4 May 1999

Committee Secretary Standing Committee on Primary Industries and Regional Services House of Representatives Parliament House CANBERRA ACT 2600

Dear Sir

Electricity Supply Association of Australia Limited (ESAA) Submission to the Inquiry into Infrastructure and the Development of Australia's Regional Areas

The Electricity Supply Association of Australia Limited (ESAA) represents a wide range of participants in the electricity industry, ranging from electricity generators and distributors/transmission entities through to electricity retailers. Its membership includes State and Territory government business enterprises and private enterprises.

ESAA welcomes the opportunity to make a submission to the House of Representatives Standing Committee on Primary Industries and Regional Services' inquiry into infrastructure and the development of Australia's regional areas.

This submission will make comment on behalf of ESAA members in three main areas:

- The contribution of electricity supply infrastructure to economic and jobs growth in regional areas;
- Barriers to development of electricity supply infrastructure in regional areas, and
- Factors that would enhance the development of electricity supply infrastructure in regional areas.

The paper is prefaced by an executive summary of the issues and includes recommendations/submissions relating to the particular issues contained therein.

We thank you for the opportunity to make this submission, and would be pleased to discuss any of these issues in further detail. Accordingly, please contact Simon Troeth, Manager of ESAA's Canberra office on (02) 6248 3694 if we can be of further assistance.

Yours sincerely,

Keith Orchison Managing Director. Submission Paper to House of Representatives Standing Committee on Primary Industries and Regional Services

On

Infrastructure and the development of Australia's regional areas

Electricity Supply Association of Australia Limited

(ACN Number: 052 416 083)

1.0 Executive Summary

- Australia's electricity supply industry is a major contributor to national economic growth and job creation through the provision of infrastructure, especially in regional areas.
- The electricity supply sector provides jobs directly for a wide spectrum of skilled workers and indirectly through demand for contracting and consulting services, food, plant hire, mechanical repairs, fuel and other goods and services.
- Provision of low-cost, reliable electricity is vital to business viability in regional areas since electricity can be as much as 20 per cent of business input costs.
- A reliable electricity supply underpins modern communication systems, which are essential to the operation of a sophisticated financial and commercial environment and disaster recovery systems.
- Demand for electricity has grown steadily in Australia and is predicted to grow by 1.7 per cent a year to 2014/15.
- The electricity supply sector has invested more than \$67 billion in infrastructure and has plans to invest approximately \$20 billion in the next ten years.
- The creation of the national electricity market has brought price reductions for contestable customers and also introduced flexibility and market discipline into infrastructure planning.
- A number of transmission and generation developments over the next decade will make a major contribution to economic development and job creation by the electricity supply sector.
- There will also be investment in renewable energy infrastructure of between \$2 and \$4 billion in the next decade to meet the needs of the Government's mandated renewables policy.
- To fill a perceived void in regional planning, a national regional planning strategy should be developed to enable better coordination of infrastructure development in regional areas.
- Economic policies which create a low inflation, low interest rate environment should be pursued in order to grow the economy and reduce unemployment.
- Allowance in the taxation regime for accelerated depreciation concessions is important to electricity supply projects and its removal in business tax reform may skew investment in new electricity generation, with significant regional implications.

- Infrastructure tax concessions are not granted on a level playing field. Access to infrastructure tax concessions by smaller projects than is the case currently should be investigated.
- There are marked inconsistencies between States in the area of environmental law. States should be encouraged to develop uniform environmental policy approaches to development, and the Federal Government should investigate the possibility of a more uniform national environmental framework for development.
- Costing the environmental impact of projects presents difficulties for developers. This is an area that would benefit from joint government/business consideration of solutions. Use of emission trading schemes could contribute to resolving this issue and electricity supply businesses are keenly interested in the concept -- however its implementation nationally raises complex, presently unresolved issues and little progress has been made internationally in developing a framework for emission trading between countries.
- The risk and cost burden of regulation in the competitive energy markets has emerged as an important policy issue. This impacts on the electricity supply sector's capacity to serve regional and urban communities, not least through imposing substantial cost. ESAA argues that there should be a review under the national competition policy agreement of the current state of energy regulation.
- Lack of coordination between different levels of government is hampering the efficient development of infrastructure. Planning policies and actions should be better coordinated to maximise the net benefit to the community of infrastructure developments.
- The electricity supply industry is discriminated against in areas such as noise regulation. Rules should be applied consistently and fairly.

