

## **VISUAL IMPACT PROVISION**

**How we intend to reduce the visual impact of existing electricity transmission lines in Areas of Outstanding Natural Beauty and National Parks**

## **Contents**

**01 Introduction**

**02 What can the Visual Impact Provision be used for?**

**03 How we will use the Visual Impact Provision**

**04 The Guiding Principles**

**05 Engagement with stakeholders**

**06 Working with other transmission and distribution owners**

**07 Review of this document**

**08 Contacts**

## 01: Introduction

National Grid is funded by a price control mechanism which is agreed with and set by Ofgem, the electricity and gas markets regulator. Ofgem and National Grid have agreed a set of price controls and incentives for the period from April 2021 to March 2026<sup>1</sup>.

The price controls and incentives include a provision of £465 million<sup>2</sup> for electricity transmission owners to mitigate the visual impact of existing electricity infrastructure in nationally protected landscapes in Great Britain. For National Grid, which is the electricity transmission owner in England and Wales, this means considering the visual amenity of our existing infrastructure in Areas of Outstanding Natural Beauty (AONBs) and National Parks. We call this the 'Visual Impact Provision'.

AONBs and National Parks are nationally important landscapes with statutory protection. At National Grid we are passionate about playing our part in conserving and enhancing the natural beauty, wildlife and cultural heritage of these landscapes. By making use of this fund, we are doing as much as we possibly can to conserve and enhance England and Wales' most valued landscapes.

We are seizing the opportunity the fund creates to work collaboratively with stakeholders to achieve this. We are of course working in accordance with our statutory duties and licence obligations<sup>3</sup> and national planning policy<sup>4</sup>. In particular, we have duties to maintain our network in an economical and efficient way, to preserve amenity, and to conserve and enhance the natural beauty, wildlife and cultural heritage of the AONBs and National Parks.

This document has been prepared as our Visual Impact Provision policy on how we are using the fund and working with our stakeholders to identify opportunities for maximising benefits from it.

Our objective is to achieve the maximum enhancement to the landscape from the available funds whilst ensuring that no significant adverse impacts arise as a result.

This policy document sets out our approach to achieving our objectives, including the identification of a set of guiding principles, the creation of a Stakeholder Advisory Group consisting of stakeholders with national remits for England and Wales, and ways of engaging other stakeholders. We are committed to using the Visual Impact Provision in a collaborative and transparent way.

---

<sup>1</sup> RIIO T2

<sup>2</sup> £465m in 2018-19 prices.

<sup>3</sup> Section 11A(2) of the National Parks and Access to the Countryside Act 1949; Section 85 of the Countryside and Rights of Way Act 2000. We have summarised our duties on our VIP website

[www.nationalgrid.com/uk/electricity-transmission/network-and-infrastructure/visual-impact-provision](http://www.nationalgrid.com/uk/electricity-transmission/network-and-infrastructure/visual-impact-provision)

<sup>4</sup> Para. 176 and Para. 180 of the National Planning Policy Framework (July 2021); Paras. 6.3.10, 6.3.16 and 6.4.4 of Planning Policy Wales (Edition 11, February 2021); Paras. 5.9.9-5.9.13 of Overarching National Policy Statement for Energy (EN-1) (2011); Para. 2.2.6 of National Policy Statement for Electricity Networks Infrastructure (EN-5) (2011)

## 02: What can the Visual Impact Provision be used for?

National Grid's Visual Impact Provision applies to existing electricity infrastructure in designated AONBs and National Parks in England and Wales. This infrastructure mainly comprises our existing high voltage (400,000 and 275,000 Volt) overhead electricity transmission lines.

