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Introduction

The Energy Users Association of Australia (EUAA) welcomes the Productivity Commission's Review of National Competition Policy Arrangements. We believe that the National Competition Policy (NCP) program that the Federal, State and Territory Governments co-signed in 1995 has provided a worthwhile improvement to the structure, performance and conduct of Australia's energy sector.

The EUAA was formed on 1 January 2001 by a merger of the Energy Users Group of Australia (EUGA), which had focused mainly on electricity issues and the Australian Gas Users Group (AGUG), which dealt with gas issues. The merger reflects the increasing convergence of gas and electricity and the range of similar issues affecting electricity and gas users.

The EUAA is a non-profit organisation funded mainly by membership fees and focused entirely on energy issues. The EUAA represents the views of approximately 80 large business end users of electricity and/or gas. Membership ranges across a number of sectors, including mining, manufacturing, construction, commercial property and service sector. Many of the EUAA members operate across States.[1]

Our members welcome the PC review of the NCP program nine years after the commencement date. Our members believe that the Review provides for a timely opportunity to assess what has been achieved in the energy sector (electricity and gas) and an opportunity to lay a roadmap for future reforms.

The Issues Paper outlines the key features of the current NCP program, seeks feedback on the impact of the NCP and related reforms to date on the Australian economy and community. The Paper also seeks comments on areas offering opportunity for significant gains to the Australian economy from removing impediments to efficiency and enhancing competition.

In response to this invitation, the EUAA is pleased to submit its comments on the Issues Paper. The EUAA's submission focuses on the best way of co-

[1] The EUGA was formed in 1996 and the AGUG had existed since the mid 1980s. Hence, there is a lot of experience including with pre-reform situation of users, NCP, establishment of the NEM and other related reforms.

ordinating future reform in the energy sector (electricity and gas), the benefits from energy sector reform to date and future priority for energy sector reforms.

1. Best way of driving competition reform

EUAA members made input into the COAG Energy Markets Review (Parer Review) as one of the Association's top priorities for 2002. We were pleased by the findings of the review that 'just as the energy reforms have brought benefits, it seems clear that there are serious deficiencies in some of the reform areas' **(page 8, COAG, Energy Market Review, Final Report)**.

As a consequence, the Review made a raft of recommendations. The EUAA was pleased that the Ministerial Council of Energy (MCE), established by COAG to champion energy sector reform, has picked up many of the recommendations as announced in their December 2003 Communiqué.

We believe that the MCE provides the best opportunity to address deficiencies in electricity and gas reform for the foreseeable future and we are determined that this opportunity is not lost. If it is, we fear that further reform will be seriously compromised and will take years longer.

2. Has the NCP driven Energy Sector Reform?

Structural change to the energy sector had its origin prior to the formalisation of the NCP program. As early as 1991, following an Industry Commission report into the electricity sector, the Federal, State and Territory government's agreed to form a 'national grid'.

In August 1993, the Victorian Government announced a splitting of the SEC of Victoria into three distinct components being, generation, high voltage transmission and low voltage transmission as well as an examination of injecting some competition in these sectors where possible. In February 1994, the Victorian Government bolstered the structural change to the Victorian electricity sector with the further breaking up of the generation and distribution sectors into five separate corporatised units.

In January 1992 the NSW government renamed the Electricity Commission of NSW to Pacific Power and restructured it into six business units (three generating groups, one pool trading unit, one network business, one services unit). 25 distribution businesses remain separate. In May 1994, Pacific Power's network business unit was established as a separate legal entity. As a consequence of the NCP agreement, in 1995, the NSW Government moved to corporatise distribution and generation in the State.

The Queensland Government divided Queensland Electricity Commission (QEC) into two government-owned corporations in 1995. In 1996, Queensland Government announces its electricity industry reform strategy '*Powering the future*' which involved government owned corporatised generation, distribution and retail. South Australia also embarked on a corporatisation program in 1995.

In April 1995 the States and Federal Government agreed on competition policy agreements being linked to NCP payments to, among other conditions,

the implementation of specified electricity reforms. The thrust of the electricity agreement was for States and Territories to implement a national wholesale electricity market and an interconnected national electricity grid. States also agreed to a number of structural reforms to facilitate the efficient operation of the National Electricity Market (NEM).

Hence, while NCP was not the instigating factor in promoting competition reform in the energy sector, it has been a main driver since 1995 in promoting a nationally consistent reform program.

The EUAA supports the NCP program being one of the main drivers of competition reform in the energy sector.

3. Benefits to date from energy competition reform

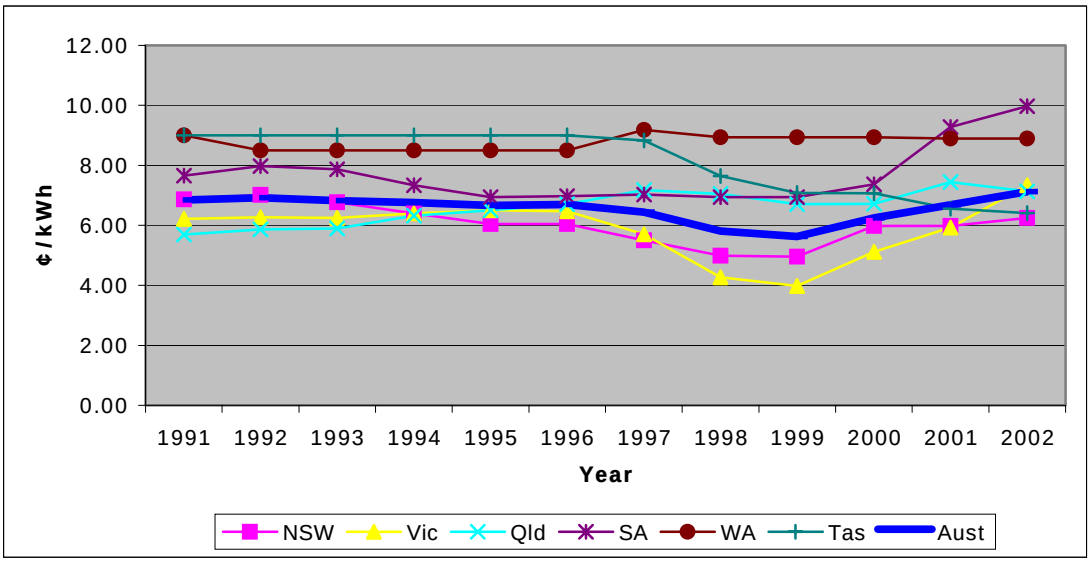
ELECTRICITY

A. Pricing

It is difficult to locate a central source of comprehensive and reliable data on retail electricity prices. However, based on anecdotal information from EUAA members and scrutiny of some sources such as the ESAA, there is no doubt the energy sector reform has delivered price benefits to end-users. However, these benefits have been patchy.

In particular, large business end users experienced electricity price benefits (both in nominal and real terms) in NSW and Victoria (and to some extent in Queensland) in the early days of the introduction of electricity contestability. This is supported by analysis carried out by the Productivity Commission, *Trends in Australian Infrastructure Prices 1990-91 to 2000-01*. However, our experience is that electricity users in South Australia have experienced price increases since the introduction of retail contestability.

