Submission to

Australian Energy Regulator's Review of the Regulatory Proposals by the NSW Electricity Distributors

15 August 2008

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Executive Summary

The Energy Users Association of Australia (EUAA) welcomes the opportunity to provide a submission to the Australian Energy Regulator's (AER) regulatory review of the three NSW Electricity Distributor's (DBs) regulatory proposals for the period 1 July 2009 to 30 June 2014**.** The EUAA is a non-profit organisation focused entirely on energy issues with membership exceeding 100. Our membership includes many of the largest electricity users in New South Wales who will be directly affected by this review**.** As this is the first regulatory review of electricity distribution businesses by the AER, the quality of the process and outcome is particularly important in terms of the future health of economic regulation of network businesses

The EUAA strongly urges the AER to adhere to principles behind network pricing, such as:

- Low cost, efficient & effective operations meeting defined technical system and customer service levels,
- Efficient and timely investments to meet growth and defined system security standards,
- Cost reflective tariff rates and tariff structures,
- Predictability over time to provide greater confidence in long term investments, especially in energy intensive industries.
- Need for supportive for rate changes, such as efficiency and productivity benchmarking.

The summary of the major points made in this submission are:

1. All the DBs propose very high real price increases in 2009/2010 (Energy Australia 29.4%, Country Energy 18.2% and Integral Energy 18.2%) and sustained annual real price increases thereafter for the rest of the regulatory period (Energy Australia 10.4%, Country Energy about 6.8% and Integral Energy 3.8%). However, the proposals do not provide sufficient relevant quantitative data to support their case for such large increases, which will impact negatively on the competitiveness of Australian energy users.
2. Such large price increases over the next 5 years in a period of cost pressures on multiple fronts including higher electricity costs, gas cost pressures, a carbon price, renewable energy costs and higher network charges will create unacceptable price increases to EUAA members. It is no exaggeration to say that such cost pressures could put business viability at risk. The AER should be cognisant of this broader impact on energy users in assessing the DBs' proposals.

3. At least two DBs have cited the previous IPART decisions of not allowing the DBs sufficient funds as a major factor for the current high price increase; in effect this is a request by the DBs to re-write past IPART decisions. .
4. The proposals ascribe the relatively high peak demand growth forecasts to residential air conditioning but provide no empirical data to support this. They should also consider alternative methods of system load forecasting, such as bottom up end-use based forecasting, as a double check of the output from their current methods, and thus provide a greater degree of assurance of forecast accuracy. The AER should also consider carrying out its own independent load forecasts.
5. A thorough analysis of forecast accuracies in the current (2004/2009) and previous periods should be carried out as an additional assurance on the veracity of the forecasts for the 2009/2014 period.
6. The reasons for the low impact – past and future – of Demand Management (DM) programs on curbing peak demand should be investigated, and actions taken so that DM becomes a significant part of DBs' capital investment strategies. Under the DBs' proposals, DM will continue to remain a token gesture during the 2009/2014.
7. Performance indicators measuring operational productivity and asset productivity are needed to provide assurance at a high level that the DBs are operating efficiently and that there is a program in place for continuous productivity improvements. Objective measures of efficiency and productivity improvements are necessary to show that the monopoly DBs are operating at as high a level of efficiency as possible, and that the cost estimates are akin to those that would prevail had the DBs been operating in a competitive environment. The EUAA would urge the AER to give economic efficiency as much importance as the other factors in assessing the reasonableness of the expenditure proposals.
8. It is arguable whether the level of capital expenditure proposed can be implemented on time and within budget with the three DBs concurrently requiring large quantities of products and services from the market which is already suffering from shortages associated with a high point in the economic cycle.
9. The DBs' proposals contain no description of their tariff strategies, particularly how they plan to minimise cross subsidies between customer classes. Allocation of demand related costs to each tariff class is probably the most important issue when it comes to cost allocations to tariff classes. There are many allocation methodologies and they all require a detailed understanding of the contribution of each tariff class to the system and regional peak demands and business costs. The use of a common and well-defined methodology would provide the level of transparency around demand related cost allocations to tariff classes, design of cost reflective tariffs and avoidance of cross subsidies.

