4 December 2003

Mr Paul Neville MP
Transport and Regional Services Committee
House of Representatives
Parliament House
CANBERRA, ACT, 2600

ESAA

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Dear Mr Neville,

Inquiry into Privatisation of Regional Infrastructure and Government Business Enterprises

1. Introduction

The Electricity Supply Association of Australia (ESAA), the national representative body for Australia's electricity industry, welcomes the opportunity to make a submission to the House of Representatives Transport and Regional Services Standing Committee's inquiry into the effects of privatisation of the electricity supply industry in rural and regional Australia.

In assisting the Committee's inquiry into the economic and social impacts facing rural and regional Australia, ESAA notes that the attached submission is not all-inclusive and focuses on several aspects of the background paper specific to electricity supply, use and associated energy management matters.

2. Executive Summary

The reform of the electricity industry was a key component of the broad micro-economic reform agenda agreed by all levels of government in the early 1990s. These reforms have already delivered significant benefits to Australia as a whole, including more efficient market based arrangements for the production, trade and consumption of electricity. At the same time, a number of State jurisdictions also undertook a series of privatisations of their government owned electricity industries.

To date, the reform has successfully delivered one of its key objectives – price reductions. Between 1992-93 and 2001-02, average real prices to all Australia customers fell significantly by 12%. Commercial customers, in particular, have received the largest business price reductions of about 16%. Residential customers, however, have experienced a marginal decline of around 5.6%. In some cases, these prices have remained relatively stable even with the implementation of the Goods and Services Tax (GST) in July 2000.

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The reduction in electricity prices have also had an impact on may customers, particularly farmers, in country Australia during the period between 1996-97 and 2002-03. Interestingly, Victoria, over this period, showed the biggest decline in tariff rates for farming.

The level of employment within the electricity industry has fallen from over 52,000 in 1993 to about 33,000 people currently employed. Proportionally, the loss of labour in regional areas is little different to that in urban areas. Moreover, while the reforms have resulted in the closure of service outlets in some small communities, employment in larger centres, which have become 'regional headquarters' have in fact increased.

Generator availability has also dramatically increased over the period of the reform program. As a result of a concerted program of performance improvements, availability in NSW increased to 90% by the late 1990's. In Victoria, the improvement was more pronounced with availability rising to 93%.

Greater efficiencies within the electricity sector have directly brought about a reduced call on savings which has enabled interest rates to remain marginally lower than they would otherwise have been. As an indirect contribution, the electricity supply industry, through its reduced prices, has assisted in improving the competitiveness of all Australian industries.

The ESAA also notes that nearly all the major electricity using facilities are primarily located in regional Australia. These electricity generators are especially located near their source of supply so as to minimise the level of transmission losses.

The ESAA strongly advocates the need for a national regulatory regime for at least electricity and sees it as being the first step in a series of changes required to create a better environment for the large investment in electricity infrastructure required to meet customer demand growth for the rest of this decade and beyond.

ESAA notes that the following key principles should be adopted: -

- Reform should provide an appropriate and clearly stated policy role for governments;
- The Regulator should have independence in day-to-day decision making. This requires regulatory decisions to be free of political involvement;
- While governments should be able to propose NEM Code changes, the driver of Code developments should be the market participants;
- The new regulatory regime should operate under a general competition policy perspective that provides uniformity of approach. Where regulation continues to be applied at a State level, the Regulators need to be bound to common principles. Consistency is needed across jurisdictions to regulate like activities;
- The regulatory regime for electricity needs to be consistent with economic regulation across other infrastructure sectors, particularly other energy sectors. Inherent in the pursuit of a more efficient regulatory regime is the need to

reduce the cost of regulation through a streamlined process. There should be a regime that actively pursues light-handed regulation and practices a preference for market-based outcomes. Included in regulatory policy should be a process to independently assess the regulator's performance against agreed benchmarks.

The ESAA is happy to make industry representatives available to you to discuss aspects of the attached submission. If you have any queries, please contact Natasha Jeena of ESAA on (03) 9670 0188. Alternatively, you may contact Terry Ryan of ESAA on (02) 6262 9577.

Yours sincerely

Keith Orchison

Keith Orchison
Managing Director

Encl.

Electricity Supply Association of Australia Limited (ESAA)
Inquiry into Privatisation of Regional Infrastructure and Government Business Enterprises

1. BACKGROUND

In the early 1990's, Australian governments agreed to develop competitive electricity markets to achieve more efficient, market based arrangements for the production, trade and consumption of electricity. Specific objectives included: -

- Structural reform of publicly owned utilities;
- Creation of generation and retail markets in the eastern States;
- A competitive wholesale market for electricity;
- A separate financial contract market; and
- Open access and economic regulation of network services.

During the same period, some State jurisdictions also undertook a series of privatisations of their government owned electricity industries. The effects of such privatisations, however, cannot be isolated without reference to all the additional changes brought upon the electricity industry, especially along the eastern seaboard of Australia.

