

ECU Ref: 00002111

SBC Ref: 23/00013/S36

Proposed Wind Farm
at
Scawd Law
near
Walkerburn, Scottish Borders

Application to Energy Consents Unit of Scottish Government
to erect a wind farm of

8 wind powered turbines up to 180m in height

Objection by Heriot Community Council

February 2023

Scawd Law Wind Farm

Response by Heriot Community Council February 2023

Heriot Community Council **objects** to the Scawd Law wind farm scheme and submits that it should be refused s36 consent and deemed planning permission.

Introduction

1. The proposal for Scawd Law Wind Farm is being made by Fred Olsen Renewables Ltd on a site on the highest ground of the Moorfoot Hills, on a subsidiary flank of Windlestraw which is the highest hill in the Moorfoots.
2. Heriot CC responded to the scoping stage of this proposal in September 2020. At that point the scheme was proposed as having 12 turbines up to 180m in height, with access off the A72 near Walkerburn. The current revised full s36 application is for 8 turbines up to 180m in height, but with the access changed. It is now proposed to be off the B709 north of Innerleithen, with traffic routed from the north off the A7 close to Middleton.
3. The scheme also requires some 6.8km of new access tracks, a borrow pit and on site battery storage capacity.
4. Most of the houses in Heriot community lie some 10km to the north of the proposed site for Scawd Law, and they are situated along the Gala Water valley or its tributaries. It is accepted that these properties will not have views of the Scawd Law turbines. However outlying parts of the community at Netlingflat and Crookston, on higher ground to the east of the A7 will have direct views of the turbines, as will any properties on higher ground.
5. The location of the proposed scheme on the highest ground in the Moorfoots renders this inevitable – and it also means that the turbines would be seen from a far wider area of the Scottish Borders. The various ZTVs provided in the EIA make this instantly apparent.

Heriot CC's Principal Concerns

6. Heriot currently has three operational wind farms either within its boundaries, or adjacent to them. 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.

Landscape & Visual Impacts

7. Scottish Borders Council has in place its Supplementary Policy Guidance on Renewable Energy (SPG) and within that Guidance the Landscape Capacity Study (LCS) by Ironside Farrar, updated in 2016 and subsequently approved by Scottish Ministers. Heriot CC draws on the considerable professional expertise and guidance it contains to inform this discussion, and indeed to use as a reference guide for all responses to wind farm applications.
8. The LCS warns that the entire length of the northern Lammermuir Hills is 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 modest sized 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.” It is noted that the developer of the Crystal Rig cluster is also Fred Olsen Renewables Ltd.
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 this would effectively destroy the “cluster and space” approach for this entire area.
10. This might appear to be an overdramatic statement. However, the Moorfoots “space” currently has three other schemes close to Heriot at various stages. These are;
 - a) Greystone Knowe, 14 turbines up to 180m in height, s36 application awaiting consideration by SBC Planning Committee. Sited about 2km west of Fountainhall and 2.5km south of Heriot. Approximately 5km north of Scawd Law.
 - b) Wull Muir 3. 8 turbines up to 150m in height. This scheme is sited just to the north/

west of Heriot. Initial scheme submitted in 2019 for 8 turbines up to 130m in height, revised by moving turbines in 2020, refused permission by SBC and by Reporter. Resubmitted in Dec 2022 with further move of turbines and increase in height to 150m. 1km north and east of parts of Heriot. Approximately 9km north of Scawd Law.

- c) Torfichen. 19 turbines up to 180m in height. S36 scoping request to ECU Jan 2023. Site is just northwest of Wull Muir. Approximately 10kms north of Scawd Law.

11. All these schemes are on the eastern side of the Moorfoots “space” and landscape. On its western side there are the following proposals/ developments

- d) Leithenwater. 13 turbines up to 200m in height. S36 scoping request to ECU Sept 2022. Approximately 5kms west of Scawd Law.

- e) Bowbeat. Operational. 24 turbines at 80m in height. Approximately 1km north of Leithenwater, and 7kms northwest of Scawd Law. It should be noted that although some 10kms from Heriot these turbines can quite often be clearly seen from high ground.

12. The Ironside Farrar Landscape Capacity Study, as part of the SBC Supplementary Planning Guidance sets out the Development Capacity for the Moorfoot Plateau Area, which is not just the relevant area for the Scawd Law application, but also for all the ones listed above. The Study states that up to 10 turbines over 120m could be accommodated:

“in smaller numbers where topography aids screening turbine developments should not adversely encroach onto the visually prominent escarpment and skyline facing Edinburgh or the setting of the Tweed Valley to the south.”

13. However the detailed paragraph at para 6.4.1 in the Ironside Farrar LCS makes the proviso that schemes might be accommodated in the central part of the plateau as

“an area of dissected Plateau Moorland within the central Moorfoot Hills with lower intervisibility from receptors, sited away from settlements and areas of local landscape designations. Screened and topographically contained by the upland landscape, this area could be capable of accommodating a mid to large size wind farm with turbines under 120m or a smaller number of turbines over 120m, (NB Although not a landscape designation a large area of the Moorfoot Hills has been designated as SSSI and SAC that could restrict turbine development).

14. It is clearly the case that the various developers bringing forward schemes in the Moorfoots Plateau Area are attempting to sweep aside the LCS in its entirety. Although each developer will argue their individual scheme can be accommodated, decision

makers must decide whether they can possibly accept the destruction of this landscape by wholesale wind farm development.

