EXECUTIVE SUMMARY

Chapter 1 - The Eastlink Proposal

The Eastlink proposal would connect the Queensland electricity grid with that of the south eastern states via a high voltage dual transmission line from Springdale near Gatton in Queensland, to Armidale in northern NSW. The line would be a 330kV double circuit steel tower transmission line having a length of about 380-400kin and capable of carrying 500mw in either direction

Chapter 2 - Health and Electromagnetic Fields

Of all aspects of the Committee's inquiry into the Eastlink proposal, the issue of potential health effects of EMFs far outweighed any other subject. Many people hold genuine reservations about the impact that a high voltage powerline may have on their health, and the health of their families.

In attempting to resolve this issue from a scientific point of view, it became clear to the Committee that reputable scientists have taken strong stands both in support of and against the proposition that high voltage power lines may cause health effects in people living near them.

In the light of such conflicting evidence, and because it is not possible scientifically to prove a negative, the Committee is unable to totally dismiss the possibility that there may be adverse effects. Similarly, the Committee is unable to conclude that a definite link between high voltage power lines and adverse effects on human health exists and thus that any new policy recommendations need to be made. (Paragraph 2.66).

However, the Committee is able to conclude that simply the fear of detrimental health effects, whether real or imaginary, is in itself having an impact on the lives of some individuals affected by the Eastlink proposal. In acknowledging these community concerns, the Committee takes a similar stand to that of the Gibbs report. The Committee agrees that, as a minimum policy or until evidence suggests otherwise, the concept of 'prudent avoidance' should continue to be practiced by government and power authorities. (Paragraph 2.67j.

However, in supporting this concept, the Committee also acknowledges that there are some difficulties with it as a policy with practical application. Firstly, people who own land through which high voltage power lines traverse may have difficulty in 'prudently avoiding' those lines while carrying out the normal activities that their farming enterprise requires. Secondly, there are currently no guidelines for what 'prudent avoidance' means. There are safety standards for exposure to ENTs but these do not readily translate to people living or working near high voltage power lines.

The Committee therefore concludes that, in the case of Eastlink, 'prudent avoidance' should mean siting the line as far as possible from houses, outbuildings and other farm facilities. (Paragraph 2.70).

As with human health, the Committee accepts that evidence line impact on the health of stock and crops grown within the vicinity of the line is equivocal. **In the absence of extensive field studies on livestock, the Committee is not able to conclude that high voltage power lines affect the health of livestock and crops, nor is it able to conclude that they do not. The Committee therefore recommends that scientific studies should be carried out in Australia on the possible effects of high voltage powerlines on stock and crops. (Paragraph 2.72).**

Regardless of whether there is an actual effect or not, public perception that there might be an effect can have an impact on the market value of stock and crops produced in areas through which high voltage power lines pass. **The Committee therefore concludes that compensation by power authorities should be extended to those property owners who suffer an economic loss as a result of the construction of Eastlink, regardless of how that loss is brought about. (Paragraph 2.74).**

Chapter 3 - Environmental Impact

The Committee accepts that there will be some direct environmental impact associated with the construction of this high voltage powerline. The primary impact will be loss of trees through clearing of casement and resultant fragmentation of habitat. Other potential environmental impacts include soil erosion, the introduction of noxious weeds during construction and maintenance activities, the use of herbicides to control vegetation regrowth along casements, the unfavourable visual impact of the line, and impact on special heritage areas.

Of greater concern to the Committee is, however, the actions of the power authorities in determining the preferred corridor, then carrying out the Environmental Impact Statement. While the final impact statement is not due to be completed until mid-1996, it is clear that the power authorities have already chosen a specific route.

The Committee questions the **practice of carrying** out **an environmental impact assessment of a proposal when alternatives have not been included in the detailed Environmental Impact Statement and when siting of the line is clearly going ahead before the Environmental Impact Statement is complete. (Paragraph 3.75).**

Chapter 4 - Social and Local Economic Impact

The Eastlink proposal, perhaps more than any other high voltage power line in Australia's history, has resulted in high levels of community opposition. The large number of critical submissions received was a strong indication to the Committee that the communities affected do not want Eastlink to proceed.

Impact on Agricultural Land

Property owners were concerned that the position of the line would have a detrimental impact on the efficient operation of their businesses through interference with facilities and with aerial agriculture. **The Committee recommends that any detrimental impact on farm operations should be the subject of compensation. (Paragraph 4.97).**

Local Economic Impact

Eastlink has already had an impact on the real estate market for properties along the Western corridor. In addition, the value of properties along the corridor may well be reduced by the advent of the powerline. It is clear that some people are currently being economically disadvantaged by the proposal.