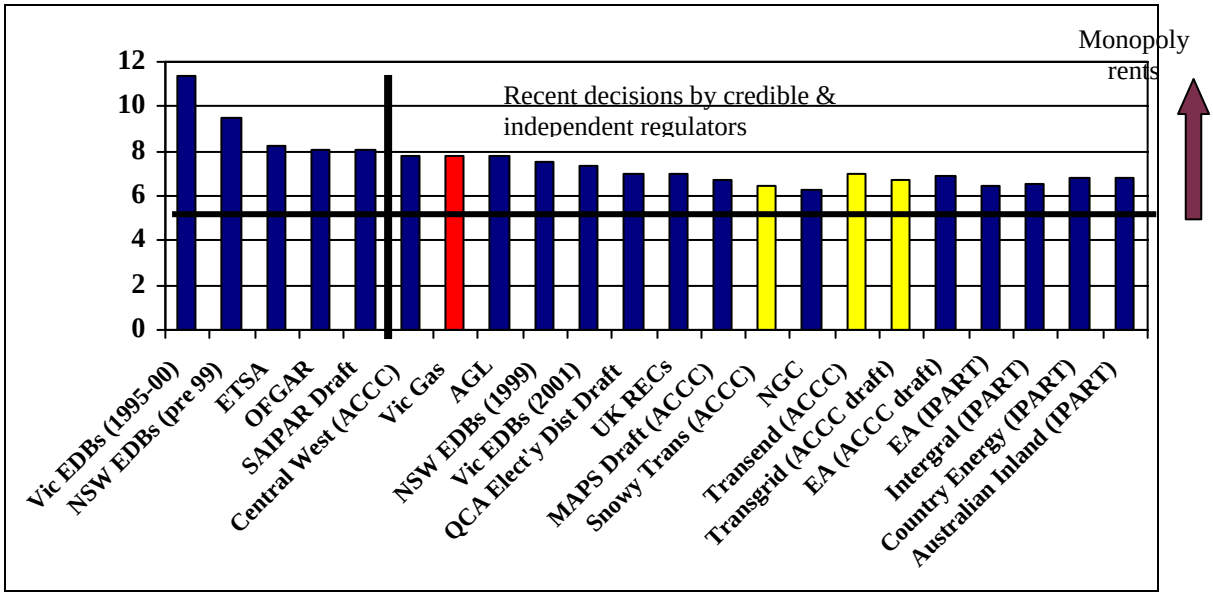
Diagram 1: Australian Large Industry Tariffs, nominal terms



Source: ESAA and Bardak

One of the major drivers of reduced prices in the 1990s has been more sound economic regulation of transmission and distribution networks by Federal and State regulators. Improved economic regulation of transmission and distribution networks during the 1990s has delivered price benefits to end users by reducing monopoly rents.[2] See Diagram 2.

Diagram 2: Benchmark WACCs, real pre-tax %

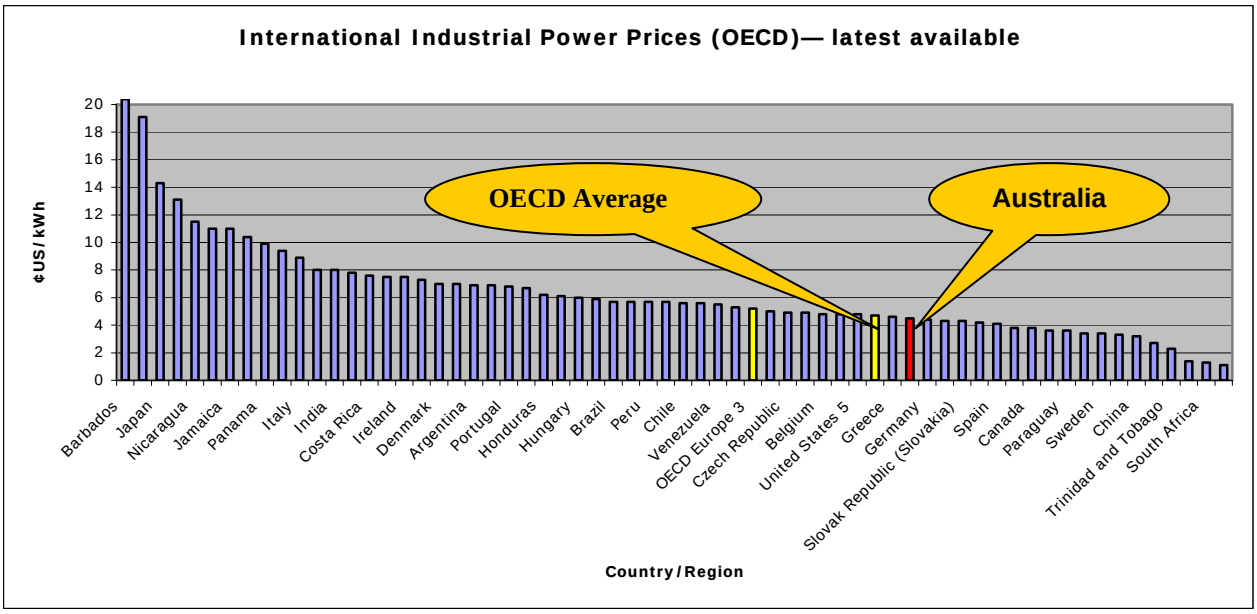


However, the EUAA still believes more can be achieved in this area. For instance, returns on equity are still above that earned by ASX companies or any other reasonable benchmark. Further, Australian regulators have endorsed outcomes that ensure Australia's energy networks will be less 'efficient' (i.e. higher cost) than in US & UK. There is nothing in the decisions of any Australian regulator to explain why return on equity and WACC must be higher for Australian utilities.

Diagram 3 shows that Australia is towards the lower end of the spectrum, but we have higher prices compared with certain major competitors such as Canada, China and Germany.

[2] Rates of return have a significant impact on network prices as the activity of networks is quite capital intensive (~60-70% of revenue relates to capital).

Diagram 3: International comparison of electricity prices



Source: Energy Market Reform Forum, presentation at Australian Energy & Utility Summit 2004, 22 July 2004.

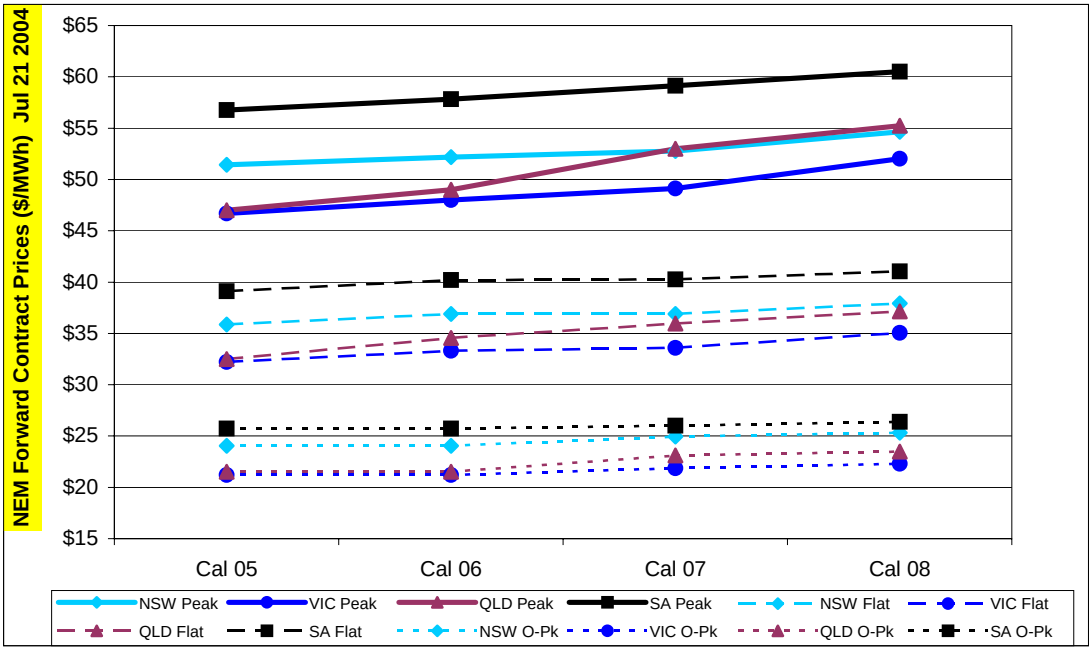
However, our view is that since 2000-01 large business users have experienced increases in electricity prices across all States, to the extent that most of the benefits derived early on have been dissipated. This is largely due to a combination of uncompetitive market volatility in the NEM, disappearing surplus capacity, the demise of vesting contracts, failure to follow national approaches and some bad policy interventions (see section 4 for more detailed discussion of these issues).

