

(Sent 17 November 2014)

From: Mrs V.C.K. Metcalfe

Department of Energy & Climate Change
3 Whitehall Place
London
SW1A 2AW

Your ref: TO2014/12766

Sir,

Open Letter response to Ref. TO2014/12766 31.10.2014

Your apology of 31st October 2014 is accepted in respect of the very late response to my email of the 19th August 2014. This communication is the result of further discussions with colleagues and experts in the fields of health, engineering, the environment and law. Due to the seriousness of current findings which have increased coverage of the situation, there are issues remaining listed 1 - 4 (under Health) amongst other concerns which require further examination and response.

I am attaching an important recent submission by Pat Swords BE CEng FICChemE CEnv MIEMA to the Northern Ireland Assembly Environment Committee¹ which, being part of the UK affects not only Northern Ireland, but becomes applicable to the whole of our nation. Also attached is a report covering Non Conformance of Wind turbines to Design and CE Certification Criteria sent to the Workplace Contact Unit of the Irish HSA by Mr. John Dooley².

Health.

In respect of safety issues extending to workers in the wind industry, Dr. Mauri Johansson, MHH, is a specialist in community and occupational medicine with more than 30 years in clinical occupational medicine, much of it related to adverse health effects caused by organic solvents - the same solvents which themselves constitute the chemistry that is inside often warm nacelles. Dr. Johansson has documented that there is a real problem – among several others. He notes that there are several toxic substances in the nacelles of wind turbines that should be considered in detail, e.g. that solvent vapours causing dizziness – not that good on the top of a 80 metre high ladder! He correctly observes that the whole work environment situation in Industrial Wind Turbines is completely unacceptable and that these jobs now are among the most dangerous in all industry.

1. Those having worked in the petrochemical industry are reporting being puzzled by the seeming lack of attention by the Health & Safety Executive to the wind industry. *Please can you provide under Fol rules any HSE reports relating to wind turbine accidents?*

The HSE are reported to have ‘breathed down the necks’ of this industry’s employees and were very concerned about both in house and public safety issues (demanding reports on ANY incident based on which they would provide their input, recommendations and penalties – if appropriate), similarly SEPA were ever present and very concerned about any environmental impact on the public - and the local council safety officers were highly attentive. This “attention” was on top of their own (independent of local management) in-house safety and environmental functions. Questions are being asked about how and why it is that the wind industry manages somehow to largely escape this “attention” from these regulatory bodies. *Does the DECC know of any industry based ‘in house’ safety functions?*

The health of workers manufacturing/maintaining turbines is known to be the responsibility of the HSE in the UK. However, on accidents/incidents HSE simply state they have no data to work with whereas the recent European document, mainly written by UK Health & Safety Laboratory members i.e. <https://osha.europa.eu/en/publications/reports/occupational-safety-and-health-in-the-wind-energy-sector>

uses the data compiled by CWIF. If the claim by HSE that they have no data is due to Renewable UK's new safety site <https://www.renewablesafety.org/> with only one link accessible to non-members - <http://www.renewableuk.com/en/our-work/health-and-safety/> revealing that the page with the link for reporting incidents confirms it is confidential and only for the industry - ***please could you explain why this does not breach the need for the public to be informed of events which have the potential to affect their safety - and does not breach relevant Directives and those of the Aarhus Convention which apply?***

2. Your letter advises that wind farms are consented subject to complying with ETSU to protect health and amenity etc. However, it is clear that through upholding the recent Appeal by CWP at Sneddon Law, the Reporter has consigned residents to cumulative noise which will now legally be able to ***exceed*** ETSU limits. It should be remembered that the expert brought in at the last minute for the Appellants was not independent being the acoustic expert Andy MacKenzie of Hayes MacKenzie. As you will know he is advising DECC on better implementation of ETSU. He also co-authored the IOA Good practice guide for ETSU 2013 which is therefore also compiled by a less than independent panel.
Please will you explain how this is protecting residential health and amenity by more rigorous implementation of that which is increasingly being proven to be unfit for purpose?

