



YOUR FUTURE POWER SOLUTION

Full Turnkey Solutions for
Electrical Infrastructure



ESE Ltd work nationwide across all market sectors, with extensive experience in the renewable, health, education, utilities, retail and industrial sectors.

We provide cost-effective packages to manage projects from conception to completion.



VISION

To provide the most efficient, innovative and sustainable UK power solution

MISSION

To deliver a cost-effective service, tailored to meet the individual needs of each customer

COMPANY VALUES

- ▶ Trust
- ▶ Integrity
- ▶ Teamwork
- ▶ Respect
- ▶ Innovation
- ▶ Ethics

ENVIRONMENTAL COMMITMENT

At ESE Ltd we are invested in sustainability throughout our entire business. We operate a Quality Management System certified to ISO 9001 and an Environmental Management System certified to ISO 14001.

We implement environmental objectives, most recently pledging to be carbon neutral by 2022. As a company, we aim to reduce all waste production. While this is a working progress, we are focussed on ensuring all waste is recycled accordingly and effectively.

Here are some examples of conscientious decisions we've made to reduce our environmental impact:

- ▶ Trading with sustainable suppliers
- ▶ Facilitating sustainable energy through our involvement in renewable energy projects
- ▶ Evaluating operations to increase efficiency which minimises waste production
- ▶ Recycling all dry waste throughout our entire workforce, including both ferrous and non-ferrous metals
- ▶ Supplying efficient and economical equipment which exceeds European standards
- ▶ Reducing toxic emissions through low emission vans and both electric and hybrid company vehicles



ABOUT US

Established in 1992, ESE Ltd is still managed today by its founding members which is fundamental to our success. Through dedication, commitment and a lot of hard work, we have grown into a renowned leading electrical contractor. Our company values are at the heart of everything we do. We encourage and support one another, communicating effectively to meet our shared goals.

Today we specialise in full turnkey solutions for electrical infrastructure up to 132,000 Volts. In 2012 we diversified, receiving full Independent Connection Provider (ICP) status accredited by the National Electricity Regulation Scheme (NERS). With a multidiscipline in-house team of engineers, we offer full project solutions including design, procurement, installation, testing, and commissioning. We have completed thousands of diverse projects nationwide, from multi-million-pound renewable projects in Northern Scotland to electrical installation projects on the Isle of Wight.

We aim to provide efficient, innovative and sustainable UK power solutions. Centrally located in Leeds, we operate throughout the UK to successfully deliver projects across all market sectors. All packages are cost-effective and individually tailored to suit the needs of the customer. We believe in building meaningful long-lasting relationships with our clients through integrity and trust.



