

CONDITION MONITORING COST SAVINGS

A STEP AHEAD OF GEARBOX FAILURE

On a site in Scotland, damage occurred in the inner workings of a turbine gearbox causing complete failure of the component and shutdown of the turbine. The turbine manufacturer was responsible for monitoring the turbines but didn't spot the failure in advance. The subsequent lost production figures were significant and summarised in the table below (Turbine A).

The team at RES reviewed the data from the damaged turbine and used their expertise to identify early warning signs. Data from all the other turbines on the site were subsequently analysed for similar patterns and one turbine was identified as potentially problematic. RES requested the turbine manufacturer visually inspect the gearbox, which confirmed the existence of the defect.

The team determined that Turbine B was able to continue operating while the replacement work was planned. This approach prevented two weeks of downtime, allowed RES to plan the replacement works in low wind, and saved considerable cost in components and labour. The component could be replaced and refurbished instead of scrapped as in the case of Turbine A.

	Turbine A	Turbine B
Lost production	£98k	£8.5k

LOST PRODUCTION SAVING

Scheduling replacement in low wind	£30k
Avoiding failure	£59.5k



Photos - for illustration purposes

CALL US NOW TO DISCUSS HOW CONDITION MONITORING COULD BENEFIT YOU

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