A submission received by the Reporter pointed out that (my emphasis) 'In setting out the procedure in para 54 the reporter has revealed how complex this issue can be. Whilst respecting the reporter's opinion I have to retain my original view that there quite simply is no solution to the cumulative noise condition other than turn the Whitelee turbines off or include the background noise level in the limits. ***That means that a protocol cannot be devised that can protect residents.***' This alone is an appalling indictment of government policy and the situation facing everyone forced to live in proximity to turbines.

Government departments need to appreciate the implications of the noise issues and sound across water as reported here <http://waubrafoundation.org.au/resources/huson-wl-navitus-bay-wind-park-submission/> by W Les Huson. ***I am requesting a legal document from DECC that the standards set in the current regulations of ETSU guarantee that no harm will come to those living in the vicinity of wind turbines. I would also like a written declaration from DECC that they have independently fully researched LFN and infrasound and completed the full environmental impact assessment (as described in 1.3 of Pat Swords' attached submission) and found that there is no link or evidence of negative impacts on the health of those living close to wind turbines.*** Adding to the burden of evidence relating to harm, there is increasing evidence from investigation by Dr. Rachel Connor into water contamination issues that industrial wind turbines are causing contamination and pollution of both public and private water supplies. This is supported by research from Glasgow University as attached³.

The Environmental Liabilities Directive:

<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32004L0035&from=EN>

Article 2(1)(3) defines water damage and 'damage' means a measurable adverse change in a natural resource or measurable impairment of a natural resource service which may occur directly or indirectly.

In 2010 Alex Salmond announced that Scottish Water would partner with Renewable Energy to enable 80,000 acres of 'our' land to be available for wind farm development. This precious land for reservoirs and their catchment area is now being contaminated with borrow pits (quarries), turbine foundations and access roads. 'Our' Forestry Commission Scotland land – is now also divided up on the instruction of the Scottish Government for wind farm development. 'Mass' felling of often 'immature' trees to vacate land for wind farms is adding to this contamination problem due to excessive machinery activity and ground disturbance of larger than normal areas of FCS land causing contamination of water catchment areas and polluted run-off into reservoirs and rivers. A similar scenario exists in Wales.

All public and private water supplies in the vicinity of wind turbines *must have a credible risk analysis* (from an independent geohydrology report) which assesses the likelihood of both disruption (reduced quantity)

and contamination of supplies. It is not adequate to map collection tanks and not to map the water source or rely on a developer's Environmental Statement.

A communication circulated by Mike Hulme of the Den Brook Judicial Review Group may not have been seen and is both relevant and important to include. Extracts and links from the report follow:

'There has been a major breakthrough with 'live' noise monitoring from MAS Environmental in conjunction with the longstanding and determined efforts of the Cotton Farm Action Group (CFAG).

Existing and future wind turbine neighbours are advised to seriously consider following this important lead set by the CFAG.

Cotton Farm Wind Farm Permanent Noise Monitoring Exercise:

- 1) *The aim of the long term noise monitoring exercise is to ensure that the Cotton Farm Wind Farm operates within the noise conditions set at appeal by the Inspector and to record and observe the range of noise characteristics and how it affects residents.*
- 2) *The Cotton Farm noise monitoring exercise is the first in the country to continuously monitor noise output from a nearby wind farm.*
- 3) *Whereas previously data associated with operational wind farms has been the undisclosed property of developers and often fails to record noise character, importantly this information will be publicly available for all to see and use.*
- 4) *The potential intellectual value of this research is far-reaching and will help to guide future understanding of operational wind farm noise especially as it relates to community impact.*
- 5) *The measurements of wind farm noise along with feedback from local residents will identify if there are periods when wind farm noise is intrusive and whether this results in a breach of limits.*

What the live data shows

The data shown can be used for two main purposes:

1. *To test compliance.....*

Please follow this link for further information: http://www.masenv.co.uk/~remote_data/

The attached Submission to Northern Ireland Assembly Environment Committee by Pat Swords BE CEng FICHEM CEnv MIEMA October 2014 goes on to say that (my emphasis):-

“1.3 The UK and Northern Ireland's Failure to Transpose the Environmental Impact Assessment Directive

The DOE and NIEA's own website on Environmental Impact Assessment state:

- *Environmental Impact Assessment (EIA) is a process undertaken by developers when it is considered that a development proposal may have a significant environmental impact.*

