Dear Sir Sabaratnam Arulkumaran,

Although a very short time has elapsed since receipt of the last BMA reply on behalf of Mr. Bourne, it has been spent in serious thought and deep discussion with colleagues. Revisiting all reports and past research has made it possible here to give only a 'tip of the iceberg/snapshot' overview of these rapidly burgeoning problems. Please be aware that this final request is therefore made not only on behalf of the rising numbers of people suffering harm, but the many destined to join them should nothing be done to avert this. Health professionals, technical expects, engineers and others strive to have the implications of their valid findings fully understood by more of their peers and most importantly, the public.

This is why the decision was made to write to you as President of the BMA, to ensure your organisation's attention is focused on an increasingly important health subject – namely the adverse health effects from exposure to operating wind turbines. I am referring specifically to wind turbine noise which includes infrasound and low frequency noise, which are not currently measured by the current noise pollution guidelines and regulations in the UK, (ETSU 97) despite wind industry knowledge since the 1980's resulting from the NASA / Kelley research in the USA that wind turbine impulsive infrasound and low frequency noise directly caused a range of "annoyance" symptoms including sleep disturbance.

Responses received from your organisation's Public Affairs Officer, reportedly from your CEO, appear to be using various pretexts to avoid both addressing this issue, and answering my specific questions. It will hopefully be understood that no offence to staff who have replied as instructed, is intended. With respect, it remains the case that, to my knowledge, neither your CEO nor your public affairs officer have medical degrees, and therefore are not bound by the medical codes of ethics which include the proviso to "first do no harm".

The current widespread practice in the UK of continuing to ignore this issue is doing immense harm to the health of an increasing number of rural residents. Urban areas will become involved if current separation distances (only advised) remain and developments are installed near larger populations.

Despite the fact that no motions are currently on the table for your ARM, deliberately ignoring the issues I am raising demonstrates an alarming attempt by your organisation's paid employees to evade a responsibility incumbent upon your organisation's stated remit to inform members. It is clear that the BMA have a duty midway between resistance to political agendas which could interfere with their remit, and the clear requirements set out in their constitution.

No organisation with total inflexibility within rules when an obvious need for relaxation arises, can avoid working against the best interests of its members and ultimately in this case, the public they serve. So to avoid the BMA becoming part of the problem instead of

actively participating in finding a solution, it is hoped that a route will be found to allow this subject to be raised at the coming meeting.

Given that your particular field of speciality is Obstetrics & Gynaecology, the reported effects from wind turbine noise of severe physiological stress and sleep deprivation should be of concern, as the consequences of both severe chronic stress and severe chronic sleep deprivation are well known to adversely affect both human fertility, and the health of women and babies during pregnancy and therefore foetal birth and health outcomes.

The recent report of miscarriages, stillbirths and birth deformities in mink in Denmark correlating directly with the start up of operation of four large VESTAS V 112 wind turbines in close proximity, provides clear evidence of adverse animal health impacts from wind turbine noise which have direct relevance for human populations. This information was included in material previously forwarded to the BMA and adds weight to the warnings given relating to human groups' vulnerability from being forced to live in proximity to wind turbines.

In addition there are reports of disturbed fertility and menstrual cycles in women living near wind turbines in Denmark, Canada and Australia from both residents and health professionals.

Just some of the health professionals, including particularly medical practitioners, and acoustic experts and researchers who have firsthand knowledge of the severity of the reported health problems who are calling for urgent multidisciplinary research in this area include:

Professor Bob McMurtry, Dr Roy Jeffery, Associate Professor Jeff Aramini, Carmen Krogh and Mr William Palmer from Canada; Dr Alan Watts, Dr Wayne Spring, Dr David Iser, Dr Gary Hopkins, Dr Andja Mitric Andjic, Dr Sarah Laurie, Mr Les Huson, Mr Steven Cooper, Emeritus Professor Colin Hansen and Dr Bob Thorne from Australia; and Associate Professor Rick James, Mr Rob Rand, Mr Stephen Ambrose, Emeritus Professor Jerry Punch, Dr Jay Tibbetts, Dr Sandy Reider, Dr Nina Pierpont, Dr David Lawrence, Dr Paul Schomer, Mr George Hessler, and Dr Bruce Walker from the USA. There are others from Europe who are also becoming increasingly vocal on this issue as wind turbines increase in size and are being placed close to larger human populations.