The entire reform program has delivered some considerable benefits to the economy, with the Productivity Commission estimating they have the potential to increase GDP by 2.5 per cent above what would occur in the absence of reform.[1] ABARE estimates suggest that the economy-wide benefits of reform, in electricity alone, have delivered around $A1.5 billion per year by 2000, with the potential to rise to around $A2.4 billion annually by 2010[2].

The benefits within the electricity sector have also included improved productivity (labour productivity and capacity utilisation) and internationally competitive electricity prices for customers. New generation and network capacity investments have taken place in response to market signals.

Even though the privatised sector was only one component of the entire reform program, it did help to encourage greater efficiencies, through greater integration and competition in the market, amongst all participants in the industry.

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[1] Productivity Commission 99, *Impact of Competition Policy Reforms on Rural and Regional Australia*, Report No 8, Ausinfo, Canberra, p.298

[2] Short C., Swan A., Graham B., & Mackey-Smith W., Electricity Reform: The benefits & cost to Australia, presented at Outlook 01, March 01

2. THE RESULTS

i. Prices: -

As demonstrated in *Table 1*, real average electricity retail prices for all Australian users dropped by 12%. Non-residential customers, i.e. commercial customers, have received the largest reductions of about 16%. Residential prices, on the other hand, have either declined marginally (around 5.6%) or remained relatively stable over the same period. This occurred when the former major cross subsidies from business customers to residential customers was substantially removed. At this point, it is worth noting that these reductions occurred even with the introduction of the GST.

The size of the reductions has varied significantly between the various jurisdictions. For example, during the period since 1992/93 to 2001/02, New South Wales has seen its commercial tariff decline by over 25%, South Australia has seen a decline by over 11.5% and Victoria, for the period ended 2000/01, saw its commercial tariff decline by 15%.

Table 1 Average real Electricity retail prices by Jurisdiction 1992/93 to 2001/02

Cents per KWh (2000/2001 dollar)		1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00*	2000/01	2001/02*
New South	Residential	11.76	11.61	11.19	10.61	10.55	10.79	10.27	10.19	10.74	10.47
	Non-residential	10.61	9.76	8.76	8.05	7.39	7.36	7.68	7.54	7.45	7.90
	Total Average	10.99	10.33	9.54	8.97	8.42	8.38	8.60	8.43	8.51	8.75
Victoria	Residential	13.99	14.72	14.53	13.43	13.67	13.90	13.55	13.25	14.19	13.71
	Non-residential	10.20	9.97	9.73	9.38	8.38	7.93	8.33	8.29	8.77	10.16
	Total Average	11.27	11.27	11.01	10.54	9.96	9.69	10.14	9.95	10.58	11.55
Queensland	Residential	11.68	11.53	11.14	10.73	10.50	10.43	10.32	10.09	10.88	10.53
	Non-residential	9.22	9.47	10.19	9.18	9.14	9.32	9.00	8.51	8.65	7.99
	Total Average	9.94	10.10	10.59	9.89	9.68	9.72	9.77	9.22	9.59	9.00
South Australia	Residential	13.03	13.03	12.64	12.36	12.69	13.65	13.75	13.65	14.63	14.64
	Non-residential	12.03	10.97	9.78	9.23	9.35	8.99	9.18	9.11	9.14	10.50
	Total Average	12.42	11.74	10.82	10.38	10.64	10.73	10.85	10.77	11.07	12.36
Western Australia	Residential	17.20	16.12	16.17	15.53	15.26	14.72	14.58	14.33	14.25	13.77
	Non-residential	14.38	13.67	12.32	11.83	11.72	11.92	11.50	11.37	9.83	9.30
	Total Average	15.23	14.40	13.45	12.87	12.78	12.79	12.48	12.35	11.15	10.77
Tasmania	Residential	10.94	11.12	10.37	9.99	9.86	9.84	10.77	10.79	11.48	10.91
	Non-residential	4.94	5.05	5.19	5.16	4.96	4.99	4.86	4.66	4.41	4.14
	Total Average	6.25	6.23	6.32	6.20	5.98	6.05	6.02	5.81	5.63	5.32
Australian Capital	Residential	9.53	9.46	9.11	9.04	8.97	8.88	8.89	9.04	9.76	9.76
	Non-residential	13.73	13.58	12.69	12.22	12.00	10.07	9.86	10.17	9.93	11.03
	Total Average	11.67	11.62	10.98	10.71	10.63	9.53	9.42	9.63	9.86	10.41
Northern Territory	Residential	15.77	15.61	15.17	14.50	14.20	14.20	14.86	14.84	15.41	14.89
	Non-residential	18.08	18.04	17.30	16.17	16.21	15.16	15.38	14.84	13.72	13.14
	Total Average	17.52	17.41	16.75	15.72	15.66	14.89	15.24	14.84	14.19	13.58
Total Australia	Residential	12.60	12.61	12.29	11.68	11.72	11.85	11.64	11.43	12.16	11.89
	Non-residential	10.18	9.82	9.37	8.87	8.29	8.18	8.38	8.17	8.21	8.57
	Total Average	11.03	10.74	10.35	9.82	9.41	9.33	9.54	9.24	9.48	9.71

*: ESAA has projected price paths for 2001-2002 based on its information sources.
Residential prices are GST inclusive, commercial prices are GST exclusive, total average prices reflect ultimate cost to customers.