2.0 Introduction

The Australian electricity supply industry has been a major contributor in the 20th century, both directly and indirectly, to national economic growth and job creation through the provision of infrastructure. Today Australia's electricity supply business has assets valued at \$67 billion and annual turnover of \$22 billion. The electricity supply sector contributes around two per cent of Australia's Gross Domestic Product.

The provision of electricity supply infrastructure has created tens of thousands of jobs for graduates and skilled workers. The electricity supply industry has also invested substantial resources in providing education and training for its large staff. It has fostered a wide range of skills and experience in tackling the challenge of building electricity supply infrastructure which can operate in a wide range of climatic conditions.

Local communities throughout Australia have benefitted from the demand for services created by the construction and operation of electricity supply facilities.

Importantly, the increased reliability of supply and internationally competitive costs of electricity made possible by the efficient provision of infrastructure has ensured that businesses enjoy the benefits of a low-cost, secure energy supply -- which is critical to business competitiveness, given that electricity makes up on average 20 per cent of business input costs in important industrial sectors.

This enables such businesses to operate efficiently, maximising opportunities for job creation and wealth creation, particularly in remote areas. In particular, the electricity industry is essential for the establishment of sunrise industries -- including high-technology enterprises - in regional areas.

A reliable electricity supply also underpins modern communication systems, which are essential to the operation of a sophisticated financial and commercial sectors and to disaster recovery systems.

Fifty years ago the nation's electricity supply organisations supplied 1.6 million customers, of whom just over 150,000 were in business. Today, the electricity business has more than eight million customers with well over a million in business. It provides power to most towns in country areas and also provides electricity efficiently and cheaply to farms and other businesses in rural areas.

As population grows and new industrial developments occur, demand for electricity will increase, prompting major further expansion in electricity supply infrastructure. The Australian Bureau of Agricultural and Resource Economics predicts electricity consumption will grow by around 1.7 per cent a year to 2014/15. However, pursuit of reduction in unemployment to five per cent by 2010 will involve higher GDP growth and higher electricity demand.

This expansion is also being facilitated by the introduction of a competitive energy market, under which all businesses and residential customers -- by 2001 in Victoria and NSW, later in the decade elsewhere -- will be able to choose the electricity supplier which best meets

their needs. Infrastructure providers, private and government, are now better placed to follow demand trends and build and operate new facilities to cater for the market's needs.

Electricity supply in Australia since the Second World War has been largely governmentowned, including significant local government involvement. The need to improve electricity efficiency to support international trade competitiveness has led to extensive restructuring in the industry in the 1990s -- involving the amalgamation of distribution businesses, disaggregation of large State generation and transmission authorities, corporatisation of government business enterprises, privatisation (mostly in Victoria) and the introduction of independent power producers (IPPs) and power retailing businesses.

National competition policy has seen the development of a competitive market in four states (NSW, Victoria, SA and Queensland) and the ACT, proposals to build high voltage links between Queensland and NSW and Victoria and Tasmania and operation of IPPs in WA.

This has led to large price reductions for contestable customers. In the Victorian and NSW markets, where there are more than 20 retail businesses buying power from the wholesale pool to sell to 16,000 large contestable industrial and commercial customers, the market has delivered average retail price reductions of some 26 percent.

3.0 Contribution of electricity industry to economic and jobs growth through infrastructure provision

The electricity industry plans to invest a considerable amount of capital in the next decade in new infrastructure or to upgrade existing facilities.

It is estimated that the industry may spend as much as \$20 billion over the next ten years, although many proposals are still in the early stages of development consideration.

More than \$2 billion will be spent on a number of transmission projects, including:

- the NSW/Queensland interconnector, costing \$400 million;
- six major transmission projects in Queensland required to meet predicted load growth, including regional lines near Tarong, Cairns and Oakey;
- a proposed \$350 million undersea link between Tasmania and the mainland;
- proposals to link NSW and South Australia via an interconnector.

These proposals will create jobs in regional areas.

For example, the NSW/Queensland interconnector will inject nearly \$9 million into the local economy during the next two years, with about half of the site workforce of between 70 and 80 people recruited from local communities and a need for local sourcing of goods such as foods, beverages, laundry and plant hire, mechanical repairs, tyres and substantial fuel requirements.