I therefore ask that the UK BMA publicly resolve to support multidiscipinary independent research, such as the government in Australia has committed to do, and which other jurisdictions have commenced and which in some instances have completed, confirming wind turbine noise associated sleep deprivation, and inner ear problems, including the Ministry for the Environment in Ontario. These are issues which have been shamefully ignored by many UK authorities and medical practitioners to date.

As your Constitution confirms, human rights issues **are** a BMA concern, this being so, I refer you to pages 22 – 26 of the document "**Leave no Marks**" by the Physicians for Human Rights, where the clinical consequences and the legal precedents relating to torture from sleep deprivation and sensory bombardment from noise and light are clearly elucidated.

Torture is clearly a human rights issue, so too sleep deprivation and sensory bombardment. This is precisely what many rural residents living near wind turbines in the UK are experiencing and have been reporting since Dr Amanda Harry's survey, conducted in 2003.

I refer you specifically to Part 1 and article 1 of the UN Convention against torture...(my emphasis)

'Article 1.

1. For the purposes of this Convention, the term "torture" means any act by which severe pain or suffering, whether physical or mental, is intentionally inflicted on a person for such purposes as or intimidating or coercing him or a third person, or for any reason based on discrimination of any kind, when such pain or suffering is inflicted by or at the instigation of or with the consent or acquiescence of a public official or other person acting in an official capacity.'

So, it could be successfully argued that a form of torture is being intentionally inflicted, because public officials have been told about it repeatedly and yet they are doing absolutely nothing to address the situation or prevent the known and established harm to human health. Should the defence be that this is *not* intentional, then it is at the very least gross negligence and dereliction of their statutory duty of care, or perhaps "wilful blindness".

This distressing situation has resulted from the failure of many government public officials including those working in the respective government departments, e.g. DEFRA, DECC, local health environmental health officers, and medical practitioners working for the NHS to deal properly with this issue, despite being made well aware of the severity of the health problems, and the chronic sleep deprivation from wind turbine noise. Despite its resultant serious, known and predictable adverse health effects, these public officials have done nothing to address the root cause of the problems — wind turbine noise pollution - or to stop the cause of the sleep deprivation. Sleep deprivation alone is itself acknowledged to be a form of torture and is described as such by the rural residents who are so badly affected.

The Adverse Health Impacts from IWT's attachment included in past exchanges included direct reports from those citizens affected and this is again included for your attention. The Davis case is referenced. That made it clear that noise nuisance was occurring for that UK family, and the fact that the developer settled rather than having the case heard to completion in the UK High Court confirms that view. Unfortunately the Davis family are unable to speak of their experiences – they have been silenced with a broad non disclosure clause. Use of such clauses has been reported in the UK, Canada, the USA, New Zealand and Australia and indicates the wind industry has much to hide.

The BMJ editorial in 2012 (over 2 years ago) raised wind turbine noise related sleep disturbance as an issue requiring attention. It is an entirely reasonable request that the BMA itself addresses the issue via its most senior officer bearers, and does not *choose to continue* to ignore it.

To add further to the ground base of information possibly not yet seen I have attached the Salt and Lichtenhan article describing how wind turbine noise affects people. The advice to acousticians extract below(my emphasis) is particularly relevant.