This is not correct; the Environmental Impact Assessment is the responsibility of the competent authority for the planning decision, which he must make available to public on request as part of the decision-making process. This requirement on the competent authority has been defined in Article 3 of the Environmental Impact Assessment Directive since 1985. To explain, the below taken from the same website is accurate:

- *An Environmental **Statement** (ES) is a developer's assessment of the environmental impact of a project. It will contain suggestions for mitigation (taking protective measures to reduce or remove this impact)... ..*

“.....This legal requirement is for “*as complete an assessment as possible of the direct and indirect effects of the project concerned on the facts set out in the first three indents of Article 3 and the interaction between those factors*”, where the factors comprise:

- (a) human beings, flora and fauna,
- (b) soil, water, air, climate and the landscape,
- (c) material assets and the cultural heritage, and;
- (d) the interaction between the factors mentioned in paragraphs (a), (b) and (c).

However, if we consider the Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2012, <http://www.legislation.gov.uk/nisr/2012/59/contents/made> which is similar to other UK regulations, there is a requirement in Section 4 that:

- *The Department or the Commission, as the case may require, shall not grant planning permission or subsequent consent pursuant to an application to which this regulation applies unless they have first taken the environmental information into consideration, and they shall state in their decision that they have done so.*

This is important; Northern Ireland planning decisions are based solely on a very weak obligation to take environmental information into consideration. The more stringent obligation on the decision maker to properly assess the impacts of the development on human beings, as to what the climate change impacts are, what the landscape impacts are, etc. and to take ownership and responsibility for them in justifying the decision to the public is simply by-passed.”

Please explain why the UK Government (DECC and DEFRA) are by-passing this legally binding Directive? Water contamination affects a large proportion of the electorate and therefore demands a full and independent investigation. Only a moratorium on any further development will comply with this. As there is now a clear need for intentions relating to this to be given, please will you provide these?

3. I note your statement ‘Where there is evidence that monitoring programmes may be required to increase understanding of potential health impacts of any activity then these should be conducted.’ It is clear from the further information from those impacted by acoustic emissions from wind turbines which are available on many websites, that such monitoring is way overdue and has now become a priority and duty. Just a few examples being:- <http://hearinghealthmatters.org/hearingviews/2014/wind-turbine-health-problems-noise/> and including those to be found at: <http://waubrafoundation.org.au/library/section/resident-impact-videos/> and <http://waubrafoundation.org.au/library/residents-stories/> plus the websites listed in their useful links section. Although this is unlikely to have occurred, I should like to be provided with copies in existence of reports from the manufacturers, and from independent physicians about any medical surveillance programs that may have been carried out. Names and address can be omitted, but age and gender on the date of the report given instead.

In addition, this interview found at: <http://www.2gb.com/audioplayer/73696#.VGFkyYcWnOc> is of international importance and relevance to a global problem, which can no longer be ignored and denied by governments - unless that is, they are happy to be judged as more concerned about votes and money than people's health and wellbeing. A public statement about the potential criminal liabilities public officials in Australia may face for torture is here: <http://waubrafoundation.org.au/resources/public-officials-at-risk-criminal-charges-for-torture-public-statement/> .

4. As our country is a signatory to the UN Convention Against Torture and Cruel Inhuman and Degrading Treatment, please can you confirm that this clears the way to start to hold our own public officials accountable? **If not please provide the reasons why this does not apply.**

You may also wish to be aware of the following article relating to Ireland "Are Wind farms Safe." The same principles are clearly applicable to the UK.
<http://the-law-is-my-oyster.com/2014/11/09/are-windfarms-safe/>

Law – the EU and Directives.

Regarding the Health & Safety at Work Act, you will be aware that under this Act provision of evidence that a health risk to the public actually results in harm is unnecessary - evidence that a health risk **exists** would be sufficient. It is stated that "*A prosecution under S3(1) is competent so long as there is a risk of exposure to danger - it is not necessary to prove that the risk actually materialised.*"

It is obvious from the EU Machinery Directive that it stresses several times the need for surveillance if there is any doubt of these health adverse effects, not only for workers in the production of wind turbines, but also neighbours and passers-by. (see Article 11). That means of course, that neighbours at risk, according to the Precautionary Principle, must be involved in a systematic, medically planned and implemented, *industry independent* program over some years to verify health reactions appearing - or reject the risk for adverse health effects of different kinds. This may also include discovering people (e.g. children) at risk.