The provision of a reliable and low-cost supply of electricity will encourage the entry of new businesses to the area, which will have a powerful multiplier effect on job creation.

Powerlink, which is building the Queensland end of the interconnector, is also spending \$600,000 on 60 community projects in seven regional shires, including furnishing an emergency respite house, buying a cardiac defibrillator and associated equipment for a local ambulance committee.

The Basslink proposal to link Tasmania and the mainland is currently being subjected to an 11-month environmental, social and economic impact study, but the Tasmanian Government has already granted it project of State significance status. The Premier of Tasmania, Mr Jim Bacon says the project will "make a major contribution to Tasmania's economic development, particularly through access to a new competitive source of electricity."

New or upgraded power stations will also make a substantial contribution to infrastructure provision in regional areas, with the construction of new generation developments valued at \$10 to \$12 billion over the next decade.

For example, a proposal to increase the generation capacity of the Tarong power station in Queensland involves expenditure of \$1.4 billion, while the proposed \$1 billion Kogan Creek power station, also in Queensland, will create about 1000 jobs during a three-year construction phase and about 150 full-time jobs when operating. The main project proponent,

Consolidated Electric Power Asia Limited, will also offer further investment and resource opportunities for the region in the form of a community development package.

In Victoria, there are plans under consideration to create "energy parks" in the Latrobe Valley -- which would site clusters of factories close to power stations, to bring industry much closer to the source of their power.

In Western Australia. Western Power Corporation is about to let tenders on new infrastructure as well as the replacement of 28 old diesel generation plants with more modern equipment -- mostly gas-fired. Tenderers are required to prove the benefits to the community of their bid, as well as outlining tourism benefits and the contribution of their bid to grid extension.

Other power station developments in regional areas under consideration and at varying planning stages include:

Queensland:

- 840 megawatt (MW) coal-fired station at Rockhampton;
- 700 MW coal-fired station at Wandoan;
- 1400 MW coal-fired station at Millmerran;
- 150 MW gas-fired cogeneration plant at Townsville;
- 368 MW gas-fired cogeneration plant at Gladstone.

WA:

- 660 MW gas-fired plant at Pilbara, WA;
- Various new capacity in West Kimberley, Mid-West and other regional areas.

NSW:

- 300 MW gas-fired cogeneration plant at Lake Illawarra;
- 100 MW gas-fired cogeneration plant at Wagga Wagga.

Victoria:

• 280 MW gas-fired cogeneration plant at Maryvale.

SA:

- 500 MW gas-fired plant at Pelican Point, SA
- 300 MW gas-fired plant at Whyalla South;
- 40 MW gas-fired plant at Katnook.

(Cogeneration is a process that generates electricity and harnesses the otherwise wasted heat for use on-site and in the immediate vicinity. The electricity generated is used onsite or sold into the grid).

A full list of proposed power station development, taken from the ESAA publication *Electricity Australia 1998*, is attached to the submission as Appendix 1.

There is also expected to be a major level of investment in renewable sources of electricity generation, including solar, wind, biomass and hydro systems as well as associated componentry and energy storage systems such as deep-cycle batteries, and important alternative power sources such as fuel cells.

Such developments often bring fringe benefits to local communities through the provision or upgrading of access infrastructure.

With the implementation of the Federal Government's requirement that retailers source an extra two per cent of their electricity from renewable sources by 2010, there is expected to be a gross investment over the next 11 years of between \$2 and \$4 billion, depending on the technologies selected.

These technologies range from photo-voltaic cell manufacturing facilities to wind farms in Western Australia.

In summary, the electricity supply industry is a vital contributor to economic activity in regional areas.

Regional employment benefits from the demand for goods and services before, during and after the construction period; ongoing jobs are created to manage and maintain the plant and equipment.

The demand also flows on to jobs such as consulting engineers, transport, education, communications and residential construction.

For example, the skills developed in the Snowy Mountains project including design, installation and maintenance have been retained by Snowy Mountains Engineering Corporation and are utilised by that firm in its work both here and overseas.

The demand from the electricity supply industry for education and training services creates jobs in those fields, including in regional areas.

