GLOBAL TRANSMISSION & DISTRIBUTION ENGINEERING CONSULTANCY | 20+ YEARS

GROUNDLINE OVERHEAD LINE DESIGN

From greenfield routes to major upgrades, we deliver overhead line design services across transmission and distribution networks from 11kV to 500kV. Our in-house electrical and structural specialists use PLS-CADD and the Power Line Systems suite to develop safe, constructible, and standards-compliant designs, supporting projects from feasibility through to construction.

OUR SERVICES

Route Selection & Feasibility

- Route selection and structure spotting
- Constructability and access assessments
- Environmental and land-use constraints analysis
- Ground and UAV surveys
- FEED studies and tender support

Line Upgrades & Augmentations

- Increasing ground clearances
- Reconductoring and OPGW installations
- Line cut ins and augmentations
- Wind and solar generation connections

Electrical & Structural Design

- Conductor and earth wire selection
- Sag-tension analysis and line optimisation
- Insulation coordination and outage modelling
- Earthing design
- Foundation and structure design
- Vibration and galloping assessments

Construction Documentation

- Line and staking schedules
- Material and stringing schedules
- Damper placement charts

TRUSTED PROJECT OUTCOMES:

Overhead Line Design You Can Build, Operate, and Maintain

We design overhead lines for challenging environments, from remote and extreme conditions to urban and heritage-sensitive locations. Our focus goes beyond compliance, delivering practical, maintainable solutions that work in the field.

By integrating structural and electrical engineering from the outset, we reduce interface risk and streamline delivery. Our PLS-CADD models are fully documented and transferable, providing a lasting design record your asset management team can use and update throughout the asset lifecycle.

THE RESULT: PREDICTABLE, RELIABLE, DEFENSIBLE OUTCOMES

- **Optimised designs:** Structure spotting, conductor selection, and foundation sizing resolved in a single integrated model, reducing cost and programme risk.
- **Constructability built in:** Designs that reflect real installation conditions, reducing RFIs, site queries, and construction delays.
- **Transmission-grade rigour:** Standards discipline applied at every voltage level, regardless of project scale.
- **Transferable deliverables:** PLS-CADD models and documentation your team can use, update, and build on.
- **Fast-track capability:** Proven ability to deliver complex overhead line projects under urgent programme constraints without compromising quality.

Let's Get to Work.

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