33kV SOLAR FARM CONNECTION

DEVELOPMENT IN STAVELEY, DERBYSHIRE

Power

Value	Multi-million
Voltage	33kV
Market Segment	Renewable
Duration	8 months

Project summary

In this project JSM designed and delivered a 20MVA 33kV DNO switchroom and cable route for a solar development.

Pre-construction

33kV DNO switchroom and cable route design - JSM employees completed the detailed design which included single line diagrams, protection and interface design – Power System and G99 Studies - Cable route design and cable calculations, ducting, cable install and jointing - earthing design, report, soil resistivity test, earth mat installation and fall of potential test.

Construction

Supplied and installed a 33kV DNO switchroom including battery chargers and a metering room, along with 3.1km of 33kV cable duct installation, cable pulling, and jointing.

Post-construction

Works included cold and hot commissioning, energisation and providing As-Built records.

- Principal designer
- Principal contractor
- Compound construction
- DNO switchgear & substation
- 3.1km cable route
- Civils
- 33kV Cables & Duct installation
- LVAC supplies
- Jointing & Terminations
- Hot and cold commissioning with Energisation

PROJECT CHALLENGES

CHALLENGE	SOLUTION
Design Approval National Grid Electricity Distribution (NGED) design approval.	Worked closely with the client (and their contractors) and NGED to achieve an acceptable design for approval.
Streetworks approvals Disruptive works for local area.	JSM Streetworks team worked closely with the local highways authority to agree all permitting of works to ensure minimal disruption to the local communities.