

# Western Power Distribution completes upgrade of Birmingham substation



*WPD jointers Jamie Westwood (left) and Francis Smith (right) look at some of the new cable installed on the racking system.*

Western Power Distribution has completed an upgrade of the Summer Lane depot in Birmingham and converted it to a primary substation site.

The upgrade has increased the capacity of the Summer Lane and neighbouring Hockley group, which supports much of Birmingham's city center, by 60 MVA. The increased network capacity is projected to meet the needs of this area for the next 60 years.

Approximately 7km of cable was installed and transferred to the new 11kV switchboards on a purpose-built ladder racking system, connecting the old cable from the road to the new 27 circuits.

The old transformer was removed in October along with the old 11kV switchboard consisting of over 70 11kV circuit breakers being decommissioned.

Prior to the upgrade, the site housed a depot and a very large substation with six separate switch rooms, with 11kV feeder cables exiting the building through a purpose-built tunnel into the public highway. The tunnel is heavily lined with asbestos which meant making use of the existing route was not viable and an alternative solution was required. Birmingham City Team Manager Lee Harrison explained.

"Because of the amount of cable coming from the substation, we had to create a new exit point," said WPD Birmingham City Team Manager Lee Harrison. "We had to dig the final joint position which required a joint hole some 30m long, 10m wide and 5m deep. Specialist shoring equipment was designed and installed with hefty steel beams to hold back the walls of the joint hole."

Find out more about Western Power Distribution at: <https://www.westernpower.co.uk/>