

# ***Written answers to Parliamentary Questions relating to ELF EMFs***

<b>Date</b>	12 September 2011	<b>Hansard Column</b>	965W
<b>Question reference</b>	71573		
<b>Heading</b>	Electromagnetic Fields: Health Hazards		
<b>Questioner</b>	Tessa Munt Liberal Democrat, Wells		
<b>Question</b>	To ask the Secretary of State for Energy and Climate Change what research his Department has evaluated on the effects on human health of residence near high-voltage power lines.		
<b>Answered by</b>	Charles Hendry Minister of State, Department of Energy and Climate Change		
<b>Answer</b>	The Department of Health is responsible for the assessment of risks to human health and providing advice to Government Departments such as DECC. As such, DECC has not evaluated any research relating to human health of residence near high voltage power lines. The Department of Health is advised by the Health Protection Agency and both keep emerging science under review.		
<b>Date</b>	14 March 2011	<b>Hansard Column</b>	113W
<b>Question reference</b>	45513		
<b>Heading</b>	Electromagnetic Fields: Leukaemia		
<b>Questioner</b>	Tessa Munt Liberal Democrat, Wells		
<b>Question</b>	To ask the Secretary of State for Energy and Climate Change if he will amend the draft National Policy Statement on Electricity Networks Infrastructures (EN-5) in accordance with the recent International Commission on Non-Ionizing Radiation Protection's guidelines for limiting exposure to time-varying electric and magnetic fields (1 Hz to 100 kHz) in respect of childhood leukaemia.		
<b>Answered by</b>	Charles Hendry Minister of State, Department of Energy and Climate Change		
<b>Answer</b>	The Department of Health is responsible for the assessment of risks to human health from electric and magnetic fields (EMFs), and they in turn advise other Departments including DECC.  New guidance for 1 Hz to 100 kHz was published by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) in December 2010. However, Government policy remains that we apply the 1998 ICNIRP guidelines in terms of the 1999 European Union (EU) recommendation for public exposure levels to EMFs. If the EU decides to revise its recommendation to member states based on the new 2010 ICNIRP guidance, then at that time the Department of Health will consider how that affects UK policy. If this policy changes as a result of the recommendation we will then look to review EN-5 to ensure that it is still relevant.		

<b>Date</b>	03 March 2011	<b>Hansard Column</b>	534W
<b>Question reference</b>	43224		
<b>Heading</b>	Electricity		
<b>Questioner</b>	Tessa Munt Liberal Democrat, Wells		
<b>Question</b>	To ask the Secretary of State for Energy and Climate Change what recent assessment he has made of the prevalence of (a) electric and (b) magnetic fields from (i) overhead electricity lines, (ii) underground cables and (iii) sub-sea cables.		
<b>Answered by</b>	Charles Hendry Minister of State, Department of Energy and Climate Change		
<b>Answer</b>	<p>The Department of Health are responsible for the assessment of risks to health from electric and magnetic fields (EMFs), and they in turn advise other Departments including DECC, although DECC is responsible for technical issues regarding power lines. As an output to the Government response to the first interim report from the Stakeholder Advisory Group on extremely low frequency electromagnetic fields my Department published on 14 February 2011 two voluntary industry codes of practice about how optimally phasing high voltage lines can help reduce public exposure to EMFs, and setting out how industry can demonstrate compliance with the exposure guidelines for protection of public health. These are available on the DECC website at:</p> <p><a href="http://www.decc.gov.uk/assets/decc/what%20we%20do/uk%20energy%20supply/development%20consents%20and%20planning%20reform/1255-code-practice-optimum-phasing-power-lines.pdf">http://www.decc.gov.uk/assets/decc/what%20we%20do/uk%20energy%20supply/development%20consents%20and%20planning%20reform/1255-code-practice-optimum-phasing-power-lines.pdf</a></p> <p><a href="http://www.decc.gov.uk/assets/decc/what%20we%20do/uk%20energy%20supply/development%20consents%20and%20planning%20reform/1256-code-practice-emf-public-exp-guidelines.pdf">http://www.decc.gov.uk/assets/decc/what%20we%20do/uk%20energy%20supply/development%20consents%20and%20planning%20reform/1256-code-practice-emf-public-exp-guidelines.pdf</a></p> <p>The Department has not made any further recent assessments for underground or subsea cables.</p>		

<b>Date</b>	12 October 2009	<b>Hansard Column</b>	711W
<b>Question reference</b>	290042		
<b>Heading</b>	Electromagnetic Fields: Health Hazards		
<b>Questioner</b>	Mr. Hurd Conservative, Ruislip - Northwood		
<b>Question</b>	To ask the Secretary of State for Health what recent advice he has received on the possible relationship between incidence of childhood leukaemia and exposure to extremely low frequency electrical and magnetic fields; and if he will make a statement.		
<b>Answered by</b>	Gillian Merron Minister of State, Department of Health		
<b>Answer</b>	<p>The Department has received advice from the Stakeholder Advisory Group on Extremely Low Frequency Electromagnetic Fields (SAGE). SAGE is a group of stakeholders representing sectors engaged with electricity transmission, regulation, property valuation, academic research and public concern campaigning. The remit of SAGE is to explore the implications for a precautionary approach to extremely low frequency electric and magnetic fields (ELF/EMF) and to make practical recommendations to Government. SAGE's First Interim Assessment: Power Lines and Property, Wiring in Homes and Electrical Equipment in Homes considered two sources of EMF: high voltage overhead power lines and electrical wiring and equipment inside the home and was published in April 2007.</p> <p>The Health Protection Agency (HPA) advised Government on the SAGE First Interim Assessment in October 2007. The HPA's advice is available at:</p> <p><a href="http://www.hpa.org.uk/webw/HPAweb&amp;HPAwebStandard/HPAweb_C/1204276682532?p=1207897920036">www.hpa.org.uk/webw/HPAweb&amp;HPAwebStandard/HPAweb_C/1204276682532?p=1207897920036</a>.</p> <p>The reply from the former Minister of State can be found at:</p> <p><a href="http://www.dh.gov.uk/en/Publichealth/Healthprotection/DH_4089500">www.dh.gov.uk/en/Publichealth/Healthprotection/DH_4089500</a>.</p> <p>I will be issuing a written statement on the Government's response to the SAGE First Interim Assessment very shortly on behalf of myself and my hon. Friends the Minister of State at the Department of Energy and Climate Change (Lord Hunt of Kings Heath), and the Under-Secretary of State for Communities and Local Government (Mr. Austin).</p>		

<b>Date</b>	16 July 2009	<b>Hansard Column</b>	660W
<b>Question reference</b>	286182		
<b>Heading</b>	Electromagnetic Fields: Health Hazards		
<b>Questioner</b>	Mr. Hurd Conservative, Ruislip - Northwood		
<b>Question</b>	To ask the Secretary of State for Health what response his Department made to (a) the interim report of the Government's stakeholder advisory group on extremely low frequency electronic and magnetic fields (SAGE) of April 2007 and (b) the Health Protection Agency's response of October 2007 to the SAGE interim report.		
<b>Answered by</b>	Gillian Merron Minister of State, Department of Health		
<b>Answer</b>	<p>A Government response to the "First Interim Assessment" published by the Stakeholder Advisory Group on Extremely Low Frequency Electromagnetic Fields (SAGE) is currently being finalised.</p> <p>The Health Protection Agency's (HPA's) advice to Government on the SAGE "First Interim Assessment on power lines and property, wiring in homes and electrical equipment in homes" was issued in October 2007. Both the HPA's advice and the reply from the Minister of State are on the Department's website at:</p> <p><a href="http://www.dh.gov.uk/en/Publichealth/Healthprotection/DH_4089500">www.dh.gov.uk/en/Publichealth/Healthprotection/DH_4089500</a></p>		

<b>Date</b>	16 July 2009	<b>Hansard Column</b>	648W
<b>Question reference</b>	286726		
<b>Heading</b>	Electromagnetic Fields: Health Hazards		
<b>Questioner</b>	Dr. Stoate Labour, Dartford		
<b>Question</b>	To ask the Secretary of State for Communities and Local Government what guidance his Department (a) has issued and (b) plans to issue to local planning authorities on planning applications for housing and schools located close to high voltage overhead power lines.		
<b>Answered by</b>	Mr. Ian Austin Minister of State, Regional Affairs and Parliamentary Under-Secretary, Department f		
<b>Answer</b>	The Stakeholder Advisory Group on Extremely Low Frequency Electromagnetic Fields (SAGE) published a report in April 2007 which made a number of recommendations to Government on ways to reduce people's exposure to extremely low frequency electromagnetic fields (ELF EMF). The Government are currently finalising their response to the SAGE report.		

<b>Date</b>	12 January 2009	<b>Hansard Column</b>	144W
<b>Question reference</b>	244745		
<b>Heading</b>	Electromagnetic Fields: Health Hazards		
<b>Questioner</b>	Dr. Stoate Labour, Dartford		
<b>Question</b>	To ask the Secretary of State for Health when he expects to publish a response to the Stakeholder Advisory Group on Electro-Magnetic Radiation report on high voltage power lines and health; and if he will make a statement.		
<b>Answered by</b>	Dawn Primarolo Minister for Public Health		
<b>Answer</b>	A Government response to the First Interim Assessment published by the Stakeholder Advisory Group on Extremely Low Frequency Electromagnetic Fields is likely to be published early in 2009.		
<b>Date</b>	20 November 2007	<b>Hansard Column</b>	785W
<b>Question reference</b>	162331		
<b>Heading</b>	Planning: Electric Cables		
<b>Questioner</b>	Mr. Swire Conservative, East Devon		
<b>Question</b>	To ask the Secretary of State for Communities and Local Government what guidance has been issued to local authorities to ensure that planning applications for developments underneath overhead power cables are assessed to ensure that such developments are within safe limits of exposure to electrical and magnetic fields.		
<b>Answered by</b>	Mr. Iain Wright Communities and Local Government Under-Secretary		
<b>Answer</b>	No planning guidance on this subject has been issued to local authorities. At present, there are no planning restrictions on development close to power lines other than the need to observe safe clearance distances.		
<b>Date</b>	10 October 2007	<b>Hansard Column</b>	670W
<b>Question reference</b>	156852		
<b>Heading</b>	Health Hazards: Electric Cables		
<b>Questioner</b>	Michael Connarty Labour, Linlithgow & East Falkirk		
<b>Question</b>	To ask the Secretary of State for Health what advice he has received from the Health Protection Agency to the Stakeholder Advisory Group on ELF EMF's report; if he will place a copy of the advice in the Library; and if he will make a statement.		
<b>Answered by</b>	Dawn Primarolo Minister for Public Health		
<b>Answer</b>	Following the publication of the Stakeholder Advisory Group on extremely low frequency and electromagnetic fields (SAGE) report, the former Minister of State (Caroline Flint) at the time, wrote to the Health Protection Agency to ask for its considered view and advice to Government. We are currently awaiting a reply.		

<b>Date</b>	25 June 2007	<b>Hansard Column</b>	245W
<b>Question reference</b>	144690, 144721		
<b>Heading</b>			
<b>Questioner</b>	Mr. Ffello Labour, Stoke-on-Trent South		
<b>Question</b>	<p>To ask the Secretary of State for Health (1) what advice the Government have sought from the Health Protection Agency in relation to the Stakeholder Advisory Group on extremely low frequency electric and magnetic fields (EMFs) report; and how the Government's decision-making process on precautionary measures to prevent public exposure to EMFs will take account of this report; [144690]</p> <p>(2) if she will place in the Library a copy of the recent report from the Stakeholder Advisory Group on extremely low frequency electric and magnetic fields. [144721]</p>		
<b>Answered by</b>	Caroline Flint Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	<p>The recently published report from the "Stakeholder Advisory Group on Extremely Low Frequency (ELF) Electric and Magnetic Fields (EMF)", known as the SAGE report, is currently under consideration by the Health Protection Agency (HPA). Government have asked HPA for advice concerning the report's recommendations. Government will consider the HPA's advice and, should any further measures be considered as part of a precautionary approach, would consult stakeholders as part of the process. A copy of the SAGE report has been placed in the Library.</p>		

<b>Date</b>	25 June 2007	<b>Hansard Column</b>	157W
<b>Question reference</b>	144689		
<b>Heading</b>	Electromagnetic Fields: Public Opinion		
<b>Questioner</b>	Mr. Ffello Labour, Stoke-on-Trent South		
<b>Question</b>	<p>To ask the Secretary of State for Communities and Local Government what account she takes of public opinion in determining suitable precautionary measures on power frequency electric and magnetic fields (EMFs); what mechanism she plans to put in place to assess public opinion on the issues raised by the recently published Stakeholder Advisory Group on Extremely Low Frequency Electric and Magnetic Fields report on precautionary approaches to power frequency EMFs; and if she will make a statement.</p>		
<b>Answered by</b>	Caroline Flint Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	<p>I have been asked to reply.</p> <p>The recently published report from the 'Stakeholder Advisory Group on Extremely Low Frequency (ELF) Electric and Magnetic Fields (EMF)', known as the SAGE report, is currently under consideration by the Health Protection Agency (HPA). Government have asked HPA for advice concerning the report's recommendations. Government will consider the HPA's advice and, should any further measures be considered as part of a precautionary approach, would consult stakeholders as part of the process. A copy of the SAGE Report has been placed in the Library.</p>		