The growing pressure to control greenhouse gas emissions and other environmental pollution also creates work for Australian power station consulting groups.

Not only does the construction and operation of electricity supply infrastructure bring valuable job opportunities to regional areas, but the provision of low-cost reliable electricity supply is in itself a catalyst to job creation by allowing energy-using businesses to set up in regional areas and provide jobs for local people.

4.0 Barriers to development of electricity supply infrastructure in regional areas

For the purposes of providing information to the inquiry, ESAA has interviewed a number of its members across Australia to assess their perception of the nature of barriers to current or further development of the electricity grid in regional areas.

Their concerns, and some other concerns held by the wider ESAA membership, are outlined below.

1. Lack of national regional planning strategy

Industry participants identified the perceived absence of a national regional planning strategy as a significant hurdle to coordinated infrastructure development in regional areas.

Planners cited a lack of proactive, coordinated planning by the Federal Government as detrimental to ongoing infrastructure development.

The Government was seen as not being able to decide between a non-interventionist approach and a "picking winners" approach.

This was seen to lead to a situation where the Government did not get involved because it was afraid of being seen as "picking winners," creating a situation of non-intervention by default.

One participant said there was a real need for a corporate plan for regional development in Australia and that the current "void" had created confusion and encouraged States to compete against each other for large developments.

Many government decisions were seen to be made outside any sort of investment framework. While not preventing investment going ahead, this perceived ad-hoc planning approach represents a source of frustration among electricity supply infrastructure planners.

They believe a systematic consultative approach should be instituted to expedite the success of major project proposals and to ensure that development and job creation imperatives and community expectations and concerns are appropriately reconciled.

2. Economic/taxation policies

Economic and taxation policies are critical to the success or failure of new infrastructure investments.

Electricity supply infrastructure is costed over the life of a project, typically 20 to 30 years, so policies affecting (for example) inflation and interest rates are critical to a project's overall cost.

Access to tax incentives can also change the economic projections of a project over its life.

The current low inflation, low interest rate environment needs to be sustained in order to create stability and certainty for investors, to grow the economy and to reduce unemployment.

However, possible changes related to the Review of Business Taxation and A New Tax System are causing some concern amongst those surveyed.

ESAA has, through the Senate Select Committee process as well as the Review of Business Taxation, raised one of the most negative effects associated with the removal of accelerated depreciation for projects.

The issue is of particular concern for members of the electricity industry and other infrastructure type enterprises which have invested heavily in capital assets. The removal of accelerated depreciation, without adequate offsets, would be counter to economic growth and would result in:

- a substantial decline in new asset investment;
- a deferral of necessary investment;
- existing technology will be used for longer, increasing the potential for functional failures, and
- any investment that is undertaken inevitably being on a smaller scale, thereby making a less than maximum contribution to GDP.

If tax on accounting profits is adopted with the consequential removal of measures such as accelerated depreciation, investors will inevitably look to other jurisdictions to make their investments (ie other countries which offer benefits which cannot be obtained in Australia).

This clearly runs counter to the objective of improving the competitiveness and efficiency of Australian business and the competitiveness of the Australian economy. Accelerated rates of depreciation for tax purposes were legislated to stimulate growth in the economy. This economic objective has not changed. It is consistent with the national objectives and is even more important today as Australia moves further into a global market.

Planners also indicated that they were aware of projects that would not have proceeded without an infrastructure tax concession. There was some concern expressed that, while these concessions are available to larger projects, smaller projects which could make equally important contributions to the community in regional areas did not get similar treatment.

Participants called for incentives for infrastructure projects to be treated on a level playing field to avoid perceptions of government being seen to be "doing deals behind closed doors" and using smaller projects to cross-subsidise larger ones.

ESAA members with regional interests also responded to this survey by urging that the Federal Government provide certainty on the future of diesel fuel excise as some projects would "wither on the vine" without subsidies on purchases of diesel fuel.

3. Environmental

While environmental regulation was not seen as a major hurdle to development in Australia, the lack of uniformity of regulation between States and the lack of a mechanism to cost the environmental effects of projects were cited as problems.

Planners said a uniform national environmental policy would provide more certainty for infrastructure projects. In the present situation environmental requirements could change rapidly and without warning. In one example, a change of government in Queensland prompted a change in the route of a major power line to avoid national parks -- the opposite position to that of the previous administration.