15. Looking at the Scawd Law scheme on its own against the caveats of the LCS, there are several immediately obvious points to be made. Although there are eight turbines in the scheme, the proposed 180m height as against “Over 120m” results in a far greater visibility than was considered in 2016. Secondly there is absolutely no screening of the turbines by topography. They are placed at the extreme south of the area and so will be visible over many parts of the Tweed Valley.
16. However the ZTV shown on Fig 3a and 3b makes it clear that the turbines will also be seen from many parts of Midlothian, East Lothian, Edinburgh and the Firth. It might be argued that they are sufficiently far from these areas for this not to be an issue, but the enormous height of the turbines negates that. The ZTV also shows that there will be widespread visibility right across the Moorfoots Plateau, including the higher ground on the eastern edges of the Gala Water valley (the A7 and Borders Railway route). In no way can Scawd Law be described as “*screened and topographically contained by the upland landscape*”. It can be seen from Fig 6.4 in the LCS that potential area for a small wind farm was suggested to be somewhere in the middle of the Moorfoots plateau where it might be possible to meet the caveats – the proposed Scawd Law site could hardly be in a worse place following those criteria.
17. The EIA for the proposal is well presented with many useful maps and montages. Looking at Figure 6.13b – Cumulative Zone of Theoretical Visibility to Tip Height (Scawd Law & Wind Farms in Operation/under Construction) it can be seen the effect the Scawd Law scheme would have. It is accepted that there are large areas where the other wind farms have visibility – but the effect of the Scawd Law turbines would be to fill a huge area of the Moorfoots Plateau (and other areas) where there is no such visibility. There are also extensive areas where both Scawd Law and the other schemes would be visible, again showing how extensive the visibility of the Scawd Law would be. The subsequent Figs 6.14 to 6.16 include other less certain schemes such as those in scoping (as referred to above) which of course makes the picture far worse. However, it is still easy to pick out many areas where the Scawd Law turbines would be making a major contribution to the overall LVIA impacts.
18. The LCS makes mention of the SSSI and SAC designations covering much of the Moorfoots Plateau (there are other highly relevant SAC designations covering areas such as the Tweed Valley which Heriot CC is not commenting about). These areas start right on the northern boundary of the site and extend all the way to Heriot, albeit with minor differences in area. The SSSI designation refers to the area’s upland mosaic and for its outstanding breeding bird assemblage. Others better qualified will no doubt be commenting on the likely impact of such a major scheme with enormous turbines right on its boundary – but it is well known that many bird species suffer casualties from turbines. In that regard this application was delayed due to a pair of golden eagles

nesting on the site. The rash of applications across this area will cause many other adverse effects apart from LVIA issues.

19. The Viewpoints provided in the EIA to inform local people and decision makers largely cover areas to the south of the proposed site. There is just one Viewpoint from the north, from a point on the B709 with virtually no visibility of the turbines. It even has close up views of the steep banks either side of the road. It is therefore of no help to decision makers.
20. Heriot CC called for Viewpoints from the east of the A7 to be provided in its Scoping Response, but this has been ignored. The wireframes which were provided at that stage show that the Scawd Law turbines would be visible on the higher ground behind the Greystone Knowe turbines. This aspect demonstrates an important part of the concerns Heriot holds about this application.
21. **Viewpoint 2 Lauder Common** is more helpful for informed comment. However, the initial position chosen for the Viewpoint was the rough parking area just of the B6362, which has a modest slope to the north and east which restricts the views in those directions to a short piece of moorland hill. A short walk of only a hundred yards north, along the main track on that side of the Common, brings the observer to a panoramic view of outstanding beauty in all directions. Looking east the Lammermuir Hills are fully visible, to the South the Eildon Hills and the Cheviots, to the north Clints Hill and Soutra forming the final ridge before the Central Belt, and to the West the Moorfoot Hills – and the Scawd Law site.
22. We are pleased to note that after drawing this defect to the attention of FORL, they have now provided a partially revised wireline – but it still fails to include the many turbines visible to the north and east, namely Toddleburn, Dun Law, Pogbie and Fallago Rig.
23. However, the crucial point is that the montage does show that even at just over 11km distance, the Scawd Law turbines will be fully visible on the western skyline and would dominate that view. Once again, this emphasises that in choosing to site the turbines on the highest ground possible, the developers are ensuring that this proposal would have the worst possible impact on local areas where there would be visibility. We would also point out that only just over 10km distant from the turbines is the Crookston area of Heriot, and many other high ground areas within the community, so the turbines would appear slightly closer than shown in Viewpoint 2. The angle between the turbines would be narrower, so they would be grouped more closely together, but they would still be fully visible towering over the magnificent southwestern view from all these areas, which currently is of empty rolling moorland, brilliant in summer, receding to that ridge with the turbines on it, which is the final horizon. This will also be true of Nettleingflat further north. Although slightly over 11km distance Viewpoint 2 again

demonstrates the potential view, although the montages do not show the Greystone Knowe turbines which would be much nearer.

24. This will also be true of the view from Lauder Common. Adding to the current views of turbines to the north and east, there is also the possibility of the Greystone Knowe turbines just further to the northwest, and just further again, Wull Muir to add to Carcant. The wireframes and the montage show exactly what the previous section of this paper set out discussing the threat of the Moorfoots Plateau suddenly becoming a “windfarm landscape” from a position of “space” as in “cluster and space.” It is difficult to imagine how any informed observer could consider this as acceptable given the current thrust of the Local Development Plan and the SPG.
25. The importance of Lauder Common cannot be stressed highly enough. It is the largest remaining area of common land in the whole of Scotland, and it has an extended history stretching back hundreds of years. The small library in the centre of Lauder acts as a repository for the many documents chronicling this history. It is held in Trust in a Common Good Fund, which used to be administered by the Royal Burgh, but is now vested with SBC. In practical terms it is farmed in a traditional way with sheep grazing most of the year, and also managed traditionally by “muirburn” at appropriate intervals along rotational strips.
26. It is therefore rich in moorland wildlife, and also features to a very large extent in the annual Lauder Riding, which is attended by hundreds of visitors, as well as hundreds of riders. The rest of the year it is an invaluable large area of open moorland accessible by all. Many local people regularly visit it to walk, exercise their dogs, ride and observe the many different species of birds.
27. The montages also show the night-time view. This is how the turbines will be seen by drivers in the dark crossing the Common on the B6362 towards Stow. As the road is relatively busy for a rural road, that means many local people. The lights at night will also intrude on those who enjoy the dark skies of the area from such an easily accessible vantage point.
28. The views to the west from the Common are of the open Moorfoot Hills and Plateau. Having that wide open view of empty hills and moorland dominated by the turbines, as shown in the montage, cannot be an acceptable development.
29. **Viewpoint 3 Scroof Hill.** This Viewpoint shows the turbines at just over 4 kms distance. Again this Viewpoint makes it clear that views towards the turbines will always have them on the highest ground, dominating the view for any observer. The relevance of this is that drawing a 4km circumference to the north of the turbines covers a great deal of the Moorfoots Plateau which currently has no views of turbines. The Scawd Law turbines will appear across that area as shown in this Viewpoint.

