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I write to object to this application.

In August 2013, the United Nations Economic Commission Europe (UNECE) declared that the UK government's National Renewable Energy Action Plan (NREAP) violates the laws that transpose the Aarhus Convention into the UK legal framework, in that it is not abiding by Article 7 of the Convention. In particular the public have not been given full access to information on the established unacceptable negative impacts on people and the environment, nor have the public been given decision-making powers over their approval.

Also, a recent ruling by Lady Clark of Calton has deemed that unless applicants who wish to connect to the national grid (and receive payments), have the relevant OFGEM licence (or DECC exemption), their application is incompetent (unlawful), and planning consent should not be given. This licence is required by law and puts the holder under obligation to safeguard the environment, landscape, wildlife and human beings. Lady Clark argues that this applies to almost all turbines.

For these two reasons alone there should be an immediate moratorium on all wind turbine applications and decisions.

Further to the above, the term 'Wind Farm' is a disingenuous spin on the words 'farm' and 'farming'. My dictionary describes 'farming' as: "the husbandry or cultivation of animals, plants, fungi and other life forms, for food, fibre, bio-fuel and other products, in order to sustain human life." Wind turbine applications often state that the turbine(s) are required for farming diversification. This is obviously incorrect. What it is, is an industrialisation and sterilisation of huge areas of land and sea. When two or more turbines are gathered together, it should be called a wind factory.

Firstly, wind turbines are certainly not life forms, and therefore it can not be a farm nor farming. And secondly, there is no conclusive evidence that they sustain human life, or the lives of any other life form (except perhaps a few carrion feeders – until they are killed by the impact of a blade or suffer internal haemorrhaging and death). In fact the opposite is probably true. For example, there is mounting evidence that the end result of wind turbine *manufacture and use* is an increase in CO2 emissions. Furthermore, there is mounting evidence that wind turbine use is harmful to humans, livestock, and other life forms.

In the last 12 months approximately 100 million birds and bats were killed world wide by wind turbines. It is estimated that 90% of the bats drown in their own blood when their lung capillaries rupture as a result of the pressure changes near turning blades. Only around 10% of bats are killed by the impact of a blade. (Small turbines are also lethal to bats and birds as they are usually sited near buildings that provide roosting and nesting sites.) At several locations, dead insects and spiders have to be power washed off turbine blades because the dead weight further decreases turbine efficiency. Spiders, caught on the wing, are about 90% of the diet of migrating swallows and swifts.

There is also growing concern over the stress, internal haemorrhaging, birth defects and still births, of livestock and pets that are kept near wind turbines. These same harmful affects are no doubt occurring to our wild life, and other life forms. Bird infertility is also suspected, see the Today Tonight report at: http://www.youtube.com/watch?feature=player_embedded&v=c-RHPaY6gk

Humans are reported to suffer depression, dizziness and insomnia and I am sure that internal haemorrhaging, birth defects and still births will follow as the years go by.

I understand that in recent years there has been an acknowledged and unexplained increase in cases of insomnia, dizziness and headaches in Dundee. There have been two large wind turbines operating in Dundee since 2006.

The harm is caused by emissions of both ground hugging Infrasound, and Low Frequency Noise. These are accumulative (ie. the longer the exposure, the worse the symptoms), have a range of around 10km, and are mostly at vibrations below the human hearing range. The use of directed sound, including Infrasound, is a known military interrogation aid and weapon (also known as "Through-the-wall weapons").

From my own observations, hares, which live and breed on open ground, would appear to be one of the first terrestrial animals to succumb to this internal haemorrhaging and death out to a distance of at least 5km.

With regard to the effect of off-shore wind factories on marine life, we can be sure that it is considerable. Water is an excellent conductor of sound vibrations, and fish have the ability to detect minute pressure changes (0.5%), and in some cases down to less than 1mb (millibar). Standard atmospheric pressure at sea level is about 1,013 mb. Also, I fail to see how the quarrying and transport of huge quantities of granite and other stone in order to stabilise offshore turbines, can possibly reduce CO2 emissions.

Recently, the cities of Kolding and Sønderborg in Denmark decided to not erect further wind turbines (in their 500 km²+ jurisdictions) until the uncertainty about the health impacts on neighbours is settled.

Mr Mauri Johansson (Specialist in Community and Occupational Medicine) recently stated that: "During the last 12 months, several smaller municipalities had done the same, in spite of strong pressure from government. They are not satisfied with the noise regulations, and demand that genuinely independent studies be done concerning the effects of wind turbines on health."

