are largely functions of choices about investment and revenue recovery.

### **Incentive Regulation**

The regime is called 'incentive based' because of a price cap (CPI-X), and the capacity for the regulator to reward performance over and above pre-determined benchmarks. The framework, however is frequently accused of being a *rate of return* regime, as the regulated rate of return (WACC) is calculated from the regulatory asset base, as is the rate of depreciation. The size of the asset base of each distribution business (the Depreciated Optimised Replacement Cost) was determined prior to privatisation, and this was a key element in determining the sale price. 'Regulatory depreciation' is the return *of* capital (return of the initial investment in installments over time). Depreciation reduces the size of the asset base. Capital expenditure (capex) is required in order to grow the size of the asset base. In general terms a business' profit maximising strategy would be to increase the size of the asset base by adding new investment and opting for slower rather than faster depreciation. In a simple analogy it is more profitable to earn 10% on \$1000 dollars, than it is to earn 10% on only \$500 (a profit of \$100 instead of \$50). The business will also attempt to increase its sales (in this case demand for electricity), and cut costs.

As monopolists there are no natural constraints on prices and service quality. This is what the regulator must oversight in order to protect customers. More specifically, the Victorian regulatory model does permit a form of competitive pressure, that being bypass (the literal duplication of infrastructure). Performance standards are set in order to preserve quality of service and supply. The creation of 'competition by comparison' is intended to provide the incentive to improve standards. A price cap is applied to prevent monopoly pricing. The price cap is not really a cap, as we commonly understand the word. It is more like a slight downwards adjustment to the price, intended to 'squeeze' the business and produce greater productivity. The price is determined by the revenue requirement which in turn is made up of the cost of new assets; operations and maintenance costs; the return *of* capital; and the return *on* capital. The revenue requirement is influenced by the volume of sales. The cost per unit falls as the number produced increases (marginal cost), an incentive to promote sales. Slower depreciation rates (wear, tear and asset replacement costs) has an adverse impact upon quality of supply: the older the assets the more likely there will be failure. The faster the rate of depreciation the greater the contribution depreciation plays in the DBs revenue requirement. The flow on is a more expensive the bill for the customer. A balance between the two is required, but it is difficult for a regulator to know the real costs and know how service standards/quality of supply are being maintained. It is more difficult if

the regulator, as in the Victorian case, is deemed a 'light handed' regulator. This kind of regulator only wants to know the results not how the results are achieved. This allows the businesses to 'game' the regulator. In essence Victorian has a very permissive regulatory framework, and the distribution businesses are taking full advantage of it. Each of the businesses are inflating their revenue requirements, and dodging quality of supply targets. Ironically, the only competitive threat, bypass, may produce perverse outcomes rather than competition. The current high regulated real rate of return (WACC) is an incentive for economically inefficient bypass (why care about whether sales can cover the cost of a new set of poles and wires when the cost of the infrastructure can be slated against all the existing customers *and* deliver a very attractive rate of return?). Theoretically, the DB (Powercor) with the highest DUOS charge should be at most risk of bypass. Practically, however it has been Citipower that has been bypassed (twice). This is a reasonable indicator of the influence of the high WACC. Strategically placed capex however, can help stave off bypass. That is, some customers (those most likely to attract bypass options) will be well catered for in terms of price and quality. It is likely to come at the expense of those customers for whom bypass is totally unrealistic. This type of price/service discrimination is called 'redlining'.

The single most important aspect of the Victorian electricity distribution industry however, - embedded in the regulatory framework - is growth in consumption. This growth, which is more than simple population or economic growth - contains a significant contribution from per capita increases in consumption of electricity. The regulatory regime condones and significantly rewards growth in electricity consumption that in turn rewards the distribution businesses. The distribution sector can be seen as 'pushers' of electricity. Unlike drug pushers, these companies are legal, and are offered every encouragement by legislation to engage in this pushing. Moreover, competition in the form of alternative fuels and technology is effectively nobbled. The companies themselves currently bear no legal responsibility for the external environmental costs associated with Greenhouse gas emissions. This responsibility is offset on to users, who in the main have little or no understanding of the effects that their behavior have on the electricity industry and its costs. The results of the incentive for consumption in the distribution sector are:

- the creation of constraint necessitating new investment where it may not be required if demand had been managed instead, leading to higher than necessary prices (most cost planning rather than least cost planning);
- shortfall in generation capacity at peak times;
- shortfall in transmission capacity;
- customers facing new costs such as Ancillary Service Payments;
- inappropriate metering solutions;
- inappropriate tariffs;
- lack of will for appropriate building codes and appliance rating
- additional demand for state spending on concessions and energy relief grants;
- increased greenhouse gas emissions.

