

50MW 132/33kV SOLAR FARM SUBSTATION

Energised ahead of the ROC tariff deadline

SCOPE — Design · Project Management · Substation Engineering · Electrical Protection Design · Civils & Groundworks · Panel Manufacture · Installation · Commissioning · Energisation

VOLTAGE
132/33kV

CLIENT
Undisclosed

CAPACITY
50MW

DELIVERY MODEL
ICP contestable works

SECTOR
Renewable / Solar

KEY DRIVER
ROC tariff deadline

DELTA HV ROLE
Design, build & commission

ADOPTION
Contestable works adopted by DNO

PROJECT OVERVIEW

Delta HV designed, built and commissioned a 50MW 132/33kV substation for a solar farm installation, delivered end to end by the Delta HV team. The scheme brought primary, civil, structural and protection disciplines together on a tight timescale, with meticulous design accuracy and rigorous adherence to safety standards. Open communication and a shared commitment to quality held every milestone, and the works were commissioned ahead of the Renewables Obligation Certificate tariff change — the end client's principal commercial driver — with successful adoption of the contestable works by the network operator.

DESCRIPTION & OVERVIEW OF WORKS

Design & value engineering	Design across primary, civil, structural, architectural, drainage, electrical and landscaping finishes, with value engineering solutions that saved time and cost during the build.
Electrical protection design	Protection design reviews, settings configuration and implementation, and off-site protection panel build at Delta HV's own manufacturing facility.
Civils & groundworks	Civils, ground works, drainage and piling, together with below and above ground earthing systems.
Installation	Plant and equipment installation; 132kV and 33kV cable jointing and terminations including specialist manufacture terminations; multicore and telecontrol cable installation, termination and testing; and LV lighting, small power and heating.
Testing & commissioning	Final on-site testing and commissioning of plant and protection schemes, with problem solving across disciplines to hold the programme.
Completion, adoption & energisation	Completion through to energisation, with adoption of the contestable works by the network operator.

Technical highlight — commissioned ahead of the ROC tariff change

The end client's return on the scheme depended on energising before the Renewables Obligation Certificate tariff changed, which fixed the completion date before the design was finished. Delta HV ran design, civils, plant and protection as parallel workstreams rather than a sequence, moved panel build off site to its own manufacturing facility to take it off the critical path, and value engineered where it saved programme — commissioning the substation in time for the tariff deadline.