<b>Date</b>	20 June 2007	<b>Hansard Column</b>	1857W
<b>Question reference</b>	144088, 144091		
<b>Heading</b>	Electric Cables: Health Hazards		
<b>Questioner</b>	Mark Tami Labour, Alyn & Deeside		
<b>Question</b>	<p>To ask the Secretary of State for Communities and Local Government (1) pursuant to the answer of 4 June 2007, Official Report, column 292W, on electric cables: health hazards, if she will publish the advice which she sought from the Health Protection Agency; and if she will make a statement; [144088]</p> <p>(2) pursuant to the answer of 4 June 2007, Official Report, columns 291-92W, on electric cables: health hazards, when the Government plan to respond to the report by the Stakeholder Advisory Group on extremely low frequency waves and electric magnetic fields. [144091]</p>		
<b>Answered by</b>	Caroline Flint Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	<p>I have been asked to reply</p> <p>The recently published report from the stakeholder advisory group on extremely low frequency electric and magnetic fields, known as the SAGE report, is currently under consideration by the Health Protection Agency (HPA). The Government have asked HPA for advice concerning the report's recommendations. This advice will be published once Ministers have had the opportunity to consider it.</p>		

<b>Date</b>	26 January 2007	<b>Hansard Column</b>	2068W
<b>Question reference</b>	117337		
<b>Heading</b>	Sage Report		
<b>Questioner</b>	Stephen Hammond Conservative, Wimbledon		
<b>Question</b>	To ask the Secretary of State for Trade and Industry when the Sage Report on Cautionary Principles on Power Lines will be published.		
<b>Answered by</b>	Caroline Flint Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	<p>I have been asked to reply.</p> <p>The stakeholder advisory group on extremely low frequency (ELF) electromagnetic fields (EMF) (SAGE) is jointly sponsored by the Department of Health, the charity Children with Leukaemia and National Grid plc. The aim of SAGE is to bring together stakeholders to identify and explore the implications for a precautionary approach to ELF EMF and make practical recommendations for precautionary measures. Its terms of reference and ways of working are described on the website <a href="http://www.rkpartnership.co.uk/sage">www.rkpartnership.co.uk/sage</a>. The SAGE process has been running since 2004 and the website indicates that it is expected to produce its first report this year although no specific date has been set.</p>		

<b>Date</b>	17 July 2006	<b>Hansard Column</b>	246W
<b>Question reference</b>	84059		
<b>Heading</b>	Electrical Fields		
<b>Questioner</b>	Chris Huhne Liberal Democrat, Eastleigh		
<b>Question</b>	<p>To ask the Secretary of State for Health what research has been conducted (a) by and (b) for her Department into the health impacts from electrical fields from (i) mobile phones, (ii) other electronic equipment in the home or workplace and (iii) major external sources, including power cables, mobile phone masts and other transmitters; and what steps she (A) has taken and (B) plans to take to tackle the potential effects on health of electrical fields.</p>		
<b>Answered by</b>	Caroline Flint Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	<p>The Health Protection Agency's radiation protection division (HPA-RPD) keeps the world-wide research findings on electric and magnetic fields (EMF) and health under review. In 2004 the HPA-RPD, previously the National Radiological Protection Board, undertook a comprehensive review of the existing body of research to date and formally recommended the adoption of EMF exposure guidelines published in 1998 by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). The HPA advice is available on its website at <a href="http://www.hpa.org.uk/radiation/publications/documents_of_nrpb/pdfs/doc_15_2.pdf">www.hpa.org.uk/radiation/publications/documents_of_nrpb/pdfs/doc_15_2.pdf</a>. The ICNIRP guidelines also form the basis of the 1999 European Recommendation (EC/519/1999) on limiting EMF public exposure.</p>		

<b>Date</b>	04 July 2006	<b>Hansard Column</b>	960W
<b>Question reference</b>	70599		
<b>Heading</b>	Overhead power Lines		
<b>Questioner</b>	Eric Pickles Conservative, Brentwood & Ongar		
<b>Question</b>	<p>To ask the Secretary of State for Communities and Local Government, what estimate the Government has made of the impact of revised health guidance on overhead power lines on (a) the planning process, (b) house prices, (c) compulsory purchase orders and (d) power line burial in new housing developments; and if she will make a statement.</p>		
<b>Answered by</b>	Meg Munn Communities and Local Government Minister, DCLG		
<b>Answer</b>	<p>The Government are considering the implications of Health Protection Agency advice regarding power lines with all stakeholders. Implications for the areas outlined in the question will be fully considered in deciding how to implement the advice.</p> <p>When appropriate policy options have been formulated the Government will undertake a consultation on the options in the normal manner.</p>		

<b>Date</b>	04 July 2006	<b>Hansard Column</b>	959W
<b>Question reference</b>	71588		
<b>Heading</b>	Overhead power Lines		
<b>Questioner</b>	Mark Tami Labour, Alyn & Deeside		
<b>Question</b>	To ask the Secretary of State for Communities and Local Government, what guidance her Department has issued to local authorities on the building of new properties in close proximity to electric pylons.		
<b>Answered by</b>	Meg Munn Communities and Local Government Minister, DCLG		
<b>Answer</b>	<p>The Government have not issued guidance concerning the building of new properties near pylons.</p> <p>However, following the publication of the (then) National Radiological Protection Board's new Electromagnetic Field guidelines in March 2004, and the associated advice to Government, the Government are giving further consideration to taking the issue of building near power lines and pylons and is consulting with all the relevant stakeholder groups.</p>		

<b>Date</b>	16 June 2006	<b>Hansard Column</b>	1549W
<b>Question reference</b>	77040		
<b>Heading</b>	High Voltage Transmission Lines		
<b>Questioner</b>	Mr. Gordon Prentice Labour, Pendle		
<b>Question</b>	To ask the Secretary of State for Health what studies she has commissioned into the health effects of living in very close proximity to high voltage transmission lines; and if she will make a statement.		
<b>Answered by</b>	Caroline Flint Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	<p>The Department's radiation protection research programme supports a number of studies investigating the possible health effects of electromagnetic fields (EMF). These range from laboratory work on possible cellular effects to large population studies. A study by Dr. Draper and colleagues of childhood leukaemia incidence and distance from power lines, funded under this programme and published in the British Medical Journal (BMJ) last year, has added to a large existing body of work in this area (BMJ Vol 330, 4 June 2005). In addition to its own research programme, the Department, along with the Health and Safety Executive, has supported the World Health Organisation's International EMF Project since it started in 1997.</p> <p>The Health Protection Agency's radiation protection division (HPA-RPD) keeps the worldwide research findings on EMF and health under review. In 2004, on the basis of a comprehensive review of the existing body of research to date, the HPA-RPD (previously the national radiological protection board) recommended the adoption of new EMF exposure guidelines in this country. In addition, in view of the scientific uncertainties in relation to power frequency electromagnetic fields, the HPA recommended the Government</p> <p>"consider the need for further precautionary measures".</p> <p>They have also noted that the majority of elevated magnetic fields are due to variations in the electricity supply and distribution system, the presence of substations and equipment in the home rather than proximity to high voltage overhead cables.</p> <p>Practical precautionary measures are now being considered in detail by a stakeholder advisory group (SAGE) that includes the Government Departments, agencies, electricity industry, specialists and public concern groups. Details of the process can be found on the website at: <a href="http://www.rkpartnership.co.uk/sage">www.rkpartnership.co.uk/sage</a>.</p>		

<b>Date</b>	05 June 2006	<b>Hansard Column</b>	354W
<b>Question reference</b>	74979		
<b>Heading</b>	Childhood Leukaemia		
<b>Questioner</b>	Dr Alasdair McDonnell SDLP, Belfast South		
<b>Question</b>	To ask the Secretary of State for Northern Ireland, what response his Department plans to make to the findings of the Health Protection Agency in relation to the effects on childhood leukaemia rates of living near electricity lines and pylons.		
<b>Answered by</b>	Paul Goggins Parliamentary Under-Secretary, Northern Ireland Office		
<b>Answer</b>	<p>The Stakeholder Advisory Group on extremely low frequency (ELF) electromagnetic fields (SAGE) was set up in response to the Health Protection Agency (HPA) advice and is sponsored by the Department of Health with funding contributions from the charity 'Children with Leukaemia' and National Grid plc. SAGE has brought together stakeholders</p> <p>"to identify and explore the implications for a precautionary approach to ELF EMF and make practical recommendations for precautionary measures."</p> <p>Stakeholders include representatives from UK Government Departments, industry, independent academics, regulators, public concern groups and associated professional groups. Government will be pleased to receive the SAGE report and will give it full consideration when it is completed in due course.</p>		
<b>Date</b>	25 May 2006	<b>Hansard Column</b>	2044W
<b>Question reference</b>	71650		
<b>Heading</b>	Electromagnetic Fields		
<b>Questioner</b>	Mark Tami Labour, Alyn & Deeside		
<b>Question</b>	To ask the Secretary of State for Communities and Local Government, what (a) guidance she issues and (b) restrictions she places on electricity companies on the siting of electricity sub-stations in areas of high population density.		
<b>Answered by</b>	Yvette Cooper Minister of State (Housing and Planning)		
<b>Answer</b>	<p>New substations or major extensions to existing substations may require planning permission from local planning authorities. However, the Town and Country Planning (General Permitted Development) Order 1995 does allow certain development to take place within existing substations and on operational land without the need to apply for planning permission.</p> <p>The Secretary of State has not issued any guidelines to electricity companies on the siting of electricity sub-stations</p>		

---

<b>Date</b>	25 May 2006	<b>Hansard Column</b>	2044W
<b>Question reference</b>	71622		
<b>Heading</b>	Electromagnetic Fields		
<b>Questioner</b>	Mark Tami Labour, Alyn & Deeside		
<b>Question</b>	To ask the Secretary of State for Communities and Local Government, what discussions she has had with electricity supply companies on the routing of high voltage power lines underground in areas of high density housing.		
<b>Answered by</b>	Yvette Cooper Minister of State (Housing and Planning)		
<b>Answer</b>	Ministers for the Department for Communities and Local Government have not had any discussions with electricity supply companies on the matter of routing high voltage power lines underground in areas of high density housing.		

<b>Date</b>	23 May 2006	<b>Hansard Column</b>	1743W
<b>Question reference</b>	71576		
<b>Heading</b>	Electromagnetic Fields		
<b>Questioner</b>	Mark Tami Labour, Alyn & Deeside		
<b>Question</b>	To ask the Secretary of State for Health, what research her Department has commissioned into the effect of electromagnetic fields on public health in the last five years.		
<b>Answered by</b>	Caroline Flint Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	<p>The Department supports two broad programmes of research into the potential effects of electromagnetic fields (EMF) and health: one on radiofrequency fields (as emitted by mobile phones) and the other largely on extremely low frequency (ELF) fields (such as associated with power lines and domestic electrical supply).</p> <p>The mobile telecommunications and health research (MTHR) programme has been running since 2001. It is funded jointly by Government and industry and is managed by an independent scientific committee. A description of the programme and a list of ongoing and completed studies are available on the MTHR's website at <a href="http://www.mthr.org.uk">www.mthr.org.uk</a>.</p> <p>The Department's radiation protection research programme supports a number of studies investigating the possible health effects of other electromagnetic fields (largely ELF-EMF). These range from laboratory work investigating possible cellular effects to large population studies. Descriptions of these studies are available on the World Health Organisation (WHO) EMF research database at <a href="http://www.who.int/peh-emf/research/database/en/">www.who.int/peh-emf/research/database/en/</a>.</p> <p>In addition, the Department, along with the Health and Safety Executive, has supported the WHO's international EMF project since it started in 1997. Information about the EMF project is available on its web site at <a href="http://www.who.int/peh-mf/project/en/">www.who.int/peh-mf/project/en/</a>.</p> <p>In the United Kingdom, the Health Protection Agency's radiation protection division (HPA-RPD) has keeps the world-wide research findings on EMF and health continually under review. In 2004, the HPA-RPD, previously the National Radiological Protection Board, published a comprehensive review of scientific evidence in support of its current advice on limiting EMF exposure which is available on HPA's website at: <a href="http://www.hpa.org.uk/radiation/publications/documents_of_nrp/abstracts/absd15-3.htm">www.hpa.org.uk/radiation/publications/documents_of_nrp/abstracts/absd15-3.htm</a>.</p>		

<b>Date</b>	22 May 2006	<b>Hansard Column</b>	1584W
<b>Question reference</b>	70660		
<b>Heading</b>	Power Lines (Advisory Group Report)		
<b>Questioner</b>	Mr. Pickles Conservative, Brentwood & Ongar		
<b>Question</b>	To ask the Secretary of State for Health if she will place in the Library copies of the (a) minutes and (b) reports on overhead power lines produced by the stakeholder advisory group on extremely low frequency electromagnetic fields.		
<b>Answered by</b>	Caroline Flint Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	The stakeholder advisory group on extremely low frequency electromagnetic fields (SAGE) is currently developing its first report. It is expected that the report will be published and presented to Government later this year. Details of the SAGE process can be found on the website of the independent facilitation company R K Partnership Ltd. at <a href="http://www.rkpartnership.org.uk/sage">www.rkpartnership.org.uk/sage</a> .		
<b>Date</b>	22 May 2006	<b>Hansard Column</b>	1403W
<b>Question reference</b>	69978		
<b>Heading</b>	Underground Electricity Cables		
<b>Questioner</b>	Tim Loughton Conservative, East Worthing & Shoreham		
<b>Question</b>	To ask the Deputy Prime Minister, what estimate he has made of the likely additional cost of requiring new houses to be serviced by underground electricity cables.		
<b>Answered by</b>	Yvette Cooper Minister of State (Housing and Planning)		
<b>Answer</b>	Most new urban houses have access to electricity services via low-voltage underground cables, although some developments in rural areas may have a mix of underground and overhead service connections.. The cost of providing underground electricity distribution lines to particular housing developments will vary from case to case. Due to the numbers and variability of new development, this information is not practical to collate centrally.		