Customers and the community generally can expect:

- an ongoing energy supply crisis, characterised by higher than necessary prices,

- periodic shortages with localised black spots of poor reliability and supply; and
- to bear the financial burden of the costs associated with increases of Greenhouse gas emissions, particularly severe and abnormal weather. This will be a two fold cost with damage to property and livelihood on the one hand and the repair and replacement of electricity infrastructure on the other (customers will have to accept more interruptions to supply as well).

The adoption of least cost planning in the regulation of distribution would resolve or assist in resolving these demand side problems in the most cost effective, equitable and environmentally sustainable way.

For further discussion on the regulation of distribution the Government should refer to the following submissions to the ORG's Electricity Distribution Pricing Review :-

EAG's submissions (parts 1 & 2)

<http://www.reggen.vic.gov.au/docs/electric/eageclc.pdf>

<http://www.reggen.vic.gov.au/docs/electric/eageclc6.pdf>

and the 'Pareto Report'

<http://www.reggen.vic.gov.au/docs/electric/elpareto.pdf>

which have a number of other important matters are raised there, including issues regarding inflation, forecasting, consumer participation, and performance monitoring.

## **2. Environment**

The current Tariff Order should have been reviewed prior to the ORG's review of distribution prices. For example, forecasts of consumption were consistently lower than actual, and may have been deliberately under-forecast. Certainly it is the case that a mismatch between forecast and actual (higher) consumption results in a financial bonanza for the DBs, creating an inappropriate driver for growth in consumption. Government needs to look very closely at potential gaming in relation to the forecasting of energy and demand load forecasts. The DBs have the incentive to under-estimate, as every unit of electricity sold over and above the forecast is pure profit in the Victorian price cap regime.

It is also necessary to examine the capex, as un-forecast growth may skew the capex benchmarks. Accordingly, the DBs are likely to 'hide' the necessary expenditure to avoid penalty. The emphasis of regulatory framework should be to facilitate 'least cost planning'. The Tariff Order, accordingly, needs to have the incentive to reduce consumption rather than increase it, as it does currently. The price cap (CPI-X) could use a claw-back provision for exceeding forecast consumption, and rewards for under forecast consumption. An "E" factor was proposed in addition to the current "X" factor (efficiency), and the new "S" factor (performance). This is to de-couple sales from profits. Unfortunately, the ORG rejected the "E" factor proposal and the least cost planning argument, in EAG's opinion because the legislative framework is prescriptive ('revenue certainty'), and does not directly provide any environmental mandate. In addition there is confusion about regulatory responsibilities in regard to security of

supply. ORG's legislative responsibility to secure benefits for customers and ensure system reliability should provide such a legitimate role for ORG to apply a brake on consumption but the combination of a 'black letter of the law' regulator (the legislation was very careful to lock in the regulatory approach) and the demarcation between ORG and NEMMCO (as system security managers in the National Electricity Market) results in security of supply problems being seen as supply side problems rather than demand side problems. It should be noted that the ORG undertook the organisation of the 'Capacity Support Program' for the summer of 1997 when shortages were anticipated. The approach to the issue then has been varied.

Consumption has plenty of other rewards under the Tariff Order. Increased consumption leads to increased capex via the nexus between load demand and system constraint. Clearly a brake needs to be applied. The DBs proposals for capex (for reinforcement, growth etc) need to be submitted against a demand management criteria. That is, capex should be prioritised to demand management. Tariff structures likewise should have demand management signals.

Government needs to be sensitive to relationship between customer classes when it comes to consumption. The residential sector is the major source of volatility in energy demand. It is the volatility - the spikes- that are driving the need for new capex. As the DBs submissions reveal it is household consumption that provides much of the scope for increasing demand (sales).. Fitches IBCA (1999) **TXU Holdings (Partnership) Limited Partnership**. Australian Global Power. December 13th, indicates the important role played by residential consumers in the DBs cash flow. Households - not being contestable or being unlikely to inspire robust competition - will more likely face inducements to consume more.

