Lees Hill Renewable Energy Park - ECU0004571

SUPPLEMENTARY OBJECTION FROM DUNS, LEES HILL - SOS

DUNS LEES HILL - SOS, Save Our Skyline, (**DLH**) is a third-party objector group in an application for Lees Hill Renewable Energy Park **(LHREP)** by Fred. Olsen Renewables Ltd (**FORL**). This supplementary objection builds on the substantive Objection (Objection) lodged on 23/10/24, subsequently published on the ECU website on 1/11/24. This supplementary objection sets out relevant information and investigations since that date.

1) Need update

a) The Objection (Appendix 1 P31-32) identified that there is a pipeline of wind generation projects across Scotland of between 30.9GW (33.1GW in the November 24 update) and 36.8GW. This project cannot be considered to be *strategic* to the Scottish Government (SG) meeting its onshore wind target. There is therefore no *necessity* to grant it.

b) This argument has been further strengthened by the UK Government's publication in December 2024 of the Clean Power 2030 Action Plan (CEAP) (Clean Power 2030 Action Plan - GOV.UK). This Action Plan identifies that the National Energy System Operator (NESO) is only expecting and only has the capacity to connect 20.5GW of wind generation across Scotland by 2030 and 21.2GW by 2035. (table 6 page 16 of the annex Clean Power 2030 Action Plan: A new era of clean electricity: Connections reform annex)

c) In these circumstances DLH submits that connecting the proposed six turbines, yielding only 37-45MW generating capacity (here, in a wholly inappropriate location) is not an effective use of the scarce resources required for additional grid connection.

The need for this proposal for wind generation has been further undermined by the Clean Energy Action Plan published in December 2024.

2) This is a Hybrid Development proposal (Wind, Solar and Battery Storage)

a) This proposal is neither strategic to wind generation nor proposed for an appropriate location.

b) The commercial incentive to co-locate different technologies is obvious but given the scale of wind generation already operational in Scotland and the constraints outlined in

the CEAP, it would be logical, efficient and more timely to co-locate Battery Storage (BESS) and solar where there are existing transmission connections.

c) DLH notes that FORL are already considering adding a new and extensive solar farm at their Crystal Rig development, a few miles away. As DLH' Objection states (P6) the renewables industry agrees and supports co-locating at *"existing sites"*. FORL has never engaged with this apparent anomaly.

***It would be more logical, efficient and timely to co-locate BESS and Solar Arrays at locations (nearby) with existing grid connections where there is no need to be concerned about further impact on human beings* or the environment.**

3) RISK/inappropriate site selection

a) given the much-reduced need for further wind generation to meet targets and NESO's constraints for connection this site is among the least favourable under consideration across Scotland due to the **major gas pipeline running through the centre of the site.**

i) the HSE made its position clear in their consultation response ***"there is potential to initiate a major accident at the major accident hazard pipeline"***

ii) further information that has been provided by National Gas Transmission (NGT) confirms the DLH assertion that the development's 'buffer zone' provided in the application does not meet the UKOPA guidelines (UKOPA/GP/013) for Turbine distances. The buffer zone in the application is 150m not the 180m required by the guideline for a 200m turbine.

iii) The NGT response makes it clear that the **UKOPA Guidelines for Pipeline Hazard Distances (UKOPA/GP/016) are being ignored by the applicants**. DLH notes that NGT take a different and contrary stance for turbine distance 'guidelines' than they do for these Pipeline Hazard Distances.

The Objection points out that the UKOPA Guidance recommends emergency hazard distances to be between 500m and 900m, dependent on the size of the pipeline. Clearly potential turbine, battery storage, substation and solar array ignition sources are fixed within these distances. This creates risks that cannot be avoided in the event of a pipeline breach.

The key advice in UKOPA/GP/016 reads (p6) *"steps should be taken to ensure that potential ignition sources are not introduced into the area around the release where gas could potentially be present in flammable concentrations."*

The advice imposes a duty to *ensure*, not merely a duty to take reasonable care.