<b>Date</b>	12 May 2006	<b>Hansard Column</b>	608W
<b>Question reference</b>	69404		
<b>Heading</b>	Electrical Fields (Childhood Illness)		
<b>Questioner</b>	Tim Loughton Conservative, East Worthing & Shoreham		
<b>Question</b>	To ask the Secretary of State for Health what recent assessment she has made of links between overhead power lines and incidences of childhood leukaemia.		
<b>Answered by</b>	Caroline Flint Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	<p>The Department's radiation protection research programme supports a number of studies investigating the possible health effects of electromagnetic fields (EMF). A study by Dr. Draper and colleagues on childhood leukaemia and distance from power lines, funded under this programme and published in the British Medical Journal last year, has added to a large existing body of work in this area (BMJ, volume 330, 4 June 2005).</p> <p>The Health Protection Agency's radiation protection division (HPA-RPD) keeps the world-wide research findings on EMF continually under review. In 2004, on the basis of a comprehensive review of the existing body of research to date, the HPA-RPD, previously the National Radiological Protection Board, recommended the adoption of new EMF exposure guidelines in this country. In addition, in view of the scientific uncertainties, the HPA recommended the Government "consider the need for further precautionary measures" in relation to power frequency electromagnetic fields. They have also noted that the majority of elevated magnetic fields are due to variations in the electricity supply and distribution system, the presence of substations and equipment in the home rather than proximity to power lines.</p> <p>Practical precautionary measures are currently being considered in detail by a stakeholder advisory group (SAGE) that includes the Government Departments, agencies, electricity industry, specialists and public concern groups. Details of the process can be found on the website at: <a href="http://www.rkpartnership.co.uk/sage">www.rkpartnership.co.uk/sage</a>.</p>		

<b>Date</b>	12 May 2006	<b>Hansard Column</b>	609W
<b>Question reference</b>	69405		
<b>Heading</b>	Electrical Fields (Childhood Illness)		
<b>Questioner</b>	Tim Loughton Conservative, East Worthing & Shoreham		
<b>Question</b>	To ask the Secretary of State for Health what recent assessment the Health Protection Agency has made of the effects of exposure to electrical fields on children.		
<b>Answered by</b>	Caroline Flint Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	<p>The Health Protection Agency's radiation protection division (HPA-RPD) continually monitors the research relating to the potential health effects of electric and magnetic fields. Prior to April 2005, HPA-RPD was the National Radiological Protection Board (NRPB) and as such it undertook a comprehensive review of the scientific evidence relating to possible adverse health effects of exposure to electromagnetic fields (EMFs) in 2004. This review is available on HPA's website at:</p> <p><a href="http://www.hpa.org.uk/radiation/publications/documents_of_nrp/abstracts/absd15-3.htm">www.hpa.org.uk/radiation/publications/documents_of_nrp/abstracts/absd15-3.htm</a>.</p> <p>It provides the basis of HPA advice on quantitative restrictions on exposure and other measures to avoid adverse effects. It explored evidence on the possibility of variations in sensitivity between different groups in the population including children.</p> <p>The preparation of this review was carried out at the request of the Department and has particularly examined the issues of uncertainty in the science and aspects of precaution. In developing this review, NRPB took advice from individual United Kingdom and international scientific experts, and from published comprehensive reviews by expert groups. It sought advice from an ad hoc expert group on weak electric field effects in the body and gave careful consideration to the views expressed in response to a consultation document on its proposed guidelines issued in May 2003.</p> <p>Having considered the totality of the scientific evidence in the light of uncertainty and the need for a cautious approach, NRPB recommended that restrictions on exposure to EMFs in the UK should be based on the guidelines issued by the International Commission on Non-Ionizing Radiation Protection in 1998.</p>		

<b>Date</b>	25 April 2006	<b>Hansard Column</b>	1074W
<b>Question reference</b>	64854		
<b>Heading</b>	Electricity Cables		
<b>Questioner</b>	Chris Huhne Liberal Democrat, Eastleigh		
<b>Question</b>	To ask the Secretary of State for Health what research her Department has undertaken into potential health risks associated with living in close proximity to high voltage electricity grid overhead cables.		
<b>Answered by</b>	Caroline Flint Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	<p>The Department's radiation protection research programme supports a number of studies investigating the possible health effects of electromagnetic fields (EMF). These range from laboratory work investigating possible cellular effects to large population studies. In addition, the Department, along with the Health and Safety Executive, has supported the World Health Organization's international EMF project since it started in 1997.</p> <p>The Health Protection Agency's radiation protection division (HPA-RPD) keeps the worldwide research findings on electromagnetic fields (EMF) and health continually under review. In 2004, on the basis of a comprehensive review of the existing body of research to date, the HPA-RPD, previously the national radiological protection board, recommended the adoption of new EMF exposure guidelines in this country. In addition, in view of the scientific uncertainties in relation to power frequency EMF, the HPA recommended the Government</p> <p>"consider the need for further precautionary measures".</p> <p>They have also noted that the majority of elevated magnetic fields are due to variations in the electricity supply and distribution system, the presence of substations and equipment in the home rather than proximity to high voltage overhead cables.</p> <p>Practical precautionary measures are now being considered in detail by a stakeholder advisory group, SAGE, that includes Government Departments, agencies, electricity industry, specialists and public concern groups. Details of the process can be found on its website at <a href="http://www.rkpartnership.co.uk/sage">www.rkpartnership.co.uk/sage</a></p>		

<b>Date</b>	19 April 2006	<b>Hansard Column</b>	736W
<b>Question reference</b>	63405		
<b>Heading</b>	Electricity Pylons		
<b>Questioner</b>	Willie Rennie Liberal Democrat, Dunfermline & West Fife		
<b>Question</b>	To ask the Secretary of State for Health what assessment her Department has made of the possible health risks to (a) children, (b) the elderly and (c) those who have suffered cancer of residing near electricity pylons.		
<b>Answered by</b>	Caroline Flint Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	<p>The Health Protection Agency's (HPA) radiation protection division has the responsibility for providing advice on exposure to electromagnetic fields (EMF). As part of its policy of ongoing evaluation of scientific evidence it reviewed its advice in 2004 on limiting exposure to EMF including that from electric and magnetic fields from power lines (extremely low frequency or ELF). The currently adopted restrictions on exposure are designed to prevent adverse health effects for members of the public of all ages and of varying health status. The HPA's advice is available on its website at <a href="http://www.hpa.org.uk/radiation">www.hpa.org.uk/radiation</a></p> <p>At the request of the Department, the HPA's radiation protection division addressed the issues of uncertainty in the science and aspects of precaution. The HPA's advice noted that an association between prolonged exposures to power frequency fields and childhood leukaemia has been found, the scientific reasons for which are presently uncertain. In the light of these findings and the requirement for additional research the HPA proposed that</p> <p>"the need for further precautionary measures should be considered by Government"</p> <p>In response, the stakeholder advisory group on ELF EMF (SAGE) was set up to explore the implications for a precautionary approach and make practical recommendations for precautionary measures. SAGE is currently developing its advice and is expected to report later this year. Details of this process can be found on RK Partnership's website at: <a href="http://www.rkpartnership.co.uk/sage">www.rkpartnership.co.uk/sage</a></p>		
<b>Date</b>	29 November 2005	<b>Hansard Column</b>	307W
<b>Question reference</b>	31426		
<b>Heading</b>	Correspondence		
<b>Questioner</b>	Mr. Jim Cunningham Labour, Coventry South		
<b>Question</b>	To ask the Secretary of State for Environment, Food and Rural Affairs when she will reply to the letter from the hon. Member for Coventry, South on the Draper Study on overhead power lines.		
<b>Answered by</b>	Jim Knight		
<b>Answer</b>	[holding answer 28 November 2005]: There is no record of this letter in the Department. If the hon. Member would like to resubmit this letter I will expedite a prompt reply		

<b>Date</b>	19 October 2005	<b>Hansard Column</b>	1110W
<b>Question reference</b>	18728		
<b>Heading</b>	Childhood Leukaemia		
<b>Questioner</b>	Mr. Jim Cunningham Labour, Coventry South		
<b>Question</b>	To ask the Secretary of State for Health what recent assessment she has made of the link between childhood leukaemia and overhead power lines.		
<b>Answered by</b>	Caroline Flint Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	<p>The Department's radiation protection research programme supports a number of studies investigating the possible health effects of electromagnetic fields (EMF). A study by Dr. Draper and colleagues on childhood leukaemia and distance from power lines, recently published in the British Medical Journal (BMJ) and funded under this programme, has added to a large existing body of work in this area (BMJ Vol 330, 4 June 2005).</p> <p>The Health Protection Agency's radiation protection division (HPA-RPD) keeps the world-wide research findings on EMF continually under review. In 2004, on the basis of a comprehensive review of the existing body of research to date, the HPA-RPD (previously the National Radiological Protection Board) recommended the adoption of new EMF exposure guidelines in this country. In addition, in view of the scientific uncertainties, the HPA recommended the Government "consider the need for further precautionary measures" in relation to power frequency electromagnetic fields. They have also noted that the majority of elevated magnetic fields are due to variations in the electricity supply and distribution system, the presence of substations and equipment in the home rather than proximity to power lines.</p> <p>Practical precautionary measures are now being considered in detail by a stakeholder advisory group that includes the Government Departments, agencies, electricity industry, specialists and public concern groups. Details of the process can be found on the website at: <a href="http://www.rkpartnership.co.uk/sage">www.rkpartnership.co.uk/sage</a></p>		

<b>Date</b>	12 September 2005	<b>Hansard Column</b>	2417W
<b>Question reference</b>	14776, 14777, 14778		
<b>Heading</b>	Childhood Cancer		
<b>Questioner</b>	Dr. Stoate Labour, Dartford		
<b>Question</b>	<p>To ask the Deputy Prime Minister (1) what assessment he has made of the Draper Report on Childhood cancer in relation to distance from high voltage power lines in England and Wales: a case-control study; and if he will make a statement; [14776]</p> <p>(2) if he will introduce an immediate moratorium on the building of new homes in the vicinity of high voltage power lines; and if he will make a statement; [14777]</p> <p>(3) if he will discuss the findings of the Draper Report on Childhood cancer in relation to distance from high voltage power lines in England and Wales: a case-control study with (a) ministerial colleagues in the Department for Education and Skills and the Department of Health and (b) the National Grid and power suppliers; and if he will make a statement. [14778]</p>		
<b>Answered by</b>	Yvette Cooper Minister of State (Housing and Planning) , Office of the Deputy Prime Minister		
<b>Answer</b>	<p>The Office of the Deputy Prime Minister takes advice from the Department of Health who consider the implications of medical research projects.</p> <p>The Department of Health have advised the recent publication in the British Medical Journal by Dr Draper and colleagues found a statistically increased incidence of leukaemia for children whose home address at birth was near power lines compared with those further away. The work was funded by the Department of Health and has significantly added to the body of knowledge built up over the last few years regarding this very important subject. The work will continue with an investigation of the electromagnetic field (EMF) exposures at the addresses studied.</p> <p>The World Health Organization and indeed the Health Protection Agency have recommended additional research and the need for further precautionary measures to be considered.</p> <p>The stakeholder advisory group on electromagnetic ELF fields (SAGE) set up last year has already enabled Government officials to engage in detailed discussions with industry, regulators, professional bodies and interest groups about how to respond to this complex issue. The intention of the process is to offer carefully considered practical recommendations in the interests of society as a whole. Information about this process can be found at: <a href="http://www.rkpartnership.co.uk/sage">www.rkpartnership.co.uk/sage</a></p>		

<b>Date</b>	12 September 2005	<b>Hansard Column</b>	Column 265
<b>Question reference</b>	13000		
<b>Heading</b>	Childhood Cancer		
<b>Questioner</b>	Dr. Gibson Labour, Norwich North		
<b>Question</b>	<p>To ask the Secretary of State for Health what assessment she has made of the Draper report on childhood cancer in relation to high voltage power lines; what steps she proposes to take in response to the report; what plans she has to commission further research into the subject; what discussions on the implications of the report she (a) has had and (b) plans to have with (i) ministerial colleagues, with particular reference to the Secretaries of State for Education and Skills and for Trade and Industry and the Deputy Prime Minister, (ii) relevant charities, (iii) patient groups, (iv) clinicians, (v) Ofgem, (vi) the National Grid and (vii) the electricity supply industry; and if she will make a statement.</p>		
<b>Answered by</b>	<p>Caroline Flint Parliamentary Under-Secretary of State, Department of Health</p>		
<b>Answer</b>	<p>The Health Protection Agency's (HPA) radiation protection division has a statutory responsibility to advise on health risks from exposure to electromagnetic fields (EMF). The HPA comprehensively reviewed the relevant science in 2004 and recommended not only the adoption of new guidelines on EMF exposure but also that the Government "consider the need for further precautionary measures" in relation to power frequency (ELF) electromagnetic fields. The HPA provided a considered response to the recent publication by Dr Draper, placing it in the context of the current knowledge of such issues. It noted that the majority of raised magnetic fields are due to variations in the electricity supply and distribution system, the presence of substations and equipment in the home rather than proximity to power lines. The HPA's response is available on its web site at</p> <p><a href="http://www.hpa.org.uk/hpa/news/articles/press_releases/2005/050603_childhood_cancer_voltage.htm">www.hpa.org.uk/hpa/news/articles/press_releases/2005/050603_childhood_cancer_voltage.htm</a>.</p> <p>The Draper study, which was funded directly by the Department, is also being considered by the stakeholder advisor/group ELF electromagnetic fields (SAGE), which was set up in response to the HPA advice published in 2004. SAGE has been constituted in order to make practical recommendations for precautionary measures in respect of EMF exposure—available at <a href="http://www.rkpartnership.co.uk/sage">www.rkpartnership.co.uk/sage</a>. Information about SAGE's membership can be found on the web site. It includes charities, clinicians, the electricity industry, market regulators, specialists and public concern groups as well as officials from Government Departments.</p> <p>In addition to funding its own research programme, the Department and the Health and Safety Executive support the World Health Organization's (WHO) electromagnetic fields project. The HPA undertakes EMF research and is a WHO collaborating institution. The WHO is due to review the health risks from power frequency fields later this year.</p>		

