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
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**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
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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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