

Place Plan

The Place Plan for the Upper Liddesdale & Hermitage area was registered by Scottish Borders Council on October 10th and will duly become part of the Local Development Plan 3. In the Place Plan, landscape is considered to be the primary natural asset of the area. The creation of an industrial energy park within the landscape is not considered an acceptable change of the landscape by the community.

5.6.9 Proposed Viewpoints

Viewpoints appear to have been judiciously chosen to minimise the apparent effect on the visual landscape.

Properties on the Eastern side of the Hermitage Water valley, Leahaugh and Netherraw, are at the base of a steeply rising bank which impedes the full view of the collective turbines. Properties on the Western side of the valley such as Shaws, 351037, 594796 and Newlands, 350919, 594108 however, will be afforded an uninterrupted view of the entire turbine array. If individual properties are to be used as viewpoints, then in the interests of objective balance these Western side properties should be represented with viewpoints.

As for community viewpoints, Hermitage Hall is represented, but for some reason the view from Lady's Knowe is thought to be more important than that from Hermitage Castle, 349582, 596059, the finest medieval castle in Scotland and a major tourist attraction to the area. Visitors to Hermitage Castle will see at least seven of the turbines as currently placed. This location must have a viewpoint.

Another scheduled monument is the megalithic stone circle Nine Stanes Rig at 351737, 597294. This stone circle is one of those surveyed by Alexander Thom, the founder of Archaeoastronomy, and is listed in his book "Megalithic Sites in Britain". According to Thom, the sites of stone circles were carefully chosen so that the rising and setting of the sun and moon at various maxima and minima in their orbital cycles could be noted as they coincide with horizon features in the landscape. The view from this monument is thus particularly sensitive to the intrusion of a large array of turbines which will dominate the landscape to the South West.

Public benches are usually included in viewpoints as these are invariably located at places where the scenic beauty of the landscape is particularly valued. The public bench at 351414, 593338 on the minor road connecting Steele Road to the B6399 affords a particularly spectacular view over the Hermitage valley. The bench will look directly at the wind farm and every turbine will be visible in its entirety. This bench should be included as a viewpoint.

1.4 EIA Definition

It is stated that scope of the EIA will be limited to the site of the wind farm.

2.3.8 EIA for Grid Connection

It is stated that the EIA for the grid connection will not be considered as it falls under a separate consent process.

Examination of what constitutes the ‘development’ and the ‘environment’ for consenting purposes.

The law (Electricity Works (Environmental Impact Assessment) (Scotland) Regulations (2017), hereafter called the Act) applies to, “*An application under section 36 of the Electricity Act 1989 for consent to construct, extend or operate a generating station*” (1.2.a) and states that such an application, “*must be accompanied by an Environmental Impact Assessment report (EIA report)*” (5.1). The report must include, “*a description of the development comprising information on the site, design, size and other relevant features of the development...*” (5.2.a) and “*a description of the likely significant effects of the development on the environment*” (5.2.b). In particular, the EIA report must include, “*a description of the physical characteristics of the whole development...*” (Schedule 4.1.b) (our emphasis)

The pertinent questions here are, what constitutes the ‘development’ for consenting purposes? Also, what constitutes the ‘environment’?

The Development

We first note that “relevant features” of the “whole” development are not constrained to the application which is made under Section 36 of the Act, as the Applicant argues at 2.3.8. The Act leaves open the possibility that other parts of “the project” may be applied for under different legislation, but stipulates that for the purposes of the EIA, the “whole” development must be considered.

For reasons upon which we will not speculate here, it has become custom and practice for wind farm Applications not to include an EIA report on the transmission line that will connect the wind farm to the grid. Instead, the Development is routinely split into two separate Applications, firstly for the wind farm itself under the Electricity Act (1989) Section 36 and, if that is successful, a separate Application under the Electricity Act (1989) Section 37 is made for the transmission line to connect the wind farm to the grid. The EIA for each part of the Development is therefore considered separately and at different times. However, we argue that it is unlawful to interpret the Act this way and that caselaw supports this view.