We anticipate that these price increases will continue in the medium term. For example, the recent price caps allowed for by NSW IPART for State Distributors is likely to lead to price increases of up to 35% for some large end users over the next five years in NSW.

Further, additional costs arising from NEMMCo fees, MRETS/NGACs and government-sanctioned levies and fees (such as the Victorian Government's land tax on transmission easements and proposed NSW Levy to fund Demand Side initiatives) are increasingly becoming significant.

Diagram 4 shows the forward market for energy also points to an increase of energy costs over the next four years. All things being equal, the higher forward contract prices should generated greater investment in electricity generation. However, as we outline further in the submission (under the market power section), NEM market imperfections we believe are not allowing for such investment to take place in a timely fashion.

Diagram 4: Electricity Forward Markets



Overall, by 2012, electricity prices could be over 60% above levels at the beginning of deregulation reforms in 1998, or 22% higher than pre-deregulation reform levels in 1996/97[3].

Bardak Energy and Management Services has found that most of the price benefits of reform seem to have occurred during the structural change period of 1991 to 1998. Over this period, State Governments, at various pace and degrees, vertically and horizontally broke up State owned natural monopolies, corporatised their State own energy utilities and introduced competition where possible to energy supply. Over this period, analysis performed by Bardak showed that:

> *…average tariffs in all States generally fell or remained constant — meaning that they fell in real terms quite considerably. This was particularly so in New South Wales and South Australia, the latter benefiting directly from the Victorian reforms by importing up to one third of its electricity from that State under a pre- existing contractual arrangement which delivered very low costs for imported energy* ***(source: http://www.bardak.com.au).***

Bardak found increases in tariff prices seem to have coincided with the introduction of the national electricity wholesale market:

> *The situation changed from 1999 onwards, coinciding with the implementation of the NEM and the completion of the privatisations in Victoria and South Australia.*

[3] Source: Energy Market Reform Forum, presentation at Australian Energy & Utility Summit 2004, 22 July 2004

> *While tariffs in Queensland and New South Wales have continued to remain moderate, allowing for GST effects, those in Victoria and especially South Australia have risen strongly. With 45% increases in industrial/commercial tariffs applicable in South Australia from mid 2001, and 30-35% increases in domestic tariffs expected from the start of 2003, and with further pressure to come on Victorian retail tariffs, the upward trend in these States is set to continue* ***(source: http://www.bardak.com.au).***

B. Service quality

Obtaining meaningful data on service standards over the past decade is very difficult. Further, it is worth mentioning that both major forms of incentive regulation practiced for transmission and distribution businesses in Australia and elsewhere, price and revenue capping, create some incentives for regulated entities to reduce service levels as one way of out-performing the regulatory benchmarks for either prices or revenue.

An important consequence of this for end users is that they pay transmission and distribution charges but have very little meaningful information about what they are paying for.

More recently, Federal and State regimes have evolved to counteract such impacts by focusing on both prices and service levels. The regime for Victorian distributors applied by the Victorian ESC has taken some steps in this direction in that it applies certain (albeit engineering based) service performance standards and at the time of the last review, attached some modest incentives to some of these standards. The South Australian regime also has some desirable attributes and we note that Tasmania has recently announced a service quality regime for that State. We remain disappointed that, in NSW, IPART has only decided to introduce a paper trial of service standards in the 2004/05 to 2008/09 Distribution Pricing decision.

We also welcome the ACCC setting up a Service Standards Industry Working Group to assist it with identifying and requiring TNSPs to implement some (limited) service standards benchmarks. Transmission charges can potentially have a big impact on energy price and market conditions therefore, it is important to address this by making TNSPs more accountable and responsive to market conditions. For example, a planned outage during a peak demand period can constrain the system and allow generators, through the re-bidding process of the NEM, to set wholesale prices well above the long run marginal cost clearing price, even for peak generators. Introducing service standards, which reward and/or penalise TNSPs for their actions and the consequences of these actions on market pricing and conditions, is an important ingredient in incentive based regulation.

As part of the process, the ACCC recently announced that they would release, by the end of July 2004, a draft set of service standards transparency benchmarks. This is a positive step towards a robust incentive scheme. The transparency benchmarks will allow transmission (generation and end users)

users, for the first time, to compare the level of service standards across TNSPs.

These are small steps in the right direction, albeit still inadequate in terms of genuine customer-oriented service.

The EUAA has consistently argued for the need for regulated transmission and distribution entities to be provided with (positive and negative) incentives for service standards. In the recent Queensland and Victorian Regulators Distribution Pricing Reviews the EUAA has proposed a number of Principles for Service Quality Requirements for Large End Users. Service standards for individual users are almost completely lacking in the reforms and regulatory regimes applied to date. We have attached these principles as Attachment A for the Productivity Commission's consideration.

Hence, the EUAA recommends that service standards outcomes should be embedded in the NCP energy sector agenda. This will elevate the consideration of service standards to a national level and assist in speeding up the process in developing nationally consistent and end user focused service standards.

GAS

The implementation of the Gas Access Regime since the mid-1990s has brought benefits to major gas users. Transmission and distribution network prices have been reduced, reflecting regulated determinations, which have reduced monopoly rents, and increases in the economic efficiency of network businesses. However, as we have outlined above, we still believe there is room to further reduce regulated transmission and distribution charges without any negative impact on investment.

The advent of third party access has also promoted inter-basin gas-on-gas competition, and is, as a consequence, more potential for gas retail competition to develop. Investments in linking infrastructure projects have increased, gas consumption has risen, and more consumers, especially in regional centres, have access to gas supplies.

Indeed, we are aware that recent contract negotiations for several large gas contracts have produced more favourable outcomes in terms of prices than were generally expected. These benefits are thought to be due to the emergence of a more diverse and competitive gas market, including new entrants, new fields, expansion of existing fields, new pipelines and the threat of additional competition from gas in PNG and the Timor Sea. We expect that this will find its way through to users in the form of additional competition for gas supplies and less upward pressure on prices.

However, these developments are new and emerging. They may not deliver on their promise if gas policy and regulation in upstream markets does not evolve to support them, or if pipeline regulation reverts to a situation where monopoly rents are institutionally sanctioned. This review needs to ensure

that both upstream developments and pipeline regulation are used to support the further development of the Australian gas market so that it delivers competitively priced and reliable gas to end-users. Any move to diminish the application of the National Gas Access Code to monopoly (or near monopoly) gas pipelines is likely to damage these gains and would be seen by the pipeline industry as a 'signal' to extract higher monopoly profits.

Upsteam gas competition is particularly important given the large share of 'ex field' gas prices in the delivered cost of gas to customers. Particular attention has been focused on the areas of joint venture marketing, exploration leases and access to production facilities. We note the MCE has some of these issues under consideration and would welcome further reform in the upstream areas in order to promote more competition in gas.