There is however, an interesting relationship between households and the industrial/commercial load because of maximum demand. Reactive power (motors for example) exhibit maximum demand when started, but tail off once running. The system needs to supply this maximum demand but the system is then, in effect under-utilised most of the time. Some would argue to increase demand to use this capacity in the system. The problem is risking constraint at the point of maximum demand. The least cost solution is to shift the reactive power load (stagger it, if possible), and remove the threat of constraint as a result of general increases in load. Because households demand peaks in the morning (getting up to go to work) at the same time as the industrial/commercial reactive load peaks there is much value in demand management in the residential sector.

The electricity industry is the major producer of greenhouse gas emissions in Victoria. The DBs are heavily involved in promoting consumption of electricity and in retarding the implementation of demand management and renewable technology. The Greenhouse Effect is ironically, cause for weather events that have adverse impacts on the DBs infrastructure (storms, floods, fire), as well as on the economies on which the rural DBs in particular, rely. Currently, weather damage to electricity infrastructure is paid for by customers, either in the form of the DB self-insuring with contingency funds or by taking

out insurance policies. ORG has stated in the past that ‘disaster’ costs would be funded by allowing a higher than otherwise WACC (the argument goes, that by allowing a higher profit in every regulatory period, when a major disaster occurs the DBs should pay the costs). This kind of policy may be acceptable when risks are properly allocated and ameliorated. However, the opposite is occurring in which the electricity industry is adding to the risk.

### **Distribution Losses**

As UEL points out in its initial submission to the ORG’s EDPR the higher the utilisation of the lines, the greater the losses. Losses are a cost that is smeared across users. All the DBs are seeking higher utilisation. Users therefore are assuming yet another sets of costs.

- a) the actual losses, and
- b) an increase in losses, and
- c) the capex associated with line augmentation.

Demand management has significant benefit for users. Interval metering would aid in the control of distribution losses. Currently these losses are smeared across users who are inappropriately metered. With proper pricing signals consumers can switch load, reducing losses. The DBs can identify where the losses are occurring. The costs of the losses can be properly allocated to the parties responsible rather than being smeared. User pays for losses would provide an appropriate demand management incentive. KVA tariffs, for example, as demand tariffs (reflecting the maximum demand) allocate the distribution losses to the (source) customer that causes the distortion.

## **3. Social Issues**

### **Redlining & Threshing**

Redlining is a term to describe certain forms of price/service discrimination. Generally, it occurs in a situation in which an unattractive customer - unable to utilise an alternative service – is subject to price rises and/or a decline in the quality of service. The service provider may do it to stem losses, to take monopoly rents, or in order to cross-subsidise customers elsewhere in their network, particularly if they are subject to competition. Redlining is evident within the banking industry and increasingly, in terms of performance, with Telstra.

In electricity distribution/retailing it can be where the customer location and/or low customer density make them unprofitable or less attractive to supply, and where the DB is at risk of bypass.

The EAG has identified the threat of bypass and cherry-picking of profitable customers as a major factor in the way the electricity distribution businesses responded to the distribution pricing inquiry. Life at the end of the electricity line in rural and remote areas is going to get worse rather than better. Powercor’s submission to the pricing inquiry correctly identifies, in our opinion, that the regulatory regime is poor enough to allow significant decline in the quality and reliability of power supply. This is a very significant understanding because it opens the door to Powercor to protect its more

profitable customers from competition. Powercor's & TXU's problem is that its regulated distribution charges are higher than its neighbouring urban DBs, which makes it vulnerable to bypass, especially its large industrial customers in Melbourne's western suburbs. It must offer lower prices to these customers or lose them. A defensive strategy is to keep prices low and quality of supply higher in the vulnerable areas, and *redline* those customers who are not in danger of being bypassed. In essence these customers are hostage to an increasingly expensive and unreliable electricity network. Without a change strategy from Powercor, and a regulatory regime which prioritises customers needs, communities like those in the Wimmera will need to look at the alternatives. Unfortunately, these customers may incur a great deal of expense and disruption before they find a suitable solution. If this type of economic inefficiency is exactly what Government/regulators should be seeking to avoid. TXU's approach has been better with the use of micro-generators and embedded generators. However, if bypass is explicitly permitted because the threat of it promotes competitive behavior, the perverse incentives need to be addressed. Facilitating robust competition from alternative technologies and fuels is clearly the logical step. If costs are transparent, explicit and verifiable, and identifiable by customer class and locality and cross-subsidies do not distort pricing signals competition from the alternatives can begin in earnest. For rural communities it would result in net gains in employment and service rather than continuing losses.