'The primary role of acousticians should be to protect and serve society from negative influences of noise exposure. In the case of wind turbine noise, it appears that many have been failing in that role. For years, they have sheltered behind the mantra, now shown to be false, that has been presented repeatedly in many forms such as "What you can't hear, can't affect you."; "If you cannot hear a sound you cannot perceive it in other ways and it does not affect you."; "Infrasound from wind turbines is below the audible threshold and of no consequence."; "Infrasound is negligible from this type of turbine."; "I can state categorically that there is no significant infrasound from current designs of wind turbines." All of these statements assume that hearing, derived from low-frequency-insensitive IHC responses, is the only mechanism by which low frequency sound can affect the body. We know this assumption is false and blame its origin on a lack of detailed understanding of the physiology of the ear.'

The WHO 2009 Night Noise Guidelines for Europe about the effects of chronic severe sleep disturbance are a particularly important and relevant source of information e.g:-

Extract. 2.1.2 DEFINITIONS OF DISTURBED SLEEP.

'Sleep disorders are described and classified in the International Classification of Sleep Disorders (ICSD) (American Academy of Sleep Medicine, 2005). When sleep is permanently disturbed and becomes a sleep disorder, it is classified in the ICSD 2005 as "environmental sleep disorder". Environmental sleep disorder (of which noise-induced sleep disturbance is an example) is a sleep disturbance due to a disturbing environmental factor that causes a complaint of either insomnia or daytime fatigue and somnolence. Secondary deficits may result, including deficits in concentration, attention and cognitive performance, reduced vigilance, daytime fatigue, malaise, depressed mood and irritability.'

The attached letter to the AMA from Bruce Rapley BSc, MPhil, PhD. Principal Consultant, Acoustics and Human Health, relates audibility and infrasound effects from turbines and clearly summarises the known science and the consequences of ignoring what is known.

I am asking you personally to consider that by their example, those members of the United Kingdom medical fraternity who have acted according to their Hippocratic oaths - to name but a few, Dr Bridgit Osborne, Dr.Amanda Harry, Dr. Christopher Hanning, Mr A Farboud, Mr R Crunkhorn and Mr A Trinidade, together with Professor Alun Evans and Dr Colette Bonner from Ireland, have blazed a trail of which the UK Medical Profession can be rightly proud.

However, there is now an ethical responsibility for the current BMA office bearers to support much broader discussion of the subject regardless of current and past government policy, in order to prevent further "irreparable harm to physical and psychological health" as described in the Falmouth USA case where in December 2013 Justice Muse ordered an immediate injunction for wind turbines to be turned off at night, so people whose health had already been badly damaged on the basis of evidence presented to him, could sleep.

There is also an urgent need for the BMA to openly support multidisciplinary research together with the development and enforcement of health protective wind turbine noise pollution regulations and planning regulations in the UK. The current planning regulations

and wind turbine noise guidelines in the UK are operating as a "licence to harm" UK rural residents. I am sure you will agree that this is unacceptable.

Finally, I am again presenting below for your attention and response, the questions which I request that your organisation answers.

Apologies are due for the length of this letter, but the importance and breadth of the subject matter defied my best attempts to reduce contents.

With thanks for your kind attention.

Yours sincerely,

Mrs. V.C.K. Metcalfe.

Questions.

- 1.Do you accept the evidence that sleep deprivation from wind turbine noise is occurring, and that sleep deprivation is extremely serious and health damaging? You will have presumably have seen Prof Alun Evan's recent review and also the Arra and Lynn review, by two public health physicians in Canada which supported the concerns expressed in 2012 about wind turbine noise by Dr Chris Hanning and Professor Alun Evans published in the BMJ your own journal.
- 2. Would you support turning wind turbines off at night if there are noise complaints, so that people can sleep?
- 3. Would you support conducting urgent multidisciplinary research involving full spectrum acoustic monitoring inside homes, and concurrent physiological monitoring of EEG, heart rate, blood pressure and sequential cortisol in those people who are reporting adverse health effects?
- 4. Has the BMA or any of its members ever received any money or gifts, either directly or indirectly from the wind industry? There are reports that some surgeries have been refurbished via "community grants" from wind developers.
- 5. As has been previously requested, what is your complaints procedure?