4. Unfinished Business

The Productivity Commission Issues Paper, Box 3, quite clearly identifies the following as unfinished NCP business in the energy sector:

- A fully competitive national market not being fully realised;
- Inefficient institutional arrangements;
- Lack of grid interconnection;
- Insufficient competition in generation;
- Inflexible price signals for residential customers; and
- Regulatory and market failures limiting the use of long-term contracts.

The COAG and MCE process (with particular emphasis on the December 2003 Communiqué) has made inroads on some of these areas, especially in the area of institutional arrangements were MCE has agreed to streamline the regulatory institutions with the establishment of the Australian Energy Regulator (AER) and the Australian Energy Management Corporation (AEMC). As stated above, we fully support this measure so far.

The EUAA firmly believes more needs to be achieved in the structural and conduct part of the energy market before we attain the goal of a fully efficient and operational energy market (gas and electricity). The remainder of this submission aims to expose the deficiencies in the energy sector reform program as well as the roadblocks to energy sector reform and implementation.

The EUAA recommends that the following areas be closely assessed by the Productivity Commission as needing further attention especially by COAG/MCE and by individual jurisdictions.

A. Building Blocks approach to Economic Regulation

The system of regulation currently applied to energy monopolies is based on the so-called ‘CPI-X’ regime. Under this system, monopoly charges are permitted to increase by the rate of *inflation, less a factor 'X', that* is a catch all for efficiency improvements. The EUAA believes such a method provides an

opportunity for privately owned natural monopolies in the energy sector to 'game' the system by inflating Capital and/or Operating Expenditure forecasts.

This is evidenced in the recent ACCC Draft Revenue Review decision for Energy Australia's transmission assets:

> *For the [Sydney] CBD project, the ACCC has determined that EnergyAustralia was prudent in undertaking the regulatory test and that, if the investment had occurred as planned then it would have been deemed prudent. However, the ACCC has also determined that the entire cost of the upgrade is not necessarily prudent because of the cost increases.*
>
> *Without a demonstration that EnergyAustralia was prudent in incurring these cost increases the ACCC will not roll the entire spend of $62 million into the RAB for the final revenue cap decision. Therefore, consistent with the draft TransGrid revenue cap decision the ACCC will disallow any return on EnergyAustralia's investment in the CBD upgrade during the period of construction for the draft decision. Adopting this approach would mean reducing the carried forward value of this project by $8.7 million or 14 per cent. (page vii – viii)*

There is currently a vigorous debate about whether the way we apply this regime in Australia – and it is generally being consistently applied by all respected regulators – is actually 'light handed' and based on providing regulated businesses with incentives to improve their performance. Some have argued, especially regulated businesses and their representatives, that we are really applying a 'heavy handed' form of regulation based on the so-called cost of service model with regulators micro managing the business.

The EUAA would not see heavy-handed regulation and micro-management as desirable. However, we do want to see an incentive approach to regulation that does not embed inefficient costs or asset values, or allows monopolies to exploit their customers.

It is our firm view that we still need a form of incentive regulation that also pays some attention to the cost structure of regulated energy monopolies and sets a 'reasonable' rate of return as part of the incentive structure. Under this system, it is up to regulated businesses to outperform the cost and return benchmarks set for them. Their incentive is that they get to keep the efficiency gains for a time. However, the regulator needs to ensure that this provides the business with enough incentive to keep pursuing efficiencies. Both businesses and customers will – and have – benefited as outlined above.

Unfortunately, some regulators appear to be becoming less vigilant and prepared to place challenging efficiency benchmarks before the businesses. For example, the recent IPART determination for NSW electricity distribution charges permitted large increases in capex based on questionable analysis/data and failed to apply challenging efficiency target on opex (see EUAA submissions, www.euaa.com.au).

We are now entering the second round of economic regulation in the energy sector and we would support the rigorous examination of the applicability of

using Total Factor Productivity (TFP) as opposed to the building blocks approach for the X factor. In undertaking the examination the following needs to be considered:

- Whether we have gathered enough information on regulating costs to a point where customers can be confident that they have been minimized (as intimated above, we are not yet convinced about this); and
- Whether we have accurate historical picture of TFP for energy networks upon which 'X' can be set with confidence and if not what we need to do to begin to gather a better set on information.

We note that the Utility Regulators' Forum (URF) have begun consideration of the application of TFP approach to economic regulation in Australia and have sponsored Farrier Swier to compare the building blocks approach to TFP. This has been recently reinforce with the Victorian Essential Services Commission flagging in the current Distribution Pricing Review that it will undertake a separate exercise in determining whether they can move to a TFP analysis in the 2010 Pricing Review[4].

The EUAA has also long been opposed to the use of Depreciated Optimised Replacement Cost (DORC) valuations to establish an initial Regulated Asset Base (RAB) for regulated natural monopolies, as it overstates the value of assets.

The essential argument for DORC is that tariffs based on it are the maximum sustainable without another provider being able to duplicate existing assets and set lower tariffs. Being the maximum of such tariffs, they are at the level that an economically rational asset owner would set in both the short and long term. DORC is therefore supposed to build in (stimulate) market discipline.

There is, however, no genuine market discipline. This is because, in real life, a potential entrant would have to pay full (un-depreciated) replacement cost to duplicate or bypass existing assets. There is no second hand market to which a potential competitor can buy a used (depreciated) electricity grid. Hence, so long as the DORC value accepted by the regulator is less than actual (true) ORC, the existing grid has no threat of competition. This allows already depreciated (used) assets to be valued up to their true ORC, and hence tariffs to be at a level consistent with all infrastructure being new.Asset owners who are granted a tariff stream based on supposed DORC are, in fact, being invited to value their assets as if they are new and to be paid a return (tariff stream) as if they had just brought their assets at their true current ORC. We also note that some regulators have expressed reservations about the application of full DORC asset values and the fact that this provides an outcome, which does not balance the interests of infrastructure owners and users[5]. An independent consultant's report prepared for the EUAA several

[4] *Consultation Paper No. 1: Framework and Approach*, 2006 Distribution Pricing Review, March 2004, page 9.

[5] For example, IPART determinations in the latter part of the 1990's regularly and consistently made this point and set asset values at a 'discounted' DORC.

years ago also makes the point that DORC valuations are not in the interests of energy users[6].

The primary impact of inflated asset valuation will be an inflated maximum allowable revenue to network owners and hence, given the highly inelastic demand for electricity, inflate charges to users.

EUAA strongly recommends that the Productivity Commission note the considerable theoretical and practical opposition to the use of DORC and its adverse implications for downstream competitiveness and investments. The EUAA notes that other regulators, including many overseas and IPART (up until its 1999 electricity distribution price determination), did not prefer DORC valuation methods. We urge the Productivity Commission to investigate and carefully assess this matter.

B. Generator Market Power

The Parer Review identified market power by generators in the NEM as a significant constraint to the efficient operation of the NEM. The EUAA was disappointed the recent MCE work program did not contain any activity in identifying the costs of the abuse of market power on end users and the development of policies to alleviate the potential.