Source – Electricity Prices in Australia 2001/02, ESAA Ltd

Reductions in the operating costs (in public utilities) underlie most of these price reductions. There has also been a realignment of prices across user groups, leading to larger price reductions for commercial users in most jurisdictions.

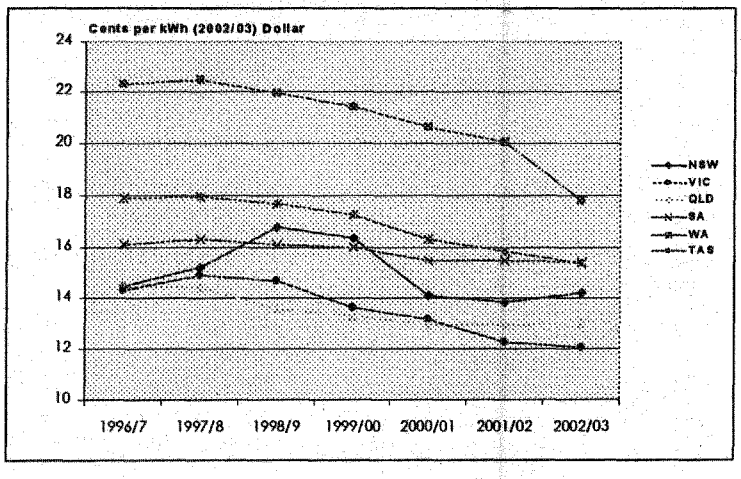
Rural and Regional Australia have also benefited from the reduction in real electricity prices. Over the period since 1996/7 to 2002/03 (see Table 2), real tariff rates for farmers have declined in all jurisdictions within Australia.

Table 2 Real electricity prices by classified customers 1996/97 to 2002/03

Cents per kWh (2002/03) Dollar		1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03
New South Wales	Residential	9.55	9.55	9.39	9.17	9.43	8.99	9.22
	Small business	13.39	13.10	12.19	11.91	11.13	10.66	10.35
	Large business	8.30	5.85	5.71	6.74	6.34	6.44	5.60
	Farming	14.47	15.19	16.77	16.39	14.10	13.82	14.22
Victoria	Residential	12.33	12.40	12.11	11.82	12.53	12.16	12.21
	Small business	20.56	19.87	19.41	18.94	18.25	17.71	17.19
	Large business	7.97	4.97	4.59	5.74	6.29	7.55	5.49
	Farming	22.34	22.47	21.96	21.43	20.65	20.04	17.78
Queensland	Residential	9.78	9.73	9.63	9.47	10.11	10.10	10.12
	Small business	14.50	14.43	13.57	13.34	12.95	12.94	12.98
	Large business	8.32	8.14	7.65	7.55	7.89	7.34	6.46
	Farming	14.50	14.43	13.57	13.34	12.95	12.94	12.98
South Australia	Residential	11.57	11.87	11.92	11.85	12.61	12.60	12.59
	Small business	16.11	16.32	16.10	15.98	15.47	15.45	15.44
	Large business	8.12	8.01	7.93	8.28	9.85	10.27	6.33
	Farming	16.11	16.32	16.10	15.98	15.47	15.45	15.44
Western Australia	Residential	13.79	14.16	13.91	13.60	14.13	13.72	13.32
	Small business	18.87	18.91	18.58	18.16	17.16	16.66	16.17
	Large business	10.64	10.39	10.20	10.04	9.43	9.16	8.89
	Farming	17.87	17.97	17.67	17.27	16.32	15.84	15.38
Tasmania	Residential	12.67	11.28	11.53	11.47	12.24	11.70	11.77
	Small business	16.08	15.82	14.63	13.65	13.14	12.24	12.05
	Large business	10.04	8.70	7.98	7.82	6.95	6.60	6.64
	Farming	14.33	14.92	14.71	13.65	13.14	12.24	12.05
Australian Capital Territory	Residential	8.41	8.77	9.28	9.63	10.40	10.45	10.32
	Small business	15.29	15.59	14.10	14.04	12.99	12.83	11.86
	Large business	10.46	10.00	7.17	8.25	7.94	8.54	7.81
	Farming	-	-	-	-	-	-	-
Northern Territory	Residential	15.73	15.77	16.61	16.37	17.02	16.52	16.04
	Small business	18.54	18.58	18.54	17.72	16.42	15.76	15.30
	Large business	-	-	-	-	10.64	9.90	9.61
	Farming	-	-	-	-	-	-	-

