Date:

Energy Consents Unit

Scottish Government

4 Floor, 5 Atlantic Quay, 150 Broomielaw, Glasgow G2 8LU

e-mail: representations@gov.scot

Dear Sirs,

**Rivox Wind Energy Hub (Ref. No. ECU00003293))**

**Letter of Objection**

I **wish to object** to the proposed wind farm, which has been submitted under Section 36 of the Electricity Act 1989, for the following reasons:

* Scottish Government Policy

Whilst the reasons for renewable energy developments are fully accepted, they must still constitute sustainable development. The production of ‘green’ power in itself does not mean the criteria has been met. For clarity, sustainable development is the overarching paradigm of the United Nations and UNESCO states that ‘There are four dimensions to sustainable development – society, environment, culture and economy – which are intertwined, not separate.’

The stated aim of Scottish Planning Policy is *“to achieve the right development in the right place”* – not at any cost. This proposed large scale industrial development lies within an unspoilt rural location whose economy relies heavily on tourists attracted by the views, recreational opportunities, cultural heritage, dark skies and ecology. Furthermore, the proposed development is likely to increase the risk of flooding of many properties (details below) and, as scientific evidence suggests, have a negative impact on the existing wind farms within an approximate 50km radius (‘wind theft’).

* Location

The proposed development, by virtue of its location, its extensive geographical coverage, and the scale and height of the structures, together with associated infrastructure, will adversely impact on the landscape of the Moffat hills, contrary to the provisions of the Local Development Plan (LDP).

The LDP states key cumulative effects are likely to be associated with: -

*“Additional wind farm development sited on the outer edges of both the Ae Foothills with Forest (18a) and the Annandale Foothills (18) would exacerbate the prominence of operational wind farms already affecting immediate skylines seen from nearby lower-lying well-settled landscapes including Nithsdale and Annandale.*

*The creation of a corridor-effect of wind farms sited on either side of Annandale, particularly where this dale narrows in the north and where the Harestanes and Minnygap wind farms are more visible. This would extend the dominant effect of the Clyde wind farm experienced from major transport routes and settlement to the north.*

*It is concluded that there is only very limited scope for additional wind energy development in this area…….”*

* Long-term employment

There will most likely be a decline in tourism as a result of the proposed development (extensive, highly visible industrial sites do not tend to attract tourists), which will directly impact on the revenue that businesses can use to maintain the historic and architecturally important premises that they occupy This will lead to the erosion of both the cultural identity of the area and local economy. It will also therefore inevitably lead to a loss of local jobs. To put this in context, Mountaineering Scotland found that tourism-related employment in Clyde, South Lanarkshire, **fell by 14%** in areas local to wind farms.

Extract from Supplement to Wind farms and tourism in Scotland: A review with a focus on mountaineering and landscape (published: November 2017)

*20. It can be cautiously concluded, from the limited evidence available, that* ***wind farms in locally designated landscapes have an adverse impact upon tourism-related employment in their local area****. All three wind farms in such areas in this study lost employment (averaging -7%), compared with a Scottish increase of 15% between 2009 and 2015, and an increase of 35% in the vicinity of wind farms in non-designated areas.*

* Increased flood risk

The majority of the proposed development site is within the River Annan Catchment, draining via the Evan Water. Both have extensive areas at **high risk** of flooding,

Para 9.121 of the EIA states that ‘the likely river flows could respond rapidly to rainfall’ and that ‘Flood conditions could potentially occur with very little, or no, warning.’

Para 9.175 on construction, confirms there will most likely be increased sediment loads in rivers and streams and that the construction of tracks will potentially increase runoff and transport of sedimentation.

In addition, para 9.197 states that the ‘entirety of the Proposed Development overlies impermeable formations and drainage management will be required to attenuate runoff.’

Whilst it may be possible to partially address this increased runoff and sedimentation within the site using ‘good practice methods’ and SUDS, this is merely mitigation. That is, that the increased flood risk resulting from the development may be reduced but **not** eliminated. It is stated in the EIA submitted as part of the Scoop Hill wind farm application Ref. No.  ECU00000533, that ‘**any** changes to the hydrological environmental (typo in the report) that results in additional flow could exacerbate the likelihood of flooding.’ It goes on to say that ‘the River Annan has extensive areas at a **high risk** of flooding *encompassing road and rail networks, residential areas and farmland’*.

Increased flood risk results in considerably higher than average insurance premiums for homeowners, reduces the value of property and to add further insult and financial burden on those potentially impacted, it is the primary responsibility of a property owner to provide its own flood protection (at its own cost).

As this issue has, through this correspondence, been brought to the attention of both the developer and the determining authority (Scottish Ministers), those likely to be impacted should be fully compensated in the event this application is approved.

* Lighting of turbines

As the turbines are in excess of 150m high, aviation lighting will be a requirement. The visual impact of night aviation lighting on the character of this rural landscape (many of the settlements/villages in the locale have no street lighting), will imbue the area with an industrial appearance and render the wind farm visible from a great distance. It is also likely to impact negatively on the health and wellbeing of both humans and wildlife.

* Wind theft

Wind theft’ has not been considered and this is a fundamental flaw in both the application and Scottish Government policy. It is recognised in the international scientific community that wind farms in relative close proximity could significantly impact on turbine efficiency. It is reported that wind farms generate wakes ‘characterised by a reduction in mean wind speed and an increase in small-scale turbulence. These wakes have the potential to disrupt the operation of adjacent wind farms…’ If the proximity of this proposed development decreases the efficiency and economic viability of existing wind farms and is granted permission, it will have unnecessarily increased the negative impact on natural capital, increased the flood risk and caused a reduction in tourism and therefore local employment. It is therefore clear that ‘wind theft’ should be fully evaluated prior to determination of this application.

* Battery Energy Storage Systems (BESS)

There are also well-authenticated, inherent dangers attached to battery energy storage systems (BESS) using lithium-ion batteries. These do not appear to have received adequate risk assessment.

* Low-flying

The proposed development is close to a military low-flying area used by high speed jet aircraft and Hercules transport planes authorised to fly at levels down to 150ft.

* Precautionary Principle

This proposal disregards the precautionary principle incorporated into the World Charter for Nature in 1982 and adopted by the United Nations General Assembly, which states: ‘When there is reasonable suspicion of harm, decision-makers need to apply precaution and consider the degree of uncertainty that appears from scientific evaluation’

There is a strong prevalent concern that there is insufficient evidence to reach reliable conclusions on the long-term effects of large scale wind farms on local and extended weather conditions and also on the effects of infrasound emitted by turbines, which research indicates can induce vertigo, disorientation, nausea and resonances in inner organs such as the heart.

Signed:

Name(s):

Address:

Post code: