

## Summary Relevant Representation on behalf of Burn Gliding Club

### Planning Act 2008

### Application by Enso Green Holdings D Limited for an Order Granting Development Consent for the Helios Renewable Energy Project

### Planning Inspectorate Application Reference: EN010140

#### Risks

1. Burn Gliding Club (BGC)'s Relevant Representation was submitted on 26 September 2024. This is a summary of that RR.
2. There are three key, outstanding aviation safety issues for Burn Airfield activities arising from the proposed solar scheme - Glint and Glare, Thermic Updraughts and Launch Failures.
3. BGC has been operating year round for nearly 50 years is formally registered as a Community Amateur Sports Club (CASC). It is an important recreation site serving Yorkshire and visitors from across the country.
4. The UK is one of the world's most successful gliding nations. BGC introduces some 200 people to gliding every year and operates a wide range of community activities. The site is very accessible for local residents and a wide range of activities take place there including Police and Army exercises.
5. Gliding activity, proficiency and safety are continuously monitored and tested by the British Gliding Association (BGA). This underlines the seriousness of the safety issues raised by BGC.
6. The airfield has three runways, orientated **07/25** (1300m in length), **01/19** (1100m in length) and **15/33** (950m in length). All 6 runway directions are used albeit the stubs on runways 15 and 19 are in a poor condition and unsuitable for safe landings.
7. Infrastructure on the site includes a modern clubhouse, a gliding simulator, a workshop for aircraft maintenance and a large hangar. There is also onsite fuel storage and a number of cabins that are towed to the active runway for administration support. There is an area for trailer parking for privately owned gliders and a members' only caravan site for touring caravans and camping.
8. BGC has in excess of 7,000 movements a year, either being launched by winch or aerotow, with daily numbers and duration weather- dependent.
9. The site is only 350m away from the airfield.

### ***Glint and Glare***

10. The BGA requires pilots are trained to carry out a standard gliding circuit in accordance with its training manual.
11. Landing, in a standard gliding circuit, requires flying a descending circuit, parallel to, and within gliding range of the landing area with 3 turns somewhere between 900 and 300 ft above the ground.
12. Circuit training, where repeated flights are carried out, requires consistency, so a trainee can replicate what an instructor has demonstrated. Should such exercises be adversely affected by turbulence replication is lost as the pilot has to concentrate on reacting to the external forces upsetting the aircraft handling.
13. Landing on any of the runways 01, 19, 25 and 33 will involve flying some or all of the circuit over the proposed solar farm at low level.
14. Therefore, in addition to turbulence, glint and glare will not be consistent due to the varying height, position of the glider and position of the sun.
15. The circuit is in a busy volume of airspace and aircraft separation is achieved by looking out. Anything which distracts from looking out increases the risk of collision.
16. Appendix 2.5 is based on fixed wing aircraft, not gliders.
17. On a soaring day many gliders are often airborne at the same time. A large proportion of the local soaring area and circuit paths is above the proposed solar panels, Should the soaring conditions change they are all likely to want to land at the same time. In this scenario pilots capacity will be tested to the full and any distraction could have serious consequences.
18. Section 7.1.2 in the Appendix 2.5 (page 63) refers to mitigation used by pilots. Only a. (wearing sunglasses), can be feasible in a glider. Items b. to g. are impractical for a glider. However, wearing sunglasses to avoid glare but in conditions that do not otherwise warrant reduces detail / depth of field which would increase risk of mid air collision in the circuit / approach phase of flight.
19. There is repeated acknowledgement of 'Potential Temporary After Image' which is an unacceptable risk for a pilot.
20. The Civil Aviation Authority Combined Aerodrome Safeguarding Team (CAST) Guidance Note July 2023, states that glint and glare is a '*key safety concern*'.

### ***Thermal Updrafts***

21. Thermal updrafts were briefly mentioned in a pre-Application draft report. There is **no assessment** in the Application.
22. Thermal updrafts and downdrafts will be caused by the differential heating of the solar panels and the surrounding land areas. A proper assessment of risk is normally site and operation specific. This has not been carried out (although reference to the updraft in section 5.2.2 and a suggestion the air brakes can be used to counteract thermic activity clearly acknowledges this *could* occur).
23. It is, however, unacceptable to be manipulating air brakes to manage glider stability in what is currently, and should be, a standard glider circuit.
24. The Applicant has suggested '*...wind shear and turbulence, and updraft impacts of the proposed development upon aircraft using Burn Airfield will be of negligible impact.*' This has not been proven.
25. The Applicant has stated, '*No significant impacts are predicted upon aviation activity associated with Burn Airfield and Burn Gliding Club*' The CAA CAP 738 makes clear that the **aerodrome operator** is the expert in assessing safety due to his or hers detailed knowledge of the site and its operations.

### ***Loss of land for safe emergency landings / managing launch failures after take-off***

26. With an aerotow<sup>1</sup> there is a risk that the tow maybe terminated due to power failure of the tug aircraft, loss of position of the glider with respect to the tug or failure of the tow rope, (although other causes are possible). Attempting to manoeuvre the glider or tug with insufficient airspeed risks control failure at low heights. The safest action is to land ahead unless there is sufficient height to recover a safe manoeuvring airspeed and then return to the airfield. A controlled landing ahead into a poor field is preferred to losing control due to a slow and poorly coordinated turn in an attempt to reach a suitable landing area. The BGC considers it would lose 25% of the landing space options from runway 15, slightly less on runways 07 and 19.
27. The risk of an unsafe landing could, potentially, be mitigated by the introduction of a clear area through the solar site along the runway centre lines. A suitable designated area would be some 400m long x 50m wide and free from obstruction.

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<sup>1</sup> An 'aerotow' is the launch of a glider having been towed behind a powered aircraft which is then released to soar.

### ***Bird Strike***

28. There is a risk of birds being attracted by the solar panels. Preventing bird strikes on aircraft near a new solar farm installation is crucial for both aviation safety and protecting wildlife.
29. Bird deterrence may be managed by the application of anti-reflective coatings or visual or audible deterrents.

### **Relevant Government Planning Sport and Recreation Policy**

30. Site used by these Air Sports recognised by Sport England are designated as 'Sports Venues'.
31. NPPF paragraphs 86(d), 94c, 100, 101, 108(f) give strong support to recreation and general aviation activities.
32. NPPF paragraph 193 sets out the principle of the 'agent of change'. This was explicitly applied to aviation by Planning Practice Guidance Paragraph: 012 Reference ID: 30-012-20190722.
33. The General Aviation Strategy, 2015, states that 'Gliding is a significant part of the GA community' and recognises wider benefits from related tourism
34. Other Government publications including 'Flightpath to the Future', the Department for Transport, 'General Aviation Handbook' 2023 strongly support General Aviation and its constituent sports.
35. Burn Field does not just support gliding but also running, walking, cycling and many other recreational activities.

### **Conclusions**

36. The BGC supports renewable energy projects in principle. However, their location and design should not adversely impact general aviation activities. It is clear that the potential adverse impacts on Burn Airfield arising from this proposed development have not been adequately or properly assessed by the Applicant.
37. There is also a cumulative effect of this proposal with other developments – including the large areas of solar already approved and the wind turbines near Eggborough – which makes the risks outlined above harder to manage.
38. At the present time, therefore, the proposed development is contrary to Government policy.