The new Machinery Directive (2006) includes an obligation for the Member States to monitor the performance of Notified Bodies and to withdraw or suspend the notification if a Body fails to carry out its duties properly. This Directive sets out more explicitly the duties of the Member States to organise market surveillance. These obligations include cooperation between the market surveillance authorities and respect for confidentiality and transparency. It also enables the European Commission to adopt a decision, after consultation with the Machinery Committee, to prohibit or restrict the placing on the market a category of machines presenting the same risk by virtue of its technical characteristics. The main responsibility in marketing machines, (wind turbines), where risks for adverse health effects have been eliminated, **rests upon the manufacturer.**

Under either EIR or FoI regulations, may I therefore please have copies from four different wind turbine manufacturers of all the documents produced, where *they guarantee that there are no health and safety risks* and describe the current and later expected risks and how to avoid them. This measure is inspired by a similar provision in the General Product Safety Directive - which raises the question of the **Exchange of information via a rapid alert system**. I.e. The Directive provides for an alert system (the RAPEX system) between Member States and the Commission. The RAPEX system ensures that the relevant authorities are rapidly informed of dangerous products. Subject to certain conditions, Rapid Alert notifications can also be exchanged with non-EU countries. In the case of serious product risks, the Directive provides for temporary Decisions to be taken on Community-wide measures. See also:

<http://ec.europa.eu/consumers/safety/rapex/alerts/main/index.cfm?event=main.listNotifications&CFID=10363169&CFTOKEN=75143981&jsessionid=09001cf4a4cd3938629d4741f6f5357397aa>

Here is the only example of a wind turbine accident that is to be found in RAPEX for the moment:

<http://ec.europa.eu/consumers/safety/rapex/alerts/main/index.cfm?event=main.search> - which brings us inevitably to all the cases in the <http://www.caithnesswindfarms.co.uk/AccidentStatistics.htm> (CWIF) register (see also detailed list <http://www.caithnesswindfarms.co.uk/fullaccidents.pdf>).

Please can you provide under FoI rules and in line with the rules in the UN's Aarhus Convention how many of these cases have been reported under the RAPEX system by the UK and/or Scottish Health & Safety Executive? There are very clear laws in EU and partly in the member states relating to these issues. Please can you tell me:

1. Which specific authority or official in our country is responsible for all, even minor incidents related to wind turbines?
2. Which authority or official is responsible **for a comprehensive registration** of harm to humans or animals, immediately to RAPEX?

In respect of http://www.fmmi.at/uploads/media/MRL_neu_engl_02.pdf and especially notice *ANNEX I*, page 35, (electronic page 12) **Essential health and safety requirements relating to the design and construction of machinery, (GENERAL PRINCIPLES)**. It is noted that there is a responsibility for wind turbine producers/manufacturers to document that the turbines are safe and what risks there may be together with monitoring mentioned in Articles 4 and 11. The Annexes hold all details, plus how to handle injuries and illness/diseases related to passers-by, neighbours and maintenance work. Instructions appear on how the member states should organize and monitor events. Of particular importance to remember is the **Precautionary Principle** in relation to this which is included in the Lisbon treaty: http://europa.eu/legislation_summaries/consumers/consumer_safety/l32042_en.htm

The CE-marking of the turbine on its final location is the sign that all rules in the EU MD have been followed and that there are no risks for the neighbours. Due to the considerable influence of e.g. topological and meteorological and other conditions it is not possible to *calculate* the noise immission, especially including the infrasound range (0.1 – 20 Hz) but it must be *measured in situ*, using relevant equipment and full spectrum sound graphs in all this low range interval (where by far the massive, but inaudible sound pressures are concentrated, measured as SPL dB(lin), i.e. *without any filter*).

These questions remain to be answered under FOI or EIR regulations:

1. Have the factual sound/noise/infra-waves been documented to all involved authorities and, related to complaints, also to the neighbours?
2. Please can you confirm that ALL wind turbines in UK are CE-marked today according to the EU MD?
3. If they are not, what plans are in place to ensure compliance?