Last year, retired Danish High Court judge Peter Roerdam stated that wind power is "an industry which has thoroughly corrupted the political system". Further, Mr Mauri Johansson has this year added that: "It is clear the institutional political corruption, and the lack of professional ethics on the part of wind industry acousticians and public health researchers, who ignore or deny the existence of the sleep and health problems and the consequent serious long term damage to health, *is not limited to Denmark.*" Indeed, in 1987 a report, led by N.D. Kelley from the Solar Energy Research Institute in Colorado, found 'impulsive infrasound' caused health problems. This report has been ignored for 25 years.

In July the Czech Government approved a law to stop subsidies for new renewables projects at the end of 2013, in order to maintain the country's international competitiveness.

1,257 towns and 20 villages from the State of Wisconsin, USA, have demanded a windfarm moratorium.

In Poland, President Komorowski wants a moratorium on local wind farms.

The Dutch province of North Holland has realised that windparks are a complete and useless eyesore that blight the landscape, and they save very little CO2. Therefore, the province has decided to forbid their construction.

Last year, Litchfield Town Council (New York) passed in a 4 - 1 vote a local law that will ban construction of industrial wind turbines.

The President of the Italian/German speaking region of South Tyrol (Alto Agide), Luis Durnwalder said that his region will be wind energy free, with the exception of a small plant close to the Brennero Pass (which will be dismantled in a few years).

Wind electricity is one of the most expensive forms of electricity to be produced. Each turn of a blade adds to our electricity charges. This is as a result of their abysmal efficiencies and the huge subsidies. It has been calculated that the average turbine only produces between 15 - 28% of its rated capacity over a year, and the kilowatts of electricity produced per square kilometre, or cubic kilometre, of a wind factory is equally abysmal.

The way these huge subsidies and costs (Renewables Obligation [RO], Feed In Tariffs [FIT], extra pylon and infrastructure construction, and other 'upgrades') are arbitrarily added to our electricity bills, and the profits kept by a select few, is worse than the illegal chain letter scam. I say worse because one has to actually "opt in" to be scammed by a chain letter. This is not the case with wind energy. However, it would be a simple matter to contact all electricity users and ask them if they wish to pay for wind electricity - and if so, could they tick the '*opt in to be scammed*' box. The cost of wind electricity could then be proportioned fairly between those willing and able to pay for it.

Even small turbines increase our electricity prices, since turbines up to 6KW can be very easily connected to the grid to export electricity and receive an income (through FITs for example).

I understand that thousands of diesel generators are being prepared all over Britain to provide emergency back-up when wind power fails - in order to prevent the National Grid collapsing. Under this hugely costly scheme, the National Grid is set to pay up to 12 times the normal wholesale market rate for the electricity they generate. Currently the wholesale price for electricity is around £50 per megawatt hour (MWh) but diesel-generator owners will be paid £600 per MWh. These generator owners will also be paid enormous sums for just having them available to be switched on.

Any suggestions that:

1. "because there are already turbines or pylons in the area, then it is somehow OK to compound the problem with these turbines" is ludicrous! You do not solve a problem by creating an even bigger problem.
2. "because there is already a commercial business in the area and therefore it is somehow OK to compound the problem with these turbines" is similarly ludicrous. Why enhance an eye sore with an even larger eye sore?
3. "if we have to have wind factories, then this is as good a place as any to have one" is again ludicrous. We are meant to be living in a democracy and nobody should *have to have* anything; particularly when it is against the wish of the majority of the population. There are probably now as many, if not more, opinion polls against wind turbines as there are for them. One thing is certain though, those against are growing rapidly as more and more people realise the true nature and cost, both financially and environmentally, of wind turbines, be they individual or factory units.

