

Our ref: PCS/166661  
Your ref: G/P/661694/04/10/03

If telephoning ask for:  
Aden McCorkell

31 July 2019

Mark Ashton  
The Scottish Government  
Energy Consents Unit

By email only to: [Econsents\\_admin@gov.scot](mailto:Econsents_admin@gov.scot)

Dear Mr Ashton

**The Electricity Act 1989  
The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations  
2017**

**Application: G/P/661694/04/10/03**

**Kirkan Wind Farm**

**Located 5.8km northwest of Garve, Highlands, on the southern side of the A835  
trunk road southeast of Loch Glascarnoch Dam**

Thank you for your consultation email which SEPA received on 18 July 2019.

**Advice for the planning authority**

Unfortunately we must **maintain our objection** to this application due to impacts on peat. We will review this objection if the issues detailed below are adequately addressed.

**1. Site layout**

- 1.1 Alternative track - While we will now **withdraw our objection** to this aspect of the proposal, we highlight that the addition of yet another wind farm track, where access is already available, results in unnecessary and cumulative environmental impacts. While alternatives may not be considered outwith the red line boundary, development should not be assessed in isolation and this approach does not result in sustainable development for the environment.
- 1.2 Amended site plan for battery storage: In our previous response (PCS164876) dated 22 May 2019, we asked that a site plan be provided which shows that the battery storage area is bunded with appropriate drainage. It was agreed in a teleconference meeting on 24 June 2019 that we would be happy for this information to be provided by condition. We also highlight that information on the environmental risks associated with battery storage (i.e. spills, leaks etc.) should be addressed as part of the CEMP or Schedule of Mitigation.

## 2. Impacts on peat

- 2.1 In the applicant's email of 18 July 2019, it states that "in terms of justifying individual locations...with respect to maximisation of whole-array efficiency...it is insufficient to look at individual turbine locations in isolation." The Highland Council Onshore Wind Energy Supplementary Guidance states that "peat survey and site assessment should inform the siting and design of wind turbines and all associated infrastructure. Through this assessment, impacts on peat should be avoided, for example, by careful siting of the windfarm components to avoid deep peat, and avoid altering hydrological regimes." We also note that it is our experience with other wind farm proposals that this iterative approach to re-siting wind farm infrastructure to minimise impacts on peat and wetlands does not only comply with the Local Development Plan and Scottish Planning Policy, but is common practice. Unfortunately, as suggested, use of conditions do not guarantee the impacts on peat will be appropriately addressed, and if the site layout cannot be amended now to avoid areas of deep peat along with competing constraints, then we would question whether the infrastructure is suitable in this context.
- 2.2 In our response of 22 May 2019 (PCS/164876) we asked that floating tracks be considered for specific areas of deep peat. In the applicant's email (dated 18 July 2019), Figure 9.1.7 presents two areas of floating track (approximately 200m in total). The applicant's email states that Figure 9.1.7 presents technical constraints that are in accordance with SEPA guidance. For clarification, the constraint figures which were quoted have been derived from the guidance "Floating Roads on Peat", developed by SNH and Forestry Commission Scotland in 2010.
- 2.3 Scottish Planning Policy states that "where peat and other carbon rich soils are present, applicants should assess the likely effects of development on carbon dioxide (CO<sub>2</sub>) emissions. Where peatland is drained or otherwise disturbed, there is liable to be a release of CO<sub>2</sub> to the atmosphere. Developments should aim to minimise this release." The developer thus needs to demonstrate in relation to the proposed layout how peat excavations and disturbance have been minimised. If floating tracks are not feasible over areas of deep peat, then we would again question whether this site layout is therefore suitable for development.
- 2.4 While we welcome that floating tracks have been considered in two 100m sections, the access track to Turbine 2 remains of particular concern, covering a distance of approximately 400m which will result in cutting through peat 1- 2.5m deep. This will not only result in the direct removal of large quantities of peat, but also progressively drain the peat habitat on either side of the proposed track. This results in the peat habitat drying out, eroding and oxidising. The layout of the track in this section of the development does not demonstrate that impacts on peat have been sufficiently minimised while suitable alternatives appear to exist, and we therefore **maintain our objection** to this aspect of the proposal. We will withdraw our objection if this section of track is floated, or is re-sited, for example from the north-east between Turbine 5 and Turbine 8 where peat depths are less than 1m.
- 2.5 In our previous response (PCS/164876) we also asked that more detailed peat depth information be supplied for Turbines 5, 7 and 16, as these resulted in the largest peat excavations. While we welcome that this information has been supplied, the results of the surveys confirm that the turbines are located in areas of deep peat and that there are areas of less deep peat immediately adjacent. We therefore must **maintain our objection** until the following modifications are made:
- **Turbine 5:** It is clear from the peat depth information provided that peat depths increase to

the west of the turbine (1- 2m depths), while peat depths to the east of the turbine, along the access track are much less at 13cm and 31cm depths. Relocating the turbine and crane pad east appears to be a suitable alternative that will result in substantially less peat being excavated. We also note that moving infrastructure east towards the access track will also result in less track excavations. We also note that where the track diverges from the main route, peat depth was recorded at 1.5m. We would ask that this junction be relocated 50m to the north where there is substantially less peat present. Relocating the turbine between the peat depth probes of 13 and 31cm may eliminate the need for an access track to the turbine all together.