Given the HSE's view of the risks at this site there can be no rational argument for these industry safety guidelines to be ignored.

b) Incidents of turbine failure and BESS fires are well documented. Scotland Against Spin has recently published its latest turbine accident statistics (Turbine Accident Statistics – Scotland Against Spin) this identifies:

- Regarding blade failure: ***"Pieces of blade are documented as travelling up to one mile. In Germany, blade pieces have gone through the roofs and walls of nearby buildings.*** *This is why we believe that there should be a minimum distance of at least 2km between turbines and occupied housing or workplaces, in order to adequately address public safety and other issues including noise and shadow flicker."* and
- Regarding fire: *"The biggest problem* ***with turbine fires*** *is that, because of the turbine height****, the fire brigade can do little but watch it burn itself out****. While this may be acceptable in reasonably still conditions,* ***in a storm it means burning debris being scattered over a wide area, with obvious consequences****."*

We estimate that the BESS is only 180m away from Turbine 1. Given the risks identified in the Turbine Accident Statistics we would suggest that this Turbine is far too close to the BESS for comfort.

The risk of turbine failure so close to the BESS (and the gas pipeline) is a risk best avoided.

4) EIA Neutrality, sufficiency, invalidity and legality

a) DLH's Objection raised the concern that the lead consultant preparing the EIAR, **The Natural Power Consultants Ltd. (NP) and FORL are related companies**. This fact was concealed from the EIAR recipients including the Council. It calls into question the neutrality, objectivity and indeed the integrity of the conclusions drawn in the EIA.

b) DLH believes this is in breach of the Institute of Environmental Management and Assessment's (IEMA) Professional Code of Conduct (IEMA - Code of professional conduct) which states that members (i.e. NP) **should *"declare conflicts of interest that may influence – or be perceived to influence …. Objectivity"***. *Duns, Lees Hill-SOS has* ***raised a complaint with IEMA in this regard.***

Discussions with IEMA continue. At this stage it appears that IEMA's stance is that a breach of the Institutes Code of Professional Conduct by NP would not invalidate their use of the IEMA Quality Mark. This is a position DLH finds anomalous.

5) **Bird Flight/Collision risk and Hule Moss Ramsar site**

The Objection provided detail (pages 22-24) of Pink Footed Geese (PFG) (*Anser brachyrhynchus*) frequenting Hule Moss, a lochan on Greenlaw Moor adjacent to the proposed LHREP, and impacting the function of Hule Moss in their ecology.

During the day the geese fly out to feeding locations in the surrounding countryside and coast. They return at dusk in flocks numbering many thousands to roost on and around Hule Moss. The numbers of birds at Hule Moss could be 14,000 to 18,000 annually.

This supplementary information is drawn from a report by Carl Mitchell of the Wildfowl and Wetlands Trust entitled *'Mapping the distribution of feeding Pink-footed and Iceland Greylag Geese in Scotland*' (Mitchell, 2012).

Mitchell (2012) also includes information regarding the feeding activities of Greylag Geese (GG) (*Anser anser*), another migratory goose species. No feeding site information in relation to GG for Hule Moss, Greenlaw Moor, is included in the report.

Mitchell (2012) details information on where PFG roosting during the winter at Hule Moss feed on their daytime foraging flights. This information is represented by maps showing each Special Protection Area (SPA) roost site in Scotland and where the birds from that SPA roost and feed. The maps (reproduced in the Appendix) showing feeding sites for PFG during the periods: winters 1986/87 to 2011/12, Fig' 71, (page 92), and winters 2007/08 to 2011/12, Fig' 72, (page 93), at Hule Moss.

Hule Moss lochan is only approximately 3.8km (2.4 miles) west of the centre of the Lees Hill development site. The significance of these maps lies in that they show the proposed development site is situated between the PFG roost at Hule Moss, and their feeding sites near the east coast.

Whilst it is acknowledged that a greater number of PFG fly south and west to feed, a significant cohort, probably several thousands of birds, fly east. Birds transiting between Hule Moss and their east coast feeding locations will, depending on the route they take, risk flying over or through the site and the rotating arcs of six, 200m tall wind turbines and their attendant overhead cable infrastructure. Should the proposal be allowed the risk of collision

mortality for birds being hit by turbine blades or from flying into overhead cables would be severe.