10. Currently, there is a lack of transparency and comprehensiveness in ensuring cost reflective tariffs in the regulatory process that leads to a lingering suspicion that business customers carry a disproportionate share of the cost burden of the distribution network. The EUAA would urge the AER to look at means of tightening the regulatory oversight of the tariff (rate) design process to ensure that the principles of "user pays" and "no cross subsidy" are fully and unambiguously adopted by the DBs in their tariff design.
11. AER should also require the DBs to collectively carry out well-designed Load Research programs that would provide sufficient customer usage related data that would be useful in designing truly cost reflective tariffs. It is not necessary to wait for the full roll out of Advanced Metering Installations (AMI) which is still in its very early stages.
12. The DBs' proposals do not address the issue of supply quality as much as they do on supply reliability. While not downplaying the importance of reliability, the need for supply quality is more important to the EUAA members. The AER should call for DBs' proposals to include quantified performance indicators and the planned improvements in those indicators, with the aim of exceeding Code specified standards.
13. The EUAA agrees with the Australian Energy Regulator's view, expressed at the NSW public forum on 30 July 2008, that pass throughs need to be tightly defined in the first instance so there is a proper sharing of risk between business and consumers, and that the distributors should not use pass throughs to remove all risk**.**

1. Introduction

The Energy Users Association of Australia (EUAA) welcomes the opportunity to provide a submission to the Australian Energy Regulator's (AER) regulatory review of the three NSW Electricity Distributor's (DBs) proposals for the period 1 July 2009 to 30 June 2014. This document represents the EUAA's response to (i) "Regulatory Proposal" dated June 2008 by Energy Australia, (ii) "Regulatory Proposal to the AER 2009 to 2014" dated 2 June 2008 by Integral Energy and (iii) "Country Energy's Electricity Network Regulation Proposal 2009 – 2014" dated 2 June 2008.

1.1. EUAA Interest in Electricity Network Regulation

The EUAA is a non-profit organisation focused entirely on energy issues with membership exceeding 100. Members determine the EUAA's policy and direction; and our activities cover both national and state issues. Our membership represents a wide spectrum of end users located in all states, and is predominantly comprised of large business users of energy with activities across many sectors of the economy. Our membership includes many of the largest electricity users in New South Wales who will be directly affected by this review.

While the EUAA members have the ability to choose their energy retailers in a competitive market, network services are provided to their sites by various monopoly network businesses whose prices and service levels are subject to regulatory oversight. Accordingly, it is important for the EUAA to participate in and contribute to the regulatory process to ensure that its members face network tariffs that are efficient and equitable across the board.

All EUAA members have a strong interest in regulatory developments associated with issues such as network charges, supply reliability and quality, connections to networks and customer service. Some EUAA members are extremely energy intensive, have operations in more than one State and thus have a significant interest in regulatory mechanisms that are uniform in all jurisdictions to the maximum extent possible.

The EUAA has taken part in many distribution reviews in different jurisdictions over the past few years. It has been an evolutionary process with each jurisdictional regulator building on lessons from previous determinations both within and outside their jurisdiction. The natural progression of these to a national jurisdiction adopting a consistent approach in both policies and processes is generally welcome, provided it improves regulatory processes and outcomes for our members. As this is the first regulatory review of electricity distribution businesses by the AER, the quality of the process and outcome is particularly important in terms of the future health of economic regulation

of network businesses. As mentioned at the AER public forum, we are looking not just for a "reasonable" outcome but an "exceptional one" in terms of how it will impact on users.

1.2. Context for the Review – the future facing energy users

As also mentioned at the AER public forum, energy users face rising costs challenges on multiple fronts – the costs electricity are rising and our members are now paying (on average) 50 percent more for their contracted power than they previously were, gas prices are rising due to a lessening of competition, greater use of gas for power generation and the prospect of LNG exports from Queensland, a carbon price is coming and network charges are reflecting increased regulatory expenditure. The EUAA believes that the next 3-5 years, that is, within the time frame of regulatory period under consideration in this review – will be critical in terms of these risks to energy users. It is no exaggeration to say that cost pressures could drive some out of business or results in a scaling back of operation. This would not be advantageous to energy users, the economy or even the electricity supply chain. The AER cannot solve all these issues in this review but needs to see this review in this context and consider that its determination will have a significant impact on the competitiveness of Australian energy users, especially those in New South Wales.

1.3. National Regulatory Approach Needed

Electricity distribution is a mature technology and each business a natural monopoly in its service territory. While each DB is a unique business, many of the business drivers of DBs in the Australian National Electricity Market (NEM) are comparable, with differences governed by issues such as customer mix, customer dispersion and climate. In this regard, the EUAA hopes that the AER will adopt standard policies and processes in its future regulatory determinations of various jurisdictional DBs, and thus improve the effectiveness of the regulatory process and the quality of the outcomes for end users.

Such a uniform approach has much to commend it from a customer perspective as well, since many EUAA's members operate in more than one jurisdiction and have to deal with many DBs not only on matters of pricing but also on connections, service reliability and quality.

