

Carlisle to Lancaster Overhead Line

Our Services

- Desk Study Review
- Geotechnical Walkover Survey
- Preliminary Geotechnical Risk Rating
- Desk Study Report (*including intrusive investigation recommendations*)



Overhead Line Desk Study and Geotechnical Walkover

As part of proposed refurbishment works, **CGL** were commissioned by Electricity Alliance West, to provide a desk study and to conduct a geotechnical walkover survey of an overhead line commencing at Harker Substation, north of Carlisle and finishing at a terminal tower in Quernmore, south of Lancaster.

The route comprises 345 towers spanning over 116km and passing through the Lake District National Park, rural agricultural land and remote heathland.

The desk study report provided by **CGL** contained historical, geological and hydrological data, and this report, supplemented by walkover survey observations, led to a comprehensive analysis and a tower specific geotechnical risk rating. The work was undertaken in accordance with National Grid Transco's specification (NGT 3.4.15). The risk ratings considered geotechnical hazards such as soft ground, ground dissolution features, slope stability, flood risk, groundwater and/or compression/uplift foundation risk.

These semi-quantitative geotechnical risk ratings enabled **CGL** to provide the client with recommendations for targeted low cost investigative works at towers perceived to have high-medium-low risks accordingly. The identified risks were also reduced or mitigated to the satisfaction of the client.

Client: Electricity Alliance West
(on behalf of National Grid)