Tel: 0113 272 1222

eselimited.co.uk

OUR SERVICES



DESIGN



NEW CONNECTIONS



INSTALLATION



MAINTENANCE



HIGH VOLTAGE EQUIPMENT



TRANSFORMERS



PACKAGE SUBSTATIONS & CONTAINERISED SOLUTIONS



LOW VOLTAGE DISTRIBUTION UNITS



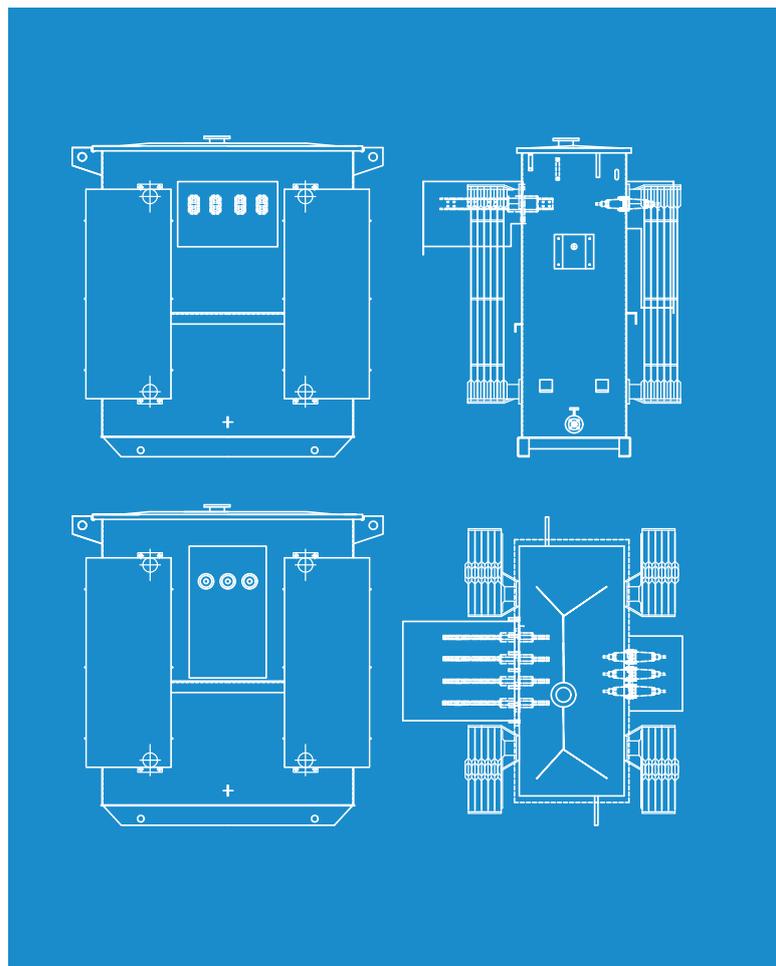
DESIGN

ESE Ltd take responsibility for all aspects of design from conception through to final sign off by the end-user. As both an ICP and a Private Network Contractor, we apply the necessary design standards including BS and IEC to our works.

Our experienced in house NERS accredited team carry out detailed designs ranging from 415V to 132,000V to offer customers a full turnkey solution.

Electrical and Civil Design Works include:

- ▶ Load flow
- ▶ Fault and Protection studies
- ▶ Voltage transient and stability studies
- ▶ Harmonic and Earthing studies
- ▶ Cable and Transformer sizing
- ▶ CAD Drawings
- ▶ Grid connection applications
- ▶ Trench Design
- ▶ Substation Building
- ▶ Plinth Casting
- ▶ Section 50 Applications



NEW CONNECTIONS

Certified by Lloyds Register as a NERS accredited ICP, we deliver grid connections to the agreed standard and quality required to be adopted by the DNO or IDNO. We design, build and deliver the new connection faster than the DNO. We are cost-effective with greater flexibility to provide a full turnkey solution.

From project conception to the date of energisation, ESE's in-house ICP team design, manage and deliver the connection. Our capabilities include:

- ▶ Liaising with the relevant DNO/IDNO to apply for a point of connection
- ▶ Bespoke ICP project design to ensure the connection complies with the asset owner
- ▶ Cable Installation, jointing and terminations
- ▶ Substation construction and equipment install
- ▶ All associated civil works, including excavation, duct installation, trench reinstatement and substation plinth construction
- ▶ Onsite testing / commissioning for the asset owner to witness



INSTALLATION

At ESE Ltd we offer a full range of installation and support services. All services are carried out by our highly trained and qualified engineers, including our Authorised Persons, jointers and electrical fitters. All our engineers have extensive experience in the installation of distribution equipment up to and including 132,000 Volts.

Our services include:

- ▶ Transformer installation
- ▶ High Voltage and Low Voltage switchgear installation
- ▶ Off-loading and positioning of all distribution equipment, including all delivery requirements
- ▶ Cable installation, terminations and jointing up to 132,000 Volts
- ▶ Testing and commissioning
- ▶ All Civil and Fabrication services
- ▶ Substation fit-out and GRP installation

We are fully certified under numerous major accreditation schemes including Constructionline, ISO 9001, ISO 14001, NICEIC, Achilles UVDB, and Lloyds Register.





MAINTENANCE

ESE Ltd offer maintenance contracts to look after customers' High Voltage equipment, whilst also taking on the role of Authorised Person duties where required.

