CHAPTER5

ECONOMIC CONSIDERATIONS

Term of Reference (1) (b) the overall economic impact of the power line.

- 5.1 The two power authorities involved in Eastlink, *Transgrid* and *Powerlink*, have commenced feasibility studies on the basis that interconnection is economic and will result in net benefits to both NSW and Queensland. The benefits that have already accrued through the interconnection of the southern states are expected to be extended through the connection of Queensland to the grid. However, because Eastlink is part of a broad strategy, it is difficult to separate it from wider economic considerations of the national grid and reforms to the electricity industry.
- 5.2 The main economic benefit expected of Eastlink is a permanent reduction in the generating capacity held as reserve in NSW and Queensland because, after connection, this reserve capacity can be shared. *Transgrid* estimates that interconnection would allow an estimated 400mw reduction in installed reserves in Queensland and an estimated 350mw reduction in the southern states. Accordingly, a total of about 750mw of new generating plant would not need to be built. *Transgrid* further estimates that the financial benefits of deferring this capital investment in power stations alone outweighs the costs of Eastlink. The net national economic benefit of Eastlink has been quantified by *Transgrid* at \$80 million.
- 5.3 Economic benefits should also accrue from increased competitive pressures among generating authorities. These pressures should provide an incentive for electricity producers to find ways of reducing costs associated with electricity production and cost reductions should ultimately be passed on to the consumer though reduced electricity prices. Such benefits have not been quantified by the power authorities involved because of the difficulty at this stage of putting them into dollar terms.

Concerns Expressed In Submissions

- 5.4 In contrast to the views expressed by *Transgrid* and *Powerlink*, many community groups who made representations to the Committee argued that Eastlink was not economic, that the benefits were questionable, that they would not flow to small consumers and that the people of both states, but in particular Queensland, would be better served by a mix of decentralised, renewable power generating systems. Submissions frequently expressed the view that the proponents of Eastlink had not adequately demonstrated any real benefits, especially to the communities that will suffer direct disruption from the proposal.
- 5.5 A detailed cost benefit analysis of Eastlink has never been published. This has led to suspicion that the 'hidden costs' relating to environmental and social impacts and compensation had not been fully taken into account. 3 Some submissions claimed that it was hard to know what the real cost would be because statements had been made by different people, including state ministers for energy, that the project would cost variously \$280m, and somewhere between \$350m and \$500m.
- 5.6 While the document *Eastlink Your Questions Answered* (June 1995) concludes that trading in electricity through Eastlink 'will be carried out, like any trading, to the mutual benefit of buyer and seller', some submissions argued that there are more stakeholders than just buyer and seller. Other parties involved include the people affected by the power line, their communities and the environment.
- 5.7 Among the many detailed criticisms of the economics of Eastlink, the following points were made,
 - The projected appeared to have a very high cost, compared to the relatively insignificant supply. (The line is designed to carry 500mw, which represents the output of one older style turbine. Since modem power stations now have four 660mw turbines, this line will carry less than 1/4 of one power station output.)
 - If power sharing was to occur from east to west it would be easy to understand the potential for demand sharing, but trading electricity from south to north along the eastern seaboard did not make sense because demand would be synchronised.
 - The construction of Eastlink undermined the value of viable, less polluting alternatives such as gas turbines, renewable energy sources and demand side management.
 - Current electricity prices do not adequately reflect the environmental, health and social costs that are caused through pollution.
 - Electricity used by Queenslanders should be generated within their own state, and not bought from elsewhere because it would result in increased employment in NSW and reduced employment opportunities in Queensland.
 - While Eastlink was expected to postpone the need for construction of costly new power generating plant in Queensland, that State has in fact announced a future energy package that includes constructing or upgrading several new power stations thereby increasing its installed capacity to 9840mw by 2006. 9

- 5.8 Many people believe that the connection of NSW and Queensland through Eastlink will not in fact result in any decrease in the price of electricity to them, or any other benefits. They believe that small consumers, and particularly those in rural areas will actually be disadvantaged by the creation of a 'national' grid. As put in one submission: 'We simply do not believe that a small number of wholesale entities will enter into free and open competition in order to reduce costs to the consumer; the very nature of free enterprise almost certainly ensure maximisation of profit, not reduction of selling price.
- 5.9 The general view presented in submissions was that the overall impact Eastlink would be to promote big business at the expense of small business and individuals. Eastlink is designed to allowing electricity trading between states and big cities, it is not designed to allow delivery of electricity to people who currently lack this service. Electricity will cease to be a service, become instead a commodity which can be purchased more cheaply by the consumers. As pointed out in several submissions, there is no guarantee Eastlink will result in consumer price reductions in electricity as promised the state and federal governments.

The Fear of Privatisation

5.10 There is a strong belief in the Eastlink community that the ultimate, of governments is, once public utilities have been corporatised, to follow m privatisation, an action which was opposed by many people. One submiss concluded:

This power line is not needed, not wanted, a huge cost to taxpayers and consumers, and 1 suspect, harbouring a hidden agenda to privatise the national grid to the detriment to small consumers.