- **Turbine 7:** Turbine 7 is located over peat between 1-2m deep, while 50-70m to the north, along the access track, is substantially shallower peat (56 and 27cm depths). Relocating the turbine and crane pad into shallower peat will also result in less access track infrastructure being required and therefore further minimising impacts to peat.
- **Turbine 16:** Again, Turbine 16 has been located on a pocket of deep peat adjacent to areas of much shallower peat. We therefore ask that the turbine either be relocated further to the south into shallower peat and float the access track to the turbine over the pocket of deep peat, or relocate the access track to avoid deep peat; or relocate the turbine and crane pad to the north-west onto substantially shallower peat and thereby also reducing the length of the access track required.

2.6 We are satisfied that all points under Section 3.3 of our previous response (PCS/164876) will be adopted into the Peat Management Plan by **condition**.

### **3. Borrow pit restoration**

3.1 While we welcome the plans for borrow pit restoration and the use of cell bunds to secure stability and sequential restoration, we must **object** to the use of corrugated plastic sheeting in the creation of the cell bund walls. These plastic sheets are utilised in peatland restoration for ditch blocking and can be easily removed from the environment, while the restoration cells will be permanent and buried structures. As an alternative to plastic, we would suggest utilising appropriately graded aggregate or non-peat overburden from the site. The material used should be graded finely enough that it will not permit wet peat and water to easily leak through.

3.2 In Section 4.1 of the applicant's email, dated 18 July 2019, it states that "the reprofiled aggregate material would have topsoil placed as a layer across the surface to encourage revegetation". We assume this statement is specific to the back wall of the borrow pit, but to avoid any doubt, topsoil and aggregates should not be mixed with peat or layered together (with the exception of the bunds to secure catotelmic peat).

## **Regulatory advice for the applicant**

### **4. Regulatory requirements**

4.1 Authorisation is required under The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR) to carry out engineering works in or in the vicinity of inland surface waters (other than groundwater) or wetlands. Inland water means all standing or flowing water on the surface of the land (e.g. rivers, lochs, canals, reservoirs).

- 4.2 Management of surplus peat or soils may require an exemption under The Waste Management Licensing (Scotland) Regulations 2011. Proposed crushing or screening will require a permit under The Pollution Prevention and Control (Scotland) Regulations 2012.
- 4.3 A Controlled Activities Regulations (CAR) construction site licence will be required for management of surface water run-off from a construction site, including access tracks, which:
- is more than 4 hectares,
  - is in excess of 5km, or
  - includes an area of more than 1 hectare or length of more than 500m on ground with a slope in excess of 25°

See SEPA's [Sector Specific Guidance: Construction Sites \(WAT-SG-75\)](#) for details. Site design may be affected by pollution prevention requirements and hence we strongly encourage the applicant to engage in pre-CAR application discussions with a member of the regulatory services team in your local SEPA office.

- 4.4 Below these thresholds you will need to comply with [CAR General Binding Rule 10](#) which requires, amongst other things, that all reasonable steps must be taken to ensure that the discharge does not result in pollution of the water environment. The detail of how this is achieved may be required through a planning condition.
- 4.5 Details of regulatory requirements and good practice advice for the applicant can be found on the [Regulations section](#) of our website. If you are unable to find the advice you need for a specific regulatory matter, please contact a member of the regulatory services team in your local SEPA office at: Graesser House, Fodderty Way, Dingwall Business Park, Dingwall IV15 9XB Tel: 01349 862021.

If you have any queries relating to this letter, please contact me by telephone on 01349 860353 or e-mail at [planning.dingwall@sepa.org.uk](mailto:planning.dingwall@sepa.org.uk).

Yours sincerely

Aden McCorkell  
Part time Senior/Planning Officer  
Planning Service

ECopy to: [MKelly@rsk.co.uk](mailto:MKelly@rsk.co.uk)

*Disclaimer*

*This advice is given without prejudice to any decision made on elements of the proposal regulated by us, as such a decision may take into account factors not considered at this time. We prefer all the technical information required for any SEPA consents to be submitted at the same time as the planning or similar application. However, we consider it to be at the applicant's commercial risk if any significant changes required during the regulatory stage necessitate a further planning application or similar application and/or neighbour notification or advertising. We have relied on the accuracy and completeness of the information supplied to us in providing the above advice and can take no responsibility for incorrect data or interpretation, or omissions, in such information. If we have not referred to a particular issue in our response, it should not be assumed that there is no impact associated with that issue. For planning applications, if you did not specifically request advice on flood risk, then advice will not have been provided on this issue. Further information on our consultation arrangements generally can be found on our [website planning pages](#).*