<b>Date</b>	28 June 2005	<b>Hansard Column</b>	Column 151
<b>Question reference</b>	6190		
<b>Heading</b>	Leukaemia (Draper report)		
<b>Questioner</b>	Mr. Walker Conservative, Broxbourne		
<b>Question</b>	To ask the Secretary of State for Health if she will meet the charity Children with Leukaemia to discuss the implications of the Draper report; and if she will make a statement.		
<b>Answered by</b>	Caroline Flint Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	<p>There are currently no plans to meet the charity Children with Leukaemia. The recent publication in the British Medical Journal by Dr. Draper and colleagues found a statistically increased incidence of leukaemia for children whose home address at birth was near power lines compared with those further away. The work was funded by the Department and has significantly added to the body of knowledge built up over the last few years regarding this very important subject. The work will continue with an investigation of the electromagnetic field (EMF) exposures at the addresses studied.</p> <p>A number of population studies in the past have linked magnetic field exposure with a raised incidence of childhood leukaemia. This has led to the International Agency for Cancer Research to classify extremely low frequency fields or ELF, such as those associated with power lines and domestic wiring as a "possible carcinogen". The World Health Organisation and indeed the Health Protection Agency have recommended additional research and the need for further precautionary measures to be considered.</p> <p>The stakeholder advisory group on electromagnetic ELF fields (SAGE) set up last year has already enabled Government officials to engage in detailed discussions with industry, regulators, professional bodies and interest groups about how to respond to this complex issue. The intention of the process is to offer carefully considered recommendations in the interests of society as a whole, which can be found on R.K. Partnership's website at: <a href="http://www.rkpartnership.co.uk/sage">www.rkpartnership.co.uk/sage</a></p>		

<b>Date</b>	20 June 2005	<b>Hansard Column</b>	786W
<b>Question reference</b>	4552		
<b>Heading</b>	Childhood Leukaemia (Power Lines)		
<b>Questioner</b>	Dr. Tony Wright Labour, Cannock Chase		
<b>Question</b>	To ask the Secretary of State for Health what action she is taking following the findings of the Draper report on the relationship between childhood leukaemia and proximity to high voltage power lines		
<b>Answered by</b>	Caroline Flint Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	<p>The recent publication by Dr. Draper and colleagues on leukaemia and distance from power lines have reinforced the need for continued departmental support for research into the causes of leukaemia and the role of electromagnetic fields (EMF). Measurements of EMF will be included in the next phase of Dr. Draper's work. The Department, together with the Health and Safety Executive, is continuing to fund the World Health Organisation (WHO) EMF project that started in 1997. The WHO is due to review the health risks from power frequency fields later this year.</p> <p>The Health Protection Agency's (HPA) radiation protection division (RPD), which have statutory responsibilities to advise on health risks from electromagnetic field exposure, also undertakes research in support of its advice. In 2004, the HPA-RPD, when it was the National Radiological Protection Board, published a comprehensive scientific review in support of its new EMF guidelines. It recommended that, in view of the scientific uncertainties in relation to power frequency EMF, the Government should "consider the need for further precautionary measures".</p> <p>The HPA have also noted that the majority of higher magnetic fields are due to variations in the electricity supply and distribution system, the presence of substations and equipment in the home rather than proximity to power lines.</p> <p>In addition to funding research, therefore, the Department is leading a stakeholder group to consider practical precautionary measures. The group includes Government departments, agencies, the electricity industry, specialists and public concern groups. The latest work by Dr. Draper has increased the interest in these issues but the complex nature of the scientific and social issues mean that no immediate decisions will be made.</p>		

<b>Date</b>	20 June 2005	<b>Hansard Column</b>	785W
<b>Question reference</b>	4423, 4424		
<b>Heading</b>	Childhood Leukaemia (Power Lines)		
<b>Questioner</b>	Mrs. Dean Labour, Burton		
<b>Question</b>	<p>To ask the Secretary of State for Health (1) what plans she has to fund research projects into whether electromagnetic fields are a cause of childhood leukaemia;</p> <p>(2) what advice she is giving to (a) other Government Departments and (b) local authorities with regard to the construction of new homes and schools in the vicinity of overhead power lines following publication of the Draper Report.</p>		
<b>Answered by</b>	Caroline Flint Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	<p>The Department provides funding under its radiation protection research programme for investigating the potential biological and health effects of electromagnetic fields at power frequencies. The work by Dr. Draper and colleagues on leukaemia and distance from power lines, recently published in the British Medical Journal, was funded under this programme (BMJ Vol. 330, 4 June 2005). The Department, together with the Health and Safety Executive, has also supported the World Health Organization (WHO) electromagnetic fields project since 1997. The WHO is due to review the health risks from power frequency fields later this year. The Health Protection Agency (HPA) has statutory responsibilities to advise on health risks from electromagnetic exposure and undertakes its own research to support this advice.</p> <p>In 2004, on the basis of a comprehensive review of the existing body of research to date, the HPA's radiation protection division, previously the National Radiological Protection Board, recommended that in view of the scientific uncertainties the Government "consider the need for further precautionary measures" in relation to power frequency electromagnetic fields. It has also noted that the majority of higher magnetic fields are due to variations in the electricity supply and distribution system, the presence of substations and equipment in the home rather than proximity to power lines. Practical precautionary measures are now being considered in detail by a stakeholder group that includes Government Departments, agencies, the electricity industry, specialists and public concern groups. The latest work by Dr. Draper has increased the interest in these issues but the complex nature of the scientific and social issues mean that no immediate decisions will be made.</p>		

<b>Date</b>	20 June 2005	<b>Hansard Column</b>	786W
<b>Question reference</b>	4634, 4644		
<b>Heading</b>	Childhood Leukaemia (Power Lines)		
<b>Questioner</b>	Tim Loughton Conservative, East Worthing & Shoreham		
<b>Question</b>	<p>To ask the Secretary of State for Health (1) what research her Department has carried out into (a) the causes of childhood leukaemia and (b) whether there is a link with electromagnetic fields; [4634]</p> <p>(2) what assessment she has made of whether there is a link between electricity pylons and cancer in children; and if she will make a statement. [4644]</p>		
<b>Answered by</b>	Caroline Flint Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	<p>The Department provides funding under its radiation protection research programme for investigating the potential biological and health effects of electromagnetic fields at power frequencies. The work by Dr. Draper and colleagues on leukaemia and distance from power lines, recently published in the British Medical Journal, was funded under this programme (BMJ Vol. 330, 4 June 2005). Electromagnetic field measurements will be included in the next phase of this study.</p> <p>Details of other research concerned with childhood leukaemia supported by the National Cancer Research Institute's 15 partners, the largest Government and charitable funders of cancer research in the United Kingdom, can be found on the international cancer research portfolio database at <a href="http://www.cancerportfolio.org/faq.js">www.cancerportfolio.org/faq.js</a> icrp.</p> <p>The Department, together with the Health and Safety Executive, has supported the World Health Organization (WHO) electromagnetic fields project since 1997. The WHO is due to review the health risks from power frequency fields later this year. The Health Protection Agency (HPA), which has statutory responsibilities to advise on health risks from electromagnetic exposure, undertakes its own research to support this advice.</p> <p>In 2004, on the basis of a comprehensive review of the existing body of research to date, the HPA's radiation protection division, previously the National Radiological Protection Board, recommended that, in view of the scientific uncertainties, the Government</p> <p>"consider the need for further precautionary measures"</p> <p>in relation to power frequency electromagnetic fields. It has also noted that the majority of higher magnetic fields are due to variations in the electricity supply and distribution system, the presence of substations and equipment in the home, rather than proximity to power lines. Practical precautionary measures are now being considered in detail by a stakeholder group that includes Government Departments, agencies, the electricity industry, specialists and public concern groups. The latest work by Dr. Draper has increased the interest in these issues but the complex nature of the scientific and social issues mean that no immediate decisions will be made.</p>		

<b>Date</b>	14 June 2005	<b>Hansard Column</b>	307W
<b>Question reference</b>	3428		
<b>Heading</b>	Leukaemia (High Voltage Lines)		
<b>Questioner</b>	Keith Vaz Labour, Leicester East		
<b>Question</b>	<p>To ask the Secretary of State for Health whether the Government have commissioned research into a possible correlation between children living within 200 metres of high voltage lines at birth and risk of leukaemia; how many homes in England are estimated to be within 200 metres of high voltage power lines; and whether the Government plans to make recommendations regarding the safety of living near high voltage power lines.</p>		
<b>Answered by</b>	Caroline Flint Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	<p>The Department commissioned the work by Dr. Draper and colleagues on childhood cancer and distance from power lines, recently published in the British Medical Journal (BMJ Vol. 330, 4 June 2005). The study found higher rates of childhood leukaemia among those born within 600 metres of a power line compared with those born further away. The rate was higher for those born within 200 metres than those between 200 and 600 metres. The authors have no satisfactory explanations for the results in terms of causation by magnetic fields. A response statement has been provided by the Health Protection Agency's (HPA) radiation protection division and is available on its website at: <a href="http://www.hpa.org.uk/radiation">www.hpa.org.uk/radiation</a>.</p> <p>The study concerned high voltage power lines forming the National Grid in England and Wales, that is all 400 kilovolts (kV) and 275kV lines and a small fraction of 132kV lines. The National Grid Transco website notes that 139,000 homes in England and Wales, less than 1 per cent. of homes, are within 200 metres of their lines.</p> <p>A number of population studies in the past that have linked magnetic field exposure with a raised incidence of childhood leukaemia but with no corresponding explanation. This led to the International Agency for Cancer Research to classify extremely low frequency electromagnetic fields as a "possible carcinogen". The World Health Organization and the HPA in this country have recommended additional research and, bearing in mind the scientific uncertainty, the need for further precautionary measures to be considered. Government officials have already started detailed discussions with industry, regulators, professional bodies and interest groups about how to respond and a stakeholder group has been set up with the intention of making practical and proportionate recommendations in the interests of society as a whole.</p>		

<b>Date</b>	13 June 2005	<b>Hansard Column</b>	94W
<b>Question reference</b>	3619		
<b>Heading</b>	Overhead Power Lines		
<b>Questioner</b>	Lady Hermon Ulster Unionist, North Down		
<b>Question</b>	To ask the Secretary of State for Northern Ireland what evidence he has assessed of the possible risk of developing leukaemia to children living close to overhead power lines.		
<b>Answered by</b>	Mr. Woodward Parliamentary Under-Secretary of State, Northern Ireland Office		
<b>Answer</b>	<p>The Department of Health's Radiation Protection Research Programme has funded Dr. Gerald Draper of Oxford University's Childhood Cancer Research Group to investigate the incidence of childhood cancer near power lines. The results of the first phase of this study were published in the British Medical Journal on Friday 3 June. The Health Protection Agency posted a considered response to the publication on its website, <a href="http://www.hpa.org.uk">www.hpa.org.uk</a>.</p> <p>The research so far shows a statistical link between electronic fields (EMFs) and increased cases of childhood leukaemia. At this stage, research has not proved that power lines cause leukaemia in children. The Stakeholder Advisory Group on EMFs, which was set up to consider the need for precautionary measures in relation to EMFs, will address and take into account the findings of Dr. Draper's research so far.</p>		

<b>Date</b>	07 June 2005	<b>Hansard Column</b>	525W
<b>Question reference</b>	2017		
<b>Heading</b>	Childhood Cancer		
<b>Questioner</b>	Mrs. Spelman Conservative, Meriden		
<b>Question</b>	To ask the Secretary of State for Health when she expects the Draper report on childhood cancer and electromagnetic field exposures from power lines to be published; what assessment she has made of the data on which the findings are based; and if she will make a statement.		
<b>Answered by</b>	Caroline Flint Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	<p>A study of childhood cancer in relation to distance from high voltage power lines in England and Wales was published in the British Medical Journal on 4 June. The work was led by Dr. Draper at the Oxford childhood cancer research group and was funded under the Department's radiation protection research programme. The results found an association between an increased incidence of leukaemia for children whose home address at birth was near power lines. There was no association for other childhood cancers. Magnetic field exposures were not included in the publication, but will be included in the next phase of the study. A response statement has been posted on the Health Protection Agency (HPA) website at <a href="http://www.hpa.org.uk/radiation">www.hpa.org.uk/radiation</a>.</p> <p>There have been a number of population studies in the past that have linked magnetic field exposure with a raised incidence of childhood leukaemia. This has led to the International Agency for Cancer Research to classify extremely low frequency fields as a "possible carcinogen". The World Health Organization and the HPA in this country have recommended additional research and the need for further precautionary measures to be considered. Government officials have already started detailed discussions with industry, regulators, professional bodies and interest groups about how to respond and a stakeholder group has been set up with the intention of making recommendations in the interests of society as a whole.</p>		