4. the county has somehow missed out on 'tens of millions of pounds worth of investment money' by the rejection of several wind factory applications is, once again, ludicrous. Very little of that supposed investment would ever benefit the county, as is proven time and again, where the local business to gain the most is probably the fencing contractor!
5. communities would somehow gain from the so-called Community Fund, or "community bribe" as more and more people are calling it, isludicrous - although there is an argument that this is merely another disingenuous misleading spin. The value of the 'fund' is often only equivalent to the concessions and exemptions a landowner receives for having a wind factory on his land, and therefore the net gain to local county and therefore community, is probably zero.
6. jobs would be increased by this application is misleading, if not ludicrous. The majority of the workforce in the construction, erection and maintenance of turbines comes from abroad, and if the American example is anything to go by, any UK jobs come at a cost of \$12m per job. There is also the valid argument that they are not "green" jobs anyway, since they cause harm to humans and the environment, and raise CO2 emissions.
7. it is somehow 'OK' to empty properties and effectively sterilise huge areas of the Scotland so that wind factories can be built is outrageous and is reminiscent of the Highland Clearances. We have much to be proud of in our history with our determination to fight for, and support, freedom and democracy. This renewable energy policy is certainly not something to be proud of.
8. there is a silent majority in favour of wind turbines - that harm their neighbours and cause great financial hardship through the exorbitant increases to our electricity bills, is yet again, ludicrous. The silent majority are silent because they have not been told about the harm (to humans, environmentally and financially) that wind turbines and wind factories cause. This comment is supported by the UNEC decision mentioned above.
9. the exorbitant cost of wind energy is justified by CO2 reduction is incorrect. The majority of the huge amounts of money we pay for wind electricity is kept by the developer and land owner as profit, very little is used for CO2 reduction or research into CO2 reduction. Recently I was speaking to a friend who has three small turbines on his land, and he said "'They' pay me around £40,000 direct into my bank account every year just for having the turbines". I replied that I didn't know what split of the income he had agreed with the developer, but if it was 50:50, and since about half of this income comes from increases to our electricity bills, then he was directly responsible for adding an approximate extra £40,000 to our electricity bills (or £40 onto 1,000 bills) every year. My friend has not employed anyone new as a result of these small (not 'industrial') turbines, does not commission any CO2 reduction research, and keeps the money for his own benefit. I am sure this is the case with most land owners and developers.

Any arrangement which pays millions of pounds to wind factories to NOT produce electricity when the wind is blowing, is beyond belief. If this was applied to every business, I dread to think where the money would come from to pay for all the surplus production and services.

Should Scotland gain its independence, one wonders if the electricity users of the rest of Great Britain will continue to be prepared to pay the exorbitant price for Scottish wind power, even if it is later sold back to them at a ridiculously reduced price. If not, and if these costs are placed solely on Scottish electricity users, it will cause great hardship, financial difficulty, fuel poverty and bankruptcy to many people and businesses in Scotland, and Scotland will swiftly follow in the footsteps of countries like Spain and others who have fallen for the wind power scam. (Spain is a particularly cautionary tale. By failing to control the cost of guaranteed subsidies, Spanish electricity users have been saddled with €126bn of obligations to renewable-energy developers.)

In theory would take about 1,500 wind turbines of around 100m tall spread over 20km² to produce the same electricity as a 1,000 megawatt (1GW) power station – even then the wind farm could not provide a steady supply. Wind varies considerably, and thus the power station is still required – or maybe we need to cover over 100sq km with turbines to possibly provide something near the power from one power station. Another way of looking at it: if we are to achieve this energy policy, nearly 40% of rural Scotland will be covered with wind turbines (or more accurately, 40% of rural Scotland will be within 2km of a turbine).

In Denmark there are over 6,000 turbines for 5.4m people, yet wind power only counts for less than 19% of their electricity requirements, has not resulted in the closure of any power stations, and they have one of the highest electricity prices in Europe.

Germany has the most expensive electricity in Europe and it is estimated that up to 800,000 German households have had their power cut off because they couldn't pay the country's rising electricity bills.

In the UK there are around 5 million households that are struggling to pay their ever rising electricity bills (mainly as a result of wind turbines). With the potential increase in wind turbines, it has been forecast that by 2017, the rapidly rising UK electricity prices will be almost double German prices.

German CO₂ emissions have been rising for two years in a row as coal is experiencing a renaissance, and they are building 20 new coal-fired power stations to provide power when there is no wind or sun – usually in the winter when the power is most needed.

CO₂ emissions in the EU as a whole are likely to rise because of increased coal burning at power stations.

The import of vast amounts of wood, from countries such as America, to power biomass power stations cannot possibly be good for the environment or help reduce CO₂ emissions, and no doubt will cause further unnecessary price increases for our electricity.

There are very few *good* wind turbines. By *good* I mean ones which comply with a few simple, common-sense criteria such as:

- a) where the electricity produced helps to supplement the power requirements of the landowner without taking money from every other electricity user in the country to do so;
- b) where they do not cause continuous harm to humans and other life forms;
- c) where the CO₂ emissions caused by the construction, erection and maintenance of the turbines is accurately assessed and the result (either increased or decreased), is justified;
- d) where the loss of revenue to other local businesses caused by the location of the turbines is justified.

