

CLIENT Lovell Homes

PROJECT Substation for 174 New Homes Development

## LOCATION

Selby Road - Howden - Goole

## **OVERVIEW**

## SERVICES PROVIDED

- HV and LV network design
- Installation of 11kV substation to include HV switchgear, 800kVA transformer, and 5-way LV fuse board to supply 174 new homes
- Construction to the adoptable standards of Northern PowerGrid (Npg) and ESP Utilities Group (ESPUG)

The scope of works included the design, procurement, and installation of a UDE (Unit Distribution Equipment) substation consisting of Schneider Electric RN2-C HV switchgear, 800kVA transformer, complete with a close coupled 5-way LV board. The UDE, once energised, provided power to 174 new homes on the Saddlers Grange development in Howden. This substation is dual-owned by Northern Powergrid (NPg) and ESP Utilities Group (ESPUG) and, therefore constructed to the adoptable standards of both parties.

## DESCRIPTION

IUS installed approximately 300m of 3 x 1 core 300mm aluminium XLPE cable from the substation location to the agreed point of connection, together with an 80m length of 70mm bare copper earth, which forms part of the HV earthing arrangement. IUS then carried out excavation works around the substation building to install this earthing system. The programme was critical as the housing developer had prospective homeowners eagerly waiting for the handover of their new properties. IUS successfully met the expectations of Lovell Homes and their customers by executing our work within the allotted timeframes.

The IUS protection engineer carried out the pre-commissioning tests including primary and secondary injection testing. Once the UDE had been successfully tested our HV-authorised cable jointers attended the site to carry out the HV cable termination and LV terminations at the 5-way LV board.

As well as IUS cable jointers and the protection engineer, other trained, authorised, and competent members of the site delivery team included our electrical fitters and the Senior Authorised Person responsible for safety documentation. The key points of contact for Lovell Homes were the IUS project manager and project coordinator, who has the responsibility, as per their titles, for the management and coordination of all the works. The IUS team all contributed to the safe and successful energisation of an essential substation asset.