As part of our contracts we include:

- ▶ 24/7 365 days a year call out
- ▶ Annual visual inspections on all HV equipment
- ▶ Written report outlining any faults and costings to repair
- ▶ First year shutdown works with full protection testing
- ▶ Oil Sampling
- ▶ Silica Gel breather replacement
- ▶ Full Health and Safety substation signage
- ▶ Optional PD Monitoring
- ▶ Site Schematic installed in every substation

Our engineers are available nationwide in the event of loss of power and we also carry out cable location and fault finding to ensure the issue is rectified as quickly as possible.

We have a large stock of transformers and switchgear at our unit in Leeds, removing procurement lead times to minimise site disruption.





HIGH VOLTAGE EQUIPMENT

ESE Ltd supply a large range of High Voltage equipment from all major manufacturers across a voltage range which includes 11kV, 33kV and 132kV.

We can offer High Voltage equipment which may be a replacement or upgrade to an existing site as well as new installations. These can include:

- ▶ All types of switchgear
- ▶ PIR – Pre-Insertion Resistor
- ▶ NER – Neutral Earthing Resistor
- ▶ Power Factor Correction Units
- ▶ POW – Point of Wave Switching
- ▶ Hybrid Circuit Breaker Solutions

All equipment provided by ESE Ltd is tested by our experienced in-house commissioning engineers which ensure all equipment is fully tested before and after the installation. We can also carry out periodic testing of existing equipment.

With over 25 years' experience working with a variety of different equipment, our engineers have the knowledge to supply the right solution for our customers.

ESE Ltd can also provide bespoke steel framework or civils work to accommodate any equipment installation.



TRANSFORMERS

At ESE Ltd we have over 25 years' experience in the supply and installation of new and re-engineered transformers. We are at the forefront of changes, offering leading EU Directive Tier 1, Tier 2 and Amorphous transformers. Our transformers help organisations reduce their carbon emissions and operating costs with huge potential savings over the lifespan of ESE Tier 2 and Amorphous transformers. All our transformers are manufactured under the recognised British and International standards.

We are a leading supplier of ground mounted liquid filled distribution and power transformers, ranging from 50kVA to 100MVA. These transformers have a maximum primary voltage of 132,000 Volts and an adaptable secondary voltage to suit individual customer requirements. We also supply a range of cast resin transformers up to 30MVA with a primary voltage up to 52,000 Volts, and a secondary voltage again to suit customers' requirements.

Several optional extras are also available, including Bucholtz protection, pressure relief devices and on-load tap changers. Both High and Low Voltage switchgear can be close-coupled to our transformers to form a complete package substation.





PACKAGE SUBSTATIONS & CONTAINERISED SOLUTIONS

ESE Ltd offer a range of package substations for several different applications, including permanent and temporary installations. This service includes a bespoke design on a project by project basis where we can offer a number of solutions, including steel and GRP enclosures.

All equipment can be housed in the enclosure and in most cases, the equipment is installed at our headquarters in Leeds and tested prior to site arrival. This results in simplified on-site logistics, minimised downtime required for the installation works and reduced commissioning time. Advantages of this enclosure type include:

- ▶ Cost-effective
- ▶ Low maintenance
- ▶ Compliant with Health and Safety Regulations
- ▶ Non-corrosive
- ▶ Fire rated
- ▶ Reduced civil footprint
- ▶ Ability to transport between sites

We offer custom-built enclosures on a supply only basis which can include intruder alarms, multiple lock choices and Low Voltage heating and lighting.

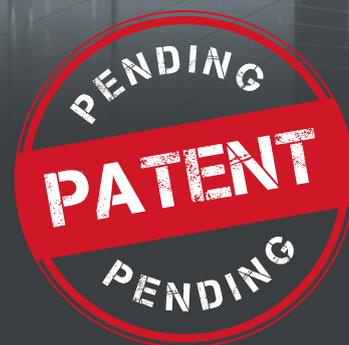


INTRODUCING

THE EOS RANGE.



ESE's new range of outdoor and extensible Low Voltage ACB Cabinets and Feeder Pillars. Please download the **EOS brochure here** for more information.





ESE Ltd. Systems House, Unit 1, Waterside Industrial Park, Leeds LS10 1RW

Tel: 0113 272 1222 | Fax: 0113 272 1333 | Email: sales@eselimited.co.uk

eselimited.co.uk