

**Energy Consents Unit** 

12 December 2022

# RE: Tom na Clach Wind Farm Extension Peat Landslide Hazard Risk Assessment Stage 1 Checking Report Response

This letter and the associated updated Peat Landslide Hazard Risk Assessment report provides our response to the comments within the Stage 1 Checking Report for the Tom na Clach Wind Farm Extension issued 26 August 2022.

The following comments that require acknowledgement, explanation or update are listed below with the subsequent action.

## Ironside Farrar Comment

Section 2.3 states 'Competencies of the team undertaking the PLHRA have not been stated.'

## Fluid Response

These have been stated within the PLHRA report in a new section: Section 1.5 Team competencies.

#### Ironside Farrar Comment

Section 2.5 states that 'The western part of the site (west of the main access track" doesn't appear to have had any features added to the mapping' and '...suitable justification [should be] given as to why this area is not included in the assessment.'

#### Fluid Response

The spatial scope of the study has been updated to exclude the area to the west of the main access track, as this is the Operational Tom nan Clach wind farm (the 'Operational Scheme') and not part of the Proposed Development. Plate 1.1 has been updated to show the spatial scope of the assessment. None of the figures now show any mapping on that side of the track.

#### Ironside Farrar Comment

Section 2.5 states 'it would be useful to include the resolution of the digital terrain model (DTM).

## Fluid Response

The DTM used was of 5m resolution which is now stated in section 3.1.



#### **Ironside Farrar Comment**

Section 2.6 states that 'the probing plan (Figure 5) suggest the peat depths west of the existing Tom na Clach access track have been interpolated from probes previously completed for the existing Tom na Clach windfarm. However, the probing locations, layout and density in this area have not been provided so it is unclear if the interpolation is based on reasonable and adequate peat depth data (e.g. so that over interpolation has not occurred). Please provide further information including peat probe layouts for this area of the site.'

## Fluid Response

The existing access track for the Operational Scheme will not be altered and therefore additional peat depths along this access track are not required as it is not subject to further assessment. In the area of the assessment all new infrastructure has been probed at frequencies appropriate to the most current guidance.

## Ironside Farrar Comment

There is no probing along the main access track from the north and also along existing track that will be used to access T3, T4, T5 and the proposed substation. Comment is required as to whether any construction activity will be carried out on the existing track. Suitable justification is also required for omitting detailed probing in these areas.

#### Fluid Response

The Operational Scheme access track will not be altered and therefore peat depths along this access track are not subject to further assessment. Any infrastructure that connects to this existing access track has been probed at appropriate frequencies.

#### Ironside Farrar Comment

Section 3.1 have a number of comments which primarily relate to the absence of assessment in the operational scheme.

#### Fluid Response

The area of the Operational Scheme is not included in the assessment. This has been clarified within the updated report.

#### **Ironside Farrar Comment**

Section 3.2 states 'Figure 9 shows the location of source zones selected from the risk mapping where run out has been assessed. It is noted that not all moderate areas have been included and comments is required as to why some locations have been omitted, e.g. a section of track to T6.

Tom na Clach Wind Farm Extension Peat Landslide Hazard Risk Assessment Stage 1 Checking Report Response December 2022 Fluid Environmental Consulting Ltd Page 2 of 3



#### Fluid Response

As stated in the PHLRA 'Figure 9 shows in purple any proposed areas of infrastructure of greater than 25 m in length intersecting with areas of moderate or higher landslide susceptibility (from the contributory factor approach) or Factor of Safety of 1.4 or less (from the limit equilibrium approach). A 25 m overlap has been selected as this is considered the minimum size of a potentially environmentally significant landslide. In order for there to be a "Medium" or "High" risk (Scottish Government, 2017), likelihoods must be "Moderate" or higher (see Plate 4.1 below) and hence this provides a screening basis for the likelihood results. In all, 6 infrastructure locations overlap with areas of "Moderate" landslide likelihood for > 25 m distance. One source zone (1) is less than 25 m in length and is not included further in the risk calculations.'

These areas are therefore not deemed of sufficient size to warrant further assessment.

## Ironside Farrar Comment

Section 3.2 also states 'It is also noted that a number of areas designated as marginally unstable (FoS<1.4) that intersect with infrastructure have also been omitted. It would be anticipated that these areas would also warrant consideration so as to provide a robust assessment. Again comment is required and mapping and assessment needs to be updated accordingly.'

## Fluid Response

The Factor of Safety output shown on Figure 6 does not present these outputs on a plan as suggested by the checking report. Furthermore, any areas that have been considered to be marginally unstable have been highlighted on Figure 10 of the PLHRA and in Section 6.2.

#### Ironside Farrar Comment

Section 3.3 states 'following the above comments in 3.1 and 3.2, it is noted that risk calculations may require updating.'

#### Fluid Response

This is considered unnecessary due to the explanation provided and because the area west of the existing scheme track is not part of the development.

#### Ironside Farrar Comment

Section 3.4 states 'following the above comments in 3.1 - 3.3, mitigation may require updating.

#### **Fluid Response**

As with the comment in Section 3.3 this is considered unnecessary due to the explanation provided and because the area west of the existing scheme track is not part of the development.

Tom na Clach Wind Farm Extension Peat Landslide Hazard Risk Assessment Stage 1 Checking Report Response December 2022 Fluid Environmental Consulting Ltd Page **3** of **3**