Another form of redlining is 'electronic redlining' which involves data mining, and the financial profiling of customers. Electricity supply gives access to every household. This is a significant business opportunity for an electricity supplier. A household's energy consumption is analysed and correlated with data mined from other sources. Attractive customers will be barraged with products via their electricity bill. Unattractive customers - those that have little or no disposal income or with low consumption are marginalised. Consumers will be very familiar by now with how this works. A small bank customer faces increasing bank fees that force them to opt out or pay up. Wealthier customers obtain rewards.

The DBs have already spent large sums of money on IT systems that allow them to undertake the 'data mining' that is a pre-requisite for electronic redlining.

These problems will be exacerbated with what is emerging as a poor framework for full retail contestability. It appears that retailers will be required to nominate the geographical areas in which they want to operate. This will be explored in more detail below but in terms of distribution the oversight of the ring fencing provisions needs to be strident. Even with formal separate ownership as has been required in NZ problems still emerged.

Threshing is the use of group companies to avoid ring-fencing provisions. It permits over-charging to occur as the transfer cost between the companies are escalated (double dipping). It also obscures profits and permits costs to be loaded onto the regulated parts of the business. The problem has been examined in the USA (Charles Higley [1999] **Money Harvest**; Utility Holding Companies Are Threshing Ratepayers, Public Citizen Critical Mass Energy Project. May).

### **Tariff Re-Balancing**

The ORG's determination on distribution prices provides substantial scope for tariff re-balancing that will disadvantage particular classes of classes, or even particular sets of customers within a particular class.

ORG has mandated cuts of 12-22% to the 'tariff basket' in year 1, and further cuts of 1% per year thereafter. Prices are permitted to climb by CPI + 1-2%. This leaves open the possibility that some customers may experience price increases of 25% in year 1 with increases above CPI in the following years. The DBs were required to set out the upper and lower bounds into terms of costs of supply for each customer class. These were criticised as being too permissive adding to fears of redlining. The ORG ignored calls for setting out guidelines for tariff design. Standing charges, for example have a substantial impact on the actual costs to the customer and can result in over recovery of costs by the DB. Tariffs are a good starting point for addressing affordability and equity issues. In addition tariffs can function as demand management tools by providing pricing signals. Air-conditioning for example, which is currently heavily subsidised under the MUT could be placed on a discrete tariff and made pay its own way. Given the obvious implications of air-conditioning to peak summer load the benefits would be significant. EAG has made submission that a generic cost of supply model be adopted.

### **Affordability**

For the historical record it needs to be stated (again) that by and large the price decreases awarded to households between 1995 -2000 merely represent the price hikes of 1993, when the tariff was raised by 10% and the supply charge doubled to \$33 per quarter. Moreover, the price cuts were mandated by Government and are not the result of a voluntary decision of the DB. The dramatic increase in the supply (standing) charge was matter of controversy at the time as it severely penalised households with low consumption and/or low income. The relative proportion of standing charge to consumption is barrier to behavior modification in relation to consumption.

The last research to be undertaken on the relationship between household consumption, income and fuel poverty was in 1982 by the Center for Urban Research & Action. Research and programs elsewhere have demonstrated wider economic, social and environmental dividends are gained by addressing the needs of the poorest utility users. The DBs have regrettably no formal responsibilities to address affordability. The reform process left this as a 'Community Service Obligation' for the taxpayer.

Government programs should align with service provision. The separation of 'community service obligations' from service delivery in the utilities sector has been a retrograde step. As essential services Government and industry should be initiating research and programs that properly target programs that address systemic causes of household fuel poverty like lack of income, appliances, housing stock and life-cycle issues. Emergency financial relief, such as the Energy Relief Grants Scheme (ERGS) alleviates only single episode crises, whereas fuel poverty relates, in the main, to chronic poverty.

