

SBC 19/00191/FUL

Wull Muir Wind Farm
Heriot, Scottish Borders

Application to erect 8 turbines up to 130m
height

Joint Objection by Stow & Fountainhall and Heriot
Community Councils

July 2019

Wull Muir Wind Farm Application

Stow & Fountainhall and Heriot Community Councils Object to this Application

Introduction

1. The Wull Muir Wind Farm application is for 8 turbines up to 130m in height on a site next to Carcant wind farm, approximately 3kms west of the A7 on the edge of the escarpment marking the northern end of the Moorfoot and Lammermuir Hills. This site is to the north west and north of the main areas of Heriot community, which is diffuse with several separate areas of houses.

Operational and Proposed Wind Farms in Area

2. Heriot currently has three operational wind farms either within its boundaries, or adjacent. There is a small wind farm of 3 turbines at Carcant, which is adjacent to the Wull Muir site. There are 12 turbines forming the Toddleburn wind farm just within the northern boundary of Fountainhall, and then to the east there is the Dun Law cluster, with some 61 turbines forming Dun Law and Dun Law Extension, and a further 12 turbines recently constructed on the Pogbie site, literally adjacent to the eastern part of Dun Law.
3. There is a further scheme at Gilston Hill, within 2 kms of the Dun Law cluster, for 7 turbines, which has been refused permission by SBC Planning Committee. This decision was appealed, and the Reporter appointed by the DPEA allowed the appeal, despite a previous application on the same site having been refused in 2012. This decision has very recently been overturned by the Court of Session, following an action brought by Heriot Community Council challenging the procedures followed by the Reporter. It is expected that the wind farm developers will seek a further planning appeal before a new Reporter.
4. The Wull Muir application is to the west of the A7 and Gala Water valley, which runs north to south and forms the centre of the physical area of Heriot, with the several clusters of houses forming the bulk of Heriot community. Apart from the small scheme at Carcant this area has so far been free of wind farm development, and so the Wull Muir proposal would mark a major extension of wind farm development if approved.

5. However, the community councils have also been in preliminary discussions with yet another developer concerning a site called Greystone Knowe some three kilometres south of Wull Muir, for a further 12 turbines. This site is at the northern end of Fountainhall community. The developers are expecting to start the scoping process shortly.
6. There are further indications at an early stage of proposals for a further 6 turbines just to the west of the Toddleburn wind farm, and also for four turbines near Nettlingflats. The latter site is roughly in the middle between Gilston Hill and Wull Muir, and Heriot CC is meeting the developers very shortly for preliminary discussions.

Inadequacies of Planning Policy for Multiple Wind Farms

7. The situation that has emerged in Stow & Fountainhall and Heriot, with a possibility of five further wind farms, several of them much closer to the settlement areas than the three operational wind farms, has emerged in a piecemeal way over the last two years. The planning system is ill designed to cope with such situations (which are not unique to this area) as each wind farm has to be considered on its own merits. Furthermore, if one or two of the applications which are furthest forward are approved, this then inevitably weakens the case for refusing subsequent schemes.
8. This may sound unlikely, but there are clear precedents for exactly this happening very close to the local communities. It is already accepted that the entire length of the northern Lammermuir Hills are in real danger of becoming a “Wind Turbine Landscape” and any further expansion of this effect to the west and into the Moorfoot Hills must be restrained. Borders residents have observed in dismay how developers and their professional advisers set about securing consent on wild upland landscapes. Firstly, the argument is made that a broad expanse of empty hills can accommodate a wind farm on its own. Then after that ground has been occupied, the next argument is that as there is now a wind farm in place, the area is less valuable as wild upland and so a further wind farm can be tolerated. And finally, the current status at Crystal Rig is reached, where so many turbines have been built that now the landscape has been entirely degraded and its character irreversibly changed and so becomes a “Wind Turbine Landscape.”
9. SBC Planners have attempted to follow a “cluster and space” policy towards the emerging pattern of multiple wind farm applications in the Borders. This has to some degree been followed in their approach to the Crystal Rig cluster, and to the Dun

Law cluster. If the Dun Law cluster is allowed in a piecemeal fashion to sprawl significantly to the west with the five current potential schemes this would effectively destroy the “cluster and space” approach.

Planning Policy

10. Mr Ian Kelly of Graham & Sibbald, the planning expert retained to advise Raeshaw Farms Ltd, has submitted an Objection Paper which is available on the Planning Portal for this application. Mr Kelly sets out in detail planning policies that are relevant to this application, drawing the conclusion that they do not support the Wull Muir application. The CCs agree with his conclusion, and just consider the one specific topic below.

Scottish Borders Council Supplementary Planning Guidance

11. The recently adopted SBC SPG on Renewable Energy and the associated Landscape Capacity Study undertaken by Ironside Farrar is very clear that this entire area around Heriot has very little remaining capacity for further wind farm development given the large-scale operational clusters to the east. The Study considers capacity for turbines in various bands corresponding to turbine heights and concludes that the landscape around the various wind farm sites in Heriot including the Wull Muir site has no further capacity for turbines above 80 metres in height.
12. The joint CCs share this assessment by landscape experts, but of course from a layman’s perspective. It is clear that these further five prospective developments would change Heriot in particular drastically. Effectively the community would become surrounded by turbines, some of which would be within sight and/or sound virtually everywhere. Whilst the CCs are aware that each application is considered on its merits, it is this background that also informs the current view of the two community councils. They have taken a consistent approach to wind farm applications that fail to meet the requirements of current planning policy at national and local level. This approach led the joint CCs to object to the Gilston Hill proposal, and also now leads them to objecting to the Wull Muir proposal. However, it is also their view that current planning policy needs further strengthening to cope with the emerging pattern of multiple applications in relatively small areas, dramatic increases in turbine heights up to 200 metres and above, and single sites with turbines numbers matching current clusters.

Failure to Consult Heriot Community Council

13. The developers have consistently and persistently failed to engage with the community council. They attended one solitary meeting at the very early stages of the proposal and, despite being repeatedly invited have never been available to attend subsequent CC meetings. A first public display was arranged with no direct notification of the community other than, as we later found out, an advert in the low-circulation Southern Reporter. This event was poorly attended and following pressure from the Community Council was finally repeated less than a week before the submission of the planning application. On this occasion, despite the planning application being submitted to SBC the following week, the public exhibition failed to display any photomontages, making it impossible for the public to visualize the visual and landscape impacts.

Wull Muir: Landscape & Visual

14. Wull Muir Application is for 8 turbines up to 130m in height on a site next to Carcant wind farm, approximately 2kms west of the A7 on the edge of the escarpment marking the northern end of the Moorfoot and Lammermuir Hills. Whilst this site does mean that the turbines will not be visible from houses in Heriot that shelter in the local valleys, it is notable from the ZTVs that the turbines will be visible from large areas of Midlothian and even Edinburgh and the Firth. It also means that some residential areas of Heriot will have extensive views of the turbines. The group of houses at Nettlingflat already have a clear view of the three smaller and more distant turbines at Carcant, and the Wull Muir turbines will be more prominent and extend further. This will also apply to the nearby group of houses at Falahill, and particularly to houses at Falahill Farm and Shoestanes which are on higher ground. Residents at Brotherstone will also see the very tips of the turbines, but as their access road goes through Nettlingflat, they will share the same view when coming and going. This group of houses would also be severely affected if Gilston Hill is consented, and given the close proximity of that scheme, were the subject of the EIA Residential Amenity Survey for Gilston Hill.

Consideration of Viewpoints in the Wull Muir EIA

15. **Viewpoint 6 Nettlingflat:** The montage depicts the proposed turbines as seen from Nettlingflat and concedes that the effect will be Significant. Many of the houses, and the access road, have extensive views to the west across the A7 valley, and there can be no doubt that the impact of the turbines will be severe, especially their rotation

which of course montages cannot demonstrate.

