

K1 Solutions Training

132/400kV Appreciation Course

Duration: 2 days

Cost: £600 + VAT including certificate, PDF copy of the course notes, lunch and refreshments

Location: Lincoln Training Centre

Audience: Professionals involved in developing or operating connections into the National Transmission System through both National Grid Electricity Transmission (NGET) and the Electricity System Operator (ESO)

Prerequisites: None required

Course overview

As today's development of new large scale generation projects are utilising higher connection voltages, navigating the interface between user networks and NGET/ESO or the DNO demands a greater understanding of the complexities of these cross-boundary connections. This 2-day course provides essential insight into cross boundary operations, and the equipment used equipping participants with the knowledge to manage the process from construction and commissioning through to operations.

Whether you are preparing for energisation, coordinating with control rooms, or managing RISSP documentation, this course offers structured guidance aligned with National Safety Instructions and industry best practices.

What you will learn

By the end of the course, participants will be able to:

- ⚡ Understand the hazards of electricity and how risks may arise to understand how the controls measures have been applied
- ⚡ Recognise behavioural factors that influence electrical operations and decision making
- ⚡ Use the “golden safety rules” to produce switching schedules to create a safe zone of work. Practice switching operations in our substations using field/control room protocols as required TNCC and understand the role of the operation desk and safety desk
- ⚡ Identify air insulated switchgear and its operational features
- ⚡ Understand typical boundary points between user networks and NGET
- ⚡ Recognise the different protection systems at transmission level
- ⚡ Recognise sources and risks of impressed voltages (IV)
- ⚡ Apply NESO National Safety Instructions, especially NSI 2, including primary and portable earthing
- ⚡ Manage cross boundary safety through RISSP documentation, including issuing and receiving exercises
- ⚡ Develop an IV management plan tailored to the user's substation
- ⚡ Gain an understanding of the NESO / NGET compliance process

Assessments

There is one assessment for this course:

1. **Multiple Choice Exam** – Test knowledge of the course material

Assessments are delivered to City & Guilds standards.

Employer benefits

This course is ideal for engineers, commissioning teams, and operational staff working on or considering a transmission level connection. It bridges the gap between technical understanding and procedural execution, ensuring safe collaboration across boundary interfaces.

2026 Course Dates

-  2nd & 3rd February
-  8th & 9th April
-  1st & 2nd June
-  10th & 11th August
-  3rd & 4th November

Visit www.k1-solutions.co.uk for more information and email Training@k1-solutions.co.uk to secure your place.