Fuel poverty is best addressed by a combination of financial relief and demand management. A regulatory framework that rewards consumption imposes a considerable and unnecessary impost on vulnerable households. The adoption of least cost planning in distribution would be a positive contribution to equity. State Government concessions and ERGS currently cost around \$50m - \$60m per year. The ERGS can only be utilised by the applicant once every seven years. The assumption is a single episode crisis rather than chronic poverty and/or poor housing/poor appliances. The grants scheme should be addressing the systemic problems. Research has demonstrated that poor housing stock and poor appliances guarantee failure for low income households. The costs of this failure are not exclusive to Government. Charities also provide financial relief. The industry itself has been extremely slow to appreciate that debt write off/bad debt could be substantially reduced by retrofit programs.

### **Equalisation**

It was the policy of the ALP to retain the MUT if elected to office. In addition there is a proposition by Powercor and TXU that some kind of 'equalisation fee' be introduced to provide equity for rural households and farms once the Maximum Uniform Tariff ends. EAG welcomes the Government's decision to defer any decision on this issue. If cross-subsidies are to be considered, it should be done only after extensive public consultation. The issue is a complex one with a substantial history, some of which is provided below.

Consumers and Government need to have regard for the fact that distribution businesses and generating companies not only receive payment for each unit of electricity they sell or distribute but are paid for constraint. A MUT type of arrangement under the current market rules would remove or distort pricing signals to consumers. There are substantial dangers in this. Households like existing contestable customers are to be made liable for Ancillary Service Payments (blackout levies), and their energy prices will either be full flow through or an average based on the price spikes (constraint has a direct impact on the wholesale energy pool price). What customers may 'save' by having a subsidised price would easily be outweighed by these other variable costs.

If Government wishes to maintain pricing parity between rural and urban customers it would need to weigh the 'social equity' benefit of an indiscriminate subsidy against the dis-benefits (and lost opportunities) such a subsidy would likely create *given the current structure of the industry*.

EAG is not opposed to cross-subsidies, but believes that the cross-subsidy should not be internalised in the existing pricing arrangements. It should be external to the Distribution Use of System (DuoS) charge where it would be explicit and transparent. Moreover, it should be delivered as a subsidy to reduce consumption not a financial rebate. A financial rebate leaves the recipient customers constantly under threat of having it reduced or removed. Demand management measures and a boost for alternative technologies will improve quality of supply as well as reduce the end price of electricity to the user.

The EAG believes it is important that the public and customers appreciate the cross-subsidy issue, and some history can assist in this. The five DBs were carved out of the SECV and the MEUs were incorporated into these new businesses. Revenue requirements & prices were calculated on estimates of customer numbers, demand etc. A view was formed that the rural DBs were because of their low density of customers and vast geographical area would have higher cost structures. This meant they would have to charge their customers more than the urban businesses. As these were market reforms, this was acceptable (it would send the correct pricing signals). Moreover, cross-subsidies would need to be eliminated as these distort the pricing signals. However, in the short term the previous Government did not want there to be a pricing differential as this would have been difficult in political terms. The solution was to write down the asset value of the rural and write up those of the urban DBs. As the rate of return is calculated from this asset base this meant the rural DBs would receive less income than their urban counterparts. The effect is that rural prices would need to be lower, hence the Government's claim that the write down was an up front subsidy to rural consumers. Compensation was to come in the form of a cross-subsidy from urban customers (as the urban DBs asset value was written up, this means they could charge their customers more in the future). In 1995 this cross-subsidy mechanism, the Grid Equalisation Fee (GEF) was worth just under \$24m (nominal). According to Powercor, they received \$19m per annum, which leaves Eastern Energy with \$5m. The subsidy is being eroded by inflation. Eastern Energy will be receiving no cross-subsidy after the next few years.

Nevertheless, the GEF is only about one quarter the size of the estimated cross-subsidy that was considered to exist under the SECV's MUT policy. A very sizable slice of the cross-subsidy was eliminated by the doubling of the supply charge and in lifting the general domestic tariff by 10% in 1993. There are also significant internal cross-subsidies with both Eastern Energy and Powercor, from their urban centres (including outer metropolitan Melbourne) to rural and remote customers. Finally, the cost of supply has a relationship to consumption. Increasing consumption in the existing network acts to lower the unit price. All of the DBs have exceeded their forecast consumption significantly. This means they are way ahead financially. In a nutshell, the combination of current pricing levels and growth has virtually eliminated the cross-subsidy from urban DBs customer to rural DBs customers. Urban customers are paying hugely higher prices than necessary, much of which is collected by Government in the form of the Franchise Fee. By the time the rural DBs complained to Government (November 1994) that their allowable revenue streams were too low, most of the financial arrangements underpinning the restructure and privatisation had been settled. It did not want to increase the size of the GEF cross-subsidy and did not. The Government's publicly articulated policy was to eliminate cross-subsidies in the longer term, and its actions in allowing an extra 1% WACC is an explicit statement that it remained in favour in pricing differentials between urban and rural customers. Contrary to spin put by Powercor and Eastern Energy the higher WACC *was and is* about them charging their customers more - not about subsidies. In the short term, the increased WACC was obscured by the MUT being set so high. As future prices are related to asset values, the asset write down of the rural DBs, was a signal to potential buyers that the profit potential of the rural DBs was significantly less than the urban DBs whose asset bases were written up. That is, the Government was

