

Executive Summary

Introduction

This is the formal submission of the funding request for delivering the outputs of the Peak District East (Peak East) Visual Impact Provision (VIP) project. This submission is made in accordance with Special Condition 6G of the National Grid Electricity Transmission (NGET) licence.

Background

Ofgem has established a £500m provision across Great Britain to help reduce the impact of existing electricity transmission lines in Areas of Outstanding Natural Beauty (AONBs) and National Parks. In 2014, we created a policy document which set out the guiding principles for how we would select the schemes for VIP. Following stakeholder consultation by Ofgem, the Authority confirmed that they supported the implementation of the Policy. The principles of this were as follows:

- result in greatest landscape enhancement benefits
- result in greatest opportunities to conserve and enhance natural beauty, wildlife and cultural heritage whilst avoiding unacceptable environmental impacts
- result in greatest opportunities to encourage public understanding and enjoyment of the protected landscapes, including positive socio-economic impacts
- are technically feasible in context of the wider transmission system
- are economical and efficient.

The Peak East project was proposed for development in September 2015 by the Stakeholder Advisory Group (SAG). This group consists of independent stakeholder organisations working together to advise us in identifying the areas that could benefit most from the provision. The selection process involved a landscape and visual assessment of all 571km of transmission lines in National Parks and AONBs in England and Wales. This was carried out by two firms of landscape consultants. It eventually led to the SAG shortlisting 12 sections of line, which were ranked as having the highest impacts on the landscape. Peak East was found to have one of the highest landscape and visual assessment scores, which led to the SAG prioritising this project, along with three others.

As Peak East meets the principles of our VIP Policy, we accepted the SAG's proposal and agreed to carry out more detailed development to determine the feasibility of the project.

Benefits

The Peak East project will remove 8 pylons by undergrounding 2km of existing overhead line, creating major benefits for several landscapes in this National Park. Local communities will benefit from this project, through the removal of an existing sealing end compound and large pylons, which will have a transformative effect on the views of the local landscape. Those who use the cycleways and footpaths, such as the Trans Pennine Trail (long distance footpath running from coast to coast) will experience significant visual benefits as the existing transmission infrastructure is particularly intrusive. The current overhead line runs parallel to these trails. In addition, visitors to publicly accessible sites, such as open

access land and a local reservoir will benefit from the removal of these pylons, as they can be seen over a wide area.

To illustrate the impact of removing these pylons, an artist's impression of a section on the Peak East project can be found below.



Although there are likely to be minor impacts on local wildlife, these will be offset by proposed enhancement measures, leading to an overall net benefit.

To further quantify the benefits of the scheme, we commissioned the services of Professor Carys Swanick, who is a recognised expert in the field of landscape assessment. For the overhead line that would be removed, a visual assessment score was determined based on the impact of the overhead line. A score of greater than 25 indicated an impact of 'very high importance' while a score from 0 to 9 indicated an impact of 'lower importance'. The pre overhead line removal score for Peak East was 27 (indicating a very

high importance). The score after the overhead line removal was 4. This indicated a significant landscape benefit from the implementation of the project¹.

Stakeholder engagement

We have worked with stakeholders throughout the development of the Peak East project and have engaged them through different ways to maximise contribution from various groups. One of the key groups has been the Stakeholder Reference Group (SRG). This is made up of local organisations and the local council to advise on local issues. The SRG has been essential in shaping the decisions on the project that determine the underground route. This has been demonstrated through the stakeholder feedback on the laydown area at Wogden Foot, where the optimum location was being established.

In September 2016, we participated in a local agricultural show to gain wider public views on the Peak East project. 108 people visited the stand, with the vast majority being supportive. This theme continued in July 2017, where we held public drop-in and public consultation events on the project. We showed how plans for the project were developing and provided an opportunity for people to share their views. Over 90 per cent of those submitting a feedback form were in favour of the project.

While most stakeholders are supportive of the project, a minority have concerns over the impact to ecology. There is also one stakeholder group who wish to reinstate a disused railway line, which runs along part of our proposed cable route. We have met with them and agreed that we would both continue to progress our respective projects. Since then, we have submitted a planning application. Key political transport stakeholders also confirmed that they would not be raising objections.