16. **Viewpoint 4 Corsehope Rings:** This depicts the turbines as seen from higher ground within Heriot. Whilst the effect is graded as Significant, it is not accepted that the sensitivity is low as stated. Many local people work outdoors, and others walk or ride. People therefore frequently go onto higher ground in many areas around Heriot, and this Viewpoint was chosen as representative. Furthermore, it is at such places where cumulative effects are most noticeable. Heriot CC considers that this montage is a good illustration of how major the impact of the scheme will be moving around the area.
17. **Viewpoint 5 A7 Gilston Road:** This shows the potential view from the A7 travelling north. This view will come and go at different points along the A7 and with the rotation of the turbines will undoubtedly catch the eye of alert motorists – and may indeed distract them momentarily as it is just the turbine blades that will be visible, so the context may be confusing.
18. However, it should also be borne in mind that the A7 going south from Middleton rises up to open ground and full views of the escarpment and therefore the turbines. Certainly, it will be obvious what they are so confusion will not be an issue, but the sheer size of the turbines will be. Indeed the ZTV makes it clear that the turbines will be visible along long stretches of the A7 going south all the way from the Edinburgh by pass. No doubt vegetation and trees will provide some screening, but it will become increasingly obvious as the motorist proceeds that there are very large turbines right on the skyline. This can be confirmed by looking at:
19. **Viewpoint 9 Tynehead Road,** which is a secondary road that joins the A7 north of Heriot. Whilst the EIA accepts that the effect will be Significant, it downplays the sensitivity. It is hard to see how that can be justified, given that on both roads there will be significant sections where the turbines will be relatively close, in full view, and on much higher ground. They will undoubtedly “tower” over the roads especially to those who might be seeing them for the first time (such as tourists).
20. These effects will be made even more stark if Gilston Hill also gains consent, as that site too is on the edge of the escarpment, and not far to the east. It was specifically to stop such effects that the Dun Law cluster were set back from the escarpment edge, and of course these turbines are only around 70m high. It is the CCs understanding that the planners attached considerable importance to preserving the pristine state of the escarpment edge from major industrial objects such as the

proposed turbines. This is of considerable importance to local people, who are regularly coming and going along these very local roads.

21. **Cumulative Impacts.** There is potential for cumulative impacts with other local wind farms at the Viewpoints discussed above, and more generally. Some of the montages make this clear by illustrating the Dun Law cluster, Toddleburn and the potential turbines at Gilston Hill. On many areas of high ground within Heriot these turbines come into view in a variety of ways. Clearly there would be major effects when combined with Wull Muir, as this scheme is well to the west of the others (apart from the 3 smaller Carcant turbines) and so will create the sense of the landscape having turbines in many directions. The effect of Gilston Hill and Wull Muir combined will extend the Dun Law cluster considerably to the west and will considerably degrade the landscape away from being comprised of natural hills towards becoming a “landscape with turbines.”

22. Taking into consideration the above discussion on Landscape and Visual effects of the Wull Muir application on local people, the CCs have decided that these are unacceptable and are clear grounds for refusing consent.

23. **Impact on Special Landscape Area.** The site is situated immediately adjacent to the southern boundary of the Gladhouse Reservoir & Moorfoot Scarp SLA (Midlothian). Technically, this development is just outside that area, but will obviously impact very directly on it. To suggest that a turbine is visually unacceptable in one position, but is perfectly permissible just ten metres away on the other side of a notional boundary requires one to dismiss the entire spirit of the concept of a protected view.

24. **Turbine positions.**

The turbine no. 6 is situated on the site boundary and its nearest neighbor, turbine 5, is also close to the boundary, although it is not possible to determine exactly how close. As the proposed turbine blades have a sweep of 58.5m, this means that turbine 6 will project outside the site boundary in every possible wind direction other than one that is orthogonal to the boundary. It is possible that turbine 5 may also suffer from a similar failing. Not only is this unacceptable in planning terms (we would not, for example, be permitted to construct a building whose first floor encroached over a neighbour’s boundary), it also means that the turbine directly encroaches into the Gladhouse Reservoir & Moorfoot Scarp SLA.

25. **Turbine Heights.** This paper has already touched on this aspect, but further comment is needed. It is widely accepted by the wind farm industry that in the post subsidy regime moves towards much higher and larger turbines is essential to ensure economic viability. There are now several applications in the Borders and Dumfries and Galloway for turbines of 200m and higher. Another consequence is that consented schemes are now being revised to increase potential output, with s42 applications to increase turbine heights, sometimes together with proposals to remove a turbine or two. Energiekontor, the Wull Muir developers, have two consented schemes in the Borders, namely Windy Edge and Pines Burn. In both cases s42 applications have been made, and the justification is identical in both cases. It shows that increasing the turbine heights from 130m to 150m results in a disproportionate increase in energy generated of around 65%. It must therefore be assumed that a similar application will be made in the case of Wull Muir, as the economic logic is inescapable.
26. It is therefore essential to consider this application as if it was being made with the final turbine heights to be decided at a later date to suit the developer, and therefore the predicted LVIA effects as being understated, and even more serious than the EIA accepts. This is a difficult issue to deal with, but the logic of the situation demands that it be considered.