We argue that there is “functional interdependence” between the wind farm and this transmission line connecting it to the grid. The line connecting the wind farm to the grid would be constructed for the use of this wind farm only, and would not be constructed unless the wind farm was to be, or had been, built. Both would be very substantial construction projects in their own right, but neither would have any commercial relevance and would be in effect a stranded asset without the other, as they cannot function independently.

Caselaw agrees with this point. See, for example, *Burridge v Breckland DC* (2013) Civ 228, R (Larkfleet Ltd) v S Kesteven DC (2014) EWHC 3760 and *Wingfield v Canterbury CC*. EWHC 1975 (2019) amongst others.

There are problems with the consenting authority assessing the environmental impact of the whole development when only part of the development has been described. In *Burridge v Breckland* at [78], for example, the Judgment stated “...*There are, as it seems to me, formidable objections in requiring a planning authority to have regard to some possible further development in contemplation, but not yet specified...*”.

The Applicant must therefore include in the EIA report a description and an assessment of the environmental impact of the transmission line connecting the proposed Wind Farm to the grid.

To do otherwise is tantamount to “salami slicing”, where having given consent for the wind farm, there is inevitable pressure on the Scottish Government as consenting authority to give consent to the transmission line - despite any concerns there may be over the environmental impact of its construction - or otherwise leave the wind farm as a stranded asset.

The proposed wind farm and the infrastructure by which it is to be connected to the grid must be regarded as a single project for the purposes of the Act. Since there are currently no details of the infrastructure by which this proposed wind farm would be connected to the grid, there is no possibility of assessing the EIA for such infrastructure, as required by the Act.

We therefore maintain that the EIA must include the impact of the transmission line by which the wind farm will be connected to the grid.

The Environment

As noted above, the Act requires the Applicant to give, “*a description of the likely significant effects of the development on the environment*”.

We also note that in Regulation 4(3) it is stated that the EIA must describe the effect of the development on: *(a) population and human health; (c) land, soil, water, air and climate...* But nowhere is it stated that this description should be confined to the site of the wind farm.

Schedule 4(4) states the EIA must give, *A description of the factors specified in regulation 4(3) likely to be significantly affected by the development: population, human health, biodiversity (for example fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape.* Again, nowhere is it stated that this description should be confined to the site of the wind farm.

There is nothing which limits the assessment of the environmental impact to the site of the Development, or indeed to the country of Scotland. At no point is the word “local” or similar used as a qualifier to any requirement to assess the impact to the environment.

As legal support for this argument, we note the recent Supreme Court decision *R (on the application of Finch on behalf of the Weald Action Group) (Appellant) v Surrey County Council and others (Respondents)* (20th June 2024). The Judgement examined whether the scope of the environment to be assessed should be confined to the site (in this case, an oil well in Surrey) or more widely cast. In this respect, Para 93 and 94 of the Judgement are worth quoting in full.

93. It is worth emphasising that the EIA Directive does not impose any geographical limit on the scope of the environmental effects of a project which must be identified, described and assessed when an EIA is required. In principle, all likely significant effects of the project must be assessed,

irrespective of where (or when) those effects will be generated or felt. There is no justification for limiting the scope of the assessment to effects which are expected to occur at or near the site of the project. The fact that an environmental impact will occur or have its immediate source at a location away from the project site is not a reason to exclude it from assessment. There is no principle that, if environmental harm is exported, it may be ignored.

94. That is no less true if the effect will be produced or felt outside the territorial jurisdiction of the state (here, the UK) whose national law requires the EIA to be carried out. If there were otherwise any doubt about this, it is removed by the express inclusion in Annex IV, para 5, of “transboundary” effects in the description of the likely significant effects on the factors specified in article 3(1) which should be covered (see para 83 above).

It should be noted that in para 94, reference it made Annex IV of the original EU EIA Directive (2017). However, it is clear that the Act referenced above is a derivative of the EU EIA Directive and Part 10 of the Act can replace Annex IV of the Directive in para 94 above.