Source – Electricity Prices in Australia 2002/03, ESAA Ltd

Figure 3.1 Real Tariff rates for farmers



From the graph above, it is interesting to note that Victoria, in actual fact, showed the biggest decline in tariff rates for farmers. It is important to note that, having said this, the apparent decline may not necessarily be solely attributable to privatisation.

ii. Employment: -

As a result of Australia's electricity reform, employment in the electricity supply industry has declined from around 52,000 in 1993 to about 33,000 people currently employed in the sector. Some regions such as the Latrobe Valley, in particular, experienced significant job losses in the electricity industry. The Valley had lost between 6000 and 8000 jobs. The LaTrobe Shire Council makes note that this is the equivalent to 10% of the Shire's total population. Direct employment comparisons can no longer be meaningfully made because the shift to contractor services overstates the true extent of job losses.

Increased competition, incentives for outsourcing non-core activities, centralisation of services and the implementation of new technologies, has seen this trend continue. Proportionally, the loss of labour in regional areas is little different to that in urban areas. Moreover, while the reforms have resulted in the closure of service outlets in some small communities, employment in larger centres which have become 'regional headquarters' has increased.

Recent infrastructure development projects such as Basslink[3] has also offered an increased level of employment. Mr John Chapman[4], in addressing the Joint Advisory Panel (JAP), indicated that 'some 300 man-years of local employment will be directly engaged over the construction period and that there will be some $100 million spent on the procurement of local goods and services.

iii. Labour Productivity: -

The overall employment reductions, if anything, has contributed to significant improvements in labour productivity which, in turn, has created the scope for reductions in costs and prices in regional and urban areas alike. The fast growth of this sector has also meant that, overall, small businesses within these regions have become more prominent.

iv. Generator Availability: -

There have also been major reductions in the capital requirements for the industry because of the entire competition reform and privatization package. As shown in figure 2.2, Generator availability has increased dramatically over the period of the reform program.

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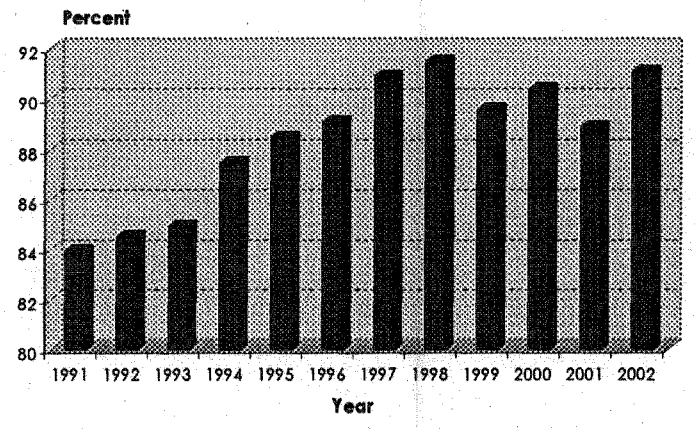
[3] The private sector electricity interconnector between the Victorian grid at Loy Yang and the Tasmanian grid at George Town

[4] Siemens' Project Director, representative of the companies selected to build the land offshore portions of Basslink

Figure 3.2 **Generator Availability Factor** **1991 to 2002**



Source – Electricity Australia 2002, ESAA Ltd

As a result of a concerted program of performance improvements, generator availability, in New South Wales, increased from around 80% in the 1980's to approximately 90% by the late 1990's. In Victoria, the improvement was more pronounced with availability rising to 93%.

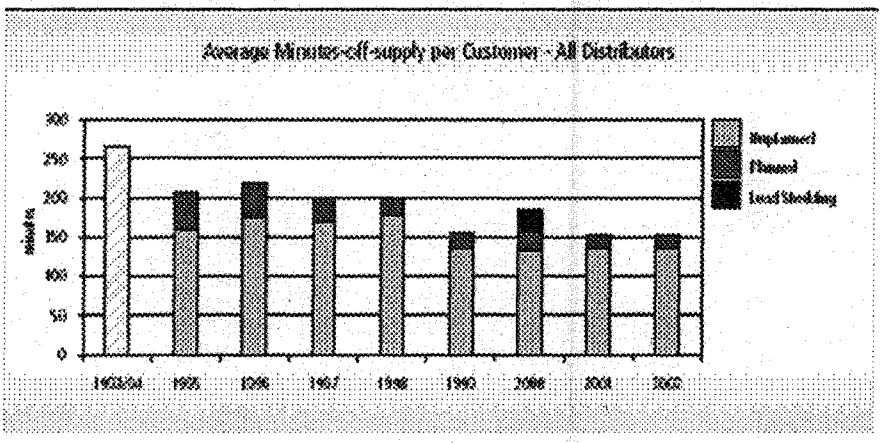
These efficiency improvements demonstrate that better management of power plants, under the new market arrangements, has had the potential to save billions of dollars of premature investment in new generation facilities since the reform program was implemented. In recent years, Queensland has been the only State to have built any new major coal fired base load power stations.

v. *Reliability of Service: -*

The reliability of supply has become an increasingly important source of competitive advantage for electricity suppliers, particularly with the advent of the 'contestable customer'.