Residential Amenity

27. There appears to be no Residential Amenity Survey of nearby properties, despite a number being identified as close enough to require consideration of potential noise impacts. One of the closest of these properties is in Midlothian. Several of the others are at Carcant, which already has three turbines, but it is unclear why they have not been properly assessed. We consider the developers should be instructed to prepare the appropriate assessments.
28. There are a number of issues that arise from a single property that is situated about a kilometre from the proposed turbines, called Heriot Cleugh. It is occupied by a local family and is accessed by a farm track via Shoestanes Farm. It is situated on the same plateau as the proposed turbines, somewhat to the east.
29. **Visual.** There is no assessment of the visual effects of the turbines on the property, with the developers indicating that a nearby plantation screens the turbines. They suggest that Viewpoint 1 Broad Law should be consulted to ascertain the visual impact. This is not an acceptable assessment for Residential Amenity purposes.

30. **Noise.** The EIA indicates that the property will suffer noise in excess of ETSU-R-97 guidance limits at certain wind speeds. The residents have asked Heriot CC to undertake an independent assessment, which will be done. Heriot CC has requested the raw data from the developers, who have refused to supply it on grounds of “commercial sensitivity”. This is a standard red herring advanced by developers, which is equally regularly set aside by Reporters during planning appeals. This recently occurred during the Gilston Hill appeal. It is our view that SBC should require developers to release such data on request to interested parties, subject to suitable undertakings that the data will only be used for assessment purposes. The CCs request that Energiekontor are approached by SBC in this case.
31. **Water Supplies.** The EIA states that there are no public water supplies within the site. This is not correct, as the source of the water supply for Heriot Cleugh is within the site. Midlothian Council also raise this issue in their response. The CCs consider that the Hydrology section of the EIA fails to assess the impact of constructing the wind farm on private water supplies.

Effects on Wildlife

32. The developers acknowledge the impact on local wildlife, in particular the number of birds that will be killed by the turbines over the next 25 years, including golden plover and curlew. The RSPB and SNH responses request that mitigation and contributions to initiatives to assist birds be included in the plan. While these may assist the general populations of certain species, it will not assist all affected species, nor does it mitigate against the loss of birdlife in the local environment. Loss of vulnerable species such as curlew from the Heriot area is a loss to the Heriot community, and simply hoping that someone will be able to develop new breeding grounds elsewhere does not compensate the local area for their loss.

National Policy & Need for Development

33. Responsibility for energy production and regulation in Scotland is retained by the Westminster Government. Whilst Scottish policy encourages renewable energy, this has to be as subordinate policy within the UK framework. UK policy now looks to offshore wind and no longer encourages further onshore wind. Furthermore it should be noted that the Levy Control Framework (LCF) caps subsidies at £7.6bn in 2020 (albeit with a generous 20% extra headroom).
34. The LCF cap is based on operational and currently consented renewable electricity generation capacity achieving an implied UK output of approximately 110 TWh by

2020. Renewable Energy Foundation estimated at December 2018 the likely UK output figure at about 164 TWh or an overshoot of about 50%. This is based on operational renewables of 36.2 GW, with a further 4.3 GW under construction, and 19.9 GW awaiting construction. Therefore, under UK policy there is simply no requirement for further consented on shore capacity, which includes the Wull Muir scheme.