30. This can also be demonstrated by a montage from the Greystone Knowe application. **ECU Reference ECU00003341 Viewpoint 7 Windlestraw Law.** The Greystone Knowe turbines, at 5.5km dominate the view in that direction (roughly northeast) despite being lower than Windlestraw, and so with some of the lower parts of the turbine towers not being visible. This montage also has wireline views of the Scawd Law turbines in a south easterly direction – enormous of course and too large to fully display. The intervisibility of the two schemes could not be more clearly illustrated. It also makes clear the overwhelming effect the current generation of turbines at 180m in height (or even higher in other applications) will have on the local area.

Road Access

31. Heriot CC has considerable concerns about the road access, especially the section along the B7007 and B709. The EIA has detailed “swept path analysis” of some 27 “pinch points” with nos 17 to 27 on those two roads. However, the whole survey is a desktop survey, with a full on site survey only proposed after consent has been gained.
32. The survey concedes that south of the Dewar the B709 becomes a single track road some 4m wide. Access roads for modern wind turbines apparently require a width of some 5.5m. The EIA report further states that this section of the survey could not be properly carried out as the available OS maps do not show the width of the carriageway, merely an overall width including verges. It is questioned how accurate that is.
33. This road is very old and therefore historic. The road is shown on Roys (military) Lowland Maps of 1752-1755 from Innerleithen to Garvald. This section of road will need widening in its entirety to at least 5.5m. The road anyway is in a poor condition and has indeed been the subject of complaints from Heriot CC to SBC Roads. It has been patched to some degree, but the survey accepts it is in poor repair, so may well need remedial work before any construction traffic actually uses it. Widening the road will destroy its rural character, which is highly valued by local people. In addition passing places will need to be installed at frequent intervals, with even further intrusion into the edges.
34. . The B7007 section rises from the A7 at 230m to Broad Law at 400m traversing the slope of the escarpment delineating the edge of the Central Belt. It then turns south and descends again to Garvald Lodge at around 300m. Once past the access point for the Carcant turbines at Broad Law the road is only 5m wide, there are several pinch points in this section, as the road is narrow and twists as it descends. Therefore widening will be required for its entire length from there until the proposed junction with the access track.
35. From Garvald Lodge it becomes the B709 (this ancient road having joined from Heriot). Just past the junction there is a high bank on the right, which is shown as being removed completely to enable a wide swing around a sharp corner. Garvald Lodge is just past

this bend and would be on the very edge of this considerable area of ground to be removed and levelled. The road then gradually rises again to the summit at The Peebles Pipers Grave, marked with a stone. Whilst this section is straight for considerable distances, it is only 5m wide. The Grave frequently has flowers laid and is close to the road by a rough passing area. It needs careful protection. The road is again at roughly 400m height above sea level.

36. The road is protected by snow gates, and frequently suffers severe winter weather. It is known locally as “The Granites” due to the outcropping rock. It is used extensively by local people coming from the Tweed Valley communities towards Edinburgh but it has little heavy commercial traffic due to being totally unsuitable.
37. At the Pipers Grave the hillsides close in on the road as it passes through Dewars Gill. On both sides of the Gill the road follows local water sources that coalesce into streams. The northern water turns east at Garvald Lodge and becomes part of the Gala Water at Heriot. After Dewars Gill it descends again alongside the stream that becomes Glentress Water and then Leithen Water. All these streams are part of the Tweed catchment. They are all subject to frequent spates, as they drain extensive high hills of the Moorfoots. It can easily be seen where they erode the banks and so change their course. There is ample scope for pollution from construction traffic, as well as the possibility that this old road will not stand the heavy traffic especially near watercourses where banks have been eroded.
38. Once past Pipers Grave the road narrows to anywhere between 4.8m and 4.4m with frequent variations. It becomes much rougher with many uneven parts and levels, for much of the way there is a drop to the right of the road with the attractive stream below.
39. This section of road has old parts of road alongside the current one, and it also passes close by isolated dwellings, sheep folds and over simple old bridges. The bridges are around 4.4m wide, and so no doubt would have their stone parapets demolished. Between Blackhopebyres and Glentress the road narrows again to only 4.2m in width. In places it is extremely close to the Glentress Water, and it is also dominated by very steep hill slopes on its eastern side. Near Leithen Lodge it snakes around Dod Hill, which rises to 420m extremely steeply from the valley with the road and stream tight alongside.
40. South of Colquhar, where there is yet another bridge, the road narrows to only 4m in width between a high bank and Leithen Water. Immediately past this narrow section there is a section of road that regularly floods as the Leithen Water is actually level with the road. There are prominent flood warning depth signs. This whole section south of Colquhar could only be improved to the required status by fairly major engineering works, which would impinge greatly on the Leithen Water.

41. Having travelled the road with the care its current condition requires, and taken numerous measurements, it is clear that the suggested upgrading to this road would irrevocably change its character. It is highly unsuitable for the improvements proposed and in this particular and unusual situation should be refused consent for access to the proposed site. .

Planning

42. Raeshaw Farms Ltd (which are an integral part of Heriot community) have submitted an Objection to Scawd Law. This was written on their behalf by Ian Kelly MRTPI, Ian Kelly Planning Consultancy. Mr Kelly sets out his qualifications, and his considerable experience in planning and in particular many wind farm applications. Heriot CC considers his paper and conclusions should be given considerable weight, and we associate with his paper.
43. He deals at length with the Need Case and the OWEPS and sets out conclusively that overall, taking Operational, Under Construction, Consented, ScotWind 2022, Repowering etc into account there is a pipeline of over 70GW provision of renewable energy. He concludes at para 29 that;

“the renewable aspirations of the Scottish Government can be comfortably met without there being any need to consent any additional new, virgin site onshore wind farm proposals.”

Consideration of NPF4 in relation to Scawd Law.

44. Much has been recently written about NPF4. All current open planning appeals concerning wind farms are having specially convened hearing sessions to consider what effect the new planning framework might have. Heriot CC does not have specialist planning skills or personnel, but we are able to draw on published material by these experts. Here we reproduce an Updated Policy Position submitted to one such Inquiry by a senior planner in Aberdeenshire Council (Glendye, Fasque and Glendye Estates, Aberdeenshire, DPEA Ref: WIN-110-3) Detailed comments related to the facts of that Inquiry are not included, and only short pieces are quoted in italics, but we consider those on Policy 11 – Energy give a very balanced and useful guide to the most relevant parts concerning wind farms applications, and we include the final overall conclusion as it sets out a very clear guide for decision makers.