Environmental policy changes can also impact on existing development. For example, an impending decision on the level of water flowing down the Snowy River is expected to have a major impact on the value of the Snowy Mountains Hydro-Electric Authority when it is corporatised later this year. The level of Snowy River flow will also impact on the viability of future projects -- a particular item of plant may not be worth replacing if there is not enough water to sustain the project.

Costing the environmental impact of projects is another area that presents difficulties for developers and would benefit from joint government/business consideration of solutions.

Use of emission trading schemes could contribute to resolving this issue and electricity supply businesses are keenly interested in the concept -- however its implementation nationally raises complex, presently unresolved issues and little progress has been made internationally in developing a framework for emission trading between countries.

4. Over-regulation

An ESAA survey of costs of regulation to members last year found that Australia's electricity supply businesses face annual costs of more than \$50 million in complying with regulation.

This is clearly burdensome in the context of considering new projects or upgrading existing projects, as well as in establishing new electricity supply ventures to service customers in remote areas.

While the market has not operated for long, those surveyed said a review of regulation was already overdue and that it was inappropriate for the market regulators to be determining the level of regional development in Australia.

The situation was summed up by one planner as an imbalance between market processes and the public good.

For example, two of the national market regulators -- the Australian Competition and Consumer Commission (ACCC) and the National Electricity Code Administrator (NECA) -were cited as favouring small incremental development in transmission instead of bigger lines (eg, four lines instead of one to service an area), an approach, through its negative impact on land use and the community, seen as a socially undesirable outcome.

Another respondent said the regulatory framework was too crowded (including the ACCC, NECA, the National Electricity Market Management Company [NEMMCO], the [NSW]

Independent Pricing and Regulatory Tribunal (IPART) and the [Victorian] Office of the Regulator-General) and uncertainty in market planning was delaying the construction of infrastructure through lack of clear decisions and clear directions for future investment criteria.

Planners said it was important to reduce the regulatory overload and improve market governance by reducing the number of jurisdictions with market oversight.

5. Planning

Lack of coordination by other authorities and regulatory inconsistency between the electricity supply sector and other industries were cited as barriers to the development of infrastructure.

In general, planners said there was much greater scope for coordination of regional development -- which would avoid, for example, the same stretch of road being dug up several times in a short period by local government and utilities.

The joint planning approach under the national electricity code was cited as a useful model for maximising the community benefit through a more coordinated planning effort.

Members of the electricity supply sector also complain of suffering regulatory discrimination in some States. For example, in NSW the rail and water sectors are exempt from legislation covering noise levels, whereas the electricity supply industry is not. Residents living close to electricity substations located near railway lines can only complain about substation noise even though train noise may be the greater source of annoyance.

Western Australia's electricity supply sector is facing a potential bill of between \$60 and \$70 million for noise mitigation if it is unsuccessful in its application for a blanket exemption from new legislation.

5.0 Initiatives to enhance the development of electricity supply infrastructure in regional areas

1. National regional planning strategy

The production and release of a national regional planning strategy should be a priority for the Federal Government. Alternatively, if such a strategy exists, it should be much more widely promoted in the business community.

This strategy should include comprehensive planning for infrastructure provision in electricity supply, water, sewerage, communications, transport, health, education and other critical areas.

Electricity supply underpins the provision of all other services and is vital to the operation of modern communication systems, which are crucial to the successful functioning of business and commercial operations and disaster recovery systems.

The strategy should be consistent with an approach that maximises the net benefits to the community while removing red tape and regulatory impediments to infrastructure provision.

It should also include a clearly defined investment framework and a clear direction in industry development policy.

2. Economic/taxation policies

The Government's strategy of promoting a low-inflation, low interest rate environment for business should be pursued strongly in order to grow the economy and reduce unemployment.

Infrastructure tax benefits should be available on a "level playing field" basis and the possibility of extending them to smaller projects than is currently the case should be investigated. The concept of providing tied benefits to firms on a net social benefit basis (eg. employment) should be investigated. The Government should also encourage the provision of general infrastructure which can be accessed by all businesses such as improved telecommunications and medical facilities instead of "big ticket" subsidies.

The accelerated depreciation concession should be retained to encourage major projects to be built when rates of return might otherwise be unattractive.