prepared to forego on the sale price in order to deliver lower prices to rural customers (pay less –charge less). It was a warning to the buyers not to pay too much. But they did, and this has added pressure to the cost structure of the rural DBs. This is a case of poor judgement on the part of the buyers and as such it should not be an expense foisted upon any customer.

The Winter Energy Bonus Scheme which will deliver \$360m back to franchise customers between 1998-2000 effects another cross-subsidy as Powercor was never levied Franchise Fees and those for Eastern Energy were relative small. The fact that Eastern Energy was levied only a small Franchise Fee and receives only a small amount in GEF strongly suggests a highly profitable urban territory. Allowing the rural DBs an extra 1% WACC (paid for by urban DBs customers) would reduce the differential in the DUOS between the urban and rural DBs, and hence hedge the rural DBs against bypass risk. Bypass has significantly more risk for rural DBs than urban, because of the reliance they have on their internal cross-subsidies. Reducing the bypass risk reduces competitive threat and theoretically we should see price rises/service decline as the DBs seek monopoly rent. However, as indicated elsewhere increasing the WACC can encourage uneconomic bypass - which may completely subvert the intention of the cross-subsidy.

#### **4. Full Retail Contestability**

Innumerable questions remain to be settled about the implementation of full retail contestability (FRC). EAG remains unconvinced at this point in time that FRC as it is proceeding, will deliver benefits to households.

This pessimism can best be expressed by a few facts:

- the cost of FRC is now slated to be between \$1b-\$2b without one customer having moved from their current retailer (costs which customers ultimately bear);
- exposure to Ancillary Service Payments (ASPs) and higher energy prices are likely to rapidly wipe out any savings achieved by customers through competition;
- hedging against the risk of price spikes is pushing energy prices up and is exacerbated by the decision to not roll out interval metering; and
- unfettered demand is increasing the likelihood of further constraints, blackouts and price volatility;
- profiling rather than interval metering smears costs (inequitably), and prevents price signals to consumers;
- there is substantial risk of retailer failure and/or non-participation of retailers in the Victorian market
- there are a number of aspects of the proposals, especially the use of profiling that are anti-competitive and do not conform with Competition Law.

Decision making for FRC has been compressed within a virtually unmanageable timeframe because of the Victorian Government's seeming determination to proceed with FRC by the January 1, 2001 deadline. The process is highly complex as a result of the various regulators and decision makers involved, ranging from the National Electricity

Code Administrator (NECA), NEMMCO, ORG, jurisdictional panels and five State Governments. The various bodies are pretty much making decisions in an uncoordinated way. This is leading to decisions in some forums that are inconsistent with decisions in other forums. Two examples:

- The ACCC being asked to approve Code changes that depend on Metrology issues that are yet to be explored and resolved;
- IT specifications being let to providers although some key decisions have not been made, and the end requirement of the IT actually remaining unknown.

The credibility of some of the decision making is questionable. Customers have the right to be concerned and aggrieved about decisions to proceed with profiling of electricity and gas customer when no cost/benefit analysis has been undertaken, and experience in other jurisdictions strongly indicates a distinct lack of benefit for individual customers and competition in general.