Reliability of Distribution, particularly in Victoria, has improved considerably since privatisation. As illustrated below, there has been a continuing trend of improvement in the State's supply reliability, in terms of average minutes-off-supply per customer since 1995. The average minutes-off supply per customer for 2002 was 151 minutes, similar to that recorded for 2001 (152 minutes). Both the planned and unplanned minutes-off-supply remained stable at approximately 17 minutes and 135 minutes respectively.

Figure 3.3 **Average minutes-off-supply per Customer – All Distributors**

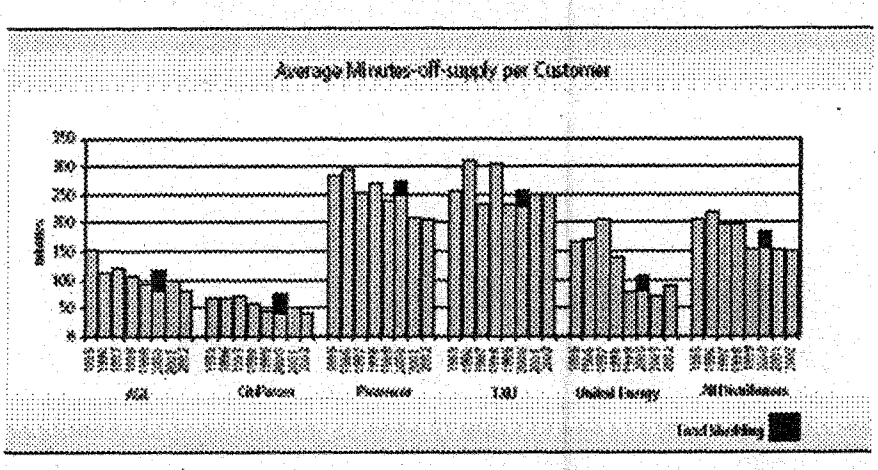


Source – Essential Services Commission

Over the past four years, the average unplanned minutes-off-supply remained considerably lower than the average for 1995-98[5]. Since 1999, the total State-wide unplanned minutes-off-supply remained relatively constant at around 135 minutes per year – a 21% improvement on the annual average of 170 minutes for 1995-98.

Planned minutes-off-supply per customer steadily decreased from 46 minutes in 1995 to 23 minutes in 1998, 22 minutes in 1999 and 17 minutes in 2001, remaining steady in 2002. Reductions in planned minutes-off-supply in previous years were due to increased live-line work and other initiatives to avoid interruptions to customers.

Figure 3.4 **Average minutes-off-supply per Customer**



Source – Essential Services Commission

[5] This excludes 28 unplanned minutes-off-supply due to load shedding in 2000, because these events were beyond the control of the distributors.

To identify whether improvements in supply reliability are being experienced by rural and regional customers, and not just by those who already receive a reliable supply, the Essential Services Commission noted that some distributors reported improvements in the average customer minutes-off-supply in 2002. Powercor reported a slight increase in average minutes-off-supply to 352 minutes (increase of 5%) in 2002. The average number of interruptions fell, whereas the average duration of supply interruptions increased. TXU reported a slight decrease in average minutes-off-supply to 410 minutes (decrease of 4%) in 2002. Both the average number of interruptions and average duration of supply interruptions fell slightly[6]

vi. General economic performance: -

Over the past decade, the electricity industry has made significant contributions toward the general economic performance of the Australian economy. As a direct result of greater efficiencies within the sector, there has been a reduced call on savings which have enabled interest rates to remain marginally lower than they would otherwise have been.

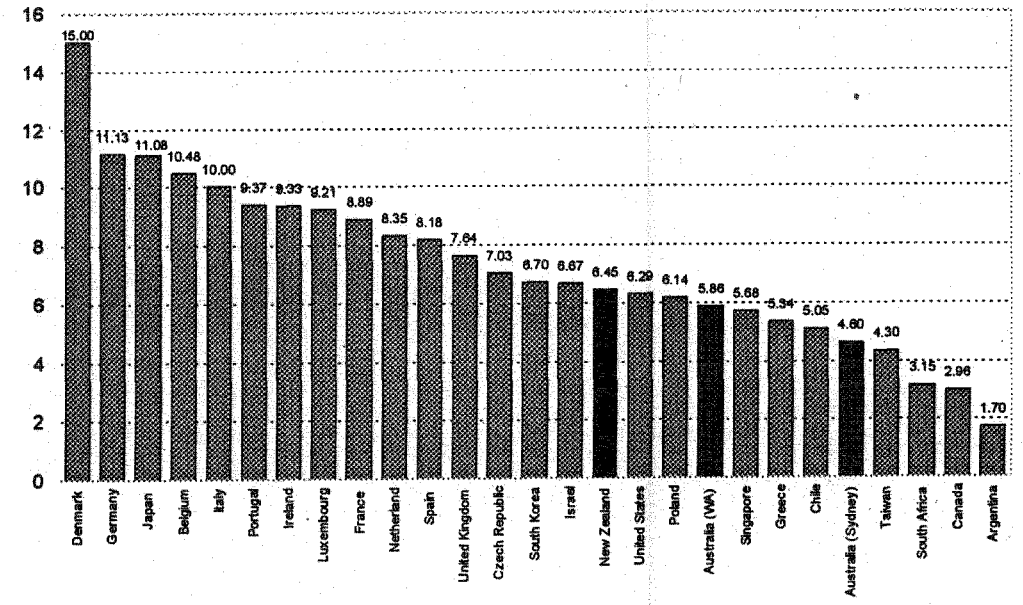
As an indirect contribution, the electricity supply industry, through its reduced prices for electricity, has also assisted in improving the competitiveness of all Australian industries.