<b>Date</b>	18 March 2005	<b>Hansard Column</b>	511W
<b>Question reference</b>	222037		
<b>Heading</b>	Electromagnetic Hypersensitivity		
<b>Questioner</b>	Tim Loughton Conservative, East Worthing & Shoreham		
<b>Question</b>	To ask the Secretary of State for Health what assessment he has made of the effect of electromagnetic hypersensitivity on people's health.		
<b>Answered by</b>	Miss Melanie Johnson Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	<p>The Department has made no overall assessment of electromagnetic hypersensitivity on people's health but the National Radiological Protection Board (NRPB) has commissioned a review of electromagnetic hypersensitivity by a consultant in public health. It will address the range of symptoms reported to arise and explore whether there is a role for the NRPB in terms of prevention, management and public information.</p> <p>The mobile telecommunications and health research programme, supported by Government and industry sources, is funding studies of individuals who have reported an increased sensitivity to mobile phones and mobile phone base stations.</p>		
<b>Date</b>	18 March 2005	<b>Hansard Column</b>	508W
<b>Question reference</b>	221886		
<b>Heading</b>	Childhood Leukaemia		
<b>Questioner</b>	Annabelle Ewing SNP, Perth		
<b>Question</b>	To ask the Secretary of State for Health when he plans to publish the report on research by the Childhood Cancer Research Group at Oxford University into possible links between powerlines and childhood leukaemia; and if he will make a statement on the report.		
<b>Answered by</b>	Miss Melanie Johnson Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	[holding answer 15 March 2005]: I refer the hon. Member to the reply I gave on 10 February 2005, Official Report, column 1690W		

<b>Date</b>	10 February 2005	<b>Hansard Column</b>	1690W
<b>Question reference</b>	214532 - 214537		
<b>Heading</b>	Draper Report		
<b>Questioner</b>	Dr. Gibson Labour, Norwich North		
<b>Question</b>	<p>To ask the Secretary of State for Health (1) when he expects the Draper Report on childhood cancer and electromagnetic field exposures from powerlines, to be published; [214532]</p> <p>(2) when the data on which the Draper Report on childhood cancer and electromagnetic field exposures from powerlines is based was first received by his Department; and if he will make a statement; [214533]</p> <p>(3) what assessment his Department has made of the data on which the Draper Report on childhood cancer and electromagnetic field exposures from powerlines is based; and if he will make a statement; [214534]</p> <p>(4) what discussions his Department has held with (a) charities, (b) patient groups, (c) other organisations and (d) representatives of the power industry regarding the potential implications of the Draper Report on childhood cancer and electromagnetic field exposures from powerlines; [214535]</p> <p>(5) if he will place in the Library a copy of the data on which the Draper Report on childhood cancer and electromagnetic field exposures from powerlines is based; [214536]</p> <p>(6) if he will list the organisations with whom his Department has held meetings regarding the implications of the Draper Report on childhood cancer and electromagnetic field exposures from powerlines. [214537]</p>		
<b>Answered by</b>	Miss Melanie Johnson Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	<p>A draft paper by Dr. Draper of Childhood Cancer Research Group at Oxford University into possible links between power lines and childhood leukaemia was submitted to a scientific journal and officials in the Department in November 2004. In accordance with the usual practice, publication will follow the appropriate peer review process and the publication date rests with the publishers. It would be inappropriate to comment on unpublished data, but we will ask the National Radiological Protection Board (NRPB) to consider the results when published.</p> <p>The NRPB's "Advice on Limiting Exposure to Electromagnetic Fields" (Documents of the NRPB Vol 15 No 2 2004) noted that below the guidelines</p> <p>"an association between prolonged exposure to intense power frequency magnetic fields and a small raised risk of childhood leukaemia has, however, been found, the scientific reasons for which are presently uncertain. In the light of these findings and the requirement for additional research, the need for precautionary measures should be considered by Government".</p> <p>On the basis of this commendation precautionary measures are currently being considered by departmental officials in association with a large number of stakeholders including other Government Departments, the devolved administrations, the electricity supply industry, the electricity supply regulators and a number of non-government organisations and</p>		

public concern groups.

<b>Date</b>	01 December 2004	<b>Hansard Column</b>	130W
<b>Question reference</b>	199609		
<b>Heading</b>	Leukaemia		
<b>Questioner</b>	Mr. Andrew Mitchell Conservative, Sutton Coldfield		
<b>Question</b>	To ask the Secretary of State for Health what estimate he has made of the number of children under 15 years of age who (a) died and (b) suffered from leukaemia in each of the last three years who lived (i) within 100 metres of and (ii) over 100 metres away from high voltage power lines.		
<b>Answered by</b>	Miss Melanie Johnson Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	No such estimate has been made. The Department has, however, been supporting a study by the Childhood Cancer Research Group at Oxford University of children with leukaemia diagnosed between 1962 and 1995 in relation to their residential proximity to power lines. A summary of the study design is available on the WHO web site at <a href="http://www.who.int/peh-emf">www.who.int/peh-emf</a> .		
<b>Date</b>	18 November 2004	<b>Hansard Column</b>	1970W
<b>Question reference</b>	197550		
<b>Heading</b>	Leukaemia (Power Lines)		
<b>Questioner</b>	Mr. Andrew Mitchell Conservative, Sutton Coldfield		
<b>Question</b>	To ask the Secretary of State for Health what estimate he has made of the number of children under 15 years of age who (a) died and (b) suffered from leukaemia in each of the last three years who lived (i) within 100 metres of and (ii) over 100 metres away from high voltage power lines.		
<b>Answered by</b>	Dr. Ladyman Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	It has not proved possible to respond to the hon. Member in the time available before Prorogation.		

<b>Date</b>	17 November 2004	<b>Hansard Column</b>	1691W
<b>Question reference</b>	196751, 196752		
<b>Heading</b>	Pylons		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	<p>To ask the Secretary of State for Health (1) what discussions he has had with National Grid Transco on the health effects of electricity pylons;</p> <p>(2) if he will make a statement on the health effects of overhead electricity lines and pylons, with particular reference to children's health.</p>		
<b>Answered by</b>	Miss Melanie Johnson Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	<p>Recent advice on high voltage power lines and children's health comes from the National Radiological Protection Board's publication, "Review of the Scientific Evidence for Limiting Exposure to Electromagnetic Fields", produced in support of its advice issued in March 2004 (Documents of the NRPB Vol. 15 No. 2 2004). In addition to recommending the adoption of harmonised international guidelines, the advice noted that, at levels below the guidelines:</p> <p>"association between prolonged exposure to intense power frequency magnetic fields and a small raised risk of childhood leukaemia has, however, been found, the scientific reasons for which are presently uncertain. In the light of these findings and the requirement for additional research, the need for precautionary measures should be considered by government."</p> <p>The Department and National Grid Transco have instigated a programme of stakeholder discussions in order to develop appropriate practical policies.</p> <p>The possible application of precautionary measures are currently being considered by departmental officials in association with a large number of stakeholders, including other Government Departments, the devolved Administrations, the electricity supply industry, the electricity supply regulators and a number of non-governmental organisations and public concern groups.</p>		
<b>Date</b>	11 November 2004	<b>Hansard Column</b>	868W
<b>Question reference</b>	196748		
<b>Heading</b>	Pylons		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Health if his Department will publish the report on the health effects of electricity pylons		
<b>Answered by</b>	Miss Melanie Johnson Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	I refer the hon. Member to the reply I gave to my hon. Friend the Member for Northampton, North (Ms Keeble) today.		

---

<b>Date</b>	11 November 2004	<b>Hansard Column</b>	868W
<b>Question reference</b>	197551		
<b>Heading</b>	Leukaemia		
<b>Questioner</b>	Mr. Andrew Mitchell Conservative, Sutton Coldfield		
<b>Question</b>	To ask the Secretary of State for Health if he will make a statement on research conducted by his Department on possible links between high voltage power lines and incidence of leukaemia in children under 15-years-old.		
<b>Answered by</b>	Miss Melanie Johnson Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	I refer the hon. Member to the reply I gave to my hon. Friend, the Member for Northampton North (Ms Keeble) today.		

---

<b>Date</b>	11 November 2004	<b>Hansard Column</b>	868W
<b>Question reference</b>	196749		
<b>Heading</b>	Pylons		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Health what discussions he has had with the Prime Minister on the health effects of electricity pylons		
<b>Answered by</b>	Miss Melanie Johnson Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	None.		

---

<b>Date</b>	11 November 2004	<b>Hansard Column</b>	871W
<b>Question reference</b>	196750		
<b>Heading</b>	Pylons		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Health what recent research he has evaluated on the health effects of electricity pylons.		
<b>Answered by</b>	Miss Melanie Johnson Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	<p>At the request of the Department, the National Radiological Protection Board (NRPB) has recently undertaken a comprehensive research evaluation of the health effects of electromagnetic fields (EMF) to support its most recent advice on limiting EMF exposure. This advice was published in March 2004 in the series, "Documents of the NRPB" (Volume 15, No. 2, 2004). NRPB information on extremely low frequency fields (ELF) such as those from power lines was principally drawn from a report on "ELF Electromagnetic Fields and the Risk of Cancer" (2001) by the NRPB's independent advisory group on non-ionising radiation.</p> <p>In providing advice on EMF, the NRPB continually monitors world-wide research and works closely with the International Commission on Non-ionizing Radiation Protection and the World Health Organization</p>		

---

<b>Date</b>	11 November 2004	<b>Hansard Column</b>	845W
<b>Question reference</b>	197003		
<b>Heading</b>	Leukaemia		
<b>Questioner</b>	Ms Keeble Labour, Northampton North		
<b>Question</b>	To ask the Deputy Prime Minister what assessment he has made of the implications for planning policy of the preliminary findings of the study by the Childhood Cancer Research Group at Oxford University into possible links between power lines and increased rates of childhood leukaemia.		
<b>Answered by</b>	Keith Hill Minister of State (Housing and Planning), ODPM		
<b>Answer</b>	<p>Following the publication of the National Radiological Protection Board's (NRPB) new Electromagnetic Field (EMF) guidelines in March 2004 and the associated advice to Government, the Government are committed to taking forward the issue of building near power lines in consultation with all the relevant stakeholders. The Office of the Deputy Prime Minister's officials are participating in this process.</p> <p>The Office of the Deputy Prime Minister takes advice from the Department of Health, which considers the implications of medical research projects</p>		

---

<b>Date</b>	11 November 2004	<b>Hansard Column</b>	868W
<b>Question reference</b>	197002		
<b>Heading</b>	Leukaemia		
<b>Questioner</b>	Ms Keeble Labour, Northampton North		
<b>Question</b>	To ask the Secretary of State for Health when he plans to publish the report on research by the Childhood Cancer Research Group at Oxford University into possible links between power lines and childhood leukaemia.		
<b>Answered by</b>	Miss Melanie Johnson Parliamentary Under-Secretary of State, Department of Health		
<b>Answer</b>	A report by the Childhood Cancer Research Group at Oxford University into possible links between power lines and childhood leukaemia is being submitted to the Department this week. At the same time, the report will be sent to a scientific journal for publication. In accordance with the usual practice, publication will follow the appropriate peer review process. This is expected to take a few weeks.		