45. Policy 11 -- Energy

Policy 11 intends “to encourage, promote and facilitate all forms of renewable energy development onshore and offshore”. Policy 11(a) is clear that development proposals for all forms of renewable, low carbon and zero-emissions technologies will be supported and includes a list of development types. Wind farms are included as point

(i) in this list. Despite the support given in principle for renewable energy developments, the Policy also makes it clear in part (e) that there are other factors to be considered in the assessment of proposed developments. This list is similar, and in instances identical, to the wording used in paragraph 169 of SPP.

46. Overall, Draft Policy 11 is notably similar to paragraph 169 of SPP in terms of assessment criteria. However, the main change is the direction to decision makers to place ‘significant weight’ to carbon reduction targets and the benefits of the proposed development albeit it does not set out any actual policy test as such. There is not a fundamental change in approach and is reflected in many, if not all, recent pre NPF4 decisions on windfarms.
47. There is still a requirement for the planning balance to be assessed. Although the policy provides that significant weight is to be given to both the global climate and nature crisis, and the contribution a proposal will make to renewable energy generation targets and the reduction of greenhouse gas emissions, it notably does not state those factors are to be given decisive weight. Further, the policy does not say that the weight to be given to the global climate and nature crisis, renewable energy generation targets and the greenhouse gas emissions alters the mode of assessment of the weight to be given to those factors when set against negative impacts, such as the adverse effect on the landscape – which we have clearly set out above. The weight to be given to those impacts remains a matter for the decision maker. It is accordingly still open to the decision maker to decide that even with significant weight being given to the factors prescribed in the policy, the negative impacts outweigh the benefit of the proposal’s contributions.

Overall Conclusion

48. In summary, the Planning and Energy Policy environment is undergoing a period of significant change. The most significant change across the documents is the incorporation of the Climate Emergency and Biodiversity Crisis. The Council (Aberdeenshire) considers this to represent a consolidation or formalisation of recent approaches to decision making, as opposed to a change of approach.
49. Under the provisions of NPF4, OWPS, DESJTP and ALDP 2023, wind energy developments continue to attract a significant degree of support in principle. However, that general support is tempered through a requirement to ensure the effects of the development are acceptable. **The myriad of considerations reflects the need for a planning balance to be struck in order to achieve the right development in the right place, not development at any cost.** (Emphasis added). The weighting to be assigned to each consideration remains a matter for the decision maker. While there may have been changes in the relevant policy documents, they do not introduce either individually or cumulatively, a new or novel approach to planning.

50. Having also considered several other sources, including the Raeshaw Farms objection, we consider that there is general agreement that the assessment criteria set out in Para 169 of SPP remains as policy. With slight modifications. Decision makers for this application will be only too familiar with Para 169, the relevant issues for this application being in our opinion as follows.
51. Heriot CC considers from its perspective that it is clear the Scawd Law proposal would create unacceptable impacts on Landscape and Visual, Cumulative, Natural Heritage, and Local Roads. When the comments lodged by other objectors are taken into account there are several other adverse impacts identified in Para 169 SPP that they have highlighted.
52. In that regard Heriot CC draws attention to the Objection submitted by Mr Stuart Bell, which can be found on the ECU web site for this application as Representation Redacted Objection 19 -24. It is the first objection in this set of five. Mr Bell recently stood down as an SBC Councillor and he served on the Planning Committee. His objection is extensive and knowledgeable and covers a number of points on Planning Policy as well as Environmental Issues. We consider his Objection should carry considerable weight and we are happy to associate with his Objection.
53. SPP has largely informed SBC Policy ED9 and therefore there is complete overlap with Heriot CCs conclusions as set out below in referring to Policy ED9 to draw a final conclusion.
54. Consultees in other applications have gone further than simply noting the adverse effects of wind farm applications. We note that for instance NatureScot considers that some of the sections of NPF4 put an onus on developers to demonstrate that their proposals will actually enhance the state of the environment. There is no such overall conclusion that can be drawn about Scawd Law.
55. In a recent submission to the same appeal as above in Aberdeenshire WIN -110-3 dated January 12th 2023 Nature Scot write *“with particular respect to Policy 3b of the draft NPF4, this introduces a new requirement for proposals to demonstrate that they will enhance biodiversity, such that it is in a demonstrably better state then without intervention. We are not aware of any development proposal currently under consideration which addresses this new requirement to enhance biodiversity, although some may include enhancement measures which are intended to compensate for the predicted impacts from development. This is a matter which all parties ... will need to consider not just for this application”*

Consideration of Onshore Wind Policy Statement in relation to Scawd Law.

56. The comments below draw on the recent Hearing Statement submitted to the Faw Side Wind Farm appeal DPEA Ref: WIN-170-2007 (Section 36 Wind Farm) on behalf of the Faw Side Community Group by Christopher Ford BA, MBA, MSc, PhD, MRTPI. Mr Ford's statement updates the material he very kindly allowed Heriot CC to draw upon for the joint objection submitted in relation to the Greystone Knowe Wind Farm application ECU Ref: ECU00003341. The extracts are very brief compared to Mr Ford's entire paper submitted to the Faw Side PLI but in the view of Heriot CC these are sufficient to highlight that there is no economic need for this application or its potential output. Mr Ford's paper draws very similar conclusions to Mr Kelly's – which should be carefully noted. Both make a thorough examination of the current rush of renewable energy projects that threaten to do terrible damage to the fabric of Scottish landscapes.

57. *The Scottish Government has published the finalised Onshore Wind Policy Statement (OWPS), on 21 December 2022, updating the 2017 version.*

Amongst other key points are;

- *Setting an 'overall ambition of 20GW of installed onshore wind capacity in Scotland by 2030'.*
- *Overall, the OWPS reaffirms the decision criteria of 'the right development in the right place'. Echoing NPF4(see above), the conclusion emphasises that "we are also in a nature crisis. Onshore wind farms must strike the right balance in how we care for and use our land" (p49).*

THE EFFECTS OF 20GW AMBITION

58. *Superficially the '20GW ambition by 2030' may seem like a green light for the renewables industry. However, examination of this shows that the OWPS does not provide the all-out policy rationale to set aside all other considerations that the industry would have liked. Confirming FSCG's earlier analysis 33, the OWPS sets out that Scotland has 8.7GW of current operational onshore wind energy installed. It also identifies 1.2GW under construction, 4.5GW of projects consented and awaiting construction, with 5.5GW in the planning process. Combined this pipeline gives 11.3GW.*

59. *Together the current operational and pipeline projects therefore precisely match the 20GW ambition (8.7+11.3=20). In practice therefore the OWPS's policy ambition is easily within sight and can be comfortably achieved without undue sacrifices of the environment and by communities. The OWPS is therefore striking that, while it talks*

about a role for onshore wind energy, in practise it has not set the ambition any greater than the scale of the current pipeline.

