

Consideration of PE812 in advance of review on December 1st 2009
Caroline Paterson, *Stirling Before Pylons* November 18th 2009

- On October 16th the joint government response to the Stakeholders Advisory Group on ELF EMFs (SAGE) Report was published (I attach a detailed review for your information). This claims that there are no adverse health effects associated with high-voltage overhead transmission lines (HVOTLs) without reference to any scientific evidence and little to SAGE, and appears to have been predetermined in 2004. The document has been condemned by leading scientists, together with *Children With Leukaemia*, (who part funded SAGE). The scientific evidence for adverse health effects is now overwhelming and still growing. Just this week a Japanese study (Saito et al, Journal of Epidemiology 2009) reveals an **eleven-fold increase in brain tumours for children exposed to magnetic fields above 0.4 microtesla**. It is therefore very disappointing that the Scottish Government is party to the governmental response denying any adverse health effects and ignoring the calls of many MSPs for the adoption of a precautionary approach in line with much of Europe. Eventually, denial of the evidence will have to be addressed, but the longer it continues, the more people will suffer and the costlier it will be to rectify this threat imposed by our grid infrastructure.
- By the date of PE812's review (Dec 1st) it is likely that a decision will have been taken on the Beaulieu to Denny 400kV proposal. *Stirling Before Pylons* was alerted to the health issue by this application, but PE812 is not specific to it and relates to all new HVOTLs. In England, awareness of the adverse health effects of power lines is growing with the announcement of new nuclear plants and their associated transmission lines, and in Scotland, a series of new HVOTLs relating to Renewable schemes is expected to be announced shortly.

***Stirling Before Pylon's* does not support the closure of PE812, since the health threat posed by new HVOTLs remains and will only increase while the issue fails to be addressed by those in authority.** With a poor track record on asbestos, BSE, smoking etc, the governments would do well to follow a precautionary approach.

I don't know where PE812 can go from here, but our concerns have still not been addressed, despite presenting robust scientific evidence. I hope the Committee can find a way forward, because failing that, all our efforts will have been in vain and thousands of lives will be seriously threatened until meaningful precautions are adopted. **Neither the SG nor the HPA has addressed our concerns, nor have they reviewed the scientific evidence underlying PE812, which was submitted in 2004.**

Response to Scottish Government's (Mike Palmer) 21st Oct letter on PE812

Page 1: Full review of the government's response to SAGE is attached. Not one of the 4 low-cost measures recommended will result in any meaningful reduction in public exposure to power line EMFs, which will only be achieved if there is a building moratorium, as outlined by SAGE. The Government's rejection of this option on the basis of SAGE's cost benefit analysis (CBA) needs closer examination, as many stakeholders condemned **SAGE's CBA as deeply flawed**. Critical differences revolved around whether only the condition of childhood leukaemia was assessed and even then, what the projected number of associated cases was – varying from c.1-2 cases to 60 cases pa. The CBA would alter radically if illnesses such as Alzheimer's,

adult cancers, depression and miscarriage were factored into the calculations. Moreover, mitigation costs through undergrounding were hampered by SAGE's over-inflated costings provided by the National Grid (12-20 times that of an overhead line), whilst European costings (using XLPE technology with lifetime costs of 3-5 times that of an overhead line), were persistently ignored.

Page 2: The Scottish Government's liaising with industry on the implementation of ICNIRP's recommendation of 100 microtesla is irrelevant since this happens to be the maximum reading under a 400kV line (allowing such lines to pass directly over homes). Moreover, the risk of childhood leukaemia is internationally recognised as doubling with exposure above 0.4 microtesla (250 times below the ICNIRP recommendation). EC/519/1999 is already obsolete, with a European Parliamentary Resolution passed on April 2nd 2009 calling for stricter regulation and protection of residents from the potential risks of EMFs, including a review of the scientific basis and adequacy of the EMF limits laid down in Recommendation 1999/519/EC.