<b>Date</b>	10 November 2004	<b>Hansard Column</b>	763W
<b>Question reference</b>	196744		
<b>Heading</b>	Electricity		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	<a href="#">To ask the Secretary of State for Trade and Industry what discussions she has had with the Secretary of State for Health on the health effects of electricity pylons.</a>		
<b>Answered by</b>	Mr. Mike O'Brien Ministers of State, Minister for Energy & e-Commerce, Department of Trade and Ind		
<b>Answer</b>	<a href="#">None.</a>		
<b>Date</b>	10 November 2004	<b>Hansard Column</b>	763W
<b>Question reference</b>	196745		
<b>Heading</b>	Electricity		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	<a href="#">To ask the Secretary of State for Trade and Industry what recent research she has evaluated on the health effects of electricity pylons.</a>		
<b>Answered by</b>	Mr. Mike O'Brien Ministers of State, Minister for Energy & e-Commerce, Department of Trade and Ind		
<b>Answer</b>	<a href="#">A comprehensive report was published on 31 March 2004 by the National Radiological Protection Board. The contents of the report and the accompanying advice to Government have been welcomed by Government and are being acted upon.</a>		
<b>Date</b>	10 November 2004	<b>Hansard Column</b>	763W
<b>Question reference</b>	196746		
<b>Heading</b>	Electricity		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	<a href="#">To ask the Secretary of State for Trade and Industry what discussions she has had with National Grid Transco on the health effects of electricity pylons.</a>		
<b>Answered by</b>	Mr. Mike O'Brien Ministers of State, Minister for Energy & e-Commerce, Department of Trade and Ind		
<b>Answer</b>	<a href="#">My officials and those in the Department of Health hold ad hoc discussions with National Grid Transco on issues that may have a bearing on possible ill health effects from high voltage overhead lines.</a>		

<b>Date</b>	08 September 2004	<b>Hansard Column</b>	1251W
<b>Question reference</b>	186155		
<b>Heading</b>	Power Lines (Residential Properties)		
<b>Questioner</b>	Mr. Greg Knight Conservative, East Yorkshire		
<b>Question</b>	To ask the Deputy Prime Minister what guidance he has issued concerning the building of residential properties under or near power lines.		
<b>Answered by</b>	Keith Hill Minister of State, Office of the Deputy Prime Minister		
<b>Answer</b>	<p>The Government have not issued guidance concerning the building of residential properties near power lines.</p> <p>However, following the publication of the National Radiological Protection Board's (NRPB) new Electromagnetic Field (EMF) guidelines in March 2004 and the associated advice to Government, the Government are committed to taking forward the issue of building near power lines in consultation with all the relevant stakeholder groups.</p>		
<b>Date</b>	20 March 2002	<b>Hansard Column</b>	439W
<b>Question reference</b>	41188		
<b>Heading</b>	National Radiological Protection Board		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Health what decision the NRPB has made with respect to its magnetic field exposure threshold		
<b>Answered by</b>	Yvette Cooper Parliamentary Under-Secretary of State for Public Health		
<b>Answer</b>	<p>The National Radiological Protection Board advice on electromagnetic field (EMF) exposure guidelines is contained in Documents of the NRPB Volume 4 Number 5, 1993 and Documents of the NRPB Volume 10 Number 2, 1998.</p> <p>A further review of the scientific basis for the EMF exposure guidelines is currently in progress. The terms of reference for the review are:</p> <p>To produce a comprehensive assessment of the science covering the areas of biology, epidemiology and dosimetry and provide guidance on limiting exposure of people to electromagnetic fields in the range of 0 Hz to 300 GHz.</p> <p>To consider where information may be lacking, discuss any need to invoke a precautionary approach and what that might be. The results of the review will be published as a consultative document in 2002.</p>		

---

<b>Date</b>	20 March 2002	<b>Hansard Column</b>	439W
<b>Question reference</b>	41186		
<b>Heading</b>	National Radiological Protection Board		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Health whether it is within the remit of the NRPB to present to the public a statement of the effects of (a) ionising and (b) non-ionising radiation.		
<b>Answered by</b>	Yvette Cooper Parliamentary Under-Secretary of State for Public Health		
<b>Answer</b>	<p>The Radiological Protection Act 1970 provided for the establishment of a National Radiological Protection Board (NRPB) with functions concerning the protection of people from radiation hazards; and for connected purposes. The Act defines "radiation hazards" as the dangers of ionising radiations emitted by radioactive substances or other sources and radiations which are electromagnetic but not ionising. The reference to non-ionising radiation was added by Statutory Instrument 1974 No. 1230.</p> <p>It is, therefore, within NRPB's remit to comment on ionising and non-ionising radiation; NRPB's website <a href="http://www.nrpb.org">www.nrpb.org</a> contains much material on both types of radiological hazard.</p>		

---

<b>Date</b>	20 March 2002	<b>Hansard Column</b>	439W
<b>Question reference</b>	41187		
<b>Heading</b>	National Radiological Protection Board		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Health what evidence underlay the NRPB's judgment that a magnetic field exposure of 1600uT is unsafe.		
<b>Answered by</b>	Yvette Cooper Parliamentary Under-Secretary of State for Public Health		
<b>Answer</b>	<p>The considerations underlying the National Radiological Protection Board's guidance on exposure to electromagnetic fields is contained in Documents of the NRPB Volume 4 Number 5, 1993 and Documents of the NRPB Volume 10 Number 2, 1999.</p> <p>Insofar as magnetic fields are concerned, the exposure guidelines are developed to prevent adverse effects of induced current in the body. The current density level given in the above NRPB advice to avoid adverse biological effects on the central nervous system is 10 milliamperes per square metre.</p> <p>Calculations were made to relate the external magnetic field to the induced current density using a dosimetric model. The model chosen was considered to be conservative hence exceeding the investigation level (1600T) does not necessarily imply an "unsafe" level.</p>		

<b>Date</b>	20 March 2002	<b>Hansard Column</b>	438W
<b>Question reference</b>	41185		
<b>Heading</b>	National Radiological Protection Board		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Health to what extent the work and advice of the NRPB is independent of Government.		
<b>Answered by</b>	Yvette Cooper Parliamentary Under-Secretary of State for Public Health		
<b>Answer</b>	<p>The National Radiological Protection Board (NRPB) was set up in 1970 under the Radiological Protection Act as a corporate body with functions concerning the protection of people from radiation hazards. It is a non-departmental public body. The chairman and members of the statutory board are appointed by Health Ministers, following Nolan/Neill principles, to ensure an appropriate mix of independent experts. Responsibility for setting the overall strategic direction of the work of NRPB, for monitoring the programme and ensuring that advice is impartial, authoritative and independent of Government and others bodies, rests with the chairman and the appointed members.</p> <p>The board benefits from the advice of three independent advisory groups composed of non-NRPB experts. The Advisory Group on Non-ionising Radiation and the Advisory Group on Ionising Radiation review the evidence on the biological and medical effects of radiation. They also advise the board on future research priorities. A new advisory group—the Radiation, Risk and Society Advisory Group—has been set up to help NRPB to improve its communication in a practical way.</p>		

<b>Date</b>	04 February 2002	<b>Hansard Column</b>	791W
<b>Question reference</b>	30752		
<b>Heading</b>	Overhead Power Cables		
<b>Questioner</b>	Mr. Wray Labour, Glasgow Baillieston		
<b>Question</b>	To ask the Secretary of State for Health what assessment he has made of the number of cases of (a) leukaemia, (b) skin cancer and (c) lung cancer which may be attributed to overhead power cables near places of residence.		
<b>Answered by</b>	Yvette Cooper Parliamentary Under-Secretary of State for Public Health		
<b>Answer</b>	<p>The Department obtains advice on the possible health implications of exposure to electromagnetic fields, including the extremely low frequency fields (ELF) associated with overhead power cables, from the National Radiological Protection Board (NRPB).</p>		

In March last year, the NRPB's Advisory Group on Non-ionising Radiation (AGNIR) issued a report on "ELF Electromagnetic Fields and the Risk of Cancer". This was issued following a wide-ranging and thorough review of scientific research related to this issue. The group concluded that the power frequency electromagnetic fields that exist in the vast majority of homes are not a cause of cancer in general. However, some epidemiological studies do indicate a possible doubling of the risk of childhood leukaemia associated with exposure to unusually high levels of power frequency magnetic fields. The AGNIR found no clear evidence of a carcinogenic effect in adults or of a plausible explanation from experiments on animals or isolated cells. Their view was that the epidemiological evidence is currently not strong enough to justify a firm conclusion that such fields cause leukaemia in children.

The board of NRPB issued a statement following publication of the AGNIR report. This indicated that if the doubling of the risk of leukaemia in children with exposures to magnetic fields above 0.4 T (400 nanotesla) was causal then an additional two cases of childhood leukaemia might be caused each year in the UK in addition to the 500 cases that would arise from other causes. Possibly one case every two years would be due to proximity to powerlines. There is no clear evidence of effects of magnetic fields on other cancers in children or of any cancers in adults. The AGNIR is, however, examining the possible effects on health of corona ions generated by powerlines. A number of concerns have been raised by members of the academic community in the United Kingdom that corona ions may have an influence on the behaviour of pollutant aerosols and cause an increase in exposure which could cause increases in risk of cancer or other diseases.

<b>Date</b>	30 January 2002	<b>Hansard Column</b>	386W
<b>Question reference</b>	30142		
<b>Heading</b>	Overhead Transmission Lines		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Trade and Industry what measures she has taken to ensure that National Grid abides by the relevant planning conditions when erecting pylons for the Lackenby to Shipton overhead transmission lines, with particular reference to access to land in dry conditions		
<b>Answered by</b>	Mr. Wilson Energy Minister		
<b>Answer</b>	It is a matter for the relevant local planning authorities to enforce the planning conditions applied to the North Yorkshire power line. However, where there is doubt over the interpretation of a condition the Department has been willing to provide clarification.		
<b>Date</b>	30 January 2002	<b>Hansard Column</b>	386W
<b>Question reference</b>	30192		
<b>Heading</b>	Miscarriage		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Trade and Industry what assessment she has made of recent research by the National Radiological Protection Board on the relationship between magnetic fields and the risk of miscarriage.		
<b>Answered by</b>	Mr. Wilson Energy Minister		
<b>Answer</b>	<p>The National Radiological Protection Board (NRPB) has not recently conducted specific research into any possible relationship between magnetic fields and the risk of miscarriage.</p> <p>Two papers have, however, been published in the January 2002 journal <i>Epidemiology</i> by authors funded by the California Department of Health Services. Both papers purport to show an epidemiological association between magnetic fields and the risk of miscarriage and have attracted some media attention.</p> <p>One leading American epidemiologist has, in an editorial in the same journal, already questioned the papers' findings and the possible influence of confounding factors.</p> <p>The conclusions of the papers are also contrary to the findings of an expert Standing Committee of the International Commission for Non-Ionising Radiation Protection, who thoroughly reviewed the published epidemiological literature on electric and magnetic fields and health over the last three decades. Their review was published in December 2001.</p> <p>The NRPB's Advisory Group on Non-Ionising Radiation (AGNIR) will be looking at these papers during the coming weeks and will report its views.</p>		

---

<b>Date</b>	30 January 2002	<b>Hansard Column</b>	386W
<b>Question reference</b>	30143		
<b>Heading</b>	Overhead Transmission Lines		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Trade and Industry what action she has taken to curb the number of overhead transmission lines that have been planned for the future.		
<b>Answered by</b>	Mr. Wilson Energy Minister		
<b>Answer</b>	The National Grid company has a duty to develop and maintain an efficient, co-ordinated and economical system of electricity transmission. It is a matter for that company what proposals it brings forward. These applications are then considered by the Department in the section 37 procedure and decisions reached on them.		

---

<b>Date</b>	24 January 2002	<b>Hansard Column</b>	1065W
<b>Question reference</b>	29256		
<b>Heading</b>	Electromagnetic Fields		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Trade and Industry what assessment she has made of the World Health Organisation's policy of prudent avoidance to exposure to electromagnetic fields; and if she will make a statement.		
<b>Answered by</b>	Mr. Wilson Energy Minister		
<b>Answer</b>	The World Health Organisation, in its publication "Electromagnetic Fields and Public Health--Extremely low frequency fields and cancer", Fact Sheet No. 263, October 2001, refers to certain precautionary measures that can be taken by Government, industry and individuals. Several of these measures are already in place in the UK.		

---

<b>Date</b>	24 January 2002	<b>Hansard Column</b>	1065W
<b>Question reference</b>	29576		
<b>Heading</b>	Overhead Transmission Lines		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Trade and Industry what recent changes she has made to her policy on overhead transmission lines.		
<b>Answered by</b>	Mr. Wilson Energy Minister		
<b>Answer</b>	None.		

<b>Date</b>	24 January 2002	<b>Hansard Column</b>	1065W
<b>Question reference</b>	29492		
<b>Heading</b>	Overhead Transmission Lines		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Trade and Industry what measures she has taken to ensure that contractors working on the Lackenby to Shipton overhead transmission line will comply with legal and safety requirements.		
<b>Answered by</b>	Mr. Wilson Energy Minister		
<b>Answer</b>	The relevant local planning authority is responsible for seeing that planning conditions are complied with. The enforcement of other statutory requirements falls to the relevant agencies.		
<b>Date</b>	17 December 2001	<b>Hansard Column</b>	108W
<b>Question reference</b>	21951,21952		
<b>Heading</b>	Power Lines		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Trade and Industry (1) what assessment she has made of the information contained in recent correspondence from the hon. Member for Vale of York on the health effects of electromagnetic fields; and if she will impose a moratorium on the proposed Lackenby to Shipton overhead transmission line; [21951]  (2) if she will (a) revoke her decision to proceed with the Lackenby to Shipton overhead transmission line and (b) enhance the power of the existing line through the Vale of York. [21952]		
<b>Answered by</b>	Mr. Wilson Energy Minister		
<b>Answer</b>	While we are always interested to note the hon. Member's representations, development consent was granted for the North Yorkshire power line in March 1998 and it is now up to the National Grid Company to implement that decision.		

