

ANGUS COUNCIL

PLANNING AND TRANSPORT POLICY COMMITTEE

28 JANUARY 1999

SUBJECT: DRAFT CIRCULAR - LAND USE PLANNING AND
ELECTRO-MAGNETIC FIELDS

REPORT BY DIRECTOR OF PLANNING AND TRANSPORT

Abstract: This Report advises members of the publication by the Scottish Office of draft advice to Planning Authorities on land use planning and developments which either give rise to or are in the vicinity of Electro-Magnetic Fields such as overhead power lines.

1 RECOMMENDATION

It is recommended that the Committee:

1. note the publication of draft guidance on Land Use Planning and Electro-Magnetic Fields and agree that the guidance, when finalised, will be taken into account in the preparation of appropriate policy statements and in the assessment of relevant development proposals in Angus;
2. agree that in finalising the circular the Scottish Office be requested to clarify the practical implementation of the advice, particularly in respect of those circumstances meriting the application of a precautionary approach to the siting of development.

2 INTRODUCTION

- 2.1 The Scottish Office Development Department together with the Scottish Office Health Department have jointly issued a Draft Circular giving advice to Planning Authorities on land-use planning and developments which either give rise to or are in the vicinity of Electro-Magnetic Fields (EMFs).
- 2.2 The Draft Circular, a copy of which is appended to this Report, recognises that there is some public concern about the possible health effects of exposure to EMFs. In addition to commenting on the occurrence of EMFs and health effects of exposure to EMFs, the Draft Circular confirms various responsibilities governing the operators of any installation or equipment which emits EMFs and summarises land use planning interests.
- 2.3 The Draft Circular also makes reference to a Briefing Document on EMFs currently being finalised by the World Health Organisation. A pre-publication draft circulated with the Draft Circular is available for reference at the Department of Planning and Transport.
- 2.4 The Scottish Office have invited any comments on the Draft Circular by 26 February 1999.

3 DISCUSSION

3.1 The Draft Circular makes a number of significant observations, including:-

- there is no convincing evidence of a causal link between EMFs and cancer;
- other than in the most exceptional circumstances there is no reason for Planning Authorities to take the radiated power output of telecommunications equipment into account;
- any policies which introduce a cordon sanitaire around telecommunications or electricity supply equipment or which otherwise seek to restrict such development should have regard to operator's responsibilities under health and safety legislation;
- the courts have held that any genuine public perception of danger is a valid planning consideration, although the weight to be given to this will be a matter for the body determining the application taking into account the particular facts of the case.

3.2 Recognising both safety concerns and operational issues, the Consultative Draft Angus Local Plan includes Policy INF11 on High Voltage Power Lines:-

"Development proposals in the vicinity of existing and proposed high voltage power lines will only be permitted where it can be shown that there is no health risk and the proposals accord with the policies of this Local Plan."

3.3 Pending any further detailed national advice or guidance the above draft policy provides a general statement within which particular cases can be examined. It is also worth noting that the Draft Circular confirms that Planning Authorities do not deal with applications for installing or erecting electricity lines. Consequently, there is no need for Planning Authorities to include policies covering new overhead power lines or underground cables in their development plans.

3.4 As it stands the advice contained in the draft circular is somewhat vague and in part ambiguous. In particular little practical guidance is offered on how the land use planning system should take any issues arising from EMFs into account or the weight to be given to such matters. This is unfortunate where having raised issues of possible concern the extent of required action remains unclear.

4 FINANCIAL IMPLICATIONS

4.1 There are no financial implications arising from this Report.

5 CONSULTATION

5.1 The Chief Executive and Director's of Finance and Law & Administration have been consulted in the preparation of this Report.

6 CONCLUSION

- 6.1 The Draft Circular on Land Use Planning and Electro-Magnetic Fields provides some general guidance to Planning Authorities in drawing up development plan policies or determining planning applications for development giving rise to EMFs or for development proposed in the vicinity of EMFs. There are no particular issues arising from the Draft Circular requiring a detailed response from Angus Council at this stage. However it is suggested that the Scottish Office be requested to further clarify the practical implementation of advice on EMFs in finalising the Circular.

NOTE

The following background paper, as defined by Section 50D of the Local Government (Scotland) Act 1973, (other than any containing confidential or exempt information) was relied on to a material extent in preparing the above Report.

- Letter and enclosures from Scottish Office Development Department dated 29 December 1998 - Consultation Exercise : Land-Use Planning and Electro-Magnetic Fields (EMFs).

AA/CGR/KW
18 January 1999

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Director of Planning and Transport

LAND USE PLANNING AND ELECTRO-MAGNETIC FIELDS

INTRODUCTION

1. This Circular gives guidance to planning authorities in drawing up development plan policies or determining planning applications for development giving rise to EMFs or for development proposed in the vicinity of EMFs. Examples of developments emitting EMFs are overhead power lines and telecommunications base stations.
2. The Government recognise that there is some public concern about the possible health effects of exposure to EMFs and it is upon this aspect that this Circular focuses.