Competitive market theory states that, if perfectly competitive conditions exist, the highest cost seen in a spot market (before customer load starts to be shed) would be the Short Run Marginal Cost of the highest cost generator operating in the market. Based on this assumption, Bardak stated that:

> *Note in all cases, and especially in the case of South Australia, the number of price spikes which occur at demand levels which are well below the peak demand in the State. In the case of South Australia, very few price spikes occurred when loads were near the annual peak load.*
>
> *Most of the price spikes are thus not related to any shortage or imminent shortage of capacity, but rather are artificially created by generators bidding and rebidding to withdraw capacity from the market — either physically, by not starting units, or economically, by bidding their capacity at very high prices. It is not unusual to see 25- 30% of the capacity in a Region being bid at prices around $9,000/MWh* ***(source: www.bardak.com.au).***

These findings are consistent with the Parer Review that stated:

> *Some significant instances occurred in May and June 2002 where generators strategically bid large amounts of capacity into high price*

[6] *Energy Utility Asset Valuation - Impact on Users,* Report to the EUG by the South Australian Centre for Economic Studies, (July 1998).

> *bands during the evening peak even though adequate, low marginal cost base load capacity was available to meet the demand* ***(page 105).***

Bardak concluded that:

> *Up to 28% of annual pool revenue is due to price spikes which are essentially artificial and quite unrelated to the supply/demand balance at the time* ***(www.bardak.com.au).***

A competitive market outcome would ensure that all market participants (end users and suppliers) share the benefits of competitive outcomes with most of the benefits eventually being 'forced' through to end users by competition. Unfortunately, generators through their 'gaming' of the wholesale market operation, seem to have captured significant amount of the competition benefits introduced to Australia's electricity market. This is contrary to the explicit intent of both the NCP and the energy sector reforms, whereby end users are intended to be the main beneficiaries of the reforms.

In response to wholesale price volatility, continuing government ownership and political factors, the NSW and Queensland governments have introduced their own state-based schemes (NSW has introduced the Equalisation Tariff Electricity Fund (ETEF) and Queensland has introduced the Benchmark Pricing Agreement (BPA)) to control the default retail tariffs to franchise customers.

The way ETEF works is that, in NSW, IPART sets a Regulated Energy Cost (REC) based on the long run marginal cost of producing electricity (approximately $40 per MWhr). Under the rules of the ETEF, when the pool price is lower than the REC, the difference (the surplus) will be paid by standard retail suppliers into the ETEF. When the pool price is higher than the REC, the deficit will be paid from the ETEF to retailers who then pay NSW owned generators.

Unfortunately, because of the 'gaming'opportunties, NSW Generators can exert on the wholesale market, they are able to game ETEF by spiking the wholesale price and gaining access to the ETEF. This practice seems to occur most years around March to June as NSW Government Owned Generators improve their financial position and their dividend to NSW Government. This phenomenon is illustrated in Diagrams 5 and 6.

Diagram 5: Example of Generator Marker Power

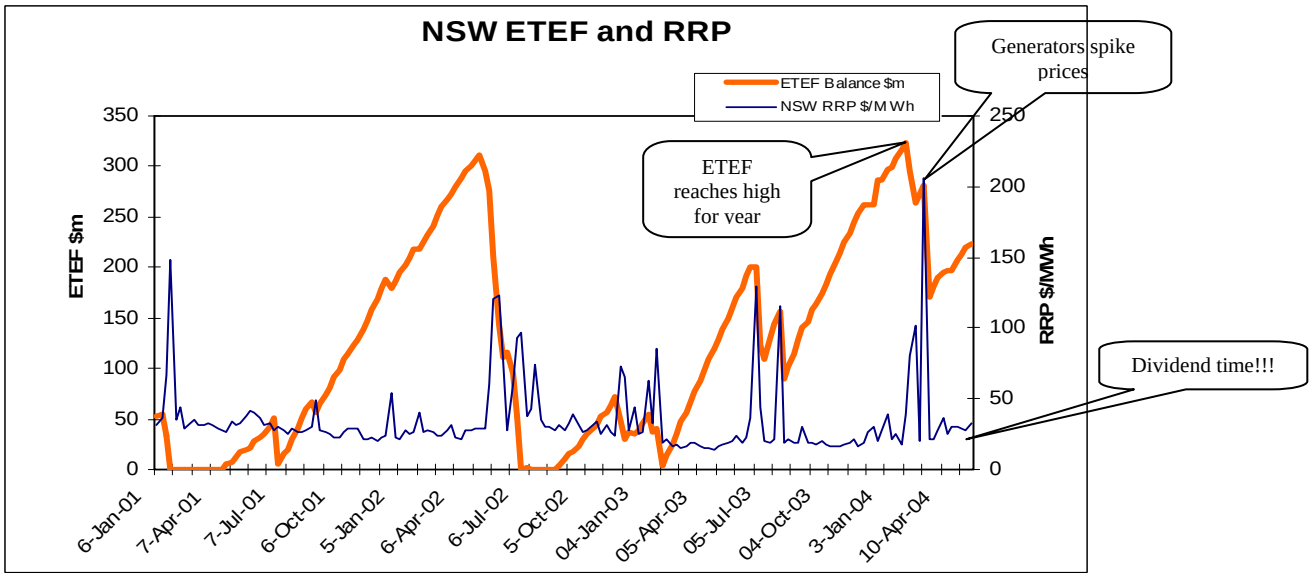
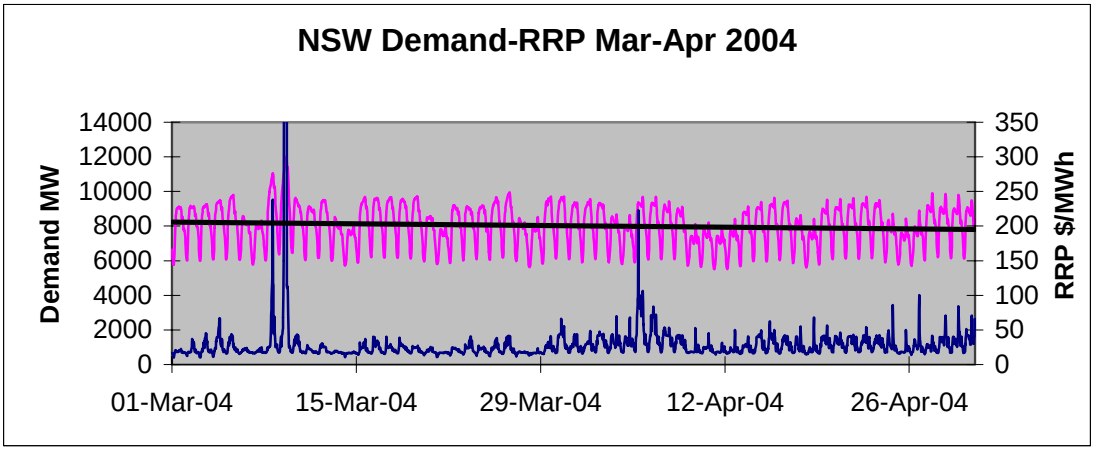


Diagram 5 shows how NSW Generators have distorted prices away from their market rates and increased dividends to the NSW Treasury.

Diagram 6: NSW Demand-RRP March-April 2004



May-June 2004, cont.