vii. An International Comparison

As Figures 3.3 and 3.4 indicate, Australian electricity prices continue to be amongst the lowest of the industrialized countries. In a basket of 28 countries tracked by ESAA, Australia (Sydney) has the fourth lowest average industrial power price and the fifth lowest average retail price.

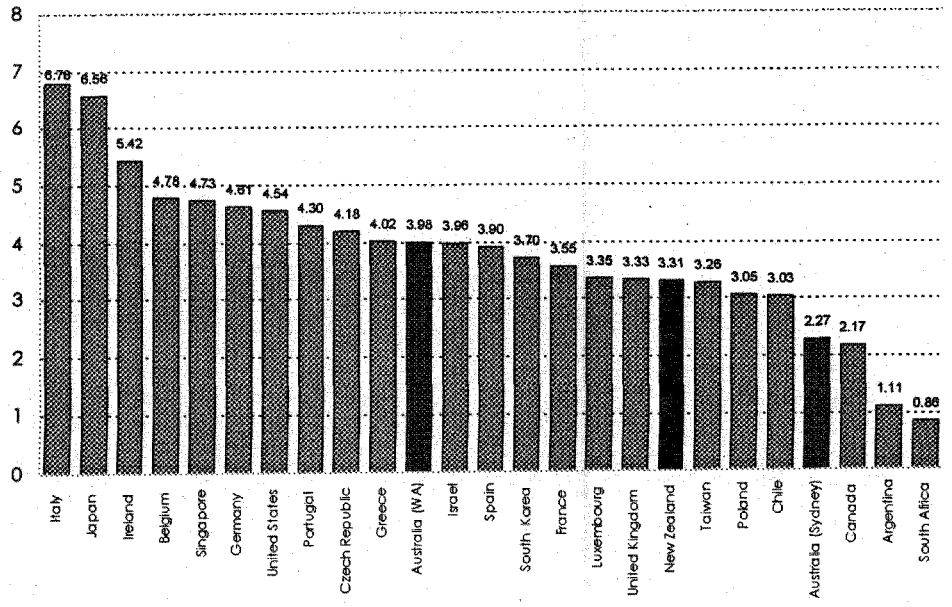
[6] Electricity Distribution Businesses – Comparative Performance Report for the Calendar Year 2002, Essential Services Commission – August 03

Figure 3.3 International Electricity Prices – January 2003 residential



Source – UK Electricity Association

Figure 3.4 International Electricity Prices – January 2003 industrial



Source – UK Electricity Association

3. LOCATION OF ELECTRICITY FACILITIES

Nearly all the major electricity generators are located in regional Australia. All the coal fired base load generators, which account for 60% of installed capacity of principle generation plant capacity, are located near major coal fields.

In the event of a move to gas fired generation capacity, the location economics for generators will need to change in order to minimise the transmission losses. Due to the higher price of gas compared to coal, gas generators are more likely to be located near their major loads. Therefore, apart from major regional electricity users, most of these gas generators will be located where the major loads tend to be – i.e. urban areas.

4. REGIONAL LOCATION OF ENERGY INTENSIVE USING INDUSTRIES

A significant proportion of major energy using facilities are located in regional Australia, many of which are especially located near their source of supply so as to minimise transmission losses. The competitiveness of Australian electricity, in world terms, has provided assistance in the expansion of these industries in the past and for many projects in the future.

For example, ABARE[7] has recently reported that:

> *'a very wide range of project proposals exist in Australia's basic nonferrous metals and minerals processing sectors. In Western Australia, expansions to mineral processing facilities are planned for alumina and nickel projects. In Queensland a range of developments for aluminium, magnesium, alumina, copper, silver, lead and zinc are proposed while a new 71,000 tonnes a year magnesium smelter is proposed for South Australia.'*

ABARE also notes that, within the nonferrous metals sector, the aluminium industry accounts for around 38% of all energy consumed, 88% of which is electricity. In the period to 2002-03, energy consumption in the aluminium sector is expected to be subdued, in line with the outlook for production and more broadly assumes both the greater use of idle capacity and some moderate energy efficiency improvements at existing facilities.