The Victorian Government having determined that some bridging is required for franchise customers once the MUT ends on the 31<sup>st</sup> December 2000. The opening of the market is going to be a communications nightmare. It is proposed that there be 'deemed contracts', a 'default tariff', 'Standing Offers', and 'market contracts'. It is a very complex beginning to a reform process the community has virtually no knowledge of. Further the Government has refused to consult with customer representative about the price/service offering for the deemed, default and standing offers. On what has been made public significant risks, such as ASPs are being shifted onto to small customers. Such risk is new to these customers who as individual users have no ability to manage this risk. Instead it assumed that customers will adapt by taking out new forms of insurance. The risk of ASP is more appropriately placed on retailers who will then have the incentive and means to manage the this risk. One of the difficulties of the current proposals is that whilst risks and costs are being slated against households, the implications are far wider. The proposed arrangements are cause of market volatility that has costs for other users (higher energy prices, ASPs), and the community in general (through blackouts for example).

It is surprising that the Victorian Government should take such little account of the costs and risks facing households with the commencement of FRC, given its public position of recognising the social aspects of energy services.

One of the central difficulties has the lack of meaningful consultation with consumer organisations. Users are for the most part are not involved in the decision making because they are either actively excluded, are not given resources required to participate, or are subjected to 'consultation' practices that are merely 'information sessions', or the pace of change is too rapid to have appropriate well developed responses. The considerable expertise in the consumer sector is heavily under-utilised. To date the ORG has processes have been well regarded in the consumer sector, with a couple of provisos. The lack of funding for users, the lack of timeliness in which to respond to consultation papers, and the lack of forward looking workplan/timetable.

## 5. Generation and Security of Supply

The Victorian Government has released its assessment *Security of Electricity Supply Taskforce Report September 2000* of Victoria's security of supply situation for the summer of 2000-2001. This report was commissioned after Victoria experienced blackouts last summer. In preparation for this report, the Government engaged consultants to undertake work the actual work. As a part of the review users were invited to attend a consultation session. Subsequent to the public release of the document users were invited back for an information session.

The result has been very disappointing to users, who are greatly concerned that any anticipated actions intended to avert power shortages are too late in coming. Some longer term solutions are canvassed but this still does not address next summers threat. Users indicated that interruptable contracts (demand side response) would be unlikely now as firms contract well advance for their energy needs. That is, voluntary load shedding by large users was highly unlikely. It would appear that the Victorian Government intends to rely on imposing voluntary and/or involuntary restrictions in order to avert load shedding by NEMMCO. Whilst a necessary last stop measure it is far from optimal. It:

- Distorts the market, exacerbating rather than resolving some of the problems that have lead to the crisis in security of supply;
- Involves heavy financial losses for businesses;
- Gives Victoria a reputation for unreliable power supply;

Users are concerned that besides demand management the most obvious action, to strengthen the interconnect with NSW was not being treated as an option.

It terms of demand management – which is strongly supported by users – EAG is mystified about the exclusion of the distribution sector from demand management. The Sustainable Energy Authority is to spend \$10m a year on mainly market based programs. This compares badly with the DBs \$200m of capital expenditure per annum on catering for consumption, a significant amount of which is new consumption.

There are a range of measures that could be taken, particularly in relation to air-conditioning from making air-conditioning pays its own way to agreements with users to have the units turned off remotely at times of constraint.

Critical to resolving the security of supply issue will be greater scrutiny of market behaviour. If the Value of Loss of Load (VOLL) is increased from the current \$5,000 MW to \$20,000 MW the incentive for generators to cause constraint will be far greater (both generators and distributors profit from constraint). Market failure is evident in the generator sector – due to the design of the market, and this needs to be addressed by Governments.

For 80% of the time Victorian has an over-supply of generation capacity. For 5%-6% of the time the Victorian system experiences constraint. This is due to a combination of

factors that include a poor mix of generating plant (too many large base load plants and too few peaking plants); weather conditions; increased use of air-conditioning and cooling; and the financial rewards of constraint that accrue to the generators themselves.

Electricity producers sell what economists describe as a ‘undifferentiated commodity’<sup>4</sup>. This means that one competitor’s product cannot be differentiated from the competition: one electron is indistinguishable from another. In industries that are also characterised as having high fixed capital costs and over-supply, economists have been able to observe predictable behaviours. Such firms compete on price, and price wars emerge. In order to salvage the bottom line, these firms resort to selling on volume. That is, offer larger quantities at a lower price in order to make the sale. The logic is that it is better to recover some costs than none. The collapse of Victorian wholesale electricity prices after deregulation is contributable in part to this dynamic. Contestable customers have been until recently ‘price takers’, but as constraints make themselves felt the volatility becomes a serious liability for customers.

