

Our ref: PCS/164876  
Your ref: G/P/661694/04/10/0  
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Mark Ashton  
The Scottish Government  
Consents Manager  
Energy Consents Unit

If telephoning ask for:  
Aden McCorkell

22 May 2019

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**

**Planning 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 9 April 2019.

**Advice for the planning authority**

Unfortunately we must **object** due to lack of information. We will review this objection if the issues detailed below are adequately addressed.

**1. Site layout**

- 1.1 We note that we previously provided comments in relation to the proposed access tracks in our consultation response to the Scoping Report (PCS/159309), and further advice in correspondence to the developer on 11 July 2018 (PCS/160110). We welcome that reference has been made to an alternative access track layout in Section 2.6.25 of the EIAR. We note that an informal site access options appraisal was undertaken. This states that the "*minimum distance now from the nearest Corriemoillie Turbine had increased from around 300m (per SEPA's letter reference PCS/160110) to now approximately 950m, with the shortest technically feasible route to Turbine 2 passing through a long section of the deepest peat and blanket bog habitat on the Kirkan site. By comparison, the proposed route from the A835 to Turbine 3 passes near entirely through peat with depths <50cm.*"
- 1.2 In our response to the Gate Check Report in December 2018 (PCS/ PCS/162448) we asked that the site access options appraisal be provided in the EIAR with an accompanying site plan of the alternative route(s) that were considered, overlaying the NVC and peat depth surveys. We also noted in our response of December 2018 (PCS/162448) that we

would welcome further information on the current condition/specifications of the proposed drover's route supported by site photos. Unfortunately, none of the information requested has been provided and we therefore must **object** until this further information is supplied to support that the proposed access track is an environmentally better alternative than utilising the existing neighbouring wind farm access.

- 1.3 We note that there will be battery storage on site. We assume that this is classified as the Substation Compound on the Site Plan (Figure 2.1). Unfortunately, we must **object** until Figure 2.10 is amended or another plan is provided to show that the battery storage area is bunded with appropriate drainage. Further information should be provided on the environmental risks associated with battery storage (i.e. spills, leakages etc) that need to be mitigated for.

## **2. Ground Water Dependent Terrestrial Ecosystems (GWDTE)**

- 2.1 We welcome that further information on GWDTE has been presented in Volume 2, Appendix 9.2 *Kirkan Wind Farm: Groundwater-Dependent Terrestrial Ecosystem Assessment 650395-P9.2 (02,)*, which states that GWDTE identified as potentially impacted by the proposed development are M15 modified and M6 high groundwater dependency. We agree with the assessment that although the areas of M6 are within the buffer zones they will not be affected, as there is 'no hydrogeological link between excavation work relating to Turbine 6 and the M6 mire area, as the groundwater body associated with the mire is confined to the watercourse channel.' We also note that 'there is no hydrogeological link between excavation work relating to Turbine 13 and the M6 mire area, as the groundwater body associated with the mire is confined to the watercourse channel and immediate surroundings.'
- 2.2 With regard to the M15 wet heath it has been determined that areas of this habitat within the project are not groundwater dependent. It is also listed within the NVC information as M15b sub community which is less groundwater dependent than M15a but more groundwater dependent than c and d. In summary, we are satisfied with the mitigation proposed to reduce indirect impacts and maintain groundwater continuity with the surrounding M15 wet heath.

## **3. Impacts on peat**

- 3.1 We welcome Figure 9.1.2 Indicative Peat Depth Map (South), and the Outline Peat Management Plan. We note that the largest peat excavation volume is due to the construction of the access tracks, resulting in an estimated 73,113m<sup>3</sup> of peat. It is not clear why floating tracks have not been considered for at least some of the routes. We must object until floating tracks have been considered for the following sections:
  - a) Access track to Turbine 2 covers a long area of deep peat. It appears from the main track than an alternative route through the green 0-0.5m depths would result in far less peat (although we are aware this would create another watercourse crossing). An alternative would be to float the track, and it may be beneficial to float all of the section 7 track.
  - b) Access track between Turbine 17 and Turbine 15. We also note that the access track between Turbine 15 and Turbine 12 could be microsited away from the deeper peat by moving it slightly to the south, otherwise floating tracks may also need to be considered here.