The Visual Impact Provision can, where justified in relation to the relevant special licence condition, also apply to lines adjacent to protected landscapes<sup>5</sup>, where an effect can be shown to their setting. Examples of how the fund could be used are:

- landscape enhancements
- screening substations or overhead lines from key public viewpoints
- use of alternative pylon designs, such as lower-height pylons
- re-routeing or rationalising existing lines
- whole or partial replacement of existing overhead lines with underground cables
- innovative ways of painting pylons to reduce their visual impact
- initiatives in National Park and AONB management plans, where these can be clearly shown to directly meet the purpose of using Visual Impact Provision to mitigate the visual impact of our electricity infrastructure
- measures that could help divert attention away from the overhead line
- other visual impact measures recommended by stakeholders

The research<sup>6</sup> we have conducted to establish the 'willingness to pay' of consumers indicates that the majority of consumers favour 'undergrounding', followed by screening with trees, an alternative pylon design and re-routeing. We are therefore using a significant portion of the funds for placing existing lines, or parts of them, underground. Along with our stakeholders, we also consider it is advantageous to deliver cheaper and simpler but nonetheless highly effective enhancements such as localised screening, which can be delivered over a shorter period of time, as well as more major undergrounding projects. The final proposals put forward for funding are informed by our engagement with stakeholders.

The Visual Impact Provision does not apply to:

- the construction of new transmission lines and other new transmission infrastructure; the visual impact of these is addressed through the planning and consent process before the infrastructure is constructed
- other infrastructure operated by National Grid.
- other landscape, heritage and ecological designations – such as World Heritage Sites, Heritage Coasts, conservation areas, scheduled monuments, Sites of Special Scientific Interest, Special Areas for Conservation, Local Wildlife Sites – although these are likely to be factors for consideration where they are located within or adjacent to an AONB or National Park
- infrastructure owned and operated by other businesses (e.g. lower voltage lines, typically carried on smaller pylons or wooden poles, used for electricity distribution)

<sup>5</sup> RIIO-2 Final Determinations - NGET Annex (REVISED) pages 30 – 31

[https://www.ofgem.gov.uk/system/files/docs/2021/02/final\\_determination\\_nget\\_annex\\_revised.pdf](https://www.ofgem.gov.uk/system/files/docs/2021/02/final_determination_nget_annex_revised.pdf)

<sup>6</sup> See Consumer Willingness to Pay research, National Grid Electricity Transmission (December 2019) <https://www.nationalgrid.com/uk/electricity-transmission/document/132056/download>

- areas which are not yet designated as AONBs or National Parks. However, as and when new areas are designated, lines within them will be eligible for consideration under the Visual Impact Provision

Where replacement or maintenance activity is planned on a line, the allowance will not be used to pay for this. However, when estimating the costs for mitigation options, consideration will be given to possible cost savings resulting from coordination with planned works (e.g. other works in the vicinity of potential enhancement proposals, or planned maintenance to the candidate line which would otherwise be carried out).

*“We are committed to using the Visual Impact Provision in a collaborative and transparent way.”*

### 03: How we are using the Visual Impact Provision

We are using the Visual Impact Provision to mitigate the visual impact of our electricity transmission infrastructure in the most precious landscapes. Our objective in using the allowance is therefore to achieve the maximum enhancement to the landscape in England and Wales from the available funds whilst ensuring that no significant adverse impacts arise as a result.

National Grid has contributed technical appraisals to refine these priorities. We ensured that the opinions of local stakeholders were fed into the process. As detailed proposals emerged, technical, cost and environmental factors were assessed.

In this way, we have ensured that stakeholders have had a substantial input in determining how the Visual Impact Provision is used and how National Grid takes forward proposals. A substantial proportion of the engagement activities occurred near to the start of the process, to ensure that stakeholder views were taken into account at the earliest stage and we have the best chance of using the Visual Impact Provision effectively.

#### Landscape Assessment Methodology

Alongside this policy, we have published a Landscape and Visual Impact Assessment methodology<sup>7</sup> which, in consultation with stakeholders, we have used as the basis for prioritising our response to impacts on the landscape.

#### Our Project

The process on the next page shows how we identified the projects to take forward as candidates for funding. Section 04 sets out the Guiding Principles and explains in further detail how we engage with our stakeholders to help us decide how to use the Visual Impact Provision. To deliver cheaper and simpler projects that do not involve engineering works on National Grid electricity infrastructure, such as localised screening, we have the Landscape Enhancement Initiative. We have published an annex to this policy that explains how this initiative will work<sup>8</sup>.