Throughout the development of the Peak East project, there has been regular dialogue with Ofgem, who are also a member of the SAG. This has been important in the development of VIP and the Peak East project. We have also liaised with the two companies that own the Scottish transmission networks, who are developing their own visual mitigation projects. This maximises the benefits of the allowance across England, Scotland and Wales.

In June 2020, we received planning permission for the project from Barnsley Council. This is testament to the amount of stakeholder engagement that we carried out during the project development.

Willingness to pay and acceptability testing

In 2012, we commissioned a study to assess how much domestic consumers were willing to pay to underground overhead lines in National Parks and AONBs. The research showed that, on average, consumers were willing to pay £11 per year (2016/17 price) for 8 years for up to 16km of existing overhead lines in National Parks and AONBs to be buried underground. To test that these 'willingness to pay' figures remain valid, we commissioned further independent acceptability testing with consumers in 2018. This asked representative groups of bill-payers whether electricity bill increases relating to the four lead VIP projects would be acceptable.

¹ The route for the underground cable can be found here: <http://peakdistricteast.nationalgrid.co.uk/wp-content/uploads/2018/12/3262-1-NG-VIP-Peak-District-map-2.1-V3.pdf>

The research comprised of ten discussion groups, nine in depth interviews with vulnerable bill-payers and a quantitative survey of 2,002 bill payers aged 16 and over. In comparison to the willingness to pay figure, the estimated cost provided was more reflective. This was set at a cost of £0.60 per year for 25 years. Or if comparing across 8 years, it equated to £1.87 per year. When presented with the details of the Peak East project, 73% found it acceptable for its costs to be passed onto consumers. Only 11% of the research group found it unacceptable. Finally, 16% did not provide a view either way. For the minority that opposed, their main reason was the rejection of the basic idea that consumers should foot the bill. The results also suggested that it was not a question of affordability, as the majority believed that the cost per household was easily affordable.

The perceived acceptability of the VIP projects is higher among rural bill payers and those living close to an AONB or National Park. Other than those in the lowest income bracket, the majority of people in other income levels found the projects acceptable.

This research demonstrates that the majority of end consumers are willing to fund the removal of overhead lines. This can be viewed as a positive step forward to improve the landscapes within AONBs and National Parks.

Technical scope

The 4ZO 400kV Overhead Line (OHL) route runs between Stalybridge and Thorpe Marsh, and Stalybridge and Macclesfield. It was constructed between 1966 and 1967 with standard lattice tower design, and is currently strung with a combination of twin, triple and quad conductor bundles along various sections. There is a high voltage cable section installed in the Woodhead Tunnel between Dunford Bridge and Woodhead, connecting the eastern and western section of the OHL route.

This project proposes to replace part of the OHL route in the Peak District with a 2km underground cable. Eight towers will be removed as part of the works and replaced with cable circuits installed along the existing Trans Pennine Trail. The works will also require the construction of a new tension tower and two new full tension gantries, to be installed within the new sealing end compound at Wogden Foot.

There are several special engineering difficulties that have been identified on this project. These are outlined below:

- installation of a temporary diversion to the existing Trans Pennine Trail
- narrow working areas along the Trans Pennine Trail
- restricted access routes
- multiple culvert crossings requiring reinforcement
- cable removal and installation within the Woodhead tunnel and shaft
- contaminated ground from old railway line
- proximity to distribution network overhead lines.

These constraints will be managed by the appointed contractor.

Selection of the preferred bidder

Following a period of project development, stakeholder engagement and consenting activities, a competitive tender event was carried out to invite bids from contractors to provide undergrounding solutions. After several rounds of post tender reviews, which gave contractors opportunities to clarify and re-evaluate their submissions, Morgan Sindall was selected as the preferred bidder, based on the strength of their commercial and technical proposal.

Proposed outputs and efficient cost

The cost of delivering the project is below:

Cost element	Delivery Year	Outputs	Cost (19/20 price)
Peak East project	2023	Delivery of 2km of underground cable and removal of existing overhead line	£43.5m

Funding request

National Grid is putting forward this project for funding approval. As stated under special condition 6G of the electricity transmission licence, it is requested that Ofgem determines a) whether the Peak East project is compliant with the VIP Policy and b) whether the proposed costs are economical and efficient.