

PINS NOTE 1144

To: All Inspectors

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EXTREMELY LOW FREQUENCY ELECTRIC AND MAGNETIC FIELDS AS AN ISSUE IN PLANNING DECISIONS

Background

1. Although in telecommunications cases there is clear guidance in PPG8 concerning planning and the guidelines of the International Commission for Non-Ionising Radiation Protection (ICNIRP), such guidance does not yet exist for development near power lines and electricity substations, where the potential effects of extremely low frequency electric and magnetic fields (ELF EMFs) on human health may be an issue. However, the Government has now published its response to the First Interim Assessment by the Stakeholder Advisory Group on ELF EMFs (SAGE). The Assessment reported on power lines and property (as well as wiring in homes and electrical equipment in homes). The [Government's response is available here](#).

2. SAGE was set up in response to published advice from the [Health Protection Agency \(HPA\)](#) in 2004 that, in view of scientific uncertainty about the effect of EMF field levels on the incidence of childhood leukaemia, the Government should consider the possible need for further precautionary measures. SAGE reported in 2007. This First Interim Assessment, which contains recommendations to the Government on ways to reduce people's exposure to ELF EMF, is about stage 1 of SAGE's work. Electricity substations will be dealt with in stage 2, work on which is now in progress.

3. The HPA also recommended in 2004 that the UK should adopt the ICNIRP guidelines on exposure to EMFs (see paragraph 5). As noted in paragraph 1 above, these have not been formally incorporated into the planning system in relation to power lines/substations (although they have been for telecommunications). They are however complied with on a voluntary basis by the electricity industry.

4. In its response to the SAGE report, the Government supports the implementation of the low-cost options and those points recommended by SAGE members and supported by the HPA in this first Assessment. These are to:

- '(i) support the optimal phasing of overhead power lines in those circumstances where this would significantly reduce public exposure to ELF EMF and would be cost effective to do so;
- (ii) draw the attention of manufacturers of electrical equipment to the advice issued by the World Health Organization on low-cost ways of reducing exposure;
- (iii) request the HPA to keep under review the possible relationship between childhood leukaemia and other causes of ill health and ELF EMF exposure;
- (iv) work with the HPA to deliver public messages that provide clear information about the risk of exposure to ELF EMF in the context of other societal risks.'

5. The following extract from the Government's response is of particular relevance to planning appeals:

- '4. In addition to its recommendations, the SAGE report proposed an option to be considered by Government as to whether precautionary action should be introduced through implementation of a moratorium on new homes and schools being built near overhead power lines and new lines close to existing homes and schools. This option was favoured by some members of SAGE and not by others and was presented as an option rather than a recommendation. However SAGE's cost benefit analysis does not support the option of creating corridors around power lines on health grounds. The Government therefore considers this additional option to be disproportionate in the light of the evidence base on the potential health risks arising from exposure to ELF/EMF and has no plans to take forward this action. The HPA advises that the EMF association with childhood leukaemia is weak and unproven and supports no cost/low cost options to reduce EMF exposure. Our position is in line with the WHO recommendation to explore low-cost ways of reducing exposure to ELF EMF.
- 5. The UK adopted the 1998 ICNIRP EMF public exposure guidelines in terms of the [1999 European Recommendation \(1999/519/EC\)](#). The electricity industry currently complies with these guidelines on a voluntary basis. Government has looked at the other measures that are in place under Health and Safety legislation to protect the public from the dangers of electricity, and at both historical and more recent scientific evidence relating to exposure to ELF EMF. We conclude that the available evidence does not support the mandatory introduction of corridors around powerlines as proposed by some members of SAGE, given the scientific uncertainty.'

6. The [Department of Energy and Climate Change \(DECC\)](#) published a [guidance note](#) in April 2009 for LPAs and other interested parties on the existing section 37 Electricity Act 1989 consenting regime for overhead power lines and how to interpret its new Statutory Instrument, [The Overhead Lines \(England and Wales\)\(Exemption\) Regulations 2009, SI 2009 No. 640](#). The guidance note, in its general questions and answers section (Q11), refers to the SAGE report with

regard to addressing any further possible precautionary measures that might flow from the Government response. It also mentions the UK's adoption of the [ICNIRP guidelines](#) as recommended by the HPA and in the terms of the 1999 EU recommendation and notes that these guidelines are currently complied with on a voluntary basis.

Action

7. Inspectors should be aware of the SAGE report and the Government's response, as well as the DECC guidance (and the ICNIRP guidelines). These relate to powerlines. However, it may be that in a particular case involving electricity substations one or more of these is considered relevant to the issues raised by a planning appeal and can, therefore, be referred to.

8. Planning appeals involving electricity substations may also give rise to public concern because of the perceived health and safety issues. In [Newport BC v SSW & Browning Ferris Environmental Services Ltd \[1997\] EWCA Civ 1894](#) the Court concluded in a relevant but unrelated case that the 'perceived fears of the public are a planning factor which can amount (perhaps rarely) to a good reason for refusal of planning permission'. In other words, the perceived fears of the public can be a material consideration capable of amounting (albeit rarely) to a reason for refusal. However, a decision to dismiss an appeal solely on the grounds of public fear would need to be particularly well reasoned and taken only in exceptional circumstances. The weight that should be given to public perceptions of the danger posed by electricity substations will vary and depend on the circumstances of each case, for example the extent to which public concerns are supported by evidence.

9. Any queries on this Note should be addressed to XXXX.

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