



CASE STUDY  
**13751**

# Addenbrookes Hospital

## 33kV Contestable Connection



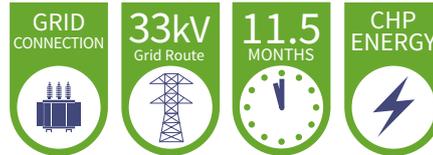
6 Panel 11 kV Switchboard adopted by 24Seven



1 of 2 installed 12/24MVA 33/11kV Transformers



33 kV Cable route rail track crossing



### Addenbrookes Hospital, Addenbrookes NHS Trust, Cambridge

To meet the increasing electrical load requirements of Addenbrookes Hospital Powersystems UK Ltd were employed to design, install and commission a new 33kV primary substation on the Hospitals site. The electrical connection to the site was carried out under Ofgems competition in connections scheme allowing accredited contractors to compete with the distribution companies to carry out the work. The project on completion was adopted by 24Seven to form part of their distribution network.

To provide a 33kV supply to the site Powersystems installed 2 No. 33kV circuits 4km from 24Sevens Fulbourn grid substation. The cables were installed in the public highway and a directional drill under a rail track was also undertaken.

The new Primary substation compound and switchrooms were designed and constructed by Powersystems to house the substation equipment.

### Within the Primary substation Powersystems supplied and installed:

- ▶ 2 No. 12/24 MVA 33/11kV transformers
- ▶ 18 panels of 11 kV switchgear
- ▶ Protection panels
- ▶ Battery Chargers
- ▶ 11 kV cables
- ▶ Building lighting and power

On completion of the installation the substation equipment was tested and commissioned to the satisfaction of the 24Seven Engineers.

The substation was completed 50 weeks after award of contract and the hospitals existing substations transferred to the new supply over the next 12 months.