One example of the need for some form of standardisation is in the documentation of the NSW DB's proposal. While the three proposals by Energy Australia, Integral Energy and Country Energy are very comprehensive in their coverage of the various regulatory issues, they differ in their scope, structure and format, particularly the Energy Australia proposal. There are differences in the presentation (how and where) of even high level comparative information, such as:

- the regulatory determinations of forecasts of demand, energy, capital expenditure, operating expenditure and service standards during the current regulatory period (2004/2009), and the actual performance of the DBs against their promises are not presented in a transparent fashion;
- the forecasts of the above for the next regulatory period (2009/2014), and how they are justified in light of the DBs' actual performance against such targets for the current period. (2004/2009).

While diversity in presentation of one's case may be desirable and probably unavoidable, the fact remains that a similar document structure of all DBs' proposals would assist the public consultation process and would enable a more thorough and effective way of comparing different proposals by the stakeholders (customers), who are not as close to the details of the issues as the proponents and the AER.

1.4. AER's Guiding Principles for the Regulatory Review

The AER needs to state categorically the guiding principles behind network pricing, such as:

- Low cost, efficient and effective operations meeting defined technical system and customer service levels.
- Efficient and timely investments to meet growth and defined system security standards.
- Cost reflective tariff rates and tariff structures to ensure optimised economic decisions.
- Predictability over time to provide greater confidence in long term investments, especially in energy intensive industries.
- Need for supportive evidence that rate changes are actually required.

Distribution pricing regulatory proposals have concentrated on aggregated annual revenue requirements and the average real price increases ("the X factor") as per the Building Block approach. The proposals do not canvass in detail as to how the high cost burden, as indicated by X factors of -18.2% for 2009/10 for Integral Energy, -23.1% fro Country Energy and -29.41% for Energy Australia, is going to be shared equitably among the various customer / tariff classes, bearing in mind that these represent proposed real increases in average prices.

This is an outcome of the "light handed regulation" philosophy of the past decade that did not probe deeply into how the annual revenue requirements are translated to individual tariff class increases. The "no cross-subsidy" test that has been used by jurisdictional regulators – namely that no cross subsidy exists as long as prices are higher than the marginal cost and lower than the stand-alone cost of supplying that customer class – has been ineffective in identifying the precise levels of cross subsidies, since the gap between these two theoretical limits are so large that almost all prices can easily pass the "no cross subsidy" test.

There is a lack of transparency and comprehensiveness on ensuring cost reflective tariffs in the regulatory process that leads to a lingering suspicion that business customers continue to carry a disproportionate share of the cost burden of the distribution network. It may well be that a more finely sculpted tariff structure with minimal inter-class and intra-class cross-subsidies might have mitigated, if not prevented, the impact of domestic air conditioning load on peak demand.

Allocation of demand related costs to each tariff class is probably the most important issue when it comes to cost allocations to tariff classes. There are many allocation methodologies and they all require a detailed understanding of the contribution of each tariff class to the system and regional peak demands and business costs. The use of a common and well-defined methodology would provide the level of transparency around demand related cost allocations to tariff classes, design of cost reflective tariffs and avoidance of cross subsidies.

The EUAA would urge the AER to look at means of tightening the regulatory oversight of the tariff (rate) design process to ensure that the principles of "user pays" and "no cross subsidy" are fully and unambiguously adopted by the DBs in their tariff design.

1.5. High price increases sought by all the Distributors

As mentioned above, users are facing a critical 5 years ahead likely to be characterised by significant cost pressures as evidenced by electricity, gas, carbon prices, renewable energy, and network pricing reviews showing escalating costs. These are of great concern and EUAA sees a real threat that at the end of the period users will face a different set of circumstances that will affect their competitiveness and ability to provide ongoing operations, investment and jobs in this country. This impacts us all – including the future financial health of the electricity networks and other parts of the energy supply chain. It is very important that both the AER and the distribution businesses recognise these pressures. The AER has to do an exceptional job to produce an outcome that is 'reasonable' in all the circumstances. EUAA is looking to contribute to this process within its available resources.

1.6. Resource available for the EUAA to compile this submission

The EUAA had limited resources available to compile a submission to the AER on this matter, not withstanding its importance to members. We made an application to the Advocacy Panel for funding to assist us but this was rejected on the grounds that they will only fund one business user advocate to take part in the review. This has hampered our ability to provide input to the review and limited the amount of work we could undertake, which has had to rely solely on internal resources that are already stretched to the limit due to other important issues that cannot be ignored,

such as the Carbon Pollution Reduction Scheme Green Paper, the Garnaut Report and two other AER regulatory reviews (for which we did receive Panel funding).

2. General Comments on the Distributors' Proposals

The EUAA's comments in this section have been structured so that they are applicable to all three Distributors' proposals to varying degrees. The comments address mainly the principles and rationale underpinning various issues, rather than the veracity of specific details and numbers in the three proposals. At the outset, the EUAA wishes to state that it is extremely concerned at the unprecedented magnitude of the network price shocks that will be faced by all its NSW members in 2009/10, and thereafter.