- c) Access track between Turbine 12 and the Substation should also be floated as well as between the Substation and Turbine 5.
- 3.2 We also note that Turbines 5, 7 and 16 result in the largest peat excavations, however the peat survey provided is not of a scale to determine whether suitable micro-siting alternatives exist and we must **object** until more detailed peat depth survey maps are supplied to clearly show each probe with corresponding peat depth at a scale which allows clear interpretation of the data and alternatives.
- 3.3 We are generally satisfied with the peat reuse proposals of the Outline Peat Management Plan, however we must **object** until the following information is provided/modified within the final Peat Management Plan:
- a) We note that Section 3.23 states that dressing off verges and edges of infrastructure we have assumed a maximum depth of 0.6m and an average width of 2.5m. This is a difficult criteria for site operatives to achieve on a construction site and this should be amended to a maximum width that should not be exceeded to ensure that there are no large areas over which thin layers of peat are spread, which we have seen on other development sites.
  - b) Further information should be provided on the restoration of the Borrow Pit areas, including the maximum dimensions of the borrow pits which are proposed to be filled and how the two metres of peat proposed for restoration at each site will be stable and not result in a risk to human or animals. Phased restoration could see the use of impermeable cell bunds which can be sequentially filled and then overtopped with a layer of actrolemic peat. We ask that the finished profiles are provided and more information on the method of restoration supplied.
  - c) We would also caution that if insufficient peat turves are present – which can often be the case following construction – we would like to see the finalised Peat Management Plan address this and prescribe that if insufficient turves are available, that they should be placed over bare peat in a checkerboard pattern to maximise coverage of the surface area, which will result in more successful restoration.
  - d) We would also ask that the Peat Management Plan address the appropriate construction of cut batters along access tracks. These are sources of de-watering for a peat bog, and experience has shown us that these are often left as large scars which gradually dry out the surrounding bog, causing erosion and long term maintenance issues due to slumping into drainage ditches. We would therefore now expect the turves to be rolled back before designing a gradual slope and then refolding the turves back over to cover the face of the bare peat.
- 3.4 Site operatives should be made aware of the critical importance of preserving turves and storing these appropriately, as these will determine the success of restoration on site.
- 3.5 We welcome the plans for peatland restoration proposal as outlined in the Habitat Management Plan and Peatland Restoration Plan.

#### **4. Borrow pits**

- 4.1 We welcome Figure 9.3.6 – Borrow Pit Cross Sections and Figure 9.3.4 Borrow Pit Development Plan, however it is not clear what the purpose is of Figure 9.3.5 Borrow Pit Indicative Restoration, as this simply shows the same information as Figure 9.3.3 Borrow Pit Topography Plan. As stated above in Section 3.3, we therefore must **object** and ask that the restoration profile be provided, especially as this is to utilise 24,700m<sup>3</sup> of peat and

proposed depths up to 2m. This information should therefore be provided on a cross section to make it clear to site operatives what is required.

## **5. Forestry**

- 5.1 We welcome *Volume 2 – Appendix 2.1 Forestry*, which states that keyhole felling will be used and that all timber will be removed from site and sold at roadside and that all lop and top will be kept clear of streams and watercourses. We would expect an appropriate buffer to be applied which will allow any riparian planting to remain in situ. If this is not the case, then further information will be required. We welcome that some riparian compensatory planting is being proposed and that peatland restoration opportunities will be delivered.

## **6. Pollution prevention**

- 6.1 We welcome that a Drainage Impact Assessment has been provided. Please note that this development requires a Controlled Activities Regulations (CAR) construction site licence and that information will need to be supplied on the management of surface water run-off from the construction site within a Pollution Prevention Plan as part of this authorisation. We therefore will not require this information to be provided at the planning stage. We would advise the applicant that surface water management features should be presented on an annotated site plan and show all cut off drains, dirty water drains and their subsequent treatment features. This makes the information fit for purpose for site contractors to implement on site.

## **Regulatory advice for the applicant**

### **7. Regulatory requirements**

- 7.1 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).
- 7.2 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. Consider if other environmental licences may be required for any installations or processes.
- 7.3 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.

7.4 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  
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*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](#).*