

Powerline To Go Ahead - Claims of Inadequate Treatment in EIS of Electromagnetic Fields and Health Issues Not Proven

- Stephen Hibbert, Partner,
Allen, Allen + Hemsley, Solicitors.

Decision

On 31 October, 1990 the Chief Judge, Mr Justice Cripps, of the NSW Land & Environment Court gave his decision in *Warren v Elcom (NSW)*, dismissing a suit by local Oberon farmers directed at stopping the construction of a 160km, 500kV transmission line between the Mt. Piper power station and Marulan.

The principal ground of attack on the project's Environmental Impact Statement ("EIS") was a criticism of the EIS's treatment of electromagnetic fields ("EMF") and health effects.

Issues

On the EMF issue, after hearing from both local and international medical and scientific experts, the court concluded that:

"... among scientists it has not been established that exposure to [extremely low frequency] electric and magnetic fields can cause cancer on what might be described as a 'cause and effect' basis" (p37).

The case provided the court with an opportunity to adjudicate on the following issues:

1. Legal issues concerning:
 - the scope, purpose and necessary content of an EIS, under the New South Wales planning laws;
 - the role of consultants in the preparation of an EIS - whether there was an "independent" obligation;
 - the scope and nature of the determining authority's obligations;
 - the scope and nature of evidence that should be brought in (environmental) judicial review proceedings;
 - the court's approach on discretion.
2. Factual issues, in the context of this particular EIS and the New South Wales Environmental Planning & Assessment Act included:
 - electromagnetic fields, transmission lines and health;
 - the identification and consideration of certain aboriginal and other sacred and historical sites.

The Project

The New South Wales Electricity Commission pro-

poses to build a transmission line approximately 160km long from its Mt. Piper power station to Marulan, near Goulburn in New South Wales.

The line is designed to 500kV but will operate initially at 300kV.

In February, 1987 an EIS was published by the Commission and copies distributed through communities along the route of the proposed line. Over the next few months, the Commission received submissions and in February, 1988 it determined to approve the construction of the line.

In December, 1988 a group of local farmers and residents by the name OPIC (Oberon Powerline Investigation Committee) commenced Class 4 proceedings in the New South Wales Land & Environment Court seeking declarations that the EIS was not properly prepared, in that it did not meet the requirements of the Act and that the subsequent decisions to approve the line were flawed. In particular, the principal allegations centred on the manner of treatment in the EIS of the electric and magnetic field issue, whether the line would be "detrimental to the health of humans and livestock" and the effect of the transmission line on certain aboriginal ceremonial sites located along the route of the proposed line.

EMF and Health

The nature of these proceedings - by way of judicial review - did not require the court to find whether in fact there was a cause and effect relationship between EMF and damage to human health. The issue in the proceedings was directed to showing whether or not the EIS was flawed by reason of its treatment of the subject. The case therefore turned upon the current state of medical and scientific knowledge about EMF and health, measured at the decision-making date, 4 February, 1988, and the manner in which that issue was addressed in the EIS.

The case did, however, provide a forum for bringing together some of the world's most highly qualified experts. The applicant relied upon the evidence of Dr. Marino, Professor Liboff from the United States and Dr. Delpizzo from Victoria. Dr. Marino expressed an opinion that people living and working within 300m of the proposed line were more likely to develop disease than people who were not within the area of influence of comparable electrical and magnetic fields. He discussed his "stressor" theory and how, according to that theory, susceptibility of people within the 300m bandwidth was significantly higher than the norm. Professor Liboff advanced as one hypothe-

sis with respect to the possible means by which EMF may interact with biological systems his "ion cyclotron resonance theory". Dr Delpizzo dealt with epidemiological issues and criticised the EIS, or at least its preparers, on the basis that they could not have been familiar with the most recent epidemiological data immediately preceding publication in February 1987 of the EIS.

In response, the Electricity Commission relied upon the evidence of Dr Bockman, a New York endocrinologist and immunologist, Mr Silva a professional electrical engineer, Dr Gelmann a Washington specialist in medical oncology and molecular biology, Dr Zaner a Boston specialist in biophysics and internal medicine, Dr Carstensen a New York professor of physics, Professor Stolwijk a professor of epidemiology and public health at Yale University, Dr Michael Repacholi scientist at Royal Adelaide Hospital and Dr Sandeman an oncologist from Melbourne.

The EIS itself dealt with EMF and health effects over a number of pages. It quoted in particular sections from the World Health Organisation Report 35 - extremely low frequency fields - and from a report prepared by Dr Graves for the Health Commission of Victoria.

On the evidence and with respect to this particular EIS, the Court found that its treatment of EMF did satisfy the requirements of the Act. The Court found that WHO 35 presented a balanced view of the state of debate at the relevant time.

Independence of EIS Preparer

The applicant alleged that the EIS was not an independent document. The claim was that the EMF aspects of the EIS were not truly the opinions of the consultants but had been arrived at through "pressure" on the consultants by Elcom. The Court confirmed that, legally, Elcom was

not only entitled but also obliged to be involved in and, in fact, prepare the EIS and that it was a "common misconception" that the EIS process was somehow flawed by the proponent participating in it. Secondly, the Court also found that the consultant did believe the facts to be true and held the opinions that appeared in the EIS.

Legal Principles

The Court reaffirmed the principles relating to the preparation and content of EIS's recounted in *Prineas v Forestry Commission NSW* 49 LGRA 402.

Generally

The decision in *Warren v Elcom* will be particularly important to power utilities and authorities and major county councils throughout Australia for its treatment of the EMF issue. It will be relevant to those involved in the process of preparing and issuing EIS's, particularly in New South Wales, including especially consultants.

Further EMF-Related Cases

Through the course of preparing and running successfully the *Warren* case for Elcom, Allen Allen + Hemsley has established a relationship with the firm of attorneys in Washington D.C. who have been responsible for the conduct of EMF-related cases and inquiries on behalf of power utilities throughout the United States over the last fifteen years. Allens also has established a comprehensive library of EMF literature, studies and reports which is being continually up-dated from medical and scientific contacts within the United States and internationally.

If you wish to obtain copies of *Warren v Elcom* please contact Stephen Hibbert (02) 229 8438.

Proposed Third Runway For Sydney Airport - EIS

- Ian Hemming, Allen, Allen + Hemsley,
Solicitors, Sydney.

The Federal Airports Corporation and Kinhill Engineers Pty Ltd have published a Draft Environmental Impact Statement for the Proposed Third Runway for Sydney (Kingsford Smith) Airport.

The EIS is a very comprehensive document. In A4 format it is over 50mm thick and deals with numerous technical issues. Yet, it is surprisingly easy to read. It is heavily illustrated with hundreds of maps, illustrations, tables and diagrams. The EIS contains a 48 page summary and the following sections:

1. Introduction
2. Analysis of Need And Alternatives
- 3 Project Description
4. Issues Relating To Project Layout
5. Issues Relating To Project Construction
6. Issues Relating To Project Operation.

Although the Environmental Protection (Impact Of Proposals) Act 1974 (Clth) only requires a 28 day exhibition period, the Minister for the Department of the Arts, Sport, the Environment, Tourism and Territories (DASETT) has directed that the EIS should remain on exhibition for a period of three months.

During the preparation of the EIS, there was an extensive public consultation programme, which involved four "community access centres" and a mobile centre. Additionally, there was an 008 free telephone access number, a freepost information service and a newsletter published in seven languages and additional research, technical workshops and consultation with interest groups such as the Citizens Revolt Against Sound Harassment.

These processes are a good example of the importance of environmental issues in the 1990s to the decision making process, which leads ultimately to construction. It