The Distributors' requests for such large price hikes may well be a reflection on the ineffectiveness of past regulatory processes and determinations, as they may be on the various factors cited in the Distributors' proposals justifying the price increases. What ever the case may be, this situation makes it even more important that the AER carefully scrutinise the proposals and ensure that its review is robust and thorough. As mentioned earlier, energy users are already facing significant costs pressures on multiple fronts and will be depending on the AER to produce an exceptional outcome in this review.

A very thorough assessment by the AER of the previous regulatory processes and determinations, as well as the Distributors' performances in the 2004/2009 regulatory period (against their promises) is necessary to understand why and how such high requirements for capital expenditure have accumulated in all the Distribution networks. This is a pre-requisite before the AER can reasonably assess the current set of proposals. Without such an understanding there is no guarantee that such rate shocks will not occur again in the future.

2.1. Growth in Peak Demand

A major common theme in the proposals is that the increased penetration of residential air conditioners has contributed to an increase in peak demand which is much higher than the growth in the total annual energy consumption, leading to a deterioration of the system load factors. The forecast annual average growth for peak demand and energy for the 2009/14 period are:

	Average % growth per annum in peak demand	Average % growth per annum in energy
Energy Australia	2.8% (summer)	**1.6%**
Integral Energy	3.6%	**1.3%**
Country Energy	**3.0% (summer)**	**1.56%**

As the costs incurred by a DB are linked to peak demand while the revenue (from the residential sector) is linked to the energy consumed, this mismatch in the two growth rates is being seen as the single most important factor governing the high forecast capital expenditure which inevitably lead to higher prices faced by all customers. EUAA is of the opinion that all the three proposals have not analysed this issue in any depth, apart from accepting it as a matter of fact and seeing increased capital expenditure as the primary, and almost the sole, policy response. Given the very high levels of capital expenditure involved, an in-depth analysis of peak demand, its causes and possible range of mitigation strategies by the DBs is sorely needed. For example, it is difficult to get an idea of the expected peak demand reduction, load shift to off peak period, etc., due to proposed DM programs that have been factored into the peak demand forecasts for the 2009/2014 period from the proposals.

Specifically, the EUAA would seek clarifications from the DBs on a range of related issues:

1. What is the MW contribution of residential air conditioners to the peak demand – both actuals for the 2004/2008 period, as well as forecasts for the 2009/14 period? What was the methodology adopted to arrive at these figures? Was the methodology the same for and consistent across all three DBs? While it is logical to accept the link between residential air conditioning load growth and peak demand growth, there does not appear to be any empirical data in these proposals associated with the actual MW contribution of air conditioners to peak demand growth. This is a serious omission given the importance of the issues as a driver for the large amounts of capex being sought.

2. On a broader scale, has any form of end use[1] demand forecasting been done, as a bottom-up method of forecasting system demand, to act as a double check of the main methods described in the regulatory proposals? If not, what are the reasons for not doing such a double check, given the pivotal role of peak demand forecasts in all proposals? Unless there are valid reasons to the contrary, we would urge the AER to insist on this work being done by the DBs for this review to ensure robustness in their proposals. The EUAA recognises that an eventual universal roll out of Advanced Metering Installations (AMI) will provide such data, but the chances of that program providing statistically reliable data during the 2009/2014 regulatory period are not high and that some interim end use, interval data measurement program across different customer classes should be considered. If not already being considered, there may be scope for carrying out such end-use oriented research on a co-operative basis between the three DBs (and Transgrid) in order to minimise costs and ensure uniformity of approach.

[1] The term 'end use' refers to the use of electricity such as Lighting, Heating Ventilation and Air Conditioning (HVAC), Refrigeration, industrial processes, electric motors, etc by different customer classes.

3. What approaches in tariff design will the DBs adopt to minimise, if not eliminate, inter-class cross subsidy between the residential customers and business customers? This is not mentioned in the proposals.

4. What approaches in tariff design will the DBs adopt to minimise intra-class cross subsidy whereby residential customers without air conditioners are now paying more than their share of costs? How do DBs propose to maintain equity amongst residential customers in their rate design during the 2009/2014 regulatory period?

5. Is it feasible to immediately introduce a kVA / kW based tariff add-on for residential customers who either already own or buy air conditioning systems above a nominated capacity? Recognising the limitations of the current residential meters in measuring demand (kW), are there non-metered solutions to recover the incremental costs incurred by the DBs (and proposed to be paid for by all customers) and implement innovative 'user pays' practices now, rather than waiting for many more years for a universal AMI roll-out?

