



UTILITY CONSULTANCY
& ENGINEERING LTD

ACCREDITED



NERS
NATIONAL
ELECTRICITY
REGISTRATION
SCHEME



EARTHING DESIGN AND CONSULTANCY SERVICES

All electrical networks must be safe. This means they require earthing systems designed and tested to:

- **Avoid hazardous stray voltages**
- **Prevent damage to equipment**
- **Provide electrical safety to personnel and livestock**

UCE HAVE OVER 8 YEARS' EXPERIENCE SUPPLYING TECHNICAL EARTHING CONSULTANCY SERVICES ACROSS UK INDUSTRY.

CROSS-SECTOR INVOLVEMENT:

- Providing earthing design and testing services within ENWL, NPG, UKPN, SPEN, SSEN, WPD and Private Wire networks

PREVIOUS/CURRENT EARTHING DESIGNS:

- Industrial sites
- Substations
- Solar farms
- Wind farms
- Battery and Gas STOR generation

The complexity of each of the earthing systems are tailored to accommodate customer and DNO requirements.

EARTHING SYSTEMS DESIGNED TO MEET RELEVANT UK STANDARDS INCLUDING:

- ENA TS 41-24, ENA ER S34, BS 7430, BS EN 50522
- Specific DNO design requirements

OUR EARTHING SERVICES:

- Utility Searches
- Soil Resistivity Surveys and Modelling
- Earthing System Designs in CDEGS™ and XGSLab™ Software Packages
- Model and Calculate Earth Return Fault Currents for Cable Connected Systems
- Touch, Step and Transferred Voltage Potentials Assessment
- Earth Potential Rise and Hot Zone Contour Assessment
- Conductor Current Density Modelling
- Post Construction Resistance Measurement using both the Fall of Potential and Clamp on Methods
- Post Construction Earthing Surveys, Assessment and Auditing
- Comprehensive Earthing Layout Drawings
- Probabilistic Risk Assessment of Earthing Systems

UCE can assist with designs from concept to completion, from soil resistivity testing to obtain the existing soil structures on site, developing a safe earth grid design through modelling in both CDEGS™ and XGSLab™ software packages, through to post install testing to confirm the installed earthing system meets the design and is safe.

OUR DESIGN AND CONSULTATION SERVICES

POWER SYSTEMS ENGINEERING...

We plan and design utility and private electrical networks up to 132kV.

PROTECTION STUDIES

We ensure your protection scheme system operates as required during fault conditions.

CIVIL DESIGN

We provide a comprehensive civil design service.

If you have any issues with your installed earthing systems or require a new earthing design, please get in touch with our experts at UCE.

CALL US ON
01226 610888

OR VISIT
www.uce-ltd.co.uk



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OUR KNOWLEDGE...YOUR GAIN