The word “significant” is obviously of importance here. If the environmental impact of some particular effect is not considered to be significant, should it be included in the EIA? The answer is given in para 152 of the Supreme Court Judgement cited above:

152.The fact (if it be the fact) that information will have no influence on whether the project is permitted to proceed does not make it pointless to obtain and assess the information. It remains essential to ensure that a project which is likely to have significant adverse effects on the environment is authorised with full knowledge of these consequences.

In other words, the applicant must provide any and all information on any environmental impact, wherever and whenever it occurs, so that the consenting authority can decide on whether it is significant or not, and make a judgement in full possession of all the facts.

We note the requirement in the Act in Schedule 4(4) to determine the effect of the project on “... *climate (for example the nature and magnitude of greenhouse gas emissions)*”. Since climate is a world-wide phenomena and greenhouse gas emissions affect the climate in the world as a whole, this is further evidence that the Act requires the environmental impact to be assessed on a world-wide basis not just within the confines of the site. It follows that the environmental impact of this development due to the manufacture of the component parts of the wind turbines and other items, from any part of the world, must be considered.

There has been much comment recently about the environmental damage caused by the mining of rare earths, particularly in China and in the Congo where the majority of rare earths are mined. The poor working conditions of the rare earth miners are well documented and publicised. Given that there will be an estimated 100 tonnes of rare earths in the turbines of this development, principally in the turbine magnets, which will require the mining of about 100,000 tonnes of ore, it is to be expected that there will be a significant environmental impact somewhere in the world due to the mining and processing of those rare earths.

The Environment Impact Assessment would be incomplete and will not fully satisfy the requirements of the Act unless a full EIA includes the wider environmental impact of all aspects and component parts of the construction of the wind farm.

We therefore maintain that the EIA should not be confined to the site, but should include any and all environmental impacts, both upstream and downstream, wherever in the world and whenever they occur. It is for the consenting authority to determine if any environmental impacts are 'significant' or not and these should not be pre-filtered by the Applicant.

5.6.10 Residential Visual Amenity Assessment (RVAA)

It is stated at 5.6.10 that an RVAA will be done to assess the *“visual effects likely to be experienced by receptors in individual properties located within 2 km of the Proposed Development.”*

It is not clear here what, *“...located within 2 km of the Proposed Development.”* means. The guidance quoted for the 2 km radius is given as, *Landscape Institute (March 2019). Technical Guidance Note 2/19 Residential Visual Amenity Assessment (RVAA)*. In this document it is stated that an RVAA should be carried out if a property is within 1.5 to 2 km of any turbine within the development. It is assumed here that this is what is meant, but this needs clarifying.

We note that the Guidance states at para 4.14, *“Considerations which provide a framework for describing and evaluating the predicted magnitude of visual change ... include:*

- Distance of property from the proposed development having regard to its size / scale and location relative to the property (e.g. on higher or lower ground);”*

It is evident that the principle of proportional scale of the wind turbine is introduced in this consideration, so it is worth asking what size of turbine was being considered when the guidance of 1.5 - 2 km was proposed in the Guidance? This size is not given in the body of the text, but a number of examples for actual wind farm developments are discussed in Appendix 1. Looking at the details for the turbine heights in the six developments discussed, the average blade tip height of the turbines across those wind farms was 123 metres.

Given that the blade tip height for the proposed development is 220m, it is reasonable to suggest that an RVAA radius of 3 - 3.5 km should be used instead of the 2 km proposed.

Other wind farm proposals with similar turbine heights in the area have agreed that the RVAA radius from a turbine will be 3 km.

We suggest that there is clear justification for the RVAA radius for this proposal should be 3 km instead of 2 km.

12.6.2 Assessing Noise

It is stated at 12.6.2 that, *“...noise assessment (will be carried out) in accordance with ETSU-R-97.”* However, we note that the actual methodology by which turbine noise should be assessed is not actually stated in ETSU-R-97. Whatever methodology and algorithm is chosen, it should be stated and should be valid for the height and type of turbine to be used.