6. The average annual energy growth in the 2009/2014 period is forecast to be 1.60% for Energy Australia, 1.3% for Integral Energy and 1.46% for Country Energy. A generally held perception in the past has been that the growth in electricity energy consumption is closely related to the growth in GDP, which are forecast to be well above these figures. The above energy growth figures seem to imply a decoupling between GDP and energy growth which may require further analysis. While energy growth forecasts is not a major driver of a DB's capital investments, the importance of a thorough analysis of energy growth forecasts cannot be overstated since, other things remaining the same, a low energy growth forecast would lead to higher customer prices, as dictated by the formula "Average prices = (Revenue requirement / Energy consumption forecasts).

The EUAA contends that it is reasonable, and indeed necessary, for the AER to satisfy itself that the DBs have thoroughly analysed all the issues relating to demand and energy forecasts and all options to manage them, as part of their case for their exceptionally large capital expenditure programs.

2.2. Timing of Capital Expenditure

The level of capital expenditure proposed by the three DBs is more than $ 15 Billion during the next regulatory period, comprising Energy Australia $ 8.66 Billion, Integral Energy $ 2.95 Billion and Country Energy $ 4.0 Billion). The EUAA is concerned about the significant step increase in capex programs since one of the significant drivers in the proposals is the costs involved in

delivering the capex program (i.e. escalating costs of material and labour). Cost escalation is being seen across the whole economy and is a symptom of the point in the economic cycle. Though each DB is confident of their ability to complete the capital works program on time and within budget, the practical issue of the impact of such simultaneous demand for somewhat similar equipment and services on both the project timing and costs would need to be considered. For example, (i) have the DBs undertaken cost/benefit analyses to take into account the ability the DBs may have to defer the timing of capital expenditure? (ii) how much more would it cost to undertake this capex in the next regulatory period instead of waiting for a different, more normal point in the cycle where costs are lower?

End users would like to see the DB's justify their proposals more robustly and provide information of this type. We would like to be assured that the costs that our members will be required to pay are indeed justified. The analysis of this important matter provided by the DBs is only partial and inadequate for our purposes. We strongly urge the AER to seek robust justification from each of the DBs.

It is also important for the AER to assess the claims of the DBs in relation to cost escalators and the likelihood that they will continue through the next regulatory period. End users would urge the AER to seek robust independent analysis of the cost escalators and the ability of the DBs to efficiently manage them. We are concerned that the DBs be required to apply rigorous cost management disciplines across their businesses to ensure that costs are being minimised and their proposals do not contain elements of cost padding or slack management due to their regulated monopoly status. The regulatory reset is the only chance of ensuring this.

We also note that businesses operating in competitive markets must manage these cost increases too but cannot pass them on through a regulatory process. The market is their discipline, whereas for the DBs it is the regulatory process.

We are also not convinced that the capex programs implied by the DB's proposals can even be delivered in the time span of the next regulatory period, as they are so large and will be susceptible to pressures for resources from other infrastructure industries and parts of the economy.

2.3. Efficiency Improvement and Productivity

The general tenor of all the proposals has been that these significantly high level of capital and operating expenditure forecasts are "reasonable costs for a prudent DB" and are justified mainly on the basis of factors such as NER Rules, licence and regulatory obligations, age of assets, etc. These may be valid points up to a point, but the question of economic efficiency has not been addressed very well in any of the proposals. Specifically the proposals need to demonstrate, through

quantified performance measures, that their operational expenditure efficiency has been increasing over the years. Users want to be assured that the DBs have been increasing their efficiency and not just padding costs. Proposals need to provide data not only on "why the particular level of expenditure is needed", but also 'how well (efficiently) the money is spent". Performance indicators measuring operational productivity and asset productivity are needed to provide assurance at a high level that the DBs are operating efficiently and that there is a program in place for continuous productivity improvements. Such objective measures of efficiency and productivity improvements are necessary to convince the customers and the AER that the monopoly DBs are operating at as high a level of efficiency as possible, and that the cost estimates are as low as they would have been, had the DBs been operating in a competitive environment. The EUAA would urge the AER to give economic efficiency as much importance as the other factors in assessing the "reasonableness" of the expenditure proposals. "Reasonableness" is a pejorative term with legal legal meaning but provided regulated entities with significant leeway.

2.4 Service Level Regime

Service performance is discussed in the proposals under four different categories: Design and Planning, System Reliability, Power Quality and Customer Service. Of these, both reliability and power quality are closely linked to capital expenditure and, to a lesser extent, operating expenditures, but the proposals do not clearly set out the linkages between them.