5.11 The Guyra Shire Council shares the concerns of its ratepayers that privatisation could mean the loss of cross subsidisation of community service obligations and that, in particular, the selling of power generating plants; result in higher charges to rural and remote users. The Council stated emphatically that because of the scattered nature of Australia's population governments must continue to accept responsibility for supplying services rural communities.

As a rural consumer of electricity there is no assurance that competition policy or privatisation will decrease or hold the price of power at its present level. We will not have the same bargaining power as industry, so the opposite is likely to occur. That has been the experience in other countries.

5.12 Extending from this was the concern that once privatisation commenced, the way was open for foreign companies to buy into Australian power authorities and control the basic essential service of electricity supply; a scenario which was rejected in some submissions.

The Need for Decentralisation

- 5.13 There was the belief expressed in some submissions that the philosophy of increased competition among public utilities was wrong because it placed increasing emphasis on 'big' solutions to economic problems and ignored environmental and social need. More specifically, concern was expressed that competition reforms in the electricity industry would increase Australia's reliance on large power generation plants while what was really needed was diversification in generation capacity with much greater emphasis on renewable and environmentally sound systems.
- 5.14 The fear was also expressed that once Eastlink was in place it would in itself become a rationale for extending the eastern power grid with more high voltage power lines. Its very presence would limit options for future electricity supply in Queensland. Because it is difficult to predict where demand would be, it would seem prudent instead to develop regional supply options rather than relying transmitting electricity over very long distances.

The Full Cost of Eastlink

- 5.15 Quite a number of submissions questioned whether the cost of Eastlink as stated by the project's proponents took into account some of the wider, indirect costs which they felt should be attributed to Eastlink. These included:
 - fair compensation for all people affected by property devaluation and loss of future options for property use;
 - the cost of associated infrastructure needed to distribute the power at either end of Eastlink;
 - the full cost of environmental impacts, in both agricultural and natural environments;
 - upheaval in affected communities;
 - the cost of health problems associated with the project, whether direct or indirect, short-term or long-term;
 - the cost of failing to implement or postponing the implementation of energy efficiency programs which would ultimately save money for government, industry and small consumers;
 - loss of jobs that could otherwise have been created through developing, producing and installing alternative technologies (such as solar); and
 - loss of jobs related to the export of these technologies.

ABARE Analysis

5.16 Submission from both TOTA in Armidale and Lockyer Valley Against Eastlink referred to an ABARE publication which had concluded that there may be significantly greater benefits from gas pipeline interconnection than from electricity, at a ratio exceeding 3:1. They took this conclusion as evidence that Eastlink was uneconomic.

5.17 The Commonwealth Department of Primary Industries and Energy commented on this, saying:

It is important, however, to note that the ABARE and IC studies not designed to be able to account for the benefits flowing from increased competition in the market as a result of grid interconnection and, to that extent, may underestimate the benefits. They are also broad studies with an energy system perspective rather than being specifically designed to examine Eastlink.

- 5.18 TOTA further argued that an analysis carried out by ABARE, published as Appendix E to the Industry Commission publication, *Australian Gas Industry and Markets Study*, which used the figure of 90mw transfer capacity for Eastlink in modelling exercises, as further evidence that Eastlink was uneconomic.
- 5.19 When questioned about the models used for this analysis, the Manager of the Energy Economics Branch of ABARE, Mr Roger Stuart, stated.

ABARE conducted a broad national level analysis of the total energy system benefits of electricity and gas interconnections and of the extent of the substitutability between the two types of interconnection under different scenarios. Neither this nor the subsequent report purported to be the detailed feasibility study that would be needed to justify investments in any particular interconnection. Indeed, neither study reports results on individual interconnections, although the interconnection of the Queensland and New South Wales systems is the major new link which the ABARE model constructs. In other words, while the ABARE work can be used to illuminate the relative economics of alternative options, it was not intended and should not be used as a definitive guide to the economics of particular interconnections.

5.20 The Committee accepts that the analysis carried out by ABARE examined the general economics of interconnection through a high voltage power line, and was not sufficiently detailed to draw conclusions about the specific case of Eastlink. The Committee further accepts that the model demonstrated, in general terms, that electricity interconnection through a high voltage power line would be economic.

Conclusions

- 5.21 The Senate Standing Committee on Industry Science and Technology recommended in its report on *Gas and Electricity* that any interconnection between NSW and Queensland should not go ahead until it was proven to be economic. While opponents of Eastlink have argued that this has still not been proven, the fact that two state governments, with the support of the Federal Government, are going ahead indicates that it is considered by them to be economic. Further, the ABARE analysis has shown that, in general terms, an interconnection would be economic. However, because a specific cost/benefit analysis for Eastlink was not available, the Committee is unable to comment on the specific case of this proposal.
- 5.22 The total cost of Eastlink is stated by the power authorities to be in the region of \$300 million. However, information given by the two power authorities on cost does not include a breakdown of what expenses have been included. Lack of detailed information has contributed to public confusion and misunderstanding about the relative costs and benefits of Eastlink and therefore to a lack of understanding of the full economic impact.
- 5.23 The Committee believes that, in the interests of good public relations, the power authorities involved should make available to the public a more detailed cost/benefit analysis of Eastlink.