Please may I also have copies of reports as examples of this kind of verification from four different wind turbine manufacturers, covering their machines in the range of 2 – 6 MW? These are required because as previously advised, health risks for neighbours were already documented in 1982 – 1987 by N. Kelley in USA (<http://waubrafoundation.org.au/wp-content/uploads/2013/07/Kelley-1987-Wind-Farm-Low-Frequency-Noise-Problem-Identified.pdf> (1987), <http://waubrafoundation.org.au/wp-content/uploads/2013/07/Acoustic-Noise-Associated-with-the-MOD-1-Wind-Turbine.pdf> (1985) and <http://waubrafoundation.org.au/wp-content/uploads/2013/07/Kelley-Methodology-Assessment-Wind-Turbine-Noise-Generation.pdf> (1982) and the adverse health effects have since been confirmed in a growing amount of medical research.

Perhaps it is fitting at a time of remembrance of the horrors, sacrifices and consequences of past and present global conflicts, to also remember the victims of the kind of bad governance which condemns such people to suffer harm from any technology – as in the case of wind power. It is a regrettable fact of life that robotic responses devoid of humanity are becoming the trademark handling procedures of government departments here, and around the world. In the face of new (and apparently) unwelcome evidence which challenges accepted thinking on an energy policy based on flawed science, advice from engineering experts is too often ignored and is compounding the mounting problems.

For example, by reading the Scientific Alliance Report newsletter found at <http://www.scientific-alliance.org/scientific-alliance-newsletter/reassessing-wind-power> - if Capell Aris's report and the "Analysis" by Stuart Young http://www.jmt.org/assets/report_analysis%20uk%20wind_syoun.pdf are read side by side, there is an astonishing correlation of conclusions, just arrived at differently. Capell used wind speed data, Young used available electricity output records at the time. The list of such exposures of current and predicted energy policy difficulties is rising – such as outlined in the excellent IESIS presentation: <http://www.iesisenergy.org/sofs/electricity-system-5.ppt>

This presentation raises some interesting points for the DECC north & south of the border. For instance, if the question is - is the Scottish wind resource not much better than for the UK as a whole? Show Slide 25 of the IESIS ppt presentation shows that the pdf for the Scottish wind is only slightly less unfavourable as compared with the UK as a whole. Also, it might be said that no one else has predicted costs for wind as high as shown – thereby classing this as a ‘rogue result.’ However, it is often thought that the ‘rogue results’ in a set often provide the most useful information. The basic costs are in line with estimates from other sources including reports done for DECC (as noted in the presentation). *No other estimates of integration costs are known.* If there is only one set of estimates then they have to be the best available. The calculations are *not* done using the most accurate method estimating cost. A main recommendation from IESIS is that the most accurate method should be used to estimate the costs. ***The estimates shown strongly underline the need for this to be done.***

The cost for nuclear (£61/MWhr) could be judged to be clearly wrong if there is an agreed strike price for nuclear at Hinkley Point of £92.5/MWhr – but *cost and price are two different things.* The £61 is the levelised cost which is discounted over the lifetime of the facility. The strike price is part of an agreement between EDF and the UK Government. The price of electricity in mainly nuclear France, is a lot less than £61/MWhr. The £61 covers the cost of decommissioning.

In conclusion then, from whichever angle this subject is examined, be it adverse effects on health, the environment, economic or energy production, the need to revisit decisions and existing policy has become urgent and unavoidable. In view of the FoI requests involved, I should be grateful for a compliant response time for these matters of immediate concern. For ease of reference these are again listed below:

1. Those having worked in the petrochemical industry are reporting being puzzled by the seeming lack of attention by the Health & Safety Executive to the wind industry. *Please can you provide under FoI rules any HSE reports relating to wind turbine accidents?*
2. Under either EIR or FoI regulations, may I therefore please have copies from four different wind turbine manufacturers of all the documents produced, where *they guarantee that there are no health and safety risks* and describe the current and later expected risks and how to avoid them?
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 2. Please can you confirm that ALL wind turbines in UK are CE-marked today according to the EU MD?
 3. If they are not, what plans are in place to ensure compliance?

Yours sincerely,

Mrs. V.C.K. Metcalfe

encs.

¹ Submission to Northern Ireland Assembly Environment Committee

² Non Conformance of Wind turbines to Design and CE Certification Criteria.

³ Whitelee Windfarm – a 5-year study of carbon, nitrogen and phosphorus aquatic fluxes