System Reliability:

The proposals address the reliability issues in some detail, referring to SAIDI and SAIFI indices as performance measures. For example, Integral Energy has reproduced SAIDI and SAIFI performance target for 2009/2014 as per the NSW DRP Licence Conditions in Tables 5.4 and 5.5 (Page 58) which remain constant during the period. The report further says "Integral Energy's planned targets will lower (i.e. improve) SAIDI over the 2009 regulatory control period". Energy Australia has provided data on expected percentage improvements in SAIDI and SAIFI up to 2006/2007 to 2010/2011, but not actual values, and not beyond 2010/11.

However, there are no details on quantifiable improvements in SAIDI and SAIFI that can be expected by customers as a result of the proposed significant expenditure outlays. Neither is there any discussion based on past performance on correlations, if any, between expenditure levels and improvements in SAIDI and SAIFI.

Power Quality:

Power quality - such as voltage level, voltage unbalances and harmonics – is very important to many EUAA members who feel the impact of power quality on their business operations. However, none of the proposals provide any quantifiable data on power quality – current or forecast – such that it is difficult to know the impact of expenditure on improvements to power quality. It was understood from IPART's previous determination that sufficient data would be gathered by the DBs on power quality during the current regulatory period that would provide a basis for more quantified performance targets for the 2009/2014 period on power quality. This does not seem to have occurred. The EUAA would request AER to seek clarifications on this matter. We would be interested in understanding the reasons behind the apparent non-delivery of this aspect of the previous IPART determination. However, it is unacceptable to end users that they are now being asked to wait a further 5 years for the information needed to commence a robust regime. The AER must ensure that the same failure to deliver does not happen again.

National Standard Agreement

The EUAA has many members who face the task of negotiating separate network service agreements in different jurisdictions for their business operations spread around Australia. Their experience to-date is that there is considerable scope for standardisation in these agreements which would benefit both the DBs and the customers.

In recognition of the importance of service levels to its members, the EUAA is working on a project to develop a boiler plate service agreement between large energy users, such as the EUAA members and their network service providers. The aim of such a Standard Connection Agreement, mainly applicable to large energy users, is to:

a. reflect the 'best practice' clauses from various existing network supply agreements in different jurisdictions
b. provide additional/revamped clauses that result in the agreement having a balanced position on the allocation of risks between the DBs and the business customer; and
c. provide a range of clauses that identify performance requirements of a broad selection of large electricity use customers, perhaps adopting a stepped approach by utilising a 'no liability' performance reporting requirement as the initial step.

The EUAA would welcome any inputs from the AER and the DBs into the development of such standard contracts and has noted the comments of the AER Chairman at the Public Forum that "the AER likes negotiation". The EUAA hopes that the above initiative would fit in well with

initiatives such as Energy Australia's Negotiating Framework referred to in Attachment 5.1 of Part III of their proposal.

2.5 Demand Management

The DBs' proposals cover in varying levels of details their DM strategy and programs as part of non-network solutions which are alternatives to supply side solutions. The EUAA supports a positive approach to DM notes the AER's proposal to continue with the 'D – factor' scheme and implement a new DM Innovation allowance.

The fact remains, however, that the effort and expenditure allotted to DM programs are very small compared to supply side investments. This situation is partly necessitated by the paucity of robust data on the cost per kW of avoided demand resulting from DM programs, comparisons of its costs with supply side solutions, as well as the "firmness" of the savings attributed to DM. An objective DM Impact analysis along the above lines should provide some guidelines to the DBs on either to significantly increase DM programs or not. The AER should seek from the DBs such robust DM program impact assessment so that the cost effectiveness of DM programs can be clearly quantified.

There are, however, several issues related to network DM that we would like to draw to the AER's attention for this review:

- Whilst the DBs have implemented some DM initiatives over the current regulatory period and we welcome this, these have been largely confined to trials or small scale projects. Their efforts in this area remain very limited as a result and the impact of DM stunted.
- The 'D-factor' regime has had very little impact to date and we are concerned that the AER needs to ensure that DM plays a far bigger role in the efforts of the DBs next regulatory period, especially given the huge amounts of capex being sought and the key driver the DBs claim is associated with growth in peak demand.
- We are concerned that any incentives provided to the DBs need to be shared with end users if parties are to be incentivised to get involved in more DM. Merely providing an incentive to the DBs is not enough. They also need to be incentivised (or required) to share the gains with users so that users are also incentivised. Too often in the past, DBs have been reluctant to share gains with users and this has been a limiting factor in the take up of DM.
- There would also be value in signalling to DBs that the AER expects them to involve end users and their representatives, as well as DM 'enablers' such as aggregators, in the development of DM programs.
- There should also be enough certainty provided to ensure that the DBs can implement programs and be assured of a continuing incentive for the life of a project.