---

<sup>7</sup> The Landscape and Visual Impact Assessment Methodology is based on the framework set out in Guidelines for Landscape and Visual Impact Assessment (GLVIA) (3rd Edition) (2013) published by Routledge on behalf of the Landscape Institute and the Institute of Environmental Management and Assessment. A copy of our methodology can be found on our VIP website <https://www.nationalgrid.com/uk/electricity-transmission/document/84136/download>

<sup>8</sup> Annex to VIP Policy: Landscape Enhancement Initiative <http://lei.nationalgrid.com/media/1100/lei-policy-doc.pdf>

## 1) Identification of potential candidate areas

We have identified the full list of National Grid's electricity assets that run through AONBs and National Parks.

We have also identified other transmission lines that lie adjacent and in reasonable proximity to an AONB or National Park that impact the landscape and visual setting of the designated area.

*Stakeholder Advisory Group – Considered relevant information and set priorities for the use of the Visual Impact Provision, in accordance with the Guiding Principles in Section 04.*

*National Grid – Provided technical inputs and resources to ensure that our statutory duties are met and to make the final decisions on which projects are submitted for funding.*

## 2) Assessment of landscape and visual impacts in priority areas

All potential candidate areas were assessed to identify the importance of the landscape and the visual effects of the existing line. These assessments were conducted by qualified landscape architects and the results discussed by the Stakeholder Advisory Group.

The results were converted into a simple scoring system that was used to give each assessment section an overall score.

Further detail on this is set out in our Landscape and Visual Assessment methodology which is published alongside this policy document.

*Other Stakeholders – Brought forward technical information, local knowledge and views (see Section 05) and identified local priorities for using Visual Impact Provision funds.*

## 3) Identification of mitigation options

Only the sections of line identified as having the highest visual impact were assessed for potential re-routeing, alternative pylon design or undergrounding. This reduced number of sites will then undergo further detailed site surveys looking at ecology, biodiversity, historic environment, socio-economic factors etc. to determine which potential enhancements would provide the greatest landscape benefit.

Areas not taken forward for this further study will be assessed to see if any of the less intrusive options would be beneficial.

*Ofgem – Observe the prioritisation process to ensure its transparency and robustness and to ensure the fund is spent efficiently.*

#### **4) Refining options – technical and economy / efficiency filter**

All potential landscape enhancements will be assessed to ensure they are deliverable, in terms of:

- technical complexity
- construction / project delivery issues
- suitability of technology
- land availability
- network capacity
- network efficiencies / benefits
- consent requirements

and that they offer value for money to the consumer, ensuring that the greatest benefit can be realised from the expenditure made. Estimates of both capital and lifetime costs should be considered.

#### **5) Final selection and approval from Ofgem for individual expenditure**

Once National Grid has determined, with the help of the Stakeholder Advisory Group and other stakeholders, the projects that we believe are consistent with our statutory duties and the most beneficial, based on the Guiding Principles, we will seek additional funding from Ofgem. This request will include:

- A description of the proposed project and the visual benefits that we intend to deliver
- Supporting evidence that the project has been identified and prioritised in accordance with the above approach
- Cost forecasts for delivering the project
- Analysis of any relevant issues that might reduce feasibility or increase costs
- Proposed timescales for delivery
- Any other relevant analysis or information

Ofgem will then assess the efficient costs of delivering the projects that have been prioritised through the Visual Impact Provision process and determine an adjustment to our allowed expenditure under the price control.

#### **6) Detailed project development by National Grid**

When expenditure is allowed, we will carry out further detailed technical appraisal, feasibility studies, cost assessments and consultation on a project-by-project basis, prior to seeking the necessary consents and permissions for construction. We will do this in line with the principles laid out in our published Approach to the Design and Routeing of New Electricity Transmission Lines.



## 04: The Guiding Principles

We have worked and will continue to work with stakeholders to decide how to treat existing National Grid electricity infrastructure to bring the most benefit from the Visual Impact Provision. Candidate schemes were selected (and will be selected in future) with reference to the Guiding Principles below.