Regional economics may feel a flow-on effect from the stagnation of the rural real estate market and the unwillingness of property owners in general to make any further capital investment in the properties. The visual impact of the power line may also affect regional tourism.

The power authorities involved have noted that real estate devaluations sometimes occur when a power line is first proposed, but suggested that the market will regain its previous level at some stage after the power line has been completed. The Committee notes, however, that this information does not help property owners who want to sell now. or who are planning to sell in the near future.

The Committee holds the view that, if the power authorities are so sure that the property market will return to normal after Eastlink is completed, they should buy now, at pre-Eastlink valuation, any property that has been on the market and that has not achieved a sale because of speculation about Eastlink. (Paragraph 4.101).

Compensation

It is the usual practice of power authorities to offer compensation for the use of easements and to offset any losses associated with reduced amenity of facilities on individual farms. However, there is a general community belief that in the case of Eastlink, the level of compensation would be inadequate.

The Committee is concerned that the practise of negotiating compensation arrangements on a one-by-one basis, without any requirement for public disclosure of the total amount, or the factors included in the summation, favours the power authorities and enables them to achieve minimum levels of compensation. Were public disclosure compulsory and if landowners had access to a simpler and cheaper avenue of conciliation than the courts, the level of compensation paid may appear more equitable to those seeking compensation for the intrusion of Eastlink.

The Committee recommends wider and more comprehensive compensation provisions, which may include provision for an independent conciliation process for individuals or groups affected. (Paragraph 4.105).

Community Consultation & Social Impact

While the power authorities made every effort to consult the people directly affected by the proposal, both those individuals and the broader community have rejected the consultation process as completely inadequate. People believe that because they were never given the choice of 'no Eastlink' the consultation process was intrinsically flawed.

It appears to the Committee that a significant cause of community disharmony and rancour has been the practice of holding discussions with individual property owners who were disadvantaged by the fact that they were ignorant of what had been said to neighbouring property owners, while the power authority officers had the advantage of knowing what offers had been made to other landholders.

More significantly the fact that the power authorities made changes to the proposed route led to suspicion that improper influence had been brought to bear. This created antagonism between neighbours and in some instances rifts have formed within rural areas that will take a long time to heal.

The Committee concludes that while the power authorities put a large effort into public consultation, the methods used were not accepted by many of those people affected by the proposed power line. The cumulative effect has been considerable social disquiet and stress. (Paragraph 4.108).

State Parliamentary Review Procedures

This Committee and its predecessor, the Standing Committee on Industry, Science and Technology, has over the last few years noted a lack of informed and detailed debate on matters relating to power generation developments. In particular, the

Committee has noted that state governments could play a stronger role in meshing policy with community needs and opinions.

The Committee suggests to all state governments that there would be merit is establishing a **process whereby communities and professionals could be more directly involved in debate on energy matters. Through such a process, parliaments could monitor community reaction to energy projects, as well as provide a more accessible and flexible grievance mechanism. (Paragraph 4.111)**

Chapter 5 - Economic Considerations

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 b them to be economic.

The Committee accepts that the analysis carried out by the Australian Bureau of Agricultural and **Resource Economics 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. (Paragraph 5.20).**

However, because a specific cost/benefit analysis for Eastlink was not available, the Committee is unable to ermment on the specific case of this proposal. (Paragraph 5.21).

The total cost of Eastlink has been stated by the power authorities to be in the region of $300 million. However, information given by the authorities 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.

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 Eostlink. (Paragraph 2.23).

Chapter 6 - Electricity Consumption and Greenhouse

The question of impact on greenhouse gas emissions hinges on whether Eastlink will increase the use of coal fired power stations. Because there is almost no data available which relates specifically to Eastlink, the Committee is unable to make a decision as to which is the more likely outcome. However, the Committee notes that the potential does exist for greenhouse gas emissions to increase. **The Committee therefore recommends that the Commonwealth Government investigate in detail the likely impact of Eastlink on coal consumption and the implications of any change in that consumption for greenhouse gas emissions having regard to its international obligations. (Paragraph 6.29).**

Chapter 7 - Renewable Alternatives

Throughout the current inquiry, the Committee was impressed by the knowledge and enthusiasm that community groups and individuals hold for alternative renewable forms of electricity generation.

The Senate Standing Committee on Industry, Science and Technology in its 1992 report, *Gas & Electricity - Combining Efficiency and Greenhouse,* stated that Queensland would be an ideal place to further research on renewables and recommended that the development of a national grid must not preclude the further development of options such as demand management, co-generation and new technologies.

Despite the outcome of the Eastlink interconnection, the Committee reiterates the opinion expressed in the Report on *Gas and Electricity* that Queensland would be an ideal place for increased research and development of renewable energy options. (Paragraph 7.33).