



[Service Brochure](#)

Follow Us:



Power Earthing Capabilities

Power Earthing

The EPS team have over 80 years of combined experience working on complex power earthing systems across the UK. Our engineers bring unmatched technical expertise and real world experience to every project, ensuring a reliable and quality service.

Service:

Earthing Site-Based Testing & Inspections



Power Earthing Specialists

Most standard high voltage annual inspections do not include a comprehensive test or inspection of power earthing systems. Which are vital for the safety and effectiveness of your electrical network, providing a safe path for fault currents and helping to prevent equipment damage and, most importantly, protect personnel from electric shock.

At EPS, we provide a range of electrical site-testing services tailored to your specific power earthing infrastructure. We work with you at every stage of the project lifecycle to ensure the safety, compliance, and efficiency of your electrical operations.

Our Services

- ✓ Annual & Periodic Testing
- ✓ Gap Analysis Reporting: Power Earthing & Lightning protection
- ✓ Soil Resistivity Testing
- ✓ Fall of Potential Testing
- ✓ Lightning Protection Inspections & Strike Risk Assessments
- ✓ Visual Surveys & Continuity Testing
- ✓ Detailed Reporting with Recommendations

EPS Sector Capabilities

At EPS, our power earthing specialists deliver comprehensive engineering support for projects of any scale or complexity. Supporting all types of HV/LV infrastructure and associated equipment, we cover all voltage levels, from **400kV, 275kV, 132kV, 66kV, 33kV, 11kV, 6.6kV, 3.3kV**, to **415kV**.

Working to all relevant industry standards and guidelines (such as **BS 7430, BS EN 50522**, and **Technical Specification 41-24**) the EPS team supports a wide range of industries and sectors, including:



**Transmission &
Distribution**



**Solar PV
Farms**



**Onshore Wind
Farms**



**Battery Energy
Storage Systems**



**Power
Generation**



**Data
Centres**



**Water &
Wastewater**



**Manufacturing
& Process**



**Petrochemicals &
Pharmaceuticals**

Notable Projects

Earthing Condition Assessment

Project Overview

Client: Undisclosed**Background:** Energy-from-Waste**Location:** Scotland, UK**Date:** May 2025

Summary:

A full condition assessment was carried out at a large UK energy-from-waste facility to verify the safety and compliance of its HV/LV earthing system. Our assessment provided a baseline for remedial works and ensured safe operation of the site's electrical infrastructure.

Scope of Work

- Continuity testing across HV/LV plant and structural metalwork
- Visual inspection of earthing infrastructure
- Soil resistivity measurement and system impedance verification

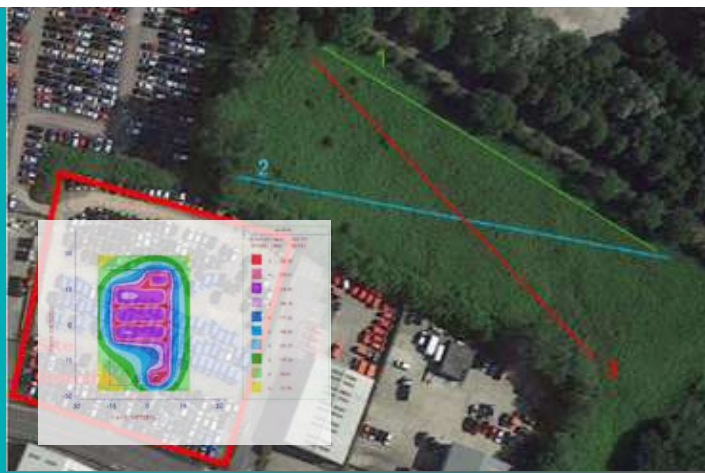
Key Outcomes

- Site-wide earth resistance was confirmed at **0.122Ω**.
- Multiple non-compliant bonds identified and documented
- Clear remedial actions were issued to achieve full **BS EN 50522** and **BS 7430** compliance

Notable Projects

Electrical Earthing Design: UK Power Generation Facility

Project Overview

Client: Undisclosed**Background:** Power Generation**Location:** Somerset, UK**Date:** January 2025

Summary:

Our client is a leading energy solutions provider specialising in the design, construction, and maintenance of electrical power systems. Their operations include complex site installations that demand rigorous safety testing and compliance with national and industry standards.

For this project, their site was set to accommodate a new peak lopping station, including high-voltage (HV) equipment and generators. Part of our scope necessitated on-site soil resistivity testing to accurately model and optimise the site's earthing system via **CDEGS** (in accordance with **BS EN50522** and **IEEE 80** requirements).

[Read the full case study here](#)



Why EPS?

Our Commitment

Our team are committed to delivering safe and efficient electrical solutions. Our thorough approach to site-testing & inspections, designing and optimising power earthing systems guarantees enhanced safety and resilience for your operations. Clients return to us time and time again because they can be assured that with our broad range of experience and expertise we can deliver high-performance and compliant solutions tailored to their unique challenges.

Client-Centric



We place our clients at the centre of everything we do. By taking the time to understand each project's specific demands.

Our agile and collaborative approach ensures a seamless experience from concept to completion, building long-term relationships based on trust and results.

Compliance



Regulatory and industry compliance sits at the core of our operations. We rigorously adhere to both UK and international standards, including:

- **BS 7340**
- **BS EN 50522**
- **BS EN 62305**
- **BS EN 62561**
- **UL 467**

ISO Accredited



Awarded for the provision of project management, front-end-engineering-design (FEED) studies, detail design, and procurement of goods and services for both onshore and offshore energy projects:

- **ISO 45001**
- **ISO 9001**



Your Trusted Partner for Safe and Compliant Power Earthing Systems

Request a call with our earthing experts today.



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