14.5.3 Socio-economic impacts and tourism

It is stated at 14.5.3 that, “...*the Proposed Development may create a substantial number of jobs during construction.*” This is a specious statement as wind farm construction is undertaken by itinerant gangs of specialised workers who move from project to project. Any local jobs created will be few in number and will not be sustainable, long term jobs.

The main industries in the Upper Liddesdale & Hermitage area are hill farming, forestry and tourism.

Employment in forestry in this area is virtually zero, which is fairly typical of any area where there is monoculture blanket forestry managed on a forty year cycle of clear-fell cropping. There is intense activity every forty years as the trees are felled and replanted, mainly done by itinerant workers who travel around the country and rarely by the use of local labour. The forests and land are mostly owned by large enterprises for whom forestry is a commercial venture and who are not part of the local community. Hill farming is an economically marginal activity and depends on government subsidies to make it viable. The land of hill farms is more valuable where it is to be planted in forestry than as a hill farm, so there is a gradual process whereby hill farms are being turned into blanket monoculture forests. The employment prospects in the area are steadily diminishing in consequence, to the detriment of the local economy.

Tourism is increasing as a diversification for farmers who are looking for ways to supplement their income, whether as B&Bs, or holiday lets, or providing sites for camping or caravans. In the Upper Liddesdale & Hermitage area, these include Hermitage Farm, Gorrenberry Farm, Larriston Farm, Singdean, Saughtree Station and Roadside Cottages Saughtree. Neighbouring areas like Newcastleton are also investing heavily to boost their tourist industry. Tourism in the Borders is heavily promoted by bodies such as South of Scotland Destination Alliance, South of Scotland Enterprise, VisitScotland and Scottish Borders Council.

In a VisitScotland survey (Scotland Visitor Survey 2015 and 2016) the most important reason tourists gave for visiting Scotland was “scenery and landscape”. The nascent tourism industry is thus very sensitive to anything which may damage the impression and expectation of remote, gently rolling hills which is the iconic timeless nature of this part of the Scottish Borders.

Proposed Scope of EIA Chapter with regard to Battery Energy Storage Systems

It is proposed in 15.5.5 that “*Accidental leaks/spills of oil, fuel, chemicals, and wastes*” be scoped out.

It is also proposed (2.3.2) that Battery Energy Storage Systems (BESS) in the form of containerised units will be considered. The location, size and other details of the battery storage system are not given, nor is it stated that they will be given.

We would comment that the significant likelihood of a spontaneous fire occurring in the BESS is now well known. There have been two publicly documented fire incidents at grid-scale BESS sites

in the UK, one operational fire in Liverpool in September 2020 and another at a project under construction in Essex in February 2025. Any proposal for a BESS requires mitigation in respect of the possible health and environmental consequences of such a fire.

Firstly, the fumes from a fire are poisonous so there needs to be two completely separate access roads to the BESS, to reduce the possibility of staff and fire fighters being overcome by fumes if there is just one approach road.

Secondly, the National Fire Chiefs Council recommends (*"Guidance on Grid Scale Battery Energy Storage Systems (BESS)"*) that in the event of fire, or the threat of fire, each BESS container should be sprayed with at least 1900 litres of water per minute for at least two hours to keep the temperature of the BESS container below thermal runaway.

For a BESS of 200 MWh capacity, (a typical BESS installation), the facility would consist of 200 containers. In the event of a fire, it would require 380,000 litres per minute for 120 minutes, or 46,000 tonnes of water. This would need to be stored in a suitable bund. This, and the two approach routes, will constrain the location of the BESS, which should be identified in the Application.

Thirdly, the run-off from the fire of all this water would cause a major environmental catastrophe as the water, laden with poisonous lithium salts, would run into Hermitage Water, and so into the Liddel Water and thence into the Solway catchment area.

We conclude that the possible consequences to human health and to the environment from a BESS fire must be scoped in. We will expect the construction and location of the BESS to be fully detailed in the application and in the EIA so that SEPA and the Fire Service can comment suitably upon it.