The long-term importance of this location for Pink Footed Geese is further evidenced by their catching and ringing in the area by Sir Peter Markham Scott, the founder of the Wildfowl and Wetlands Trust at Slimbridge and co-founder of the Worldwide Fund for Nature. Sir Peter travelled far and wide (to Iceland and back) to understand the migratory routes of Pink Footed Geese. The landowner has previously said that Sir Peter used to catch and ring birds on the Langtonlees farm with rocket nets. This is corroborated by a letter to be found in Sir Peter's archives at Cambridge University. This letter Sir Peter wrote to Colonel Logan-Home (1950) he said *"We are always most anxious to have local ornithologists with us, for example F. Brady of Berwick (was with us for some of the time, and John Berry of the Scottish Nature Conservatory) helped us with a catch at Choicelee"* (Choicelee being the farm between the proposed site and Hule Moss).

Such high mortality risk would be in direct contravention of the reasons for the Greenlaw Moor SSSI and Hule Moss Ramsar site SPAs being so designated. The conservation of an internationally significant number of migratory geese would be seriously compromised.

6) Other key submissions that have been made supporting the position of Duns Lees Hill SOS include:

a) The **MOD** have submitted an objection and have not withdrawn it, contrary to what the applicants have asserted.
b) **National Gas Transmission** have submitted a holding objection.
c) **HSE** have made their concerns clear (as referred to above).
d) **JRC** have raised concerns regarding the requested micrositing allowances.
e) **Historic Environment Scotland** have recommended that Turbines 1 and 2 should be removed or relocated.
f) A substantive **Residential Amenity** objection has been submitted by the owners of Old Langtonlees, the nearest home (not financially involved) to the development.
g) In addition to the many personal objections submitted a number of the **local Community Councils have lodged objections to this application:**

- **Gavinton, Fogo and Polwarth Community Council** (in which the development sits) held a poll across the community which resulted in a majority vote against the proposal,
- **Gordon and Westruther Community Council** has lodged a detailed objection,

- **Leitholm, Eccles and Birgham Community Council** wrote in support of the Gordon and Westruther objection and added their concerns over further high-power cables leading to the Eccles sub-station,
- **Duns Community Council**, whilst not drawing a conclusion, set out the pros and cons of the proposal as they saw them. Amongst their concerns and assurances requested were; the safety of the Battery Storage, the gas pipeline risks, the lack of information regarding the grid connection and the risk of future expansion (even closer to the town) if agreed.

DLH accordingly submits that this supplementary information further supports its Objection and that this application should be refused.

JOHN CAMPBELL KC
for Duns Lees Hill SOS
January 2025

Appendix

References

Mitchell, C. & Hearn, R.D. (2004) Pink-footed Goose Anser brachyrhynchus (Greenland/Iceland population) in Britain 1960/61 – 1999/2000. Waterbird Review Series. ISBN 0-900806-43-5. WWT/JNCC, Slimbridge, 90pp.

Mitchell, C. (2012). 'Mapping the distribution of feeding Pink-footed and Iceland Greylag Geese in Scotland'. Wildfowl & Wetlands Trust / Scottish Natural Heritage Report, Slimbridge. 108pp. Available at: https://www.bto.org/sites/default/files/mitchel_2012_mapping_distirbution_feeding_pinkfooted_and_greylag_geese_scotland_wwtsnh_report.pdf (Accessed: 9/1/2025).

Wood, K.A.et al (2020). 'Predicting cumulative wind turbine and power line collision mortality for Pink-footed Geese using an individual-based model'. Wildfowl & Wetlands Trust Report, Slimbridge. 179pp. Available at: https://www.researchgate.net/publication/370891889_Predicting_cumulative_wind_turbine_and_power_line_collision_mortality_for_Pink-footed_Geese_using_an_individual-based_model (Accessed: 9/1/2025).

Extract

Key.

For map figures 71 & 72 below the following symbols were used:

1) Sensitivity Index represented by four graduated dark blue symbols (dots).
2) 1km squares (shown with lines of latitude and longitude reference numbers) for which no quantitative data exists but geese were known to be present represented by small red symbols (dots).
3) The SPA boundary (thick red line).
4) Important roosts either within the SPA boundary (if known) or other nearby waterbodies represented by green symbols (dots).
5) 20km line surrounding the SPA boundary (black line).

