

# Independent outage support saves cost

## Snapshot

### Client

Cottam Development Centre

### Challenge

During an outage for which we provided on-site technical support, the original equipment manufacturer (OEM) proposed replacement of damaged compressor diaphragms with new components.

### Solution

We reacted quickly and were able to demonstrate that repair was a viable, safe and cost-effective alternative. We provided quality assurance for the repair process.

### Benefits

Repair of the components saved our client €690,000 compared to replacement, with no impact on outage timescales.

Our on-site assistance to clients during outages provides quality assurance and technical support with any issues that may arise. In this case, although the OEM proposed replacement of components, we put forward and supervised a repair solution that was more cost-effective and met quality standards.

### OEM proposed costly replacement

During a major inspection at Cottam Development Centre, a 400 MW CCGT power plant, the OEM rejected two stages of compressor diaphragms (stator vanes) as being damaged beyond repair. Damaged sections were outside current limits for repair and the OEM proposed replacement with new components.

### Our repair solution approved

We suggested repair rather than replacement and responded quickly by bringing our in-house scanning equipment on site to map the precise 3D geometry of the components.

Under our supervision, the OEM replaced individual damaged vanes, which were finished by hand. We witnessed all critical stages of the repair work and showed that final finished dimensions were acceptable by comparing our original scans with new scans of the repairs.

The OEM was reassured that our quality controls would meet their exacting standards and ensure critical dimensions were maintained.

### Why our assistance benefits clients

- We provide quality assurance and technical assistance to site engineers.
- We confirm that emerging work proposed by the contractor is necessary and is carried out cost effectively.
- We ensure all work by the main contractor is of high quality.

# €690,000

saving compared to new component replacement



### Value of independence

Outage inspections frequently give rise to an unexpected need to replace components.

Our experience as an owner and operator has enabled us to develop bespoke asset integrity management techniques as an alternative to traditional and often higher cost approaches offered by the OEM.

Engaging our independent technical support prior to and during outage and turnaround projects enables clients to challenge suppliers, and monitor the technical quality of contractors, components and installation.



**Uniper's swift solution for a safe alternative repair, combined with supervision of the necessary works, saved us significant replacement cost without impact on the outage timescale.**

Ian Rogers  
Plant Manager, Cottam Development Centre

### Critical time factors

Our swift response to this challenge ensured that a more cost-effective solution was adopted without affecting the timeframe of the outage. From experience in operating and maintaining our own power plants, we know that keeping downtime to a minimum is critically important to our clients' business.

Because we have our own specialist equipment, we were able to bring it on-site to scan components the day after the work-scope was agreed. All repairs were carried out within the timeframe of the outage with no impact on completion dates.

### Our outage solutions include

- Optimizing the scope and periodicity of outages and plant turnarounds.
- Ensuring components and contractor workmanship are to the correct quality.
- Calling on our international experience to ensure good practice.
- Advising on fitness for service and cost-effective options to operate with damaged components.

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