- At the household level, the use of advanced meters (AMI) and pricing signals will be important to encouraging more DM and energy conservation, but this may have no impact during the 2009/2014 period. EA acknowledges in Page 10 "there are considerable functional and technical specifications issues yet to be resolved" and it plans to pass through mechanism and separate revenue allowance". Integral Energy also states that "the technology is relatively immature". Moreover, the mere installation of interval meters without associated price signals, as in Victoria, is simply front loading costs without any associated benefit and is a flawed policy, as is providing the DBs with a monopoly on the installation of the new meters. We note that the NSW Government has announced, as part of its proposal to privatise the NSW generators and retailers, that it will be extending retail price caps to 2013. This would essentially blunt any incentives that could be provided to households through the installation of advanced meters and more cost reflective network tariffs. We would urge the AER to take this matter up with the NSW Government in the context of this review and make them aware of the implications for issues such as the capex of the businesses over the next five years and associated distribution price impacts.

All in all, the EUAA feels that the proposals do not give any indication of DM playing a major role in any significant deferral of capital expenditure and that AER should look seriously at how DM can be lifted out of its present 'pilot scale' status into full scale programs over the next regulatory period.

2.6 Effect of embedded and distributed generation

The Federal Government's expanded Mandatory Renewable Energy Targets (MRET) scheme proposes to set a target of 20% by 2020 for renewable energy's contribution to the total supply mix. This would increase the number of wind and other renewable energy power stations that are connected to the DBs' networks. The EUAA would suggest that, if not already being done, DBs should investigate the potential impacts of an extended MRET target on the DBs' proposed forecasts of peak demand, annual energy capital and operating expenditure and service level standards such as reliability and power quality.

2.7 Climate Change and Distribution Loss Factors

None of the proposals discusses the issue of percentage energy lost in the distribution network, i.e. the Distribution Loss Factors (DLF) in the body of the documents. Improvements in DLFs would mean less energy lost in the networks and, other things remaining the same, less greenhouse gases emitted from the power station chimneys. The EUAA would like to know what reductions in the DLF have been achieved by the different DBs over time and whether there is scope for continued improvements in this area.

DBs may also consider discussing with the Department of Climate Change the possibility of treating improvements in DLF as offsets in the proposed Emissions Trading Scheme, as this would provide direct financial incentives to the DBs to work towards more reductions in the DLF. There may also be similar scope for incentives to reduce leakage of sulphur hexafluoride (SF_6) from conductors, as the SF_6 has a very high global warming potential (GWP).

2.8 Pass through Provisions

As a general comment, the EUAA is concerned about pass through provisions in regulatory determinations as they are *de facto* asymmetrical and pass through applications only ever involve increased costs (and network prices) rather than decreases. This is due to the significant information advantage that a network business has over the regulator and end users.

The EUAA agrees with the Australian Energy Regulator's view, expressed at the NSW public forum on 30 July 2008, that pass throughs need to be tightly defined in the first instance so there is a proper sharing of risk between business and consumers, and that the distributors should not use pass throughs to remove all risk. In fact, given the asymmetrical nature of pass through provisions in practice, we doubt that they are justified and they certainly end up working to the disadvantage of end users.

3. Comments on Individual DB Proposals

In addition to the comments in earlier sections that apply to all DBs' proposals some additional comments, pertaining to individual proposals are offered here.

3.1 Energy Australia's Proposal

Energy Australia has provided a detailed picture of the peak demand forecasting process in Pages 43-44 of the main document and in Attachment 4.6 "Network Substation Spatial Demand Forecast Processes" which also includes "independent advice from CRA International on its forecasting process and its reasonableness". Some extracts from the CRA report are given below:

> *"The Energy Australia's spatial demand forecast for summer 2007/08 and beyond was based on a modified form of the process it usually uses. This was the result of the very low level of the peak demands experienced in the summer of 2006/07.*
>
> *CRA was engaged to review the modified process used by Energy Australia in its 2007/08 forecast, and to (a) comment on the reasonableness of the approach taken.*
>
> *The magnitude of the differences observed in many substations between the rate of growth that had been predicted in previous years and that produced by the original 2007/08 forecast were not insubstantial, in many cases amounting to rates of growth that were close to 40% lower than had pertained in the previous forecast.*
>
> *The Forecasting group (of Energy Australia) investigated several approaches to address and resolve this gap and the approach that proved the most simple and produced results highly consistent with the global demand forecast consisted of dropping the 2006/07 summer peak demand and using the trend lines produced by the previous 4 and 6 seasonal peak demands as the range of rates of growth to be considered".*

While the CRA has found the "modifications were reasonable" it goes on to add some qualifying comments:

> *"On the other hand, the peak demand levels of the 2006-07 summer illustrate that the standard approach is susceptible to difficulty whenever the peak demand of the most recent year significantly deviates from the 5- and 7-year trends. It was also recognised that even the modified approach will likely be insufficient to provide robust results where two successive years occur in which peak demands deviate in the same direction from the previous trends. In such cases, the trend line for both the 5- and 7-year forecasts would have to be reduced by two years, down to 3 and 5 data points respectively. It was for*

