

Visual Mitigation of Overhead Lines in the Cairngorms National Park

A submission to Ofgem as part of VISTA: An Assessment of the Visual
Impacts of Scottish Transmission Assets

November 2018



Executive summary

SHE Transmission is promoting VISTA (Visual Impact of Scottish Transmission Assets), an initiative instigated to assess the impact of existing electricity infrastructure in its ownership within National Parks and National Scenic Areas (NSAs) in Scotland, and where possible, to identify and develop appropriate mitigation. To play a part in conserving Scotland's designated landscapes, SHE Transmission hopes to access a proportion of a £500m fund that is administered by the electricity industry regulator Ofgem.

SHE Transmission's VISTA Policy document defines objectives that projects must meet:

- *“deliver the most beneficial enhancements for Scotland's precious landscapes while keeping undesirable environmental impacts associated with particular mitigation measures (such as undergrounding) to a minimum;*
- *enable users of National Parks and NSAs to benefit from their recreational, educational and social offering;*
- *protect the technical viability of the wider transmission network;*
- *be economical and efficient; and*
- *involve a wider range of stakeholders.”*

In order to deliver the maximum benefit, it is necessary to identify the transmission infrastructure with the greatest impacts on nationally protected landscapes, but also with greatest potential for mitigation. This was evaluated through a landscape and visual impact assessment that considered all SHE Transmission infrastructure in protected landscapes in Scotland.

A 132kV overhead line, carried on steel lattice towers, runs through the north-western part of the Cairngorms National Park, between the National Park entrance at Slochd and the substation at Boat of Garten. A second overhead line continues north-east along the Spey, passing Nethy Bridge. Where these lines pass through the broad and relatively open floodplain of the River Spey, the steel towers are visible to many people, including people living in and visiting the area. The impact of these overhead lines on the landscape and visual amenity of the National Park, and the potential for successful mitigation, was judged to merit further investigation as part of VISTA.

A range of mitigation solutions were considered against both technical and environmental criteria. Strongest stakeholder support was expressed for undergrounding, as it was thought that this would benefit the largest number of visitors to this area of the National Park. Following a technical review undertaken by SHE Transmission, no issues were raised with undergrounding. Other options, including re-routeing or replacement of the line with a wooden or composite pole line, were seen as providing less effective mitigation of the identified impacts.

Stakeholders were involved throughout this assessment and development process. A number of stakeholder meetings have been held, including formal presentations, workshop sessions, and informal discussions. Throughout the process, stakeholders, including the Highland Council and Cairngorms National Park Authority, have expressed strong support for undergrounding in this well-visited part of the National Park.

The projects will involve the removal of 46 steel lattice towers, and approximately 12 km of overhead line, from Strathspey around Boat of Garten and Nethy Bridge. The overhead line will be replaced with approximately 14 km of underground cables, which have been routed to avoid key environmental constraints. Horizontal directional drilling (HDD) will be employed to cross the River Spey, River Nethy and Allt Mor water course, thus minimising impacts on the River Spey Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI). The projects aim to remove visibility of the line in an area where it is viewed by the largest numbers of

visitors, thus mitigating the moderate landscape and visual effects identified during the earlier stages of the project.

The projects will benefit both local residents and visitors to the area and the wider National Park, by enhancing their experience of the landscape and its special qualities. Particular receptors that may benefit include residents of Strathspey, visitors to the area, and road users travelling on the A95 and B970. Landowners will benefit from a small increase in land available for farming, potentially increasing land value. Local tourism businesses, e.g. operators of the Strathspey Railway, may also see benefits arising from any increase in footfall or longer visits. In wooded areas, removing the overhead line will reduce the need for maintaining an open wayleave, which will benefit woodland species and biodiversity.

The proposals have been assessed against the VISTA Policy Document (Appendix 1), and are considered to meet the stated objectives, as set out in the Table 0.1 below.

Table 0.1 Consideration against VISTA objectives

| Objective | Evaluation |
|---|--|
| Deliver the most beneficial enhancements for Scotland's precious landscapes... | The proposals will enhance the character and special qualities of the Strathspey area within the Cairngorms National Park, in an area which is visible to the largest numbers of people. The Cairngorms National Park is home to 18,000 people and receives approximately 1.8 million visitors annually. |
| ...while keeping undesirable environmental impacts to a minimum | The overhead line will be replaced with an underground cable. The cable route, through woodland and farmland, follows a route designed to minimise impacts on other environmental receptors. Where the cable passes through wooded areas the working corridor will be reduced to minimise the need for tree removal. HDD will be utilised to cross the River Spey, River Nethy and other watercourses, helping to minimise impacts on the River Spey SAC and SSSI. Best practice construction and installation methods will minimise other environmental impacts |
| Enable users of National Parks and NSAs to benefit from their recreational, educational and social offering | The proposals have been designed to benefit the maximum number of people, by focusing on a well-visited part of the National Park. This will enhance the enjoyment of the landscape and its special qualities for many people who visit or travel through the area. |
| Protect the technical viability of the wider transmission network | The proposals will protect the technical viability of the wider transmission network, offering visual mitigation solutions via assets that are maintainable and operable. |
| Be economical | The total cost is £38.8M, with most of this project cost being provided via SHE Transmissions 132kV underground cable |

| Objective | Evaluation |
|---------------------------------------|--|
| and efficient | framework rates and assessed to be economic and efficient when considering market competitiveness. In addition, where cost estimates have been derived from non-tendered sources, costs have been estimated from similar projects or using the experience of individuals who have worked for SHE Transmission on similar projects. |
| Involve a wider range of stakeholders | A range of stakeholders have been involved in the development of these proposals, from the initial assessments, through project selection and detailed design. Stakeholder inputs are described throughout this submission document and its appendices. The proposals benefit from the support of key stakeholders. |