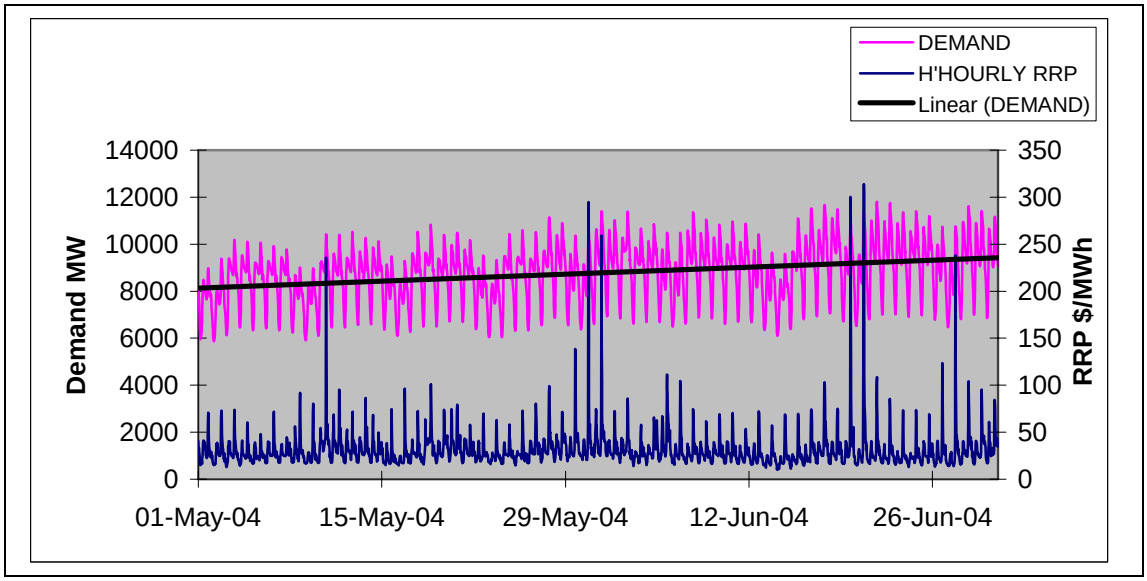


Diagram 6 shows that demand for electricity for NSW has trended up over the March and June 2004 period, however, price spikes have occurred consistently in this four month period without any significant fluctuation to demand on the days that the price spikes have occurred. These price spikes translate to a draw down in ETEF as shown in diagram 2.

EUAA analysis of NEMMCO data does not show any significant interconnector constraints at the time of the price spikes, except for the spike on 8 March 2004, when a bushfire meant the Murraylink interconnector (Victoria to South Australia connection) was off-line for approximately 2½ hours.

As ETEF only applies to NSW government owned generators and retailers a further consequence of the scheme has been that it has acted as a barrier to entry for non-government owned electricity generation and retailing in NSW.

Unfortunately, data on the BPA is not as readily available so its impact is more difficult to assess.

Unhealthy level of price volatility created by gaming activity in the wholesale market distorts investment signals. NSW and Victoria face the possibility of further base load capacity within the next five to six years and combined with the high sunk costs and lead time required with base load generation investment there is a real risk for end users that appropriate generation investment will not occur or will be delayed. This will leave end users to foot the bill of higher than necessary prices and/or lower levels of reliability of supply. We understand that a Delta/NEMMCO forthcoming paper suggest concerns about the ability of the NEM to deliver timely base load capacity.

The EUAA recommends that a multi-facet approach is the most robust way of dealing with 'gaming' by generators. Reform options must include:

- interconnection stability and investment (see below for more detailed discussion);

- disaggregating of government owned generators (with a longer term goal of government divestment from generation ownership);
- improving the operation of the wholesale market;
- a more co-ordinated demand side management response (see below for more detailed discussion); and
- examination of whether any barriers to entry for new generators exist (such as the NSW ETEF scheme) and immediate removal of these barriers.

Importantly, the EUAA also recommends that the AER's powers should be broadened beyond responsibility for economic regulation of electricity wholesale and transmission networks to include responsibility for investigation and punishment of potential market power in the wholesale market.

This is consistent with overseas practice and recognizes the inherent characteristics of electricity markets that make them susceptible to abuse of market power (eg. electricity cannot be stored, inelastic demand except in the long run).

For instance, the United Kingdom regulator (Ofgem) has powers to examine market power gaming by generators and impose penalties for abuse of such powers. A recent example of Ofgem using the power resulted from price spikes in the UK gas industry in late 2003. In an Ofgem Press Release dated 25 May 2004, the UK Regulator stated:

> *Energy regulator Ofgem continues to investigate the cause of the 80% increase in wholesale spot gas prices in September and October 2003, even though demand was at similar levels to previous years. Ofgem has closed its enquiry into five of the seven potential causes for the price increase it previously identified but is further questioning certain producers and interconnector shippers to explain the two remaining potential causes: (1) why gas deliveries from UK fields were lower than expected; and (2) why shippers did not increase imports from continental Europe across the interconnector quickly in response to the high UK price.*

In making above comments we point out that EUAA favours structural reform over regulation, but we understand some regulation may be necessary. However, the TPA currently is not adequate to address generation market power. We also note that a lack of structural reform makes need for stronger regulation necessary.

C. Re-aggregation

The EUAA is extremely concerned with recent moves within the electricity industry towards re-integration. One of the main electricity sector reform proposals of the 1990s was for the need to disaggregate vertically integrated monopoly assets and promote competition along the 'energy chain' were possible.

Recent mergers, such as Loy Yang/AGL and Singapore Power/TXU, plus others in the pipeline, cause probable concern for end users as to the implications on market structure and price/service offerings for end users.

The distinct impression is that the ACCC believe their hands are tied by a combination of inadequate merger powers in the TPA (for electricity at least), the Loy Yang/AGL Federal Court decision, the lack of strength in the National Electricity Code on this matter and the lack of attention to this in the current MCE agenda. The ACCC now seem more reluctant to pursue Court action, preferring to rely on second best approaches like opaque merger "conditions and undertakings". It should be noted that industry participants who are seeking to re-aggregate would in all likelihood be fully aware of this situation and could be doing all they can to "call the ACCC's bluff". The EUAA does not belief this is a recipe for a good market structure outcomes.

The EUAA believes that the starting point in addressing energy sector re-aggregation is the Parer Review recommendation that:

> *Specific criteria need to be included in the ACCC's Merger Guidelines to guide decisions in relation to mergers between generators (page 119).*

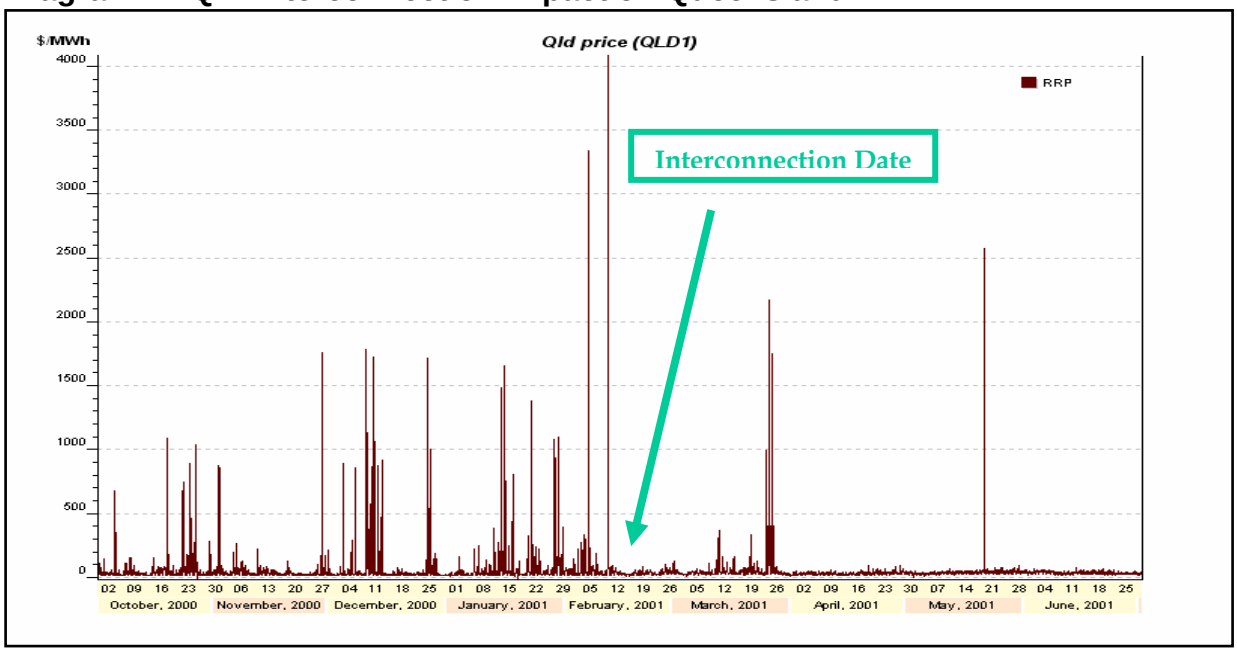
The EUAA believes such criteria should be broader to evaluate vertical as well as horizontal re-aggregation.

