

## CASE STUDY A POWER STATION

**Project:** Decommissioning of A Power Station  
**Client:** RWE npower  
**Date:** November 2012 - February 2013

The project involved dismantling/removal of a 500MW Generator (approx 250TE); 600MVA Transformer (approx 240TE); 2 x 500MW Rotor Shafts (approx 70TE ea) and 2 x Stator Casings (approx 60TE ea), necessitating on-site dismantling to enable transportation to the Group's Rotherham recycling centre.

Dismantling the Generator involved removal of watercooled copper conductors, undertaken manually by releasing bakalite support frames and pulling individual conductors out. Both stator end plates were removed to expose the radial laminations - removed using hydraulic excavator with rotating grab. The frame was then flame cut to size pending loading/transportation.

Prior to dismantling the Transformer, residual insulating oil was drained from main body and tap changer. The Transformer lid and bushing shrouds were unbolted/lifted off using mobile crane and Transformer internals dismantled and removed in the following sequence: upper lamination support chassis; upper horizontal laminations; vertical core copper windings; vertical core laminations; lower horizontal laminations and then finally the outer casing and tap changer were removed and processed to size using flame cutters working from MEWPs.

The 2 Shafts were lifted out using existing overhead travelling crane in the Turbine Hall. To enable the 2 Stator Casings to be transported, water cooling boxes were flame cut from each side and a 300T mobile crane used to lift each casing onto a low-loader.

All craneage/lifting studies and slinging was carried out in-house by Ron Hull Demolition Ltd, and transported on low-loaders to the Group's Rotherham recycling centre. Once again Ron Hull Demolition Ltd set the standard for others to follow.

