

Independent advice saves significant outage costs

Snapshot

Client

Gas-fired power plant, UK

Challenge

Following generator rotor damage at a sister plant, the original equipment manufacturer (OEM) advised of potential generator failure at another plant operated by our client. They recommended removal and repair of rotors during upcoming outage.

Solution

We remotely inspected the rotors and concluded that damage was not severe. We advised they could safely remain in operation, subject to condition monitoring and future inspections

Benefits

Our client gained confidence to continue safe operation until the next major outage in 2023, avoiding costs of around €2.3m and an outage extension of 3-4 weeks.

When faced with an OEM recommendation for expensive repairs, plant operators need an independent expert to give an alternative opinion they can rely on. Here our Outage Management and Electrical Engineering teams combined to recommend a safe approach that avoided significant costs and disruption.

OEM advises immediate repair

After insulation damage was discovered in the generator rotor at a sister plant, the OEM notified our client of a potential problem in similar rotors at a another plant operated by the same company.

They warned of a possibly catastrophic failure of the generator and advised that the rotors be removed during an upcoming planned outage so that endwinding packing and any damaged insulation could be replaced. Potential costs of such measures were around €2.3m plus lost availability during a 3-4 week extension to the outage.

Our alternative approach

We responded swiftly and carried out a remote visual inspection of the rotor endwindings, requiring minimal disassembly of the generator with the rotor remaining in-situ. Our inspection team compiled a comprehensive boroscope photographic record for further analysis.

Our generator specialist compared evidence from this inspection with data from the sister plant and concluded that the amount and extent of damage at their other plant was far less severe.

Our client took our advice that the risks from postponing replacement of the insulation until the 2023 outage could be mitigated by measures to test the rotors frequently and monitor progress of the damage.

€2.3m

repair costs avoided

Discover Uniper Energy Services

John Tomlinson
 +44 (0)7841 057637
John.R.Tomlinson@uniper.energy
www.uniper.energy