Transport issues

We note that from the exhibition by the developer at Hermitage Hall on the 18th of November, that the preferred route for HGV and abnormal loads will be from the South on the B6357, through the village of Newcastleton, then crossing the Hermitage Water at the 'Smiddy Brig' to join the B6399 then going North to the entrance to Hartsgarth Farm.

We observe that the current bridge at Smiddy Brig is a humpback bridge and is not rated to carry the prospective 500 tonne weight of the turbine nacelles. The turn at the bridge is also too tight to enable turbine blades (estimated length 90 metres) to be brought over it. A new bridge is going to have to be built. There will be extensive delays during the construction of the new bridge, on a road which is a school bus route and also an emergency services route.

It is stated at 11.5.2 that, *"Access to the Site is currently via an existing farm access junction off the B6399 which will require to be upgraded. Any suitable new access arrangement will be designed in accordance with the appropriate guidance and would meet abnormal load geometric requirements."*

Any upgrading or, in particular, the construction of a new access, will again cause extensive traffic delays and will impede the school bus and emergency traffic.

We would also note that if the details of any new access arrangement are described within the application, then any planning requirements for the new access arrangements will be covered by the consent for the development. However, if the applicant does not explicitly set out the details of any new access arrangement within the Application, then a separate Application will be required.

There will need to be considerable works in straightening the B6357 approach road from the A7, removing humps and undergrounding utility lines that cross the road from poles, all of which will cause traffic disruption and delays.

It is usual for a Traffic Management Plan (TMP) to be submitted with an Application, or at least for a condition that a TMP to be signed off by the Council before works begin. The Applicant appears to recognise that there are severe challenges to HGV and abnormal loads in any of the obvious routes to the site and do not wish to commit themselves to the expense of determining a full TMP for the development until this becomes necessary.

However, the recent memory of the debacle of the abnormal load traffic to Pines Burn wind farm is still raw, where a detailed TMP was not signed off by Scottish Borders Council, in writing (as the planning conditions stipulated). In consequence, there was a year of delay, upheaval and confusion as the TMP was extemporised *ad hoc* as immediate requirements demanded.

It is clear that a fully detailed TMP must be submitted with the Application so that the full extent of the considerable disruption can be appreciated by the affected communities and possible mitigations worked out in conjunction with the developer directly. This matter should not be 'Scoped Out'.

Cumulative issues

As listed in Table 3.1, there are a number of wind farms in the immediate area at various stages in the planning process, namely Windy Edge, Liddesdale, Cliffhope and Teviot, with a combined number of 179 turbines. With this proposed development, the number is now 197 turbines. There can be no doubt that the cumulative effect on the landscape, which is currently devoid of turbines, would be considerable. If all these wind farms are consented and built, the landscape would essentially become an industrial energy park and be completely changed from the remote and timeless rural aspect of gently rolling hills.

The Scoping Report lists amongst the guidance documents, "*Update of Wind Energy Landscape Capacity and Cumulative Impact Study*" by Ironside Farrar, commissioned by Scottish Borders Council and published in 2016. This document estimates the landscape capacity for various heights of turbines based on an objective set of criteria and was commissioned by Scottish Borders Council to help inform the placement and size of any prospective wind farms in the Scottish Borders. We note that this study finds that the landscape capacity for the proposed site is zero, even for turbines of 15 metres height, let alone turbines of 220 metres proposed height.

It has been argued that the Ironside Farrar study is out of date as turbine heights are commonly twice as high as they were ten years ago. However, as noted above, the immediate landscape is currently devoid of any turbines. It therefore cannot be claimed that it is already ruined, so a few more turbines won't matter. Moreover, the objective criteria in the study are absolute and not normalised against any current average turbine height.

Local Development Plan 2 does not in any way indicate that the Ironside Farrar study should be modified or overturned with regard to the land use or projected land use of this area.

The study remains a valid guide to landscape capacity for wind turbines and the developer must justify why this guidance, and the objective criteria it uses, should be set aside to build a windfarm in this location.