In the period 2007-08, production capacity at the Kurri Kurri smelter facility in the Hunter Valley, New South Wales is assumed to be increased by 90 000 tonnes, including a new potline. During the same period, production capacity at Tomago Aluminium (also in New South Wales) is assumed to be enhanced by 47 000 tonnes through a combination of both efficiency improvements and new capacity. In Victoria, production capacity is assumed to increase by some 41 000 tonnes in the period to 2007-08, reflecting likely efficiency gains and expansion of the two existing Alcoa smelters. Similarly, an

[7] ABARE report 03.10 page 36 - 37

expansion of 125 000 tonnes to existing facilities in Queensland is assumed to take place between 2003-04 and 2007-08.

5. Transmission Network Access

A crucial issue for the future is not just ensuring the provision of enough generation capacity to meet future demand, but also the ability for the electricity industry to deliver power through an effectively integrated transmission network.

The Ministerial Council on Energy (MCE) has recognised this and has agreed that a 'national transmission network review' needs to be developed in 2004.[8] In its August 1 Communiqué, the MCE has made the following recommendations: -

- Comprehensive assessment of a national transmission planning function for cross-border transmission, with last-resort power of direction, to be undertaken as part of the NEM transmission review;
- Transmission institutional and regulatory aspects be reviewed by the NEMMF in 2003;
- Ministers to make decisions in respect of the NEM on:
    - The need for, and scope of, a new national transmission planning mechanism;
    - Amendments to the regulatory regime, including the regulatory test and scope for asset optimisation;
    - The future arrangements for defining the boundaries of market regions in the NEM;
    - Improvements to inter-regional financial trading arrangements;
    - Incentives to maximise transmission availability and capacity; and
    - The nature of regulation applying to new inter-connectors.

The Transmission investment can be provided by either government or privately owned transmission companies. The essential element in getting the investment is that the National Energy Regulator, when setting the regulated returns for the transmission companies, does not set them at too low a level such that the cost of capital for the transmission companies are too high for the potential risk.

6. Future Demand

The most recent modelling undertaken for ESAA by National Economics was produced in July of this year and, as with earlier modelling, was presented as three scenarios, the results of which have been presented in *Table 3*.

[8] Ministerial Council on Energy Communiqué, 1 August 2003

This table, under the three scenarios, illustrate the projected relationship between the Australian average GDP growth and the average Australian population growth illustrates, under the three scenarios, the Australian average GDP growth

Table 3 Relationship between GDP and population growth 2003 - 2020

	Average Australian annual GDP growth – 2003 to 2020	Average Australian annual population growth – 2003 to 2020
Base Case (most likely scenario)	3.1%	1.1%
High Growth Scenario	4.1%	1.3%
Low Growth Scenario	2.2%	0.9%

Note: These projections are not forecasts.

A range of assumptions have, of course, been built into these scenario models. For example, these include the timing of major project developments in the mining and minerals areas.

An important point that needs to be highlighted is that demand for electricity in Australia is primarily focused in Victoria, New South Wales, the Australian Capital Territory and Queensland. These regions account for some 80% of all electricity consumption and hence, are the key stakeholders in investment in infrastructure. The only change ESAA's scenario's perceive in this situation is that Queensland will overtake Victoria as the area of second highest demand for electric power.

This geographical dimension is important in terms of Australian fuel supply. Victorian supply is dominated by brown coal generation, whilst New South Wales and Queensland are predominately black coal based. Coal-fired power stations are continuing to be built in Queensland; they are not proposed in actual developments for New South Wales and Victoria in the near future.

The rise of natural gas as a supply source for Victoria and New South Wales, and also South Australia, is seen as highly likely, raising questions about availability of reserves and about the cost of gas. Apart from the Snowy Mountains system and some smaller generation plants, hydro-electric power plays a small role on the eastern seaboard – unlike Tasmania where it is the dominant power fuel source in a small market. There are many opportunities for relatively small, new renewable energy plants but in aggregate they are not foreseen decisions. The prospect of the introduction of geothermal power, based on Cooper Basin hot rocks, is not to be discounted, but again, it will not greatly change the fossil fuel dominance of the generation "fleet".

So, where is power demand headed, according to the National Economics modelling? Under the base case (most likely) scenario, on a national basis, the outlook is as follows:

Table 4 Outlook – Base Case Scenario 2010 - 2020

Forecast	Demand in Generated GWh	Demand in Business Consumption (GWh)
2010	> 218,000	156,000
2015	> 248,000	180,000
2020	> 281,000	Almost 206,000

Major areas of consumption and demand growth will be Victoria, New South Wales, the Australian Capital Territory and Queensland.