<b>Date</b>	09 November 2001	<b>Hansard Column</b>	476W
<b>Question reference</b>	12385		
<b>Heading</b>	Magnetic Fields		
<b>Questioner</b>	Mr. Stevenson Labour, Stoke-on-Trent South		
<b>Question</b>	To ask the Secretary of State for Health if he will make a statement on the conclusions of the California Health Department report on the possible health risks associated with power frequency electric and magnetic fields published in April 2001.		
<b>Answered by</b>	Jacqui Smith Minister of State, Department of Health		
<b>Answer</b>	<p>The Department obtains advice on the possible health implications of exposure to electromagnetic fields, including those associated with power lines, from the National Radiological Protection Board (NRPB). The NRPB's independent advisory group on non-ionising radiation was set up:</p> <p>"to review work on the biological effects of non-ionising radiation relevant to human health and to advise on research priorities".</p> <p>In March this year the advisory group reported that there is some epidemiological evidence that prolonged exposure to higher levels of exposure to power frequency magnetic fields is associated with a small risk of leukaemia in children but this is, however, not conclusive. They also noted that laboratory studies and human adult studies do not suggest that they cause cancer in general. This view has been supported by a similar opinion expressed in a recent review of extremely low frequency electromagnetic fields and cancer by the International Agency for Research in Cancer, which classified extremely low frequency magnetic fields as "possibly carcinogenic" on the basis of the statistical association noted for children.</p> <p>The advisory group discussed the report from the California Department of Health Sciences on possible risks from exposure to power frequency electromagnetic fields at its meeting on 30 October 2001. The group has commented that they know of no further scientific evidence published since their most recent report that would alter their opinion regarding evidence concerning exposure to power frequency electromagnetic fields and the risks of cancer as set out in their published reviews. They noted however, that the California report also examined the possible effects of power frequency electromagnetic fields on a number of other diseases. NRPB is shortly to publish a review by the advisory group on electromagnetic fields and neurodegenerative diseases.</p>		

<b>Date</b>	09 November 2001 <b>Hansard Column</b> 474W
<b>Question reference</b>	12068
<b>Heading</b>	Powerlines
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York
<b>Question</b>	To ask the Secretary of State for Health what recent assessment he has made of the role of overhead powerlines in causing breast cancer.
<b>Answered by</b>	Jacqui Smith Minister of State, Department of Health
<b>Answer</b>	<p>The Department obtains advice on the possible health implications of exposure to electromagnetic fields, including those associated with power lines, from the National Radiological Protection Board (NRPB). The board of NRPB has set up an independent advisory group on non-ionising radiation (AGNIR)</p> <p>"to review work on the biological effects of non-ionising radiation relevant to human health and to advise on research priorities".</p> <p>In March this year, the NRPB's advisory group on non-ionising radiation (AGNIR) published a report on the potential risks of cancer from extremely low frequency electromagnetic fields. Overall AGNIR concluded that</p> <p>"Laboratory experiments have provided no good evidence that extremely low frequency electromagnetic fields are capable of producing cancer, nor do human epidemiological studies suggest that they cause cancer in general".</p> <p>In June, the International Agency for Research in Cancer (IARC) based in Lyon, France brought together an international team of experts to review the evidence for the possible carcinogenic effects of exposure to static and extremely low frequency (ELF) electric and magnetic fields. The IARC working group evaluated ELF magnetic fields as "possibly carcinogenic to humans" based on the statistical association of higher level residential ELF magnetic fields with increased risk of childhood leukaemia. In contrast, there is no consistent evidence that residential or occupational exposures of adults to power frequency magnetic fields increase the risk for any kind of cancer.</p>

<b>Date</b>	06 November 2001	<b>Hansard Column</b>	207W
<b>Question reference</b>	9650		
<b>Heading</b>	Power Lines		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Health what assessment he has made since April of international research on the health effect of living close to overhead transmission lines; and what review he plans of the health effects of pylons on human beings.		
<b>Answered by</b>	Ms Blears Parliamentary Under-Secretary of State for Health		
<b>Answer</b>	<p>The Department obtains advice on the possible health implications of exposure to electromagnetic fields, including the extremely low frequency fields (ELF) associated with power lines, from the National Radiological Protection Board (NRPB).</p> <p>In June, on behalf of the International Agency for Research on Cancer (IARC), a working group of scientific experts from 10 countries published its review on the health effects of static and extremely low frequency (ELF) electric and magnetic fields. The IARC working group concluded that ELF magnetic fields are possibly carcinogenic to humans based on a statistical association between higher level magnetic field exposure and the risk of childhood leukaemia.</p> <p>This conclusion of the IARC working group is consistent with that of the NRPB Advisory Group on Non-ionising Radiation (AGNIR), which issued a report in March 2001. AGNIR stressed, however, that there was insufficient evidence to justify a firm conclusion that magnetic fields cause leukaemia in children. In responding to the advisory group report the board of NRPB considered there was a need to understand better the factors that might result in higher residential exposures to magnetic fields, noting also the recent evidence from the United Kingdom childhood cancer study that suggested the higher levels of magnetic fields are not attributable solely to proximity to power lines. The Government and NRPB are currently planning a study into the factors that result in certain households having higher levels of exposure to power frequency magnetic fields.</p> <p>The AGNIR is also further considering the possible effects on health of corona ions generated by power lines. A first meeting to consider this issue has taken place and researchers on this topic have been invited to make presentations at future meetings. Information about the work of the advisory group is to be posted on the NRPB website <a href="http://www.nrpb.org.uk">www.nrpb.org.uk</a>. A final report will be published by NRPB.</p> <p>In July, the California Health Department released a draft report for public comment and this will also be considered by AGNIR.</p>		

<b>Date</b>	06 November 2001	<b>Hansard Column</b>	208W
<b>Question reference</b>	11366		
<b>Heading</b>	Power Lines		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Health if he will commission a Government inquiry into the health effects of power frequency electric and magnetic fields.		
<b>Answered by</b>	Jacqui Smith Minister of State, Department of Health		
<b>Answer</b>	<p>The Department obtains advice on the possible health implications of exposure to electromagnetic fields, including the extremely low frequency (ELF) fields associated with power lines, from the National Radiological Protection Board (NRPB). The Board of NRPB has set up an independent Advisory Group on Non-ionising Radiation (AGNIR) chaired by the eminent epidemiologist Sir Richard Doll. Members are some of the United Kingdom's leading experimental scientists and epidemiologists. The AGNIR has prepared a number of reports on the possible health effects of exposure to power frequency electric and magnetic fields. Its most recent report was published in March 2001 and provided a comprehensive summary of sources of exposure to ELF electromagnetic fields and methods of measurement as well as reviews of experimental and epidemiological (human health) studies.</p>		

AGNIR continues to monitor research on this topic.

In June, the International Agency for Research in Cancer (IARC) based in Lyon, France, brought together an international team of experts to review the evidence for the possible carcinogenic effects of exposure to static and ELF electric and magnetic fields. It concluded that magnetic fields are "possibly carcinogenic" to humans based on a statistical association between higher level magnetic field exposure and the risk of childhood leukaemia. This conclusion is consistent with the views expressed by AGNIR.

These two reviews by teams of eminent scientists are consistent in their findings and provide the most up to date published reviews of this subject.

AGNIR continues to monitor research on this topic.

In June, the International Agency for Research in Cancer (IARC) based in Lyon, France, brought together an international team of experts to review the evidence for the possible carcinogenic effects of exposure to static and ELF electric and magnetic fields. It concluded that magnetic fields are "possibly carcinogenic" to humans based on a statistical association between higher level magnetic field exposure and the risk of childhood leukaemia. This conclusion is consistent with the views expressed by AGNIR.

These two reviews by teams of eminent scientists are consistent in their findings and provide the most up to date published reviews of this subject.

<b>Date</b>	06 November 2001	<b>Hansard Column</b>	208W
<b>Question reference</b>	11416		
<b>Heading</b>	Power Lines		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Health what assessment he has made of the health risks of a (a) cancer and (b) non-cancer nature and other health consequences of electro-magnetic fields situated near to overhead power lines.		
<b>Answered by</b>	Jacqui Smith Minister of State, Department of Health		
<b>Answer</b>	<p>The Department obtains advice on the possible health implications of exposure to electromagnetic fields, including those associated with power lines, from the National Radiological Protection Board (NRPB). The Board of NRPB has set up an independent Advisory Group on Non-ionising Radiation (AGNIR) "to review work on the biological effects of non-ionising radiation relevant to human health and to advise on research priorities".</p> <p>Most of the research carried out on possible health effects of exposure to electromagnetic fields and radiation has concentrated on cancer risk. In March this year, the AGNIR published a report on the potential risks of cancer from exposure to extremely low frequency electromagnetic fields that includes those from power lines. The report provides a comprehensive review of experimental and epidemiological studies relevant to an assessment of the possible risk of cancer as well as information on sources of exposure and their measurement.</p> <p>An assessment has been carried out by AGNIR of the potential neurodegenerative effects of exposure to electromagnetic fields. A report has been prepared and publication is imminent.</p> <p>The AGNIR is also further considering the possible effects on health of corona ions generated by power lines. A first meeting to consider this issue has taken place and researchers on this topic have been invited to make presentations at future meetings. A final report will be published by NRPB.</p>		

<b>Date</b>	06 November 2001	<b>Hansard Column</b>	209W
<b>Question reference</b>	11187		
<b>Heading</b>	Power Lines		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Health if he will make an assessment of the possible links between childhood leukaemia and magnetic field exposures above 0.4 microtesla.		
<b>Answered by</b>	Jacqui Smith Minister of State, Department of Health		
<b>Answer</b>	<p>The Department obtains advice on the possible health implications of exposure to electromagnetic fields, including those associated with power lines, from the National Radiological Protection Board (NRPB).</p> <p>In March this year NRPB's Advisory Group on Non-ionising Radiation (AGNIR) published a review of extremely low frequency electromagnetic fields and the risk of cancer, which included an assessment of the possible link between childhood leukaemia and average magnetic field exposures of 0.4 microtesla or more.</p> <p>AGNIR concluded that recent large and well-conducted epidemiological studies, both in this country and overseas, have provided better evidence than was available in the past on the relationship between power frequency magnetic field exposure and the risk of cancer. Taken in conjunction, they suggest that relatively heavy average exposures of magnetic fields at 0.4 microtesla or more are associated with a doubling of the risk of leukaemia in children under 15 years of age. However, the evidence is not conclusive because of the small number of children exposed, and other features related to the design of the studies.</p> <p>NRPB have noted that, if the association between magnetic fields and the risk of cancer was causal, of the 500 cases of childhood leukaemia occurring in the United Kingdom each year an additional 2 cases might result from exposure to magnetic fields at exposures above 0.4 microtesla. AGNIR have pointed out that, in the UK, very few children (perhaps 4 in 1000) are exposed to 0.4 microtesla or more. The UK study (United Kingdom Childhood Cancer Study), with much the largest number of direct measurements of exposure, found no evidence of risk at lower levels.</p>		

<b>Date</b>	16 October 2001	<b>Hansard Column</b>	1222W
<b>Question reference</b>	3847		
<b>Heading</b>	Overhead Powerlines		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Environment, Food and Rural Affairs what recent representations she has received on the environmental implications of overhead powerlines; and if she will make a statement.		
<b>Answered by</b>	Mr. Wilson Energy Minister		
<b>Answer</b>	I have been asked to reply.  The Department has received representations on the possible health effects of overhead lines. Overhead lines, however, remain a cost-effective and acceptable means for transferring power from producers to the consumer.		
<b>Date</b>	20 July 2001	<b>Hansard Column</b>	594W
<b>Question reference</b>	5431		
<b>Heading</b>	Lackenby to Shipton Transmission Line		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Trade and Industry what recent representations she has received on the proposal for the Lackenby to Shipton overhead transmission line; and if she will make a statement.		
<b>Answered by</b>	Mr. Wilson Energy Minister		
<b>Answer</b>	The Department receives continued representations on the subject of the North Yorks power line. Development consents for that line were granted in March 1998 and there is no machinery for now reviewing those consents.		
<b>Date</b>	20 July 2001	<b>Hansard Column</b>	593W
<b>Question reference</b>	5427		
<b>Heading</b>	Lackenby to Shipton Transmission Line		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Trade and Industry if she will take steps to ensure that the NGC respects the legal entry onto farmland in connection with the Lackenby to Shipton overhead transmission line.		
<b>Answered by</b>	Mr. Wilson Energy Minister		
<b>Answer</b>	The National Grid Company has been granted compulsory access to land in certain places along the route of the North Yorks power line and I would expect all parties to behave lawfully in the exercise of that right.		

<b>Date</b>	20 July 2001	<b>Hansard Column</b>	594W
<b>Question reference</b>	5429		
<b>Heading</b>	Lackenby to Shipton Transmission Line		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Trade and Industry if she will take steps to ensure that no further work will continue on the Lackenby to Shipton overhead transmission line until foot and mouth has been eradicated.		
<b>Answered by</b>	Mr. Wilson Energy Minister		
<b>Answer</b>	The National Grid Company is in touch with the county council and the Department for Environment, Food and Rural Affairs and will be consulting them before re-starting any of its site-based works.		

<b>Date</b>	20 July 2001	<b>Hansard Column</b>	594W
<b>Question reference</b>	5430		
<b>Heading</b>	Pylons (Skin Cancer)		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Trade and Industry what assessment she has made of evidence suggesting a potential link between pylons and skin cancer.		
<b>Answered by</b>	Mr. Wilson Energy Minister		
<b>Answer</b>	The potential link between skin cancer and overhead power lines is one of several ill health effects that have been attributed to the electromagnetic fields that are produced by electrical equipment.		

The Government obtain advice on the possible health implications of exposure to electromagnetic fields, including those associated with power lines, from the National Radiological Protection Board (NRPB). In a report 1 published on 6 March the NRPB's Advisory Group on Non-Ionising Radiation reviewed the potential risks of types of cancer from extremely low frequency electromagnetic fields. Their conclusion, based on laboratory experiments and epidemiological studies, is that there is no evidence that extremely low frequency electromagnetic fields are capable of producing cancer.

Some evidence has been suggested that the electric fields associated with the higher-voltage power lines are responsible via indirect effects for a range of illnesses including skin cancer. These effects have been considered to arise from changes in the concentration and deposition of particles and other environmental pollutants in the presence of corona ions found in the vicinity of power lines. The physical principle for particle deposition in large electric fields is well understood. However, the NRPB has concluded that it has not been sufficiently demonstrated whether any such enhanced deposition will increase human exposure in a way that will result in adverse health effects. The difficulties with this hypothesis in relation to naturally occurring radiation have been examined in detail earlier by the NRPB and others in peer-reviewed journals. The NRPB's Advisory Group had already identified that further consideration needs to be given to the possible effects that might result from the dispersal of corona ions and the way such effects may be assessed. This work will start shortly.