60. *The Applicant argues that their Proposal is within the OWPS's pipeline of projects and is thus an essential ingredient necessary to meet the 20GW ambition. However, the OWPS recognises that "some of the projects will receive consent but some may not" (1.1.5). So, the real question for the decision maker is whether the Proposal represents the best choice, or is the least adverse, amongst the large pool of available projects to fulfil the remaining pipeline. The influence of windfarm repowering and extensions is now well established in importance in policy. NPF4 now defines wind farms as "including repowering, extending, expanding and extending the life of existing wind farms" (Policy 11(a)(i)).*
61. *There is no mention of any need to develop on virgin sites. The OWPS highlights "the natural life cycle of existing windfarms" (1.3.2), commonly referred to as 'repowering', and emphasises the value of repowering in terms of minimising impact on communities (4.2.21), the environment and waste (5.3). The OWPS confirms analysis that repowering substantially increases existing windfarm capacity. It gives the example of a four-fold increase in capacity from repowering at Tangy windfarm (5.3.7). The 2021 OWPS Refresh identified 2.5GW of existing wind farm capacity which are due for repowering. At the OWPS illustrative capacity uprating, repowering can therefore provide around 10GW of increased capacity. Repowering, together with extension on existing sites, therefore provides sufficient capacity to complete the delivery of the whole ambition, without development on new virgin sites.*
62. *The UK offshore wind programme has also expanded. The UK Government has an offshore wind target of 50GB by 2030 and it remains on track. On top of this, the Crown Estate has identified 11,000 square kilometres of deep seabed suitable for floating offshore wind energy. This can provide for 40GB of capacity, most likely with an even higher load factor than fixed turbines.*
63. *Consequently, the envisaged target by 2035, in non-Scottish waters has now been raised to 90GW. The programmes for solar and embedded generation have also continued to grow. Overall, any need for onshore wind energy in Scotland continues to diminish substantially. Any prior justification for Scotland as an 'exporter of electricity' is ebbing away. Unsurprisingly therefore the Scottish Government's OWPS does not see any role for Scottish onshore wind energy as an exporter of electricity to the rest of the UK.*
64. *A recent summary of Constraint Payments in Scotland reinforces the points made above. The Paper has been prepared by Renewable Energy Foundation (REF) and is attached in full as a separate document for reference. Relevant extracts to this paper are reproduced below in italics. They were also part of the Joint CCs Objection to the*

Greystone Knowe s36 Application – indeed they are clearly relevant to all wind farm applications in the Scottish Borders and wider areas.

Constraint Payments to Wind Power in 2020 and 2021

65. *Large volumes of wind energy are being discarded in Scotland in order to preserve grid stability, with a fleet average of over 13% of generation constrained off in the years 2015 to 2021, inclusive, with a high of 19% of generation in 2020. Some wind farms have been discarding between 20% and 50% of their output, while being rewarded with generous constraint payments from the electricity consumer for doing so. The reductions in environmental benefits are not given adequate weight in the planning system, where the low marginal benefit of additional wind capacity appears to be poorly understood. This blog offers detailed data on the volumes of wind energy constrained off at a fleet level in Scotland between 2010 and 2021, and for every individual wind farm in 2020 and 2021.*

66. *Wind turbine generation has been weak in 2021 due to low wind conditions, with total (onshore and offshore) output reduced by about 14% in 2021 as compared to 2020 (61 TWh estimated in 2021 as compared to 72 TWh in 2020). Onshore wind output has been the most severely affected, with a reduction of 20% in 2021 (27 TWh estimated) as compared to 2020 (34 TWh). This has had a significant effect on the volumes of wind energy constrained off the system, with a corresponding and welcome reduction in the total cost to consumers.*

67. *In 2020 constraint payments to onshore wind in Scotland amounted to 3,460 GWh (at a cost of £243m), whereas in 2021 this was 1,783 GWh (at a cost of £107m), a reduction of 48% by volume of energy.*

... the average load factor of Scottish onshore wind farms has fallen from 26.7% in 2020 to 22.1% in 2021. This is the second lowest fleet load factor in 20 years, the lowest being 21.5% in 2010.

... the reduction in constraint volumes brings into sharp focus the low marginal benefit of adding further wind capacity in Scotland. A reduction in wind power output, such as that in 2020, reduces constraint payments. Therefore, conversely, any new proposal for wind power in Scotland, which increases potential output, must be expected to increase constraints. Additional capacity therefore has a high probability of some part of its own output being constrained off, reducing the global environmental benefits it can claim to offset local environmental harms. This matter should obviously be given close scrutiny in the planning balance by decision makers.

68. *However, and as far as we are aware, the Scottish Government has not issued*

formal advice requiring Reporters to take the matter into account.

69. *The headline findings from these tables are stark. On an annual basis since 2015, when the windfleet reached substantial levels, Scotland has been discarding around 13% of all wind energy that it could have generated. This figure rose to a high of 19% in 2020, when demand fell due to lockdown and other public health measures, before falling back to 13% in 2021, a low wind year with recovering levels of consumer demand.*
70. *It follows that decision makers in the planning system should expect that if a wind farm currently applying for consent has not taken the potential for constraints into account, it is likely to have over-estimated its actual benefits of generation by between 10% and 20%, figures that could be crucial in determining the planning balance given the significant adverse local, and even regional environmental impact of many wind farms, on wildlife and the landscape and visual quality of unspoiled wildland areas.*
71. *However, the results on a site-by-site basis indicate that a general figure may not give an adequate insight into the scale of potential losses. Some wind farms in 2020 discarded extremely high fractions of their potential output. Corriegarth, for example, lost about 51% of its output to constraints, with other notable sites being Strathy North (48%), Blaraidh (47%), and Farr (39%). Even some of the largest, high-profile sites in lowland areas had to discard substantial proportions of their output, such as Whitelee (31%), and Fallago Rig (27%). Strikingly, these proportions remained very high even in 2021 and despite the facts of weaker winds and higher demand. In this year, Dorenell discarded 35% of its output, and Strathy North 28%, Bhlaraidh 24%, Farr 22%, Whitelee 17%, and Fallago Rig 15%.*
72. *The output constraints reinforce very clearly the conclusion in the section on the OWPS that Scotland does not require further onshore wind farms, which will only exacerbate the problem of grid capacity between Scotland and the rest of the UK. It should be noted that both Whitelee and Fallago Rig are in the area south of the Central Belt, with Fallago Rig being close enough to Scawd Law and Greystone Knowe to be considered in the cumulative assessment. It seems clear from the tone of the OWPS that the Scottish authorities are coming to recognise these factors and are looking to other classes of renewable energy for further progress in areas such as domestic and transport generation of greenhouse gases.*
73. *It is therefore essential to consider the environmental impacts that new wind farms such as Scawd Law and Greystone Knowe would inevitably cause, and if they are judged to be serious, then this must be the determining factor of the planning decision. Establishing this balance will determine whether the very limited economic benefit of the development (mainly to the developers) is negligible when set against the very real harms the development would cause.*