If one applies just these few criteria to wind factories, then there are no *good* wind factories, either onshore or offshore (the financial cost and CO₂ emissions caused by offshore factories are considerably greater than onshore factories), and very few good turbines.

If we are to have renewable energy providers for our national requirements, then we should be considering systems that guarantee to provide a steady supply of power at more than 30% efficiency, do no harm, and help save the environment. Wind power can never achieve this.

On a more personal level, I live near the Ark Hill wind factory whose 8 x 81m high turbines started to turn earlier this year. I have heard local reports of people suffering unexplained dizzy spells and headaches, and frequent sleep disturbance from turbine noise. The turbine noise is mostly heard between the hours of 0100 and 0600, when other noise pollution is minimal, and when there is little wind at ground level but enough wind at turbine blade height to turn sufficiently turn the blades. However it is not the noise or lack of sleep that is most concerning, it is the harmful unaudible emissions and pressure changes that most concerns me.

I accept that at this stage it is impossible to prove that the Ark Hill wind factory is directly responsible for the dizzy spells and headaches, but it is a remarkable coincidence.

With the low winter sun, shadow flicker is now also causing concern.

I am also deeply concerned about the long term exposure to the sounds that cannot be heard – the Low Frequency Noise and Infrasound emissions from these turbines. I accept that every individual will react differently to these emissions and to sleep deprivation, and that every turbine model will have different emissions according to factors such as turbine type, wind speed and variance (blustery/constant etc), air density and pressure. However there is no escaping the fact that turbine manufacture, transport, erection, use and dismantling is harmful to humans and the environment.

Further to this, we run a holiday cottage business, and many of our visitors have stated that, with regret, they will not return if Angus over-run with turbines. This will greatly affect our livelihood and many other businesses in the area which rely on tourism. I am sure this growing dislike and rejection of turbines applies to other areas of the country.

Let common sense prevail and reject this application.

I would like at this stage to add that:

1. The Scottish Natural Heritage (SNH) wind farm map for August 2013 <http://www.snh.gov.uk/docs/A1055080.pdf> is disgracefully and inherently inaccurate. It has no definition of what it is mapping (ie, what SNH consider a wind farm), and should not be used for any accurate analysis.

SNH state that “we seek to map all developments of more than 1 turbine – but we aren’t consulted on all of these, so the map is a subset of the applications actually within the system.” So, a single turbine over 100m high, or even a cluster of “single turbines” might not be shown – even if SNH had been consulted! It is therefore a totally useless map – as most Councils will quickly verify by a comparison with their own maps and/or Renewables Datasheets.

If SNH use information such as this for their consultations, it suggests that their consultations and recommendations are of little value.

2. Paragraphs 4.15 to 4.21 of: <http://www.scotland.gov.uk/Publications/2009/07/03153034/7> states that there is a minimum notification of 21 days for individuals to make representations.

This is a totally inadequate timescale to allow the public to raise suitable site/application specific representations. Most of us are in full time employment with busy family schedules, and it is difficult to find the time to:

- a. find out about turbine applications in the area - especially when the applicants only notify the minimum possible, and often not even the household(s) that is highlighted as being most affected according to their own proposal documentation.
- b. find, read and understand the application documentation.
- c. find, read and understand any planning legislation or regulations for wind turbines.
- d. prepare and submit a suitable site specific representation.

It also does not allow for incidents when people may be away on holiday, or for work or health reasons.

3. Similarly, the 20m boundary notification is totally inadequate since:
 - a. a turbine could be built that could potentially topple onto a neighbouring property.
 - b. neighbouring property could be at risk of ice or turbine blade throw.
 - c. it does not allow for neighbour notification regarding the very real health risks to humans out to at least 2 km.
 - d. it does not allow for neighbour notification regarding the known negative effects on property prices.
 - e. it does not allow for neighbour notification regarding the known negative effects on local tourist and other businesses.

A much more responsible solution for Councils would surely be to adopt a minimum of 3 to 4 months deadline for representations, and a direct notification (by post, not newspaper) of all "Owner, Lessee or Occupier" at the address of the neighbouring land" within a minimum of 2 to 3 km. This would at least bring us more in line with the UNECE decision quoted at the beginning of this objection.

One hopes that something along these lines is being actively suggested to Councils and Scottish Government.