The National Economics 'business as usual' modelling indicates that:

Table 5 Demand in Generated GWh Jurisdictions

Jurisdictions	Demand in Generated GWh Current (2002)	Demand in Generated GWh Projected to 2020
New South Wales / Australian Capital Territory	63,000	98,000
Queensland	35,000	70,500
Victoria	39,500	> 59,500

This indicates that consumption in these four States will have absorbed well over 85% of the total level of growth – in other words, another New South Wales will have been added to Australia.

Under-estimating the power pressures arising from population growth and use of power plus demand from industrial and commercial customers, as indicated earlier, has been the undoing of Chinese planners in the past northern summer – and it was a significant factor in the problems encountered by California in 2001.

Under the National Economics scenarios, the "high growth" version sees total consumption nation-wide in 2020 exceed 325,000 GWh – that is adding another Victoria to the additional NSW represented by the base case predictions for growth.

Demand rises under either scenario place substantial pressure on governments to get the environment for investment right and to do so in a timely manner. The data we have presented here relates to overall consumption – it does not dwell on the issue of summer peak loads, where, particularly in South Australia and Victoria, possibly in New South Wales and possibly in southern Queensland the pressures created by five or six extremely hot and humid days a year are a constant challenge.

7. ENVIRONMENTAL IMPACT

viii. Wind farms: -

There are many advantages for both regional and city areas of Australia with using wind turbines to harness wind energy. With the best wind sites in rural and regional Australia, wind farms, can have a positive impact in the local regional economies. The local communities will benefit from direct employment opportunities as well as the economic flow-on effects associated with local installation and operation of wind farms.

Wind Power Pty Ltd, a Victorian wind farm developer, noted that the proposed wind farms in South Gippsland[9] are likely to create up to 90 jobs during construction, generate ongoing income for local landowners and further indirect employment in local services and tourism. The Codrington wind farm in Western Victoria is said to be attracting about 50,000 visitors a year and a tour company has been specifically set up to meet tourism demands.

8. LEVEL OF GOVERNMENT

The ESAA is a strong advocate for the need for a national regulatory regime for at least electricity and sees it as being the first step in a series of changes required to create a better environment for the large investment in electricity infrastructure required to meet customer demand growth for the rest of this decade and beyond.

The Association is encouraged by the broad support to be found amongst all levels of government for the general idea of a national regulator. Having said that, the industry has urged the following key principles: -

- Reform should provide an appropriate and clearly stated policy role for governments. In this context, ESAA sees policy on NEM regulation as being a whole-of-government issue because of the strategic significance of electricity supply to the nation.

- While governments should have the ultimate policy role, it is critical that the regulator should have independence in day-to-day decision-making. This requires regulatory decisions to be free of political involvement.

- While governments should be able to propose NEM Code changes, the driver of Code developments should be the market participants, ie the electricity supply business. A role for customer input to this process needs to be clearly established.

- The new regulatory regime should operate under a general competition policy perspective that provides uniformity of approach. Where regulation continues to be applied at a State level, the regulators need to be bound to common

[9] Windpower News, *"Wind farms will bring more jobs and investment to Gippsland"*, 22 August 2003

principles. Consistency is needed across jurisdictions to regulate like activities eg distribution pricing.

- As well, the regulatory regime for electricity needs to be consistent with economic regulation across other infrastructure sectors, particularly other energy sectors.
- Inherent in the pursuit of a more efficient regulatory regime is the need to reduce the cost of regulation through a streamlined process.
- While the need for significant change to the regulatory system is widely acknowledged, the best aspects of the present system should be preserved – however, special care will be needed to avoid simply rebadging existing institutions and recreating overlaps in the name of change.
- The outcome of this change process should be a regime that actively pursues light-handed regulation and practices a preference for market-based outcomes. Included in regulatory policy should be a process to independently assess the regulator's performance against agreed benchmarks.

An efficient regulatory system where sovereign risk is minimized will ensure appropriate investment will be delivered into the industry. The most effective role for all levels of government is to facilitate and help get the investment under way. For example a new baseload generator can take 5 – 7 years from initial concept to starting operation. The actual time for construction is usually 18 months for site preparation and 12 months building. All the additional time is getting the necessary approvals from the various levels of government and then the financial institutions. All level of government can help reduce this time by having a quick efficient approvals process.

9. MECHANISMS OF REPORTING

The electricity industry comprises both government and privately owned companies. To ensure a level playing field and a minimization of the potential for sovereign risk premiums on investment, any regulatory or reporting mechanisms on the industry must recognize this competitive neutrality. The industry under the proposed Australian energy regulator will still be one of the most highly regulated industries in Australia.

There is already a significant cost for all companies, government and privately owned, in meeting the standards imposed on the industry. If the Australian government wants further information on the performance of component of the industry whether they are now privately owned companies or government companies transferring to private ownership, these additional information requirements should not be additional but use the already existing databases and regulatory reporting requirements that the industry is already subject to.

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