WHAT ARE EMF'S

3. In simple terms, EMFs are a form of non-ionising radiation - that is radiation which does not ionise or change matter in the way that x-rays or gamma rays, for example do. EMFs are not the only form of non-ionising radiation. They share the non-ionising spectrum with optical radiation of which the sun is the best known source. Other examples of optical radiation are lasers and arcs used for welding.
4. EMFs are all around us. They occur naturally. They also arise from a wide range of man-made sources including domestic wiring and appliances (such as lamps, hairdryers and television sets), visual display units, mobile phones, electricity power lines, broadcasting transmitters, telecommunications base stations, electric trains and security systems used in shops. So people are exposed to EMFs as a regular part of their daily lives.

HEALTH EFFECTS OF EXPOSURE TO EMF'S

5. The Government's statutory advisers on radiological protection matters are the National Radiological Protection Board (NRPB). They provide expert advice on the health implications of EMFs, drawing upon the most up-to-date research world-wide. The NRPB have published guidelines on limiting exposure to EMFs. These apply both to people who may be exposed to EMFs in their work and to members of the public. The guidelines are related to established health effects of exposure to EMFs, such as effects on electrically excitable tissues like nerves and muscles and effects caused by the heating of tissues.
6. The operators of any installation or equipment which emits EMFs must comply with the Health and Safety at Work Act etc 1974. They have a responsibility under this Act, and the Management of Health and Safety at Work Regulations 1992, to assess any risk to health and safety which may arise, including an assessment of likely exposure levels, and to take any appropriate measures. This will include the provision of advice for the protection of the public. As part of this responsibility, the operator of a mobile telephone system or power line, for example, would be expected to be able to demonstrate that exposures of employees and the public complied with the NRPB guidelines. In addition, licensed Public Electricity Suppliers who provide electricity to consumers via the transmission and distribution networks must

comply with the Electricity Supply Regulations 1988 as amended, which prescribe requirements for safeguarding the general public from any danger from their installations.

7. Under the 1992 Regulations, operators have to carry out a risk assessment, which is then used to ensure compliance with the general duties of the 1974 Act. If the assessment showed that there was, for example, an area around an EMF source where people may be exposed to fields which were in excess of the NRPB guidelines, operators would be expected to take measures to restrict access to that area. Such measures could include suitable locked and signed barriers to prevent unauthorised access to areas where people may be at risk.

8. Public exposure to EMFs, therefore, should normally be well below guideline levels.

9. A draft EU Recommendation on limitation of public exposure to EMFs is currently under negotiation. The Recommendation is based on guidelines of the International Commission on Non-Ionising Radiation Protection (ICNIRP) and relates to established health effects of exposure (paragraph 5 above). The final version of this Circular will take account of the position reached in the negotiations.

10. A particular point of public concern is whether long-term exposure to low-level EMFs might cause cancer. This issue has been examined by the NRPB's Advisory Group on Non-ionising Radiation. Their advice, taking account of work in this area in a number of countries, is that there is no convincing evidence of a causal link between EMFs and cancer. NRPB's view is that human health studies do not provide a basis for advice on setting exposure standards. This is also the view of international bodies.

11. NRPB'S Advisory Group recommended a study of the incidence of cancer in children and their exposure to EMFs and other suspected causative agents in the environment. The United Kingdom Childhood Cancer Study is currently underway and is due to report during 1999. Other international work on the possible health effects of EMFs is also in progress. The Government are keeping a close watch on the results of work in this area.

12. The World Health Organisation (WHO) is currently finalising a briefing document on EMFs. Copies will be sent to planning authorities when it is published. (In the interim, a copy of the pre-publication draft is being circulated with the consultation draft of this circular) Authorities may find the WHO document and this Circular helpful in advising members of the public who may be concerned about EMFs. The NRPB are also ready to offer advice and have themselves produced a number of leaflets and other publications in this field. Their address is at the end of this Circular.

LAND USE PLANNING

Development plans

13. The Town and Country planning system aims to secure the most effective use of land in the public interest and to ensure that facilities are built where they are needed.

Development plans set out a planning authority's policies and proposals for the development and use of land in its area.

14. Planning authorities must have regard to social, economic and environmental considerations in formulating their general policies in structure plans. These considerations will include the provision of modern utilities. Authorities should ensure that interactions between policies are fully considered and that all the policies form an integrated whole. Consequently, planning authorities should consider such matters as general amenity, access, good design and noise in their development plans in addressing development in proximity to electricity generation transmission and distribution sources. Any environmental damage or loss of amenity caused by development should be minimised. Planning Advice Note (PAN) 37, "Structure Planning" advises planning authorities to consult utility providers when preparing development plans.

15. Guidance on telecommunications planning policy with regard to Health and Safety is given in Scottish Development Department Circular 25/1985. This states that the radiated power output is subject to stringent health and safety limits and is well within internationally accepted standards. Other than in the most exceptional circumstances, there is no reason for planning authorities to take such issues into account.

16. Further guidance on telecommunications planning policy is currently being prepared by the Department for issue to local authorities. This guidance will either be in the form of a Planning Advice Note (PAN) or a Code of Best Practice.