74. This required assessment of the environmental impacts of Scawd Law wind farm is carried out using the Scottish Borders Council Local Development Plan. Applying the policy tests in consideration of this application that are set out in the SBC LDP, the most directly relevant policy is Policy ED9 Renewable Energy Development. This policy closely follows the guidance in SPP, in particular Para 169 as referenced above.
75. Under this policy SBC will support proposals for large scale renewable energy developments where they can be accommodated without significant scheme specific and cumulative effects in terms of the environment and communities. With respect to the considerations set out in that policy Heriot CC considers that the proposed wind farm:
- Is not in an appropriate location.
 - Has significant adverse landscape and visual impacts.
 - Has significant cumulative landscape and visual impacts.
 - Results in a series of risks in terms of natural heritage interests
 - Is likely to have a negative adverse net economic impact.

Therefore, in summary, the proposal is not in accordance with the specific policies for consideration of wind farms as set out in the Council's LDP.

76. In terms of the **overall Development Plan conclusions**, the proposed Scawd Law S36 wind farm is in breach of the relevant SBC LDP Policy ED9. This conclusion follows from the wind farm's siting, its adverse visual effects, and its extremely significant cumulative visual effects (including design effects), together with its adverse effects on the local landscape. Heriot CC also considers that its impacts on local bird life (ornithology), alongside the potential adverse economic effects on local tourism interests, add to the adverse effects.
77. These are not outweighed by the generic benefits of the scheme which are already built into Scottish planning policy at all levels supporting the development of renewable energy. This proposal clearly fails the acceptability tests set out in both SPP and the SBC LDP.

This decisive conclusion points to a refusal of planning permission for the proposal, and we urge decision makers to endorse our conclusion.

Heriot Community Council **objects** to the Scawd Law wind farm scheme and submits that it should be refused s36 consent and deemed planning permission.

Constraint Payments to Wind Power in 2020 and 2021

ref.org.uk/ref-blog/371-constraint-payments-to-wind-power-in-2020-and-2021

Thursday, 17 February 2022

Large volumes of wind energy are being discarded in Scotland in order to preserve grid stability, with a fleet average of over 13% of generation constrained off in the years 2015 to 2021, inclusive, with a high of 19% of generation in 2020. Some wind farms have been discarding between 20% and 50% of their output, while being rewarded with generous constraint payments from the electricity consumer for doing so. The reductions in environmental benefits are not given adequate weight in the planning system, where the low marginal benefit of additional wind capacity appears to be poorly understood. This blog offers detailed data on the volumes of wind energy constrained off at a fleet level in Scotland between 2010 and 2021, and for every individual wind farm in 2020 and 2021.



Figure 1: *Part of the Monadhliath Mountains, with Creag Mhor overlooking Loch Gynack in the foreground.* By [Spike](#) - Own work, [CC BY-SA 4.0](#), [Link](#)

Wind turbine generation has been weak in 2021 due to low wind conditions, with total (onshore and offshore) output reduced by about 14% in 2021 as compared to 2020 (61 TWh estimated in 2021 as compared to 72 TWh in 2020). Onshore wind output has been the most severely affected, with a reduction of 20% in 2021 (27 TWh estimated) as compared to 2020 (34 TWh). This has had a significant effect on the volumes of wind energy constrained off the system, with a corresponding and welcome reduction in the total cost to consumers.

In 2020 constraint payments to onshore wind in Scotland amounted to 3,460 GWh (at a cost of £243m), whereas in 2021 this was 1,783 GWh (at a cost of £107m), a reduction of 48% by volume of energy.

While it would be reasonable to say that grid reinforcement and the somewhat improved reliability on the Western Link interconnector account for part of this reduction in constraint payments and volumes, the majority of the effect is the result of reduced wind power output, which reduces the need for wind to be constrained off the system. This reduction in output affects individual wind farms in a way that is highly significant from several perspectives.

Firstly, the average load factor of Scottish onshore wind farms has fallen from 26.7% in 2020 to 22.1% in 2021. This is the second lowest fleet load factor in 20 years, the lowest being 21.5% in 2010. A reduction of this magnitude has implications for the wind farm's Internal Rate of Return (IRR), a shortfall that may be difficult for the investors to recover without exceptional output in the

future, exceptional output that probably lies beyond the end of their economic lifetimes for older and even middle-aged installations. This will have implications for the way that investors view the future of these assets, particularly older sites where maintenance costs are rising.

Secondly, the reduction in output in 2021 is a substantial contributor to the current energy bills crisis, having caused the electricity system to draw heavily from gas fired generation at precisely the moment that many other systems in Europe were experiencing the same problems. This has combined with high international demand, particularly in Asia (which is reducing greenhouse gas emissions and local air pollution by switching from coal to gas) to drive particularly high prices of natural gas in the European region.

This effect may have come as a surprise to many renewables supporters, who expected that large wind fleets would buffer the United Kingdom against high gas prices. In fact, as is well-known to experienced analysts and has been long-predicted, a heavily renewables-based system becomes critically dependent on natural gas generation across all timescales, from seconds to years, in order to guarantee security of supply. The volume of gas consumed may fall, but, paradoxically, the exposure to gas and its price increases. The addition of more wind power will do little or nothing to mitigate this effect, and will all but certainly intensify the problem.

Thirdly, the reduction in constraint volumes brings into sharp focus the low marginal benefit of adding further wind capacity in Scotland. A reduction in wind power output, such as that in 2020, reduces constraint payments. Therefore, conversely, any new proposal for wind power in Scotland, which increases potential output, must be expected to increase constraints. Additional capacity therefore has a high probability of some part of its own output being constrained off, reducing the global environmental benefits it can claim to offset local environmental harms. This matter should obviously be given close scrutiny in the planning balance by decision makers. However, and as far as we are aware, the Scottish Government has not issued formal advice requiring Reporters to take the matter into account.