Greenlaw Moor: Pink-footed Goose

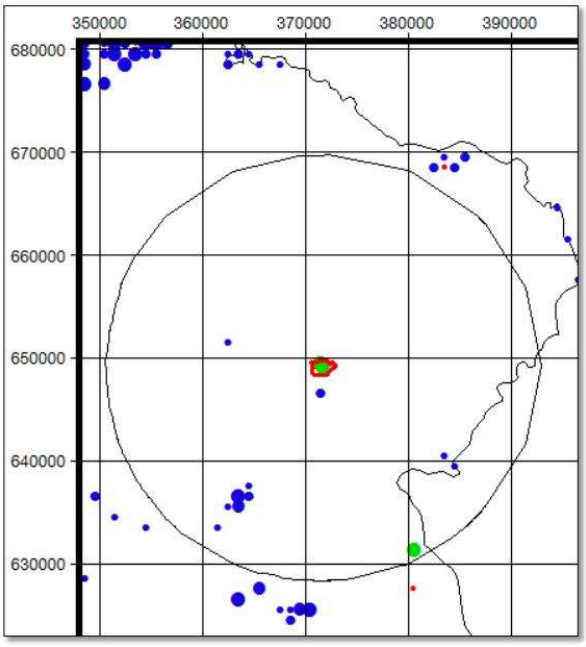

Figure 71. Feeding distribution (1986/87 to 2011/12 – all records) of Pink-footed Geese in relation to the Greenlaw Moor SPA.

Roost locations and feeding distribution Hule Moss (green circled in red) (Greenlaw Moor) forms the most important winter roost for Pink-footed Geese in the Tweed Basin, with flocks of up to 5,000 birds recorded regularly between 1960 and 1980. A dramatic increase then took place with a peak of 25,735 counted in October 1989. Pink-footed Geese roosting at Hule Moss were said to feed to the south and south west of the roost, especially around Greenlaw (Mitchell & Hearn 2004) although no details were given. A cluster of records near Smailholm probably refer to Hule Moss geese.

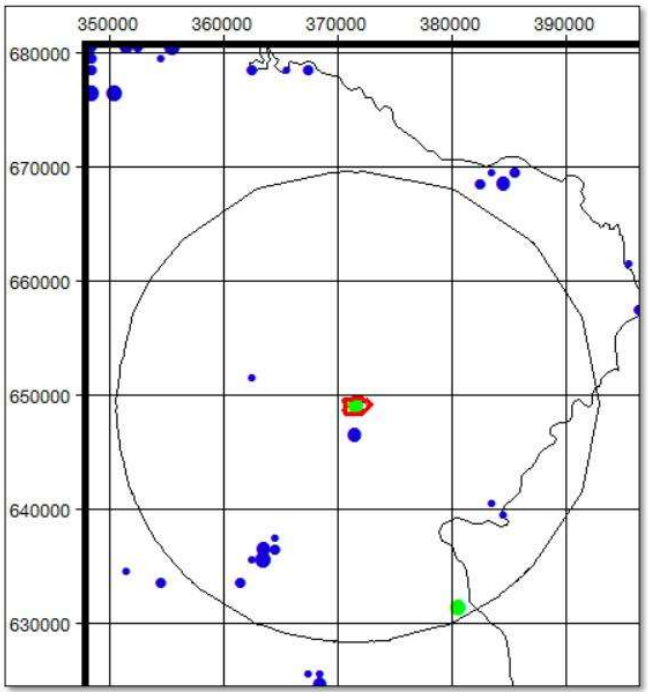

Figure 72. Feeding distribution (2007/08 to 2011/12 – new records) of Pink-footed Geese in relation to the Greenlaw Moor SPA.

Counts of between 2,000 and 9,000 birds have been regular at the site in the most recent period. Although large numbers use the loch, there are very few feeding records from the most recent period.

For clarity, the meandering line in the top right (north east) quarter of each map represents the Berwickshire/East Lothian coast. The line in the bottom right (south east) quarter of each map represents the border between Scotland and England.

It is noteworthy that there are no PFG feeding sites shown in England. Although they do exist, particularly on the Northumberland coast e.g. in the area of Lindisfarne.