### Guiding Principles

Working with stakeholders, we have prioritised and will continue to prioritise proposals which will:

- result in greatest landscape enhancement benefits
- result in greatest opportunities to conserve and enhance natural beauty, wildlife and cultural heritage whilst avoiding unacceptable impacts on the natural and historic environment which cannot be mitigated
- 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

As these principles have sometimes conflicted with one another and each scheme has performed differently against them, we have carefully balanced the choices we have made, with the help of stakeholders, against the Guiding Principles. This will continue for future projects.

*“Potential enhancements should not result in any other significant adverse impacts on other landscape or environmental features.”*

## 05: Engagement with stakeholders

We believe that the views of our stakeholders and consumers are vital in making decisions on how we use the Visual Impact Provision to maximise enhancement to the landscape from the available funds.

Our engagement is consistent with our wider stakeholder engagement principles<sup>9</sup>. We have and will continue to carry out all engagement activities on the Visual Impact Provision in accordance with the following principles:

- engaging widely, effectively and at a formative stage in establishing priorities
- being open with information and transparent about the judgements we make
- developing proposals that deliver what society needs from us

We are keen that stakeholders play a key role in helping us to identify those areas and lines which would benefit most from expenditure under the Visual Impact Provision. There are two main ways we are doing this: we have formed a Stakeholder Advisory Group; and we are seeking the views of other stakeholders.

### Stakeholder Advisory Group

We invited a group of stakeholders, with national remits and a focus on landscape across England and Wales, to join us as a Stakeholder Advisory Group, under an independent chair, to help us to:

- identify initial priorities for the use of the Visual Impact Provision, based on the guiding principles set out above
- consider the technical inputs and evidence provided by National Grid including the Landscape and Visual Impact Technical Report prepared on behalf of National Grid in October 2014<sup>10</sup>
- consider the input of wider stakeholders who are not directly represented on the Stakeholder Advisory Group (e.g. specific comments on where use of Visual Impact Provision funds might be beneficial, or where there is evidence of public support)
- identify the specific infrastructure and locations which would most benefit
- define the projects which should be taken to development phase by National Grid
- re-consider or re-assess priorities and use of the fund, as development of projects progresses

---

<sup>9</sup> <https://www.nationalgrid.com/uk/electricity-transmission/document/81026/download>

<sup>10</sup> The Landscape and Visual Impact Technical Report (October 2014) assesses the landscape and visual impact of existing electricity transmission infrastructure in nationally protected landscapes in England and Wales. The report was written by Professor Carys Swanwick acting as Independent Adviser to National Grid on the VIP project. <https://www.nationalgrid.com/uk/electricity-transmission/document/84141/download>

The organisations that are members of this group are:

National Association for Areas of Outstanding Natural Beauty National Parks England National Parks Wales	Representing the 7 National Parks and 19 AONBs in which we have overhead electricity transmission lines
Cadw Historic England Natural England Natural Resources Wales	Statutory bodies with relevant responsibilities and technical expertise
Campaign for National Parks CPRE The Countryside Charity Campaign for the Protection of Rural Wales The Landscape Institute National Trust The Ramblers Visit England Visit Wales	Organisations with an interest in protected landscapes and rural areas and their use
National Grid	To provide technical input, ensure our statutory duties are met, and decide which schemes should be submitted for funding
Ofgem, the energy regulator	To observe the process and make the final decisions on expenditure

#### Seeking the views of other stakeholders

We sought and will continue to seek the views of other stakeholders, such as local groups who use AONBs and National Parks and those who care passionately about them, to establish their priorities for using Visual Impact Provision funding. The Stakeholder Advisory Group helped shape and inform how this wider consultation works.

We engage with:

- landowner groups and landowners affected
- National Park authorities and local planning authorities
- AONB partnership boards and management units/partnerships
- amenity societies such as the Friends of individual AONBs and National Parks
- organisations with an interest in the environment (e.g. the Wildlife Trusts, RSPB)
- bodies such as Citizens Advice and the Major Energy Users' Council, which represent electricity consumers
- other electricity transmission and distribution owners
- groups established by the distribution network operators (DNOs) to advise on where DNO lines should be placed underground

The final decision on how to undertake wider consultation is made in collaboration with the Stakeholder Advisory Group. We proactively reach out to stakeholders, through our website and individual websites for major projects and the LEI; through one-to-one meetings with representatives of the organisations that represent the interests of groups of stakeholders; and through written consultations.