The constraints problem will persist until there is more than sufficient interconnection between Scotland and the centres of demand in England. Given the Scottish Government's plans for wind, particularly offshore, it is not clear that the required level of interconnection is either feasible or economically viable. Constraints are therefore likely to persist for the foreseeable future, with wind capacity constantly outrunning the network's ability to transport it to consumers at reasonable cost.

The tables below provide detailed figures on the degree to which Scottish wind farms are discarding potential generation, all the information being based on our own datasets as collected from official market sources. The first table provides our calculated estimate of Scotland's wind generation output by year, the level of actual constraints in those years, and a calculation of the proportion of wind energy that has had to be discarded to preserve grid stability. The second table provides similar estimates of generation and discarded energy for each individual wind farm in both 2020 and 2021.

The headline findings from these tables are stark. On an annual basis since 2015, when the wind fleet reached substantial levels, Scotland has been discarding around 13% of all wind energy that it could have generated. This figure rose to a high of 19% in 2020, when demand fell due to lockdown and other public health measures, before falling back to 13% in 2021, a low wind year with recovering levels of consumer demand.

It follows that decision makers in the planning system should expect that if a wind farm currently applying for consent has not taken the potential for constraints into account, it is likely to have over-estimated its actual benefits of generation by between 10% and 20%, figures that could be crucial in determining the planning balance given the significant adverse local, and even regional environmental impact of many wind farms, on wildlife and the landscape and visual quality of unspoiled wildland areas.

However, the results on a site-by-site basis indicate that a general figure may not give an adequate insight into the scale of potential losses. Some wind farms in 2020 discarded extremely high fractions of their potential output. Corriegarth, for example, lost about 51% of its output to constraints, with other notable sites being Strathy North (48%), Blaraidh (47%), and Farr (39%). Even some of the largest, high-profile sites in lowland areas had to discard substantial proportions of their output, such as Whitelee (31%), and Fallago Rig (27%). Strikingly, these proportions remained very high even in 2021 and in spite of the facts of weaker winds and higher demand. In this year, Dorenell discarded 35% of its output, and Strathy North 28%, Bhlaraidh 24%, Farr 22%, Whitelee 17%, and Fallago Rig 15%.

It should be noted that many of the heavily constrained wind farms are located in areas with great ecological, environmental and wild land value. One such area is the Monadhliaths, Great Glen region adjacent to Loch Ness. This region is one of Scotland's most remarkable wilderness areas, known for the unaltered antiquity of its landscape and its austere beauty (see Figure 1 above). Nine large wind farms have been built in this remarkable wild land area (see Figure 2 below). All of these received constraint payments in 2020/2021 with an average of 22% of potential output being discarded, averaged over the two years at a total cost to the consumer of £67 million. In spite of the clear economic evidence that the site is saturated, there are seven further wind farms in that location going through the planning system, which could increase the installed capacity by 66%. ;four already with permission to build and three awaiting a decision. It seems that the planning process is failing to consider the multiple harms to the public interest incurred by developments which sacrifice an irreplaceable natural landscape for consumer-subsided wind farms whose output is capped – at a further cost to the consumer – because the site is a wilderness remote from where power is required.

There can be no serious doubt that this is an important issue for the planning system and that it needs to be addressed to preserve public confidence in the rationality of decisions taken by reporters and the Scottish Government.

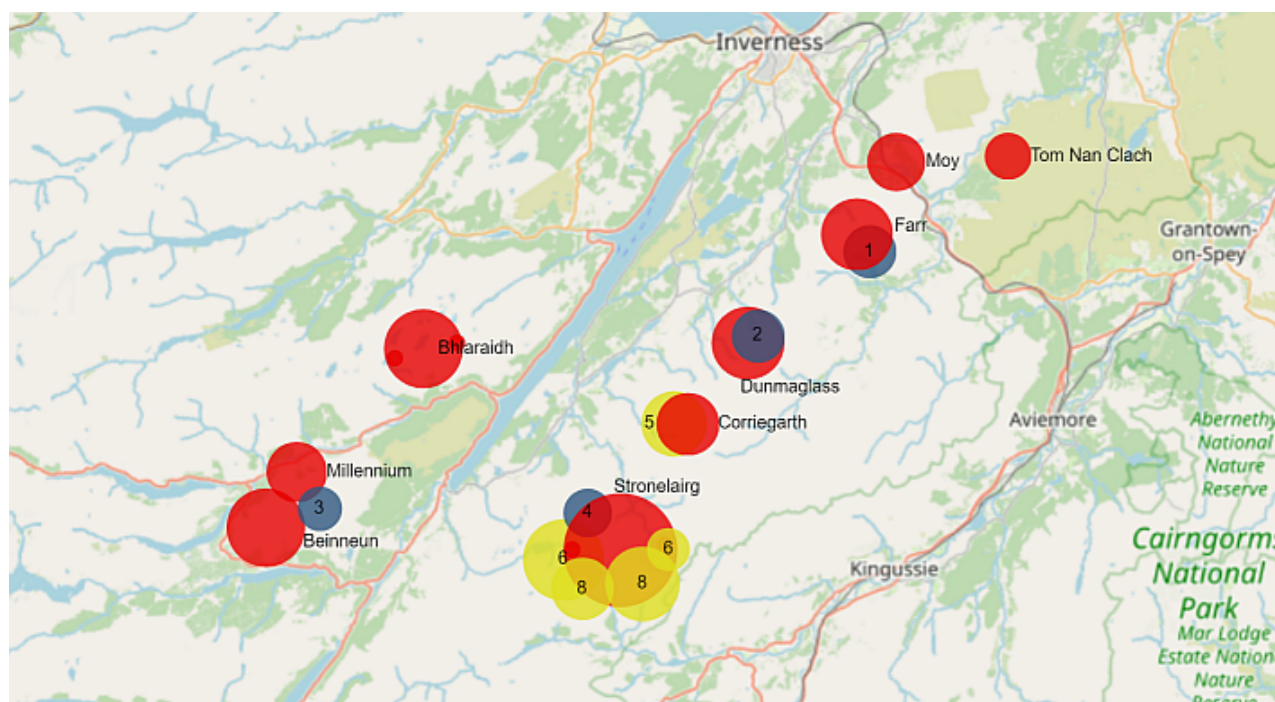


Figure 2: Wind farms are indicated by circles whose area is proportional to their installed capacity. The nine operational and constrained wind farms as of 2022 are labelled and coloured red. The four wind farms with planning consent are the blue circles and numbered as follows : Glen Kyllachy (1) 50 MW; Aberarder (2) 50 MW; Dell (4) 42 MW; Millennium South (3) 35 MW. The three wind farms whose planning permission has not yet been determined are identified by yellow circles and are: Corriegarth II (5) 76 MW, and Cloiche (6) 150 MW and Glenshero (8) 168 MW. Note that both Cloiche and Glenshero are each effectively split over two locations west and east of the centre of Stronelairg. The areas of the pairs of circles numbered 6 and 8 are proportional to the relative sizes of the west and east parts of the proposed Cloiche and Glenshero wind farms.

