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(ACE 23/95)
for information

An Update on the Health Issues related to Electromagnetic Field (EMF)

Introduction

At the ACE meeting held on 24 April 1995, the Chairman referred to an appeal from the group of objectors to the Black Point 400kV Transmission project. The meeting agreed that the Administration should provide a report to the Council outlining the new findings in the study of health effects of EMF.

Background

2. At the meeting held on 18 January 1993, the Chairman of the former Environmental Pollution Advisory Committee (EPCOM) suggested that the health aspects of EMF should be kept under review by a working group. The aim is to look into the possible risks, keep track of any new development on the power frequencies EMF issue, recommend precautionary measures and serve as an independent authoritative body to advise on power frequencies EMF-related issues in Hong Kong.

3. As a result, the Working Group on EMF was formed in early 1993 with members drawn from three tertiary educational institutions, the two local power companies, and relevant government departments (i.e. Electrical and Mechanical Services Department, Health Department, and Environmental Protection Department). Terms of Reference of the Working Group is at Annex A.

Report from the Working Group

4. The Working Group produced a progress report in 1994 (ACE paper 59/94), which was sent to Members on 3 November 1994. The Executive Summary of the progress report is at Annex B. The Working Group also issued a General Statement on the EMF issue in February 1995, which summarise the up-to-date developments of the EMF issue (a copy is at Annex C).

5. The Working Group has reviewed or been monitoring over 30 researches and studies in this area, including two recent authoritative studies by renowned organisations - the National Radiological Protection Board and the Institution of Electrical Engineers of U.K. The Working Group has come to the conclusion that there is no conclusive scientific evidence of any adverse health effects on normal individual arising from exposure to such power frequencies EMF.

6. It also considers that the current guidelines adopted in Hong Kong, which are based on the recommendations of the International Radiation Protection Association (IRPA), are appropriate.

Views of the Department of Health and the Electrical and Mechanical Services Department

7. The local guidelines are modelled on the "Guidelines on Limits of Exposure to 50/60 Hz Electric and Magnetic Fields" promulgated by the International Non-ionizing Radiation Committee of the IRPA in collaboration with the World Health Organisation (WHO). WHO has confirmed that the set of guidelines is still considered valid from the health effects point of view.

8. The WHO guidelines on EMF exposure limits refer to certain measurements of electromagnetic field, namely, the electric field strength and magnetic flux density. It is not a distance-based standard. Both the Director of Health and the Director of Electrical and Mechanical Services are not aware of any international standards which make reference to distance between homes and power lines.

Conclusion

9. Members are asked to note the findings of the review of the Working Group on EMF and the views of the Department of Health and the Electrical and Mechanical Services Department.

**Planning, Environment and Lands Branch
(Environment Division)
May 1995**