As proposed projects are refined, we will engage further with these groups (for example, in the case of new underground cables, establishing acceptable route corridors and alignments) in line with the principles laid out in our published Approach to Consenting. At this point we will carry out project-specific consultation before seeking to secure the necessary planning permissions and consents. Project information, updates and documentation are shared through our dedicated website and the dedicated website of each individual project.

## 06: Working with other transmission and distribution owners

### The Scottish transmission system

National Grid Electricity Transmission owns the high voltage electricity transmission network in England and Wales. The £465m allowance for RIIO-T2 applies to the whole of Great Britain, and can therefore also be used for the Scottish transmission network. We are engaging with Scottish Hydro Electric Transmission Limited and Scottish Power Transmission Limited, which between them own the Scottish transmission network, to try to ensure that between us we can maximise the benefits of the allowance to consumers across England, Wales and Scotland. In particular, we are engaging with the Scottish transmission owners to share best practice and knowledge with each other in relation to the implementation of the Visual Impact Provision and to share with them relevant information, technical assessments and outputs from our process of identifying and taking forward priorities.

### Local distribution network operators

The Visual Impact Provision does not apply to electricity distribution infrastructure operated by local distribution network operator (DNO) companies, as these organisations have separate allowances available for placing existing lines underground.

There may be cases where a collaborative approach to using both funds can result in greater benefits – for example, where a ‘wirescape’ of both our lines and those of DNOs exist. In such situations, we will work with the DNOs to ensure maximum benefit from the use of both funds. In particular, where they exist, we will engage with the groups established by the DNOs to advise on where DNO lines should be placed underground.

*“It is important that any expenditure we make under the Visual Impact Provision is made in accordance with our statutory duties.”*

## 07: Review of this document

The policy set out in this document was originally developed at the start of the previous price control period<sup>11</sup> in which the provision was initiated. We reviewed and updated the document in 2021 to reflect the changes to the provision introduced by the current price control period<sup>12</sup> and the progress made in the previous period.

We will review the policy in 2023, half-way through the price control period. We will consult stakeholders and revise the policy as necessary to ensure it remains fit for purpose. If required by the emergence of new best practice or any other relevant development, we may make interim amendments. In particular, we may review our Policy in the light of:

- changes to our responsibilities, legislation, government policy or guidance
- changes in best practice guidance in environmental, social or economic appraisal
- relevant technology advances
- new information about the application or costs of different technologies
- feedback from the Stakeholder Advisory Group

We will seek to record learning and best practice from the process to apply to similar or related stakeholder engagement initiatives in the future.

---

<sup>11</sup> RIIO T1 April 2013 – March 2021

<sup>12</sup> RIIO T2 April 2021 – March 2026

## 08: Contacts

Visual Impact Provision hotline: 0330 134 0051

Visit our website at: [www.nationalgrid.com/uk/electricity-transmission/network-and-infrastructure/visual-impact-provision](http://www.nationalgrid.com/uk/electricity-transmission/network-and-infrastructure/visual-impact-provision)

Send an email to: [visualimpact@nationalgrid.com](mailto:visualimpact@nationalgrid.com)

Write to our freepost address at: FREEPOST VISUAL IMPACT PROVISION

For further information: Visual Impact Provision hotline: 0330 134 0051

Visit our website at: [www.nationalgrid.com/VIP](http://www.nationalgrid.com/VIP)

Send an email to: [www.nationalgrid.com/uk/electricity-transmission/network-and-infrastructure/visual-impact-provision](http://www.nationalgrid.com/uk/electricity-transmission/network-and-infrastructure/visual-impact-provision)

Write to our freepost address at: FREEPOST VISUAL IMPACT PROVISION

National Grid plc

National Grid House, Warwick Technology Park, Gallows Hill, Warwick. CV34 6DA United Kingdom

Registered in England and Wales No. 4031152

[www.nationalgrid.com](http://www.nationalgrid.com)

Document reviewed and updated March 2021