1 Documents of the NRPB Vol. 12, No. 1, 2001) and copies have been placed in the Library. Information can be found on [www.nrpb.org.uk](http://www.nrpb.org.uk)

<b>Date</b>	20 July 2001	<b>Hansard Column</b>	593W
<b>Question reference</b>	5428		
<b>Heading</b>	Lackenby to Shipton Transmission Line		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Trade and Industry what recent representations she has received in respect of the granting of wayleaves to facilitate the construction of the Lackenby to Shipton overhead transmission line; and what steps are being taken to ensure that landowners will be able to reach a negotiated agreement before construction of the line commences.		
<b>Answered by</b>	Mr. Wilson Energy Minister		
<b>Answer</b>	The National Grid Company recently sought clarification of access rights under compulsory wayleaves and a copy of the Department's response has been seen by the objector's group, REVOLT. Given that the crucial development decision has been taken, in March 1998, and compulsory wayleaves covering access granted after due consideration, parties should already be co-operating in the implementation of the development decision.		

<b>Date</b>	18 July 2001	<b>Hansard Column</b>	222W
<b>Question reference</b>	3846		
<b>Heading</b>	Overhead Powerlines		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Health what recent representations he has received on the health implications of overhead powerlines; and if he will make a statement.		
<b>Answered by</b>	Yvette Cooper Parliamentary Under-Secretary of State for Public Health		
<b>Answer</b>	<p>The Department obtains advice on the possible health implications of exposure to electromagnetic fields, including those associated with power lines, from the National Radiological Protection Board (NRPB). In a report published on 6 March, the NRPB's Advisory Group on Non-ionising Radiation reviewed the potential risks of cancer from extremely low frequency electromagnetic fields (documents of the NRPB Volume 12, Number 1, 2001), copies of which are available in the Library. Information can be found on <a href="http://www.nrpb.org.uk">www.nrpb.org.uk</a>.</p> <p>The report states that</p> <p>"there is some epidemiological evidence that prolonged exposure to higher levels of power frequency magnetic fields is associated with a small risk of leukaemia in children. In practice, such levels are seldom encountered by the general public in this country."</p> <p>The NRPB have calculated that this relates to about 0.5 per cent. of the total population. The report also states that</p> <p>"In the absence of clear evidence of a carcinogenic effect in adults, or of a plausible explanation from experiments on animals or isolated cells, the epidemiological evidence is currently not strong enough to justify a firm conclusion that such fields cause leukaemia in children."</p> <p>An NRPB response statement noted that the higher levels of magnetic fields are not attributable solely to proximity to power lines. The Government and NRPB are currently planning a study into the factors that lead to certain households having higher levels of electromagnetic fields.</p>		

<b>Date</b>	13 July 2001	<b>Hansard Column</b>	665W
<b>Question reference</b>	1858		
<b>Heading</b>	Electricity Pylons and		
<b>Questioner</b>	Mr. Laurence Robertson Conservative, Tewkesbury		
<b>Question</b>	To ask the Secretary of State for Health what recent research his Department has (a) commissioned and (b) evaluated into the possible health effects on people who live near (i) electricity pylons and (ii) telecommunications masts; and if he will make a statement		
<b>Answered by</b>	Yvette Cooper Parliamentary Under-Secretary of State for Public Health		
<b>Answer</b>	<p>[holding answer 3 July 2001]: The Department obtains advice on potential health effects risks associated with electromagnetic fields (EMF), such as those from power lines or mobile phone masts, from the National Radiological Protection Board (NRPB).</p> <p>Power line EMF has been reviewed in a report published on 6 March by the NRPB's Advisory Group on non-ionising radiation and provides an assessment of the potential risks of cancer. (Documents of the NRPB Vol. 12, No 1, 2001). Copies have been placed in the Library. The board of the NRPB also published a response statement which can be found on the NRPB website <a href="http://www.nrpb.org.uk">www.nrpb.org.uk</a>. The report states that any possible risk of childhood leukaemia relates to those exposed at relatively high levels of domestic magnetic field exposure but that these are not necessarily associated with proximity to pylons or overhead power transmission lines. The conclusions indicate that the question of whether exposure to electromagnetic fields can influence the development of cancer cannot at present be completely resolved.</p> <p>Mobile phone base stations (transmission masts) emit radio waves at very different frequencies to those fields generated by power lines. They are therefore being dealt with as a separate issue. The possible public health implications of mobile phone technology has been investigated by the Independent Expert Group on Mobile Phones (the Stewart group). Its report, published in May 2000 concluded that:</p> <p>"the balance of evidence indicates that there is no general risk to the health of people living near to base stations on the basis that exposures are expected to be small fractions of guidelines."</p> <p>It also included a recommendation for a substantial research programme to be set up to investigate the possible effects of mobile phone technology more generally. A three year programme, jointly funded by Government and industry, has now been launched and has invited proposals relating to all aspects of mobile phone technology including telecommunications masts and handsets. The research is being undertaken under the direction of an independent programme management committee. Details can be found on the Department website <a href="http://www.doh.gov.uk/mobilephones">www.doh.gov.uk/mobilephones</a>.</p> <p>The Department is also continuing to provide financial support for the World Health Organisation International Electromagnetic Fields (EMF) Project which is comprehensively reviewing EMF effects, including those of power frequency fields and radio waves.</p>		

<b>Date</b>	29 March 2001	<b>Hansard Column</b>	753W
<b>Question reference</b>	153635		
<b>Heading</b>	Overhead Power Lines		
<b>Questioner</b>	Ms Keeble Labour, Northampton North		
<b>Question</b>	To ask the Secretary of State for Health what assessment he has made of the reported links between electricity pylons and childhood leukaemia.		
<b>Answered by</b>	Yvette Cooper Parliamentary Under-Secretary of State for Public Health		
<b>Answer</b>	<p>[holding answer 22 March 2001]: The Department obtains advice on potential health risks associated with electromagnetic fields (EMF) from the National Radiological Protection Board (NRPB). In a report published on 6 March the NRPB's advisory group on non-ionising radiation has provided an assessment of the potential risks of cancer from extremely low frequency EMFs, (documents of the NRPB Vol. 12, No 1, 2001) and copies have been placed in the Library.</p> <p>The report states that</p> <p>"there is some epidemiological evidence that prolonged exposure to higher levels of power frequency magnetic fields is associated with a small risk of leukaemia in children. In practice, such levels are seldom encountered by the general public in this country."</p> <p>The NRPB have calculated that this relates to about 0.5 per cent. of the total population.</p> <p>The board of the NRPB also published a response statement that can be found on the NRPB website <a href="http://www.nrpb.org.uk">www.nrpb.org.uk</a>. The statement includes the following points. From the findings of the main study in this country (United Kingdom childhood cancer study) the higher levels of magnetic fields are not attributable solely to proximity to power lines. The conclusions of the report indicate that the question whether exposure to electromagnetic fields can influence the development of cancer cannot at present be completely resolved. The report made a number of specific research recommendations. The board also considers that the report provides no additional scientific evidence to require a change in exposure guidelines.</p> <p>The Department will consider carefully the recommendations of the NRPB and commission appropriate research in the light of that which is already under way. Current research includes Government- funded studies in this country and support for the multinational EMFs project set up and co-ordinated by the World Health Organisation.</p>		

<b>Date</b>	27 March 2001	<b>Hansard Column</b>	582W
<b>Question reference</b>	155052		
<b>Heading</b>	Overhead Power Lines		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	To ask the Secretary of State for Trade and Industry what recent representations he has received on the setting up of a Royal Commission on the relationship between overhead power lines and the incidence of cancer and leukaemia; and if he will make a statement.		
<b>Answered by</b>	Mr. Hain Energy Minister		
<b>Answer</b>	<p>The only representation which has been received on the setting up of a Royal Commission was the recent correspondence forwarded by the hon. Member for the Vale of York from one of her constituents, Professor Henshaw.</p> <p>The hon. Lady will know that the Advisory Group on Non-Ionising Radiation published its report: "Extremely low frequency Electromagnetic Fields and the Risk of Cancer" on 6 March 2001. (Documents of the NRPB Vol 12, No 1, 2001). Copies have been placed in the Library of the House.</p> <p>The independent Advisory Group that is chaired by Sir Richard Doll reports directly to the Board of the National Radiological Protection Board (NRPB). Its terms of reference are:</p> <p>"To review work on the biological effects of non-ionising radiation relevant to human health and to advise on research priorities". The remit covers static and extremely low frequency electric and magnetic fields (including those at power frequencies) and radio-frequency fields and radiation such as infrared, visible and ultraviolet.</p> <p>The members of the Advisory Group are appointed by the NRPB on the basis of their proven research expertise. They are also independent of Government and commercial interests. Membership reflects the work of the Advisory Group at any particular time.</p> <p>There is every benefit in maintaining a group that is independent and comprises a number of particularly eminent scientists. I could not foresee the need for establishing a Royal Commission on this issue.</p>		

<b>Date</b>	23 March 2001	<b>Hansard Column</b>	389W
<b>Question reference</b>	154787		
<b>Heading</b>	National Radiological Protection Board		
<b>Questioner</b>	Miss McIntosh Conservative, Vale of York		
<b>Question</b>	<p>To ask the Secretary of State for Trade and Industry what assessment the National Radiological Protection Board has made of the study by Sir Richard Doll on a potential cancer link to overhead power line transmission; if he will make it his policy to (a) apply the precautionary principle and (b) impose (i) a buffer zone around the houses or (ii) a rerouting to avoid houses built under the proposed Lackenby to Shipton power line; and if he will make a statement.</p>		
<b>Answered by</b>	Mr. Hain Energy Minister		
<b>Answer</b>	<p>Sir Richard Doll's Advisory Group on Non-Ionising Radiation published its report "Extremely low frequency Electromagnetic Fields and the Risk of Cancer" on 6 March 2001. (Documents of the NRPB Vol 12, No 1, 2001). Copies have been placed in the Library of the House. The National Radiological Protection Board (NRPB), an independent body set up under statute and who provide scientific advice to Government issued a response statement which can be found on the NRPB website <a href="http://www.nrpb.org.uk">www.nrpb.org.uk</a>.</p> <p>The report states that any possible risk of childhood leukaemia relates to those exposed at relatively high levels of domestic exposure but that these are not necessarily associated with proximity to overhead transmission lines. The NRPB consider that the report provides no additional scientific evidence to require a change in the guidelines to limit exposure to extremely low frequency electromagnetic fields.</p> <p>The Government will consider carefully the recommendations of the NRPB and commission appropriate research with regard to that which is already under way. In the light of the available evidence and the advice from the NRPB it is too soon to state whether particular approaches will be taken.</p> <p>The advice of the NRPB is welcomed and will be considered in a Government response to a European Union Recommendation on limiting public exposure to electromagnetic fields.</p> <p>With regard to the proposed Lackenby to Shipton power line, this has been routed away from communities and individual dwellings on grounds of general amenity and was the subject of an environmental assessment and statement at the public inquiries. There are no houses under the proposed line. The existing 275kV line from Lackenby to Norton--30 km long (around the south and west of Middlesbrough) will be dismantled after the construction of the new 400kV line. There are 5,000 homes within 200 metres of the line to be dismantled compared with 250 homes within 200 metres of the new line. There is therefore a considerable net benefit in terms of general amenity.</p>		

<b>Date</b>	09 March 2001	<b>Hansard Column</b>	379W
<b>Question reference</b>	153044		
<b>Heading</b>	Low Frequency Radio Transmissions		
<b>Questioner</b>	Mr. Laurence Robertson Conservative, Tewkesbury		
<b>Question</b>	To ask the Secretary of State for Health what investigations he has made into the effects on health of extremely low frequency radio transmissions; and if he will make a statement.		
<b>Answered by</b>	Yvette Cooper Parliamentary Under-Secretary of State for Public Health		
<b>Answer</b>	<p>The Department obtains advice on potential health effects risks associated with extremely low frequency electromagnetic fields (EMF) from the National Radiological Protection Board (NRPB). A report published on 6 March by the NRPB's Advisory Group on Non-ionising Radiation was a review of all available published work to date and provides an assessment of the potential risks of cancer from electromagnetic fields (Documents of the NRPB Volume 12, Number 1,2001). Copies are available in the Library. The board of the NRPB also published a response statement which can be found on the NRPB website: <a href="http://www.nrpb.org.uk">www.nrpb.org.uk</a>.</p> <p>The report states that any possible risk of childhood leukaemia relates to those exposed at relatively high levels of domestic exposure but that these are not necessarily associated with proximity to pylons or overhead power transmission lines. The conclusions indicate that the question whether exposure to electromagnetic fields can influence the development of cancer cannot at present be completely resolved. The report made a number of specific research recommendations. The NRPB consider that the report provides no additional scientific evidence to require a change in the guidelines to limit exposure to extremely low frequency EMF.</p> <p>The Department will consider carefully the recommendations of the NRPB and commission appropriate research in the light of that which is already under way. Current research includes a number of Government-funded studies in this country and support for the multinational electromagnetic fields project set up and co-ordinated by the World Health Organisation.</p> <p>N</p>		

<b>Date</b>		<b>Hansard Column</b>	
<b>Question reference</b>	162331		
<b>Heading</b>			
<b>Questioner</b>			
<b>Question</b>			
<b>Answered by</b>	Mr. Iain Wright		
<b>Answer</b>	No planning guidance on this subject has been issued to local authorities. At present, there are no planning restrictions on development close to power lines other than the need to observe safe clearance distances.		