> *these reasons that Energy Australia decided to investigate alternative (and particularly weather-normalised) approaches to forecasting spatial demand. However, the value of these alternative approaches will not be known for some time, and could not have been known at the time the forecast was prepared."*

The EUAA recognises that Energy Australia intends to review its overall forecasting process by engaging CRA to "*provide any observations and/or recommendations regarding how the modified process could be improved or how the standard process could be enhanced to reduce the likelihood that a modified process will be needed in future forecasts should conditions similar to those experienced in the summer of 2006/07 recur"*.

The EUAA is not in a position to pass judgment on the efficacy of different forecasting techniques, but would like to seek the following clarifications:

- Are the demand forecasts used in EA's regulatory proposal based on the previous 4 and 6 seasonal peak demands, or 5 and 7 year history? Have the confidence level (statistically speaking) in the demand forecasts in their proposal been affected in any way as result of the adjusted method?
- Were the underlying causes of the actual 2006/07 peak demand being lower than forecast fully investigated? How much was it due to weather affecting all customer classes, and how much was it due to (presumably the reduced use of) residential air conditioning?
- Would end use based demand forecasting, already canvassed earlier in this submission, be helpful in improving the robustness of the demand forecasting process?
- Page 44 of Energy Australia's main proposal also shows "*Table 4.2 which is an extract from the 2006-07 summer forecast and shows that firm capacity is forecast to be exceeded at Botany zone in 2007-08*". In light of the above report, it may be useful to indicate how the actual demand turned out for 2007-08, compared to the forecasts for Botany shown in Table 4.2.

Given the crucial role that peak demand forecasts play in determining these very high capital expenditure requirements, it may be prudent for the AER to carry out separate independent demand forecasts.

Energy Australia has attributed 18.6% of the initial real price rise of 29.4% (i.e. the X factor) that it seeks for 2009/10 to "legacy of past regulatory periods" in the Table on Page 11 of its submission. The AER needs to critically assess the varicity of this claim. Based on information put forward in the EnergyAustralia proposal, we have some doubts at to the validity of this claim.

3. 2 Integral Energy's proposal

Integral Energy has proposed significant capex proposals for the next regulatory period, but we note that the level of the increase is significantly less, especially relative to Energy Australia. This is an interesting outcome given the demographic and geographic characteristics of their territory (younger families with larger houses running air conditioners and urban fringe growth areas), as well as its climatic characteristics (hotter, drier western suburbs of Sydney). This makes the Energy Australia capex proposals, in particular, even more curious.
Integral Energy has covered the important issue of productivity very explicitly by detailing their strategy towards efficiency savings, trade off between capital expenditure and opex, as well as benefits from Demand Management.

The EUAA welcomes the DM programs established by Integral Energy and indeed by the other DBs as well. It would be very useful for Integral to articulate its plans for DM going forward beyond trials to actual participation. The EUAA would suggest that serious consideration be given to facilitating third parties to aggregate demand side responses as part of non-network solutions options.

3. 3 Country Energy's proposal

Country Energy's proposal discusses all aspects of operating expenditure including forecasting an efficient level of future expenditure requirements. Nevertheless, it proposes an average operating expenditure of $ 429 million per annum during the 2009/214 period, compared to an expected average annual figure of below $ 300 Mil for the 2004/2009 period, a nearly 40% increase (Fig 4.3, Page 64 of Country Energy's proposal). It is difficult to assess whether the nature of its business has changed so dramatically as to warrant such a 'step increase.

In relation to capex, Country Energy expects to exceed its regulatory allowance by 20% in 2008 and 43% in 2009, citing, like Energy Australia, the previous determination of regulatory allowance by IPART in 2004 as insufficient.

The EUAA is not sure if claims for such a 'claw back' would have been made had IPART continued to be responsible for the determination this time round as well. EUAA suggests that the AER should seek a public and detailed response from IPART to the three regulatory proposals, specifically addressing the validity of their complaints against the previous determination.

4. Concluding Remarks

The EUAA is deeply concerned at the high levels of price increases sought by the three NSW Distributors and suggests that the AER should conduct an in-depth analysis of some of the fundamental principles that underpin the current regulatory paradigm, such as over reliance on average prices and insufficient regulatory oversight on equitable and efficient tariff design, avoidance of cross subsidy etc. Specifically, the AER and all stakeholders need to understand all the factors behind this "tsunami" of proposed price waves during the 2009/2014 period.
The EUAA's specific comments on some of the aspects of the proposals are included in this document**.**