This also provides an explanation as to why there have been no significant new entrants into generation. Base load remains for the greater amount of the time in over-supply. New inter-immediate or peak plant will relieve the constraint but replicate the over-supply problems experienced by the generators previously. If a new inter-immediate gas turbine of any size were to be built in Victoria it is possible that its likely success in capturing peak prices could send one of the base load coal fired stations to the wall. This is not to suggest that such a station would stop operating, but rather that a sell down would occur. The consequent de-valuation would put the station on a more financially sustainable basis, but the fundamental problem of over-supply of base load would remain.

The Premier indicated in February 2000 that the Victorian Government would consider a new coal fired power station. EAG hopes that the impossibility of this has been subsequently recognised by Government. The introduction of new gas fired generation to ensure security of supply is also problematic for the reasons outlined above, and because of the unworkable and high risk nature of the gas Market System Operating Rules (MSOR).

## **6. Gas Market System Operating Rules (MSOR).**

The Victorian gas MSOR needs major revision. Market rules should reflect the nature of the Victorian gas supply arrangements.

Victorian gas supply can be characterised as:

- dominated by one producer;
- having limited line pack;

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<sup>4</sup> Coyle, Eugene, 2000, **Price Discrimination, electronic Redlining, and Price Fixing in Deregulated Electric Power** American Public Power Association, Washington DC, USA

- virtually limiting access to peak load gas (Liquid Natural Gas) to the three existing retailers (a substantial barrier to entry for independent retailers trying to enter the market);
- flat commercial and industrial demand profile.

The market rules are highly prescriptive and:

- that the creation of a spot market (market carriage model) is not warranted by the size of transactions, and demand characteristics, or appropriate to the existence of a sole producer;
- exempts the “Independent System Operator” from liability for dispatch errors;
- is incredibly complex;
- market signals are delayed until after consumption and therefore do little to change customer behaviour;
- Ancillary Service Payments, particularly constraint and surprise uplift payments are more the outcome of poor market design than the nature of demand or supply, and impose unwarranted risk and costs onto consumers;
- The spot market costs more to run than the input costs of gas;
- Customers are inappropriately assuming VENCORP costs and the associated retailer risks.

Security of supply may be compromised by, and prices can be manipulated by TXUA cross-ownership of electricity and gas assets.

The ESC should be required to monitor market behaviour of Victorian energy market participants, particularly for generator gaming and possible market manipulation.

## **7. Consumer Representation**

There is a basic conflict of interest for the ORG currently because the Office is required to represent the interests of customers whilst being the independent umpire between customers and suppliers.

Consumers should be empowered by both funding and formal relationships (such as a strengthening of the role of the Customer Consultative Committee (CCC)). The CCC should have its own corporate identity, be able to research and publish independently on issues of concern, and have access to distinct funds to enable this.

Consumer representation in the utility sector needs to be strengthened by a commitment to permanent funding so as to allow the development of institutional knowledge. Utility services and regulation is a complex area requiring a wide range of skills and knowledge. At present most of these skills are learnt on the job as no educational institutions provide training, and there is little directly transferable service areas. Specialist advocacy is required. This should be backed up by both the ability to contract for specialist skills/knowledge, and the participation of other interested organisations via project funding.

Governments need to recognise that the NEM also demands the attention of consumer advocates, but that these representatives are confronted by an asymmetry of resources *and* formal participatory mechanisms that favours the supply side. Users have advocated for a long time that user side funding (directly out of the market) is required to address this lack of balance. The jurisdictions should work towards making the NEM more accountable and transparent to consumers. There needs to be greater levels of formal participation on boards of regulatory agencies such as NECA, NEMMCO and Vencorp, as well as more effective consultation processes.

EAG supports funding for advocates directly out of the NEM. This gives users access to the same funds that are used by the supply-side namely customers' money. Likewise, in terms distribution it is grossly unjust that DBs should have their participation in regulatory processes funded by customers (via the DUoS charge), whilst customers are denied this same opportunity. The Victorian Government should make provision for user side funding to come from this source. It should be noted that the Victorian DBs were awarded between \$60m-\$70m for regulatory matters by ORG, so that the asymmetry so evident at the NEM level is also a characteristic of the Victorian regulatory framework. In addition the Victorian Government should undertake some level of direct funding given the wide social and environmental ramifications of utility services.