35. Most Scottish wind farms are currently being constrained from generating due to congestion of the National Grid. In 2018 twenty major Scottish wind farms had over 15% of their output constrained, with many having between 20 – 30% of output constrained. Even more revealing, as new wind farms start to generate power, they are subject almost at once to constraint. Indeed constraint payments are often far greater than the value of the underlying electricity that has been foregone.
36. There is a chronic lack of grid capacity between England and Scotland, which affects the whole of the Scottish Borders. There is a very good illustration of this looking at Fallago Rig wind farm which is very close to the Wull Muir Site. Since April 2013, Fallago has discarded output of 505 GWh, equivalent to the annual consumption of about 150,000 households. In 2019 so far (1 Jan. to 17 June) it has lost about 66.6 GWh, equivalent to the annual consumption of about 20,000 households. This compares with about 26 GWh lost over the same period in 2018.
37. Curtailment on this scale represents a large fraction of its potential output. Over the whole of 2018 Fallago lost about 25% of its output, and on the basis of the current constraint data that seems likely to be a conservative estimate for 2019.
38. Quite apart from the eye watering levels of constraint payments these wind farm operators are being paid, it must be questioned whether new schemes can now be justified at the planning stage when their generated power increasingly cannot be used. This is now a problem that affects wind energy generated across the whole of Scotland. There are efforts being made to provide further grid infrastructure to connect Scotland to the rest of the UK, notably the 2.2GW Western Link to Wales. However, this is only a partial remedy, as there are already periods when more than 2.2GW of Scottish onshore wind has had to be curtailed. Although the link has now been notionally put into operation, it appears to be extremely unreliable with frequent periods out of operation. Furthermore, there is over 4 GW of further consented capacity scheduled to be built in the next few years.

39. Whilst no doubt the applicants will claim that SPP2 specifically rules out grid capacity as a reason for refusing individual wind farms, it must be remembered that UK policy governs energy production. Are we really to consent and build wind farms when there is no economic justification for doing so, and with no prospect of the generated power being needed or subsidised? It is clear that UK policy renders this particular part of Scottish policy irrelevant and it should therefore be ignored.

**Professor Hughes Paper Renewable Generation, Constraints & Costs 2016
Attached as Separate Paper**

40. There is of course a high economic cost as well, especially when consideration is applied to the effects on the National Grid. Professor Hughes's paper gives detailed consideration to the costs involved and reveals a truly dystopian situation. His paper is shortly to be updated, but he confirms that the picture has only worsened since it was originally written.

41. Professor Hughes reveals that for practical purposes, the net economic value of additional wind and solar generation in the UK – i.e. the market value of the power less the additional costs incurred to transmit the power and balance the electricity system – was less than £10 per MWh in 2016 and will be negative in 2020. In 2016 the net economic value of additional wind output was zero or negative for most periods when wind output exceeded 5 GW.

42. This analysis refers to the whole of the GB electricity system because balancing costs cannot be broken down to national or regional level. Still it is reasonably certain that the situation in Scotland is considerably worse than the GB figures imply. On the basis of the distribution of net economic value for Great Britain, it is likely that (a) at least 50% of Scottish wind generation in 2016 had a zero or negative net economic value, and (b) this proportion will increase significantly up to 2020.

43. The conclusion that much of the output from wind and solar generation has a zero or negative net economic value implies that money spent on building wind farms, installing solar panels, etc is almost entirely wasted. The operators may earn a satisfactory return upon their capital expenditures, but this simply reflects a transfer from electricity customers that gives rise to little or no economic benefit to the country as a whole. Furthermore it increases electricity prices for both the consumer and industry alike.

44. Referring to the updated 2020 Routemap for Renewable Energy in Scotland.

“The document is clear that onshore wind has a pivotal role in delivering the 2020 renewable energy targets for Scotland. It confirms that the Scottish Government policy on windfarm applications strikes a careful balance between making the most of Scotland’s renewable energy potential and protecting environmental issues and residential amenity.”

45. All wind farms have adverse environmental issues associated with their construction and operation – indeed every EIA has to consider all these and discuss any potential mitigation. Inevitably there are also always local people who suffer loss of their amenity in various ways, including visual effects, noise pollution, effects on private water supplies and so on. Given that it is now clearly the case that local wind farms also have zero or even negative net economic benefit; planning policy, both for the UK and Scotland, does not support further approval for onshore wind farm applications such as Wull Muir.

Conclusions

The various issues discussed in this paper give the following grounds for refusing consent to Wull Muir wind farm.

- a) Adverse impacts on Landscape & Visual grounds, especially in relation to their effects on local residents.
- b) Planning Policy and a Fundamental conflict with SBC Landscape Capacity Study giving rise to unacceptable cumulative impacts with existing wind farms, and also creating an unacceptable extension of the Lammermuir “cluster” into the Moorfoot Hills
- c) Failure to fully assess Residential Amenity issues including noise.
- d) Lack of economic benefit together with failure to discuss grid constraint effects on projected output. Conflict with the developers own assertion elsewhere in the Borders that much higher turbines are required for economic viability.