### **CASE STUDY: LIFTING SOLUTIONS**

# **OVERHEAD CRANE LIFE EXTENSION**

Upgrading a 70-year-old crane to meet modern safety and performance standards.



### **CLIENT**

Scottish and Southern Energy (SSE)

**YEAR** 2018

**BUSINESS LINE**Lifting Solutions

### The Challenge

Located in the Scottish Highlands, the Grudie Bridge Power Station's overhead crane originally installed in 1946—had not undergone a major overhaul since 1994.

With critical generator upgrade works underway, the crane required urgent refurbishment to ensure safe and reliable lifting operations.

The challenge was to modernise the crane's systems while minimising disruption to live operations and ensuring compliance with current health and safety legislation.

#### The Solution

EnerMech developed and executed a carefully phased programme of work, aligned with the station's ongoing generator upgrade schedule.

Following a detailed pre-works survey and structural inspection, the team removed and replaced worn components including ropes, hook blocks, and travel motors.

A wireless remote control system was installed to replace the outdated pendant control, and the crane was fully commissioned, function tested, and load tested to verify performance.

All works were delivered within the agreed timeframe.

#### The Outcome

EnerMech successfully extended the operational life of the overhead crane by more than 30 years.

The upgraded system now meets modern safety and performance standards, ensuring reliable operation during future maintenance and lifting activities.

SSE praised the collaborative approach and the ability of EnerMech's multi-skilled team to adapt quickly to changing scopes while maintaining safety and efficiency throughout the project.

### We Delivered...

- Pre-works survey and structural inspections to assess upgrade requirements
- Replacement of ropes, hook blocks, and travel motors to restore mechanical integrity
- Installation of wireless remote control system for improved safety and usability
- Commissioning, function, and load testing to verify performance
- >30 years of extended crane life through targeted refurbishment

## **Modernised Controls**

Outdated pendant system replaced with a wireless remote control for safer operation.

## **Client Satisfaction**

SSE praised the safe, efficient delivery and collaborative project execution.

