# **EIP106** Visual Impact of >132kV Assets

Minimising Visual Impact (and environmental) of New Network Infrastructure

## **ENA Basecamp 2024**

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SSEN Transmission





## Minimising Visual Impact (and environmental) of New Network Infrastructure

#### **Problem Statement**

- Consenting of new major infrastructure is an emotive and frequently debated public topic
- Overhead Lines (OHLs) are often considered visually unappealing
- Objections to their environment impact leads to opposition in planning consent

#### **Opportunity for Innovators**

- New designs that reduce the visual impact of OHLs
- Novel ways of blending the lattice towers into the local landscape
- Disruptive change to network design that lowers the impact on key stakeholders
- Application of novel construction materials and methods to reduce the environmental impact of new infrastructure

Angus & The Mearns

#### Angus communities rise against plan for line of 'super pylons' taller than **TEN double-decker buses**

The 400kV overhead line would stretch through the Mearns and Angus to a new electricity substation at Tealing, north of Dundee.

by Graham Brown

May 26 2023, 5:00pm





## Minimising Visual Impact (and environmental) of New Network Infrastructure

#### **Considerations**

- Solutions should not compromise the performance and capacity of the transmission lines
- All solutions must not exceed the cost of existing designs

#### **Key Stakeholders**

- Network Owners and the ESO
- General Public and Community Groups
- Local Authorities and Government
- Landowners
- Gas and Water Networks







## Minimising Visual Impact (and environmental) of New Network Infrastructure

#### **Previous Projects**

NIA SHET 0034 - Low Profile 132kV Steel Poles

#### **Project Background**

Funded through the NIA: £850,000

Timeline: January 2022 – July 2024

#### **Key Benefits:**

- £4.8m lifetime cost saving if using the new steel pole design across 7 projects
- Reduction in the amount of steel required to construct poles compared to other large structures
- Improves safety inputs for operatives
- Environmental benefits completely removes the need for concrete and access tracks during construction as foundations are buried directly in the soil





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