Shona Robison's request to the HPA to "keep under review...and report back any new scientific developments as they emerge" fails to inspire public confidence, as the **HPA has already failed to report to the Scottish Government on any of the major studies published in this field in the last 5 years.** This includes the UK's publicly funded Draper Report (2005), which not only confirmed the doubled risk of childhood leukaemia for those born close to (within 100m of) HVOTLs, but showed an increased risk extending to 600m. Furthermore, new studies have been published showing an association with conditions other than childhood leukaemia, including the Lowenthal study (2007) which shows a five-fold increased risk in certain adult leukaemias and lymphomas for those whose childhood was spent within 300m of HVOTLs, and two major studies showing clear and quantifiable associations with Alzheimer's disease (Huss et al & Garcia et al 2008). Yet the Dept of Health and HPA have declined to review these papers, despite the European Commission's Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR) latest Opinion (March 2009) which regards these papers as "*serious matters and further investigation will be pursued*". Much work has also been published on the mechanistic connection between power line EMFs and certain diseases.

The European Parliamentary Resolution of April 2009 covers EMF exposures from a range of sources including power lines. The focus of this Resolution is not just (SG) "*the need for further clarification of the possible health risks and the need for better information to the public*", but rather a call for the "***stricter regulation and protection of residents from the potential risks of EMFs, including a review the scientific basis and adequacy of the EMF limits as laid down in Recommendation 1999/519/EC, in the light of the fact that many member states have voluntarily introduced much stricter regulations than are required by the EU***". The public need precautions to protect them from this imposed threat over which they have no jurisdiction. Information without precaution would be useless, but since such information would be provided by the HPA, which is failing to even address the last five years of evidence, there is no hope that it would be accurate.

Page 3: Christopher Harvie's written statement (May 19, 2009) does not relate mainly to the European Resolution, rather it addresses the mass of scientific evidence showing adverse health effects associated with power line EMFs which has been

published since 2004 and calls on the Scottish Parliament and Government to review these studies. It also lists some of the 10 EU member states which have already introduced meaningful precautions, and advises that sections of the Beaulieu to Denny line be undergrounded or rerouted so as not to create an expensive, long-term health hazard that future generations may rightfully blame those in authority for.

The *diligence, expertise and independence* of the HPA in this field do need to be questioned, as there is no evidence base for their denial of adverse health effects, whilst a mass of scientific evidence to the contrary continues to accumulate.

With regard to the Scottish Government's supposed application of the precautionary principle, suffice to quote the leading charity *Children With Leukaemia's* response: "Government refuses to protect young lives...As scientific evidence continues to emerge in this arena the time for precautionary action to protect children is now!"

Response to Health Protection Agency (Justin McCracken) letter of Sept 25th

Page 2, para 2: Dismissal of the European Parliamentary Resolution of April 2009 on the grounds that the HPA already recommends compliance with ICNIRP's 1999 limit misses the point completely, since the latest Resolution is calling for a review of the 1999 limits, which are meaningless in practical terms.

The HPA's special role in advising Government on the SAGE Report (Oct 2007) has been much criticised for undermining the whole ethos of this stakeholder initiative. The HPA ignored almost all the scientific evidence raised within SAGE and has returned to an evidence base pre-dating the beginning of the review in 2004...as confirmed in the final paragraph on page 2: "*The current HPA advice is based on a comprehensive review of the science published in 2004*". I am not alone in suspecting that the current HPA position was already predetermined back in 2004. **The SAGE process appears to have been a charade**, with many stakeholders suspicious that its sole function was to diffuse public concern when the Draper Report was finally made public in 2005. This is unacceptable, particularly with the wealth of new studies showing serious adverse health effects published since that date. The HPA has failed to produce reviews of any of these, and I would question whether they have the expertise necessary to "monitor (these) carefully" as claimed. When we approached them for advice in 2004 we were told that they did not have the necessary resources to advise industry and redirected us to Bristol University. Now they appear to have a monopoly in determining government policy. Although the HPA continues to promulgate its view that "*the balance of evidence has not changed in a way that leads us to consider an update to our advice*", this must be set against not just **the mass of new scientific evidence which shouts to the contrary, but also, precautionary legislation being adopted throughout the world**. The German ENLAG legislation (August 2009) requires that undergrounding be considered should a HVOTL come within 200m of an individual property or 400m of a community. In Stirling the Beaulieu to Denny line, if approved, will pass almost over peoples' roofs. UK policy is becoming increasingly isolated within Europe - one of the reasons why the European Resolution called for a review of the 1999 ICNIRP guidelines.

The UK public deserve better, but are being let down by governments which simply do not care to investigate this "inconvenient truth", and as a result are knowingly building serious illness for present and future generations into our grid system.