The EUAA recommends that the Productivity Commission examine the implications of re-aggregation and its potential impact on end users and seek to have the matter raised as a priority for the MCE to address.

D. Transmission

One of the key findings of the Parer Review was that the transmission system acted as a major inhibitor to the operation of the NEM as transmission planning is regional rather than NEM-wide and that there is a lack of detailed and accurate information on network performance. Bardak and Pareto Associates have independently calculated approximately $1,200 million of potential savings each year (or over $6 billion since the NEM started) is lost to end users because Australia does not have appropriate interconnections between regions. Hence, lower priced electricity is constrained from flowing were it is most required.

Diagram 7: QNI Interconnection impact on Queensland RRP



The QNI Interconnection project was the largest transmission project in Australia in the last decade at a cost of $350M, linking the Queensland and NSW grids. The design capability was for Queensland to receive up to 500MW and export 1000MW to NSW. The interconnection was declared on 18 February 2001 and, as Diagram 7 shows, has significantly dampened price volatility and helped to reduce electricity prices for consumers.

Apart from the reduced pool price volatility, ancillary service costs in Queensland (traditionally highest and most volatile in the NEM), fell to around $2.5-3.0 million per week, generating a yearly saving of $130-150 million.
In response to the Parer Review findings, the MCE work program contains a seven step reform agenda for transmission. While the EUAA supports the reform agenda we believe the agenda does not go far enough to alleviate the concerns of users about transmission investment and its place in making the NEM more national.

For instance, the developed of the Annual Transmission Statement (ANTS) by NEMMCO will for the first time examine the investment and/or augmentation opportunities in the transmission network on a NEM-wide basis. However, the shortcoming of the ANTS is that it does not go the next step and co-ordinate transmission investment nationally. Hence, States may still operate unilaterally in facilitating transmission investment.

The EUAA believes that a National Transmission Authority should be created to co-ordinate the transmission investment and/or augmentation opportunities.

Other areas where the MCE program should go further in promoting a more efficient transmission network and that need to be included in the MCE work program include:

- The Regulatory test. While the ACCC is currently undertaking a review of the regulatory test, the EUAA remains concerned that the position espoused in the ACCC Draft of the Regulatory Test Review still fails to take into account the impact of investment in a particular region on pricing in other regions. If we are truly going to operate a NEM, then it is imperative that the application of the regulatory test takes into consideration reduction on regional price differentials caused by elimination of congestion.

  End-users currently pay, and always have paid, 100% of the costs of the 'shared' transmission and distribution network. In the context of the regulatory test, if investment in a transmission interconnector is expected to increase competition between generators and lead to changes in energy market prices that benefit end-users, these benefits should be included in the analysis. This would be the case even if the 'service' provided by the interconnecter was to create real physical competition between inter-regional generators that equalised the price in one or more adjoining Regions; and even if, in other respects, the transmission investment was sub-optimal. The fact that such competition benefits may be difficult to estimate is not sufficient reason to exclude them from the analysis, especially when they could impact significantly on end-users (i.e. the 'payers').

- The introduction of Firm Transmission Rights (FTRs) to foster greater inter-connector trade has been mentioned as one means of improving transmission in the NEM. The MCE program clearly outlines that NECA/AEMC are to 'consider the requirement for and scope of enhanced inter-regional trading arrangements, in conjunction with the development of the future process for managing regional boundary changes'. However, the MCE Implementation Milestones do not contain any activity in progressing the development of sustainable FTRs. The Parer Review proposed an innovative solution to the current lack of inter-regional trade and competition through the creation and auctioning of firm FTRs.

  The EUAA acknowledges that FTRs could offer a solution to some of the significant problems of transmission in the NEM. However, more detailed analysis and consideration needs to be given to the appropriate structure to achieve the desired ends. Therefore, we urge the Productivity Commission to recommend raising this matter onto the MCE agenda for further consideration and analysis.

E. Demand Side Management

It is normal for a fully effective market to have both a supply-side and a demand-side. This allows customers to make an informed choice about how they will respond to price and non-price offerings and reduce (or even cease) consumption. In this respect the NEM is very abnormal and definitely not working because there is a virtual absence of the demand-side.

The Parer Review recognised that an active demand-side response will increase competition and blunt the extent to which generators can exploit market power. The Review has also recognised that action by the demand-side can contribute to the deferral of expensive investment in new capacity and a reduction in greenhouse gasses. The EUAA would also add that Demand Side Management could also:

- Increase liquidity and improve risk management in the market;
- Lower the costs of network augmentation;
- Deal more efficiently with the growing demand for summer peak power in all regions of the NEM; and
- Lower the costs and improve the depth of the ancillary services market.

The EUAA has been a strong supporter of the need for a greater amount of Demand Management in the electricity sector. As part of this support, the EUAA has conducted an independent trial of a Demand Side Response (DSR) Facility for the NEM, involving the aggregation of 120 MW of load across three states, nine customers, three retailers and three distributors[7].

In summary, the Trial found that up to 500 MW of DSR in any one region and 1,000 MW across the NEM would be required to reliably affect energy market prices and network support. This is only 3.5 per cent of the maximum demand in the NEM.

Since the trial was completed, there have been some steps taken towards commercialisation and a company, *Energy Response Pty Ltd*, has been established for this purpose (EUAA is not associated with this company in any formal way but does support its establishment and operation in the best interests of end users). We understand that it would take no more than $2 million to establish a commercial DSR facility in the NEM. The benefits of such a facility are far in excess of this, with the EUAA trial indicating annual savings of up to $2 billion.

We have also subsequently undertaken several industry case studies of DSR (diary processing/cold storage, glass bottle manufacturing, vinyls and property management) to assess the potential for use at actual customer premises and improve customer awareness. The results will be published soon and are very promising.

In the December 2003 Communiqué, the MCE recognised 'that user participation in the energy market is currently less active than 'supplier participation'. Hence, the MCE work program contains three user participation reforms, mainly:

- Demand Side Response investigation;
- Examination of the introduction of interval meters; and
- Development of retail pricing principles to improve transparency of retail tariffs under full retail competition.

[7] A copy of the report is available from the EUAA web-site, www.euaa.com.au.

Given the potential benefits of Demand Side Management but its disparate and still very immature nature, the EUAA has proposed that the MCE support, as a matter of priority, the development of a DM 'roadmap' to set out a strategic course of action for DM (as already scoped by the EUAA and others) and to ensure effective participation by end users and other market participants.