More certainty should be provided as to the future of the diesel fuel rebate scheme.

3. Environmental

Jurisdictional inconsistencies hampering firms participating in the national electricity market should be identified and eliminated.

Whilst the Federal Government cannot dictate State government policies, it would be appropriate for it to advance the issue through regulatory review processes and the Council of Australian Governments (COAG) process.

Electricity supply businesses are keenly interested in the concept of emissions trading while remaining concerned about the many problems that need to be resolved in order to implement an equitable policy that will not impact adversely on Australia's trade competitiveness. Priority should be given to joint activity between government and business to address the issue.

4. Over-regulation

ESAA believes that early consideration should be given to a review of the regulatory structure governing the competitive supply of electricity, as recommended by the Industry Commission on page 146 of Volume II of the report Energy Generation and Distribution:

"The Commission recommends a review by an independent body -- in three years time -- of the progress made in implementing (regulatory) reforms. Such a review would provide an opportunity to evaluate options for further improving efficiency in light of achievements in Australia and developments overseas."

Such a review, by the Productivity Commission, should lead to more efficient regulation.

Such a review could also examine whether the regulatory structure governing the electricity supply sector could be simplified and made more accountable.

5. Planning

Planning policies and actions should be closely coordinated between local, State and Federal governments in order to maximise the net benefit to the community of infrastructure developments.

Companies need clear processes to be in place to deal with the community's expectations and concerns across different levels of government and over long periods of time to underpin planning certainty.

It is inappropriate and unfair to treat the electricity supply industry differently to other industries in areas such as noise legislation. All industries should be treated on a similar basis to avoid the discrimination and inefficiency created by regulatory inconsistency.

Sources

1. Australian Energy - Market Developments and Projections to 2014/15, Australian Bureau of Agricultural and Resource Economics (various authors), April 1999.

2. Australian Expertise in Infrastructure, Focus Publishing Pty. Ltd.

3. Powerlink Interconnector Newsletter, No. 4 March 1999.

4. *Electricity Australia 1997/Electricity Australia 1998*, Electricity Supply Association of Australia.

5. *Grid augmentation: developments and opportunities*, Jane Melanie, Australian Bureau of Agricultural and Resource Economics, presented at ABARE Outlook Conference (Canberra), March 1999.

6. *Transmission tasks may top \$2 billion*, John McIlwraith, Electricity Supply Magazine September 1998 issue, ESAA.

7. Global Private Power Update, Issue 99/1, March 1999.

Appendix 1: Proposed new power stations

(data taken from ESAA publication *Electricity Australia 1998*)

Developer	(MW)	Туре	Fuel type	Location	Proposed year of commissioning					
NSW										
Oakey Power Venturers	300	GT	Natural gas	Darling Downs	2000					
Pacific Power	350	CCGT	Natural gas	Illawarra	2001					
Pacific Power	100	CCGT	Natural gas	Wagga Wagga	2001					
QLD										
Sithe Energies	s 500	GT/ cogen	Natural gas	Gibson Island	2000					
ERM Power/ AIDC	450	GT	Natural gas	Wambo (Kogan)	2000					
Siemens/ AIDC/ERM	303	GT	Natural gas	Oakey	2000					
Tarong Energy 350	/900	Steam	Coal	Tarong Basin	2001					
MIM/ Entergy	700	Steam	Coal	Western Surat Fields	2002					
Intergen/ Normandy	700	Steam	Coal	South Surat	2002					
Surat Dawson Devel. Corp.		Steam	Coal	Surat Coal Field	2002					
BHP (Peak Downs)	230	Steam	Coal	Bowen Basin	2002					
CS Energy	840	Steam/ cogen		Gladstone	2001/2002					
Stanwell/ Destec	766	CCGT	Natural gas	Townsville	2001/2003					

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National Power UK	500	GT	Natura	l gas	Pelican Point	2000
Boral Energy	80	GT	Natura	l gas	Penola	2000
WA						
TransAlta	470	CCGT	Natura	l gas	Oakajee	2000
WPC/ Fletcher Challenge Energy	120	CCGT	Natura	l gas	Collie	2000
DESTEC Energy	660	GT	Natura	l gas	Dampier	N/A
Denote:		Cogen CCGT GT		U	neration ned cycle gas turbine rbine	