Alistair Phillips-Davies

Chief Executive

SSE

Inveralmond House

200 Dunkeld Road

Perth

PH13QA

Dear Mr Phillips-Davies

**Restoration and reinstatement of construction tracks, tower bases and other works of the Beauly to Denny Transmission line though the Cairngorms National Park**

Following on from the attendance of Donnie Mackay and Keith Ingles representing SSE at our Planning Committee on 16th February members of the Cairngorms National Park Authority Board and some of our specialist landscape and restoration officers accepted an invitation from SSE to visit the section around Drumochter, alongside the A9, on the 25th of May. A representative from SNH was also present.

Guided by SSE staff we saw the site at first hand and met with Stuart Parsons (SSE Ecological Clerk of Works). We have subsequently discussed our findings further internally with CNPA members and officers.

I am now writing to put on the record that the CNPA has significant concerns about the way in which the restoration work relating to the tracks and tower bases along the National Park section has been carried out to date and about the proposed future proposals for full reinstatement.

Despite a long period of period of pre planning and preparation it does not appear to the CNPA that the methods used are commensurate with National Park sensitivities (including Natura 2000 designations), nor the high- profile nature of the works, immediately adjacent to and often highly visible from the A9, Highland main line, National Cycle Route 7 and surrounding Munros. For example, the original vegetation and turfs have not been removed and stored in such a way as to facilitate regeneration and there has been significant soil compaction and mixing of soil horizons. Sheep and deer have access to most restored sections.

Looking forwards, the proposals for restoration seem to largely rely on ‘natural regeneration’ to achieve a proper vegetation cover. We feel that this process will take considerably longer than anticipated by SSE because of the relatively poor soil quality, short growing season and high altitude experienced in the Drumochter area. This will leave bare soil exposed for a long period which will be subject to erosion from water, wind and grazing animals. Mineral soils exposed to air will oxidise faster leading to a net loss of CO2. This method may also encourage a high proportion of less appropriate dominant species, such as soft rush and grasses that out compete heather and herbs. These dominants are undesirable in ecological terms and will make a visual impact upon the landscape because of their colour and texture.

There is considerable expertise in Scotland in vegetation restoration following construction works like tracks in upland areas. We would have expected that, based on this proven experience, detailed method statements and a comprehensive restoration programme for line works would be in place. This does not appear to be the case. Given what we have seen on site we consider it to be imperative that SSE moves now to draw on that expertise and put in place a programme of works that we can have confidence in.

To be of assistance I have attached some proposals prepared by the CNPA Peatlands Officer who was on the site visit. He has recently been overseeing major peat land restoration projects elsewhere in the Park and has amassed considerable practical experience.

We will be happy to advise and assist further if required. I look forwards hearing from you in due course.

Yours sincerely

 cc

Susan Davies Chief Executive SNH

Ian Ross, Chairman SNH

Steve Barron, Chief Executive Highland Council

Bernadette Malone, Chief Executive Perth and Kinross Council

Scottish Government Energy Consents Unit

**Beauly-Denny Transmission Line**

**Trial Restoration Proposals**

The Beauly-Denny power line passes through the CNP and 76 of its towers lie within the CNP as well as approximately 28km of tracks constructed to enable its erection. Part of the conditions for the building of the line is to restore the tracks and tower bases back to a near-natural state.

SSE are proposing to reinstate the bases and tracks to mimic the soil profile, and then leave them for 2 years to re-vegetate naturally before considering any intervention. I think this process is likely to fail (in the short-term) due to the nature of the majority of the soils along the route (very low in nutrients and thin) and the climate and altitude.

I advise, therefore, that a number of different restoration techniques are trialled along the route to compare the effectiveness of intervention against non-intervention as well as the different techniques. This will then provide a very useful guide to which technique works best and if intervention is needed along the whole route, the most effective intervention.

The following proposals would see re-vegetation trials on 18 of the 76 towers, and 3.2km of the 28km of tracks. A range of altitudes, aspects and soil types should be chosen.

**Re-vegetation techniques**

1. Sow 2 tower bases, and 4 X 100m sections of track with an appropriate native plant seed mix
2. As 1 above (2 towers, 4 x 100m of track) but include fertiliser/lime or other products such as “seed aid” based on soil assessment
3. Apply bryophyte-rich heather or cotton grass brash to 2 tower bases, and 4 x 100m of track, with a dwarf-shrub seed mix
4. Apply bryophyte-rich heather or cotton grass brash to 2 tower bases, and 4 x 100m of track with dwarf-shrub seed mix, plus fertiliser and/or lime based on soil assessment
5. Apply bryophyte-rich heather or cotton grass brash to 2 tower bases, and 4 x 100m of track, with a “nurse grass crop”, dwarf-shrub seed mix and fertiliser/lime based on soil assessment
6. Plant appropriate plug plants (dwarf-shrubs and cotton grass, 1 per square metre) to 2 tower bases and 4 x 100m of track
7. Apply geo-textile to 8 x 50m of steep slopes with a seed mix and fertiliser/lime (as in 3 above)
8. Apply bryophyte-rich heather or cotton grass brash to 8 x 50m steep slopes with a seed mix and fertiliser/lime (as in 3 above)

**Brash quantities**: typically 1 hectare requires 156 bags of brash (large dumpy builders bags), or 1 bag can cover 64m2 of ground to a depth of 1cm.

**Lime:** If the pH is below 4 lime will be required to provide the conditions needed to establish a vegetation cover. Lime should be applied as granulated (prilled) lime (e.g. Calciprill) at a rate of 1 tonne/ha to brashed bare peat areas ideally 6 weeks before fertiliser application and after the bare soil has been stabilised with brash.

**Dwarf-shrubs:** a dwarf-shrub seed mix of 85:10:5 mix of *Calluna vulgaris*, *Erica tetralix* and a small amount of other species applied at a rate of 650g per hectare).

**Nurse grass crop:** Studies have shown that establishment of dwarf shrub species on heather moorland is enhanced if a grass “nurse” is grown to stabilise the bare peat by developing a root mat that dwarf-shrub and other moorland species can gain a foothold into. The aim is to utilise grass species that will only thrive for a short period (up to 5 years) in the presence of increased lime and fertility. The nurse grass crop is based on a 50:20:30 mix of *Agrostis capillaries*, *Festuca rubra rubra* and *Lolium perenne* spread at 40kg per hectare.

**Fertiliser:** Soils are naturally very nutrient poor in the CNP and damaged soils even more so. In order to establish the grass nurse and provide favourable conditions for initial dwarf-shrub growth it is necessary to provide a short-lived low dose of nutrients using artificial fertiliser applied at the same time as the grass nurse. The exact rates are determined by the soil sample.

More information on some of these restoration techniques is available on the Yorkshire Peat Partnership’s website: <http://www.yppartnership.org.uk/restoration/technical-guidance-notes/>; and on the Moors for the Future’s website: <http://www.moorsforthefuture.org.uk/repairing-bare-peat>

While these are primarily for the re-vegetation of bare peat, they are also suitable for re-vegetating the other poor quality, low nutrient soils found along the power line.

Stephen Corcoran

Cairngorms Peatland Action Restoration Officer

Cairngorms National Park Authority

19/06/15