F. Gas Agenda

Consistency of gas reform outcome across the States is of paramount importance. This problem extends to a large range of items including: retail competition, service levels, balancing, metering and settlement, taxes and charges, and even gas quality standards. The inefficiencies and additional costs that this lack of consistency imposes on the industry continue to be a major concern for end-users. A good example of this is the inconsistent arrangements and systems in place for retail competition and B2B transactions across States and between the electricity and gas markets, requiring dual fuel retailers operating in multiple jurisdictions to have multiple systems in place to manage customer transfers.

The EUAA welcomes the announcement in May 2004 by the MCE to expand their gas reform agenda in the context of the recent supply interruption at the Moomba facility. Ministers agreed to expand the gas market element of the reform program, to accelerate development of a reliable, competitive and secure natural gas market. The project will address both short and long term gas infrastructure issues, and integrate consideration of the Productivity Commission Review of the National Gas Access Regime (due in June 2004), recommendations from the South Australia – New South Wales – Victoria – ACT Gas Infrastructure Taskforce (established after the Moomba incident of New Years Day 2004), and the review of upstream gas issues by the Ministerial Council on Mineral and Petroleum Resources.

However, the EUAA has some concerns that the Ministerial Council on Minerals and Petroleum Resources (MCMPR) is considering the issue of facilitating up-stream competition in the gas industry rather than the MCE. This carries the risk of not binding any analysis and recommendations to improved upstream competition. Further, it may dilute any competitive reforms introduced into the gas industry by the MCE in Gas pipeline access and downstream competition.

The EUAA believes that the Productivity Commission should recommend that, at a minimum, the NCP should underpin the MCMPR review of treatment of un-produced areas, access to upstream facilities and exempting future arrangements for the joint marketing of natural gas.

The Productivity Commission has proposed draft recommendations that will see a winding back of the Gas Code. The main recommendation is that there should be very light handed regulation where coverage would result in a *material* impact on competition, and price regulation only where it would lead

to a *substantial* increase in competition. Access holidays of 15 years are also proposed. The Productivity Commission found that the Code hindered investment based on claims (from the pipeline industry) that smaller (than optimal) pipelines were built under the code and that the timing of investment was affected. Quite frankly we doubt that this evidence is robust or would stand up to rigorous scrutiny. For example, the Parer Review challenged the pipeline industry to show that its claims that the Code had hindered investment had validity and concluded that the industry could provide no evidence that it had. We also express concern that the PC approach will require new legal interpretations for the tests it proposes and that this will lead to a "lawyers' picnic". It will increase regulatory uncertainty by changing the existing provisions, which have now been subjected to significant legal interpretation.

The EUAA is concerned that less regulation would only result in a redistribution of income from gas users to downstream and upstream industries and a loss of competitiveness, investment and employment in those sectors. The deadweight efficiency losses to the economy will be large if increased monopoly rents are allowed under the guise of 'light-handed' regulation or through looser or lax economic regulation of strategic infrastructure. Effective access regulation has much to do with removing a distortive input tax on downstream industries and the economy.

G. NCC Framework

The EUAA general supports the NCP framework and accompanying incentive payments in delivering and 'locking in' competition reform benefits.

However, the EUAA is concerned with the requirement that the States provide updated information on progress in meeting NCP benchmarks to the NCC as a basis for the NCC recommending the amount of the incentive payment to the Treasurer. The EUAA believes that this creates a 'conflict of interest' for State Treasuries as they are also responsible for the States' finances. That is, there is an incentive for State Treasuries to over-state progress against the NCP to maximise the incentive payment from the Commonwealth.

Indeed, we have been astounded at some of the conclusions reached by the NCC on energy reform based on such information. These conclusions have sometimes been diametrically opposed to the experience of energy users.

The EUAA recommends that States should not solely undertake reviews of progress against NCP. Rather, the NCC should be required to seek input from all stakeholders with relevant information and views, including energy users, who are meant to be one of the primary beneficiaries of NCP reforms.

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APPENDIX A

Service Quality Requirements of Large Customers - Role of the Regulator

(Preliminary Thinking – For Consideration)

1. It is recognised that as the size of an electricity customer increases, the requirements of electricity supply reliability, quality and customer service tend to become more site and user specific. Therefore, service quality indicators measured at the general network level may need to be augmented by some site-specific service indicators as well.

2. Large customers, both commercial and industrial, place heavy emphasis on all the three classes of services from the DNSPs – Reliability, Supply quality, and Customer service – to meet their electricity needs.

3. In addition, large customers may have special requirements relating to connection of new (or additional) load to the network, connection of on-site generation, such as co-generation and standby generation to the network, continuous supply for some critical processes, etc.

4. While each large customer may have unique needs, it must be recognised that the monopoly DNSPs have a degree of general commitment to an equitable treatment of all its customers. Any individualised treatment of a customer, however large or economically critical, may be seen by the DB as a departure from this.

5. Normally, these two positions are resolved by negotiations between the DNSP and the large customer under the broad principle of “user pays” or “the causer pays” for services that are unique to that customer.

6. While large business customers have recourse to technical capability required to deal with DNSPs on these issues, the fact still remains that they will be dealing with a monopoly supplier. The scope for cost effective ‘distribution bypass’ by a dissatisfied customer is non-existent in almost all cases.

7. There is also the case of information asymmetry at the negotiation table, with the DNSPs, not surprisingly, having much more data to support their positions on costs, the levels of quality indicators appropriate to that site, etc, than the customer. This asymmetry needs to be redressed so that negotiations can take place on a more ‘level playing field’.

8. In the negotiation process it should also be possible for users to seek that the DB provide information on request to the user (on a confidential basis) to

allow the customer to make a more informed decision. The regulator could act the 'referee' as to what information would be appropriate for the DB to make available on a confidential basis.

9. There may also be instances when disagreements could arise between the large customer and the DNSP over non-delivery of agreed service standards.

10. All the above factors dictate the need for a role for the Regulator in such a bilateral relationship between the large customer and DNSP. This basic principle needs to be explicitly recognised by the Regulator. EUAA's suggestions on the scope of the Regulator's role are outlined below to provide a starting point for discussion on the subject.

11. The Regulator's role needs to be carefully structured around broad principles such as:

    - The Regulator has to be cognisant of the unique needs of larger customers, but not adopt an overly prescriptive process.
    - The Regulator's intervention should normally be only at the request of either the DNSP or the large customer, though the Regulator will retain the right of intervention without such a request in some cases, eg in exceptional cases involving public interest.
    - The Regulator can provide a negotiation framework under which a large customer can directly negotiate on specific service standards with a DNSP from a position that replicates, as much as possible, that of a customer in an open, competitive market by spelling out, for example:
        - The rights and responsibilities of each party;
        - The extent of property rights that the customer can exercise over supply assets owned by them;
        - The process for arriving at benchmark service levels, penalties and rewards, including the background data needed to be supplied by the DNSP to support its preferred position,\; and
        - Dispute resolution procedure covering both the initial negotiation stage and during the on-going delivery of services, etc.
    - The Regulator can go one step further, and provide a model (template) for network services agreement that covers the above and other points.
    - The Regulator needs to provide a forum for dispute resolution through mediation or, as a last resort, arbitration.

The EUAA has, in the past, worked with other interested parties in arriving at a template document for contracting for connection and supply between a DNSP and a large customer. Its view, based on such experience, is that such connection agreements are more likely to be effective (from a customer viewpoint) only if there is some scope for regulatory involvement.

The EUAA would welcome an opportunity to work with the ESC on this issue in the ensuing months so as to assist in establishing the broader regulatory arrangements to apply from 1 January 2006 to better meet the needs of business customers.