17. If local authorities are considering adopting policies which introduce any cordon sanitaire around telecommunications or electricity supply equipment (such as masts or overhead power lines), or which otherwise seek to restrict such development, they should have regard to operators' responsibilities under health and safety legislation (see paragraph 6 above) and the lack of evidence of a causal link between EMFs and cancer (see paragraph 10 above). As noted above, national and international guidelines on limiting exposure to EMFs are related to established health effects only. This advice on cordon sanitaire is distinct from operational safe clearances discussed below which are designed to avoid contact with or close proximity to overhead lines.

18. Overhead transmission lines in Scotland are owned by Scottish Power (SP) and Scottish Hydro-Electric (HE). SP and HE do not usually own the land below power lines and cannot control development that takes place there. The power companies, however, are always ready to advise planning authorities and developers on operational safe clearances for such proposals either in general terms in relation to development plan policies or in relation to a specific development proposal.

19. The operators of overhead power lines are required to maintain safe conditions in compliance with the Electricity Supply Regulations 1988 (SI 1988 No, 1057, as subsequently amended in 1990, 1992 and 1994). These Regulations are administered by the Department of Trade and Industry. The Electricity Association, the electricity supply industry's trade association, can provide details on how the Regulations are met in respect to avoiding

accidental contact with overhead power lines by structures, trees, developers and members of the public. Details are given in ESI Standards 43-8, "Overhead Line Clearances". The necessary clearance at a specific location will be largely dependant on several factors, including the actual location where the power line is passing over, the line's construction, design and operating voltage. The power company owning the overhead line should be consulted on particular cases so that they can advise on the particular clearances prevailing at the location. Proposed developments, adjacent to overhead power lines, should be designed to facilitate their construction without infringing safety clearances. This applies to all fixed or temporary structures (scaffolding etc.) and to trees and some other special circumstances.

Development Control

20. The general principles for determining planning applications and appeals are set out in National Planning Policy Guideline 1 (NPPG 1). In summary, where the development plan is material to the development proposal, and must therefore be taken into account, section 25 of the Town and Country Planning (Scotland) Act 1997 requires the application or appeal to be determined in accordance with the plan unless material considerations indicate otherwise. Conversely, applications which are not in accordance with relevant policies in the plan should not be allowed unless material considerations justify granting a planning permission. Those determining such planning applications or appeals should always take into account whether the proposed development would cause demonstrable harm to interests of acknowledged importance. In all cases where the development plan is relevant, it will be necessary to decide whether the proposal is in accordance with the plan and then to take into account other material considerations.

21. NPPG 1 advises planning authorities that any consideration which relates to the use and development of land is, in principle, capable of being a planning consideration. The issue of whether, in any individual case, a particular matter is a material consideration will depend on the prevailing facts and circumstances. It is for the body determining the application (usually the planning authority) to decide which are the material considerations applicable in the first instance. The Courts have held that any genuine public perception of danger is a valid planning consideration, although the weight to be given to this will be a matter for the body determining the application taking into account the particular facts of the case (*Newport BC v SS for Wales and Browning Environmental Services Ltd* [1998] Env. LR at 174 and [1998] JPL 377.)

22. NPPG 1 also notes that it is not for the planning system to protect the private interests of one person against the activities of another. Although in a particular case considerations of public interest may serve to protect private interests, the material question is not whether a particular development would cause financial or other loss to owners and occupiers of the neighbouring property, but whether the proposal would have a detrimental effect on the locality generally and on amenities that ought, in the public interest, to be protected.

23. As regards telecommunications developments, the Department recently consulted on proposals to introduce a variety of procedures including prior approval under the Town and

Country Planning (General Permitted Development) (Scotland) Order 1992. The outcome of this consultation will be announced shortly.

24. Planning authorities do not deal with applications for installing or erecting electricity lines. These are dealt with the Secretary of State for Scotland under section 37 of the Electricity Act 1989. Planning authorities are statutory consultees in the process of considering applications for consent under section 37. Consequently there is no need for planning authorities to include policies covering new overhead power lines or underground cables in their development plans. If a Local Authority, in whose area a proposed new power line runs, objects to such a proposal, a public inquiry has to be held. The consent procedure under section 37 requires the applicant and the Secretary of State for Scotland to take account of environmental factors.

25. Similarly, planning authorities do not deal with applications for new power stations with a generating capacity of over 50 Megawatts. Such applications are dealt with by the Secretary of State for Scotland under section 36 of the Electricity Act 1989 and need not be included in development plan policies. If a Local Authority objects to such a proposal, a public inquiry must be held. Planning authorities will, however, deal with planning applications for generating power stations of 50 Megawatts and under in the normal way.

Further information

26. For further advice and material about EMFs, contact:

National Radiological Protection Board
Chilton
DIDCOT
Oxon
OX11 0RQ

Tel: (01235) 831600
Fax: (01235) 833891

27. For further advice about overhead line clearance, contact:

Engineering & Safety Division
The Electricity Association
Millbank
LONDON
SW1P 4RD