Table 1: Annual electrical energy generated and constrained at all Scottish wind farms, 2010 to 2020. The generation data is derived from monthly Renewables Obligation (RO), Contracts for Difference (CfD) and Renewable Energy Guarantees of Origin (REGO) data for Scottish wind farms as reported in the REF databases. As of the date of publication of this blog, the generation data for 2021 is not complete for all generators. However, for those wind farms where there is generation data for a month, the constraints volumes for that generator and month are also included in the totals below to ensure consistency in calculating the percent of output that is discarded in 2021.

Year	GWh Generated	GWh Constraints	% Discarded
2010	2,221	1	0%
2011	4,484	59	1%
2012	5,258	45	1%
2013	6,971	374	5%
2014	7,153	648	8%
2015	8,228	1,260	13%

2016	7,007	1,052	13%
2017	10,302	1,506	13%
2018	12,026	1,662	12%
2019	14,672	1,876	11%
2020	14,909	3,466	19%
2021	10,899	1,692	13%

Table 2: *Electrical energy generated and constrained in both 2020 and 2021 for individual Scottish wind farms. The generation data is derived from monthly Renewables Obligation (RO), Contracts for Difference (CfD) and Renewable Energy Guarantees of Origin (REGO) data as reported in the REF databases. Where wind farms consist of multiple installations, as is the case for Clyde, Whitelee, and others, the generation and constraints are summed for the whole site. As of the date of publication of this blog, the generation data for 2021 is not complete for all generators. However, for those wind farms where there is generation data for a month, the constraints volumes for that generator and month are also included in the totals below to ensure consistency in calculating the percent of output that is discarded in 2021. The table is sorted in descending order of percentage of generation discarded as a result of constraints in 2020.*

Wind Farm	2020			2021		
	GWh Generated	GWh Constraints	% Discarded	GWh Generated	GWh Constraints	% Discarded
Corriegarth	111	116	51%	97	18	15%
Strathy North	105	96	48%	98	39	28%
Bhlaraidh	182	162	47%	160	51	24%
Farr	156	101	39%	146	41	22%
Kilgallioch	527	319	38%	472	121	20%
Beinn an Tuirc	42	25	37%	30	8	22%
Griffin	275	147	35%	204	54	21%
Dersalloch	132	69	34%	117	26	18%
Dunmaglass	228	114	33%	189	10	5%
Black Law	269	133	33%	182	42	19%
Stronelairg	441	205	32%	495	24	5%
Beinn Tharsuinn	50	23	31%	51	7	12%
Whitelee	878	390	31%	686	137	17%
Arecleoch	207	88	30%	156	31	16%
Lochluichart	129	53	29%	118	21	15%

Hare Hill	52	21	28%	48	10	17%
Galawhistle	137	52	27%	85	10	10%
Hadyard Hill	199	73	27%	145	16	10%
Ewe Hill II	76	28	27%	61	13	17%
Fallago Rig	363	131	27%	255	43	15%
Corriemoillie	89	31	26%	66	6	9%
Glen App	51	17	24%	44	6	12%
Mark Hill	93	30	24%	77	9	10%
Edinbane	89	26	22%	51	2	5%
Gordonbush	137	39	22%	158	26	14%
Harestanes	232	66	22%	169	31	16%
Baillie	114	31	21%	85	13	13%
Aikengall	217	51	19%	187	35	16%
Dorenell	462	109	19%	331	179	35%
Berry Burn	156	36	19%	104	15	13%
Moy	96	21	18%	85	7	8%
Dunlaw	59	13	18%	44	5	10%
Kilbraur	155	32	17%	136	42	24%
Millennium	164	33	17%	133	33	20%
Tullo	86	17	17%	71	5	6%
Clachan Flats	20	4	16%	12	0	4%
Clyde	1326	251	16%	833	87	9%
Sanquhar	113	17	13%	98	11	10%
Braes of Doune	166	23	12%	91	27	23%
Pauls Hill	174	24	12%	136		
Burn of Whilk	52	7	12%	47	2	3%
Middle Muir	127	16	11%	70	17	20%
Clashindarroch	93	11	11%	38	10	21%
Foudland	56	6	10%	32	1	2%
Gordonstown	25	3	10%	20	0	2%

Roths	224	24	10%	144	7	5%
Andershaw	104	11	10%	44	4	8%
Kype Muir	256	26	9%	171	41	19%
Auchrobert	98	10	9%	50	4	7%
Mid Hill	192	18	9%	117	1	1%
Dalswinton	56	5	8%	43	1	2%
Toddleburn	78	7	8%	48	1	3%
Minsca	82	7	7%	59	1	2%
Assel Valley	78	6	7%	41	4	9%
Crystal Rig	426	29	6%	214	6	3%
Brockloch Rig	190	12	6%	99	1	1%
Beinneun	247	15	6%	144	1	0%
Camster	156	6	4%	127	0	0%
Whiteside Hill	101	4	3%	65	0	1%
AChruach	109	4	3%	73		
Blackcraig	173	6	3%	110	0	0%
Carraig Gheal	134	4	3%	83	0	0%
Minnygap	67	2	3%	41	0	0%
Cour	75	2	2%	48	0	0%
Freasdail	69	1	2%	46	0	0%
Tullmurdoch	29	0	1%	16		
Bad a Cheo	75	1	1%	55	18	24%
Robin Rigg	629	5	1%	425		
Craig	11	0	1%	6		
Beatrice	2285	3	0%	1707	311	15%
An Suidhe	52	0	0%	11		
Nanclach	135			120	10	8%



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