
WARRINGTON, UK, APRIL 15, 2002

Pumping the costs down with a motor policy

A motor management policy, developed in conjunction with ABB, is helping North West Water cut its motor electricity costs by some 6%. The utility annually uses about £25 million of electricity, a large proportion of which is consumed by pump motors.

With the policy, the utility can identify when motors should be replaced with high efficiency versions to achieve the shortest payback times.

Key to the plan's success lies in analysing in advance whether failed motors should be replaced or rewound. Rewinding a motor can cause loss of efficiency and higher running costs. By comparing these costs with those of a high efficiency motor, a payback time can be calculated to recover the higher capital cost of a replacement motor.

The policy shows that the most practical time to replace a motor is often when it fails. By identifying which motors should be replaced or rewound, the motor management policy ensures the correct commercial decision is always taken.

"The mystique surrounding the decision to rewind or replace with a new motor is resolved by work carried out in conjunction with ABB," comments Mr. Brian Heaps, Technical Manager at North West Water.

The policy was devised after an energy monitoring study conducted by ABB at three of North West Water's sites. This involved measuring energy consumption of motors over a seven day period. Each motor was then replaced with a high efficiency unit and monitored for another week. The results identified which motors should be replaced or rewound based on a maximum payback of two years. In several cases, the tests revealed that a working motor could be replaced and still achieve a payback of less than two years.

"The theoretical cost savings of high efficiency motors have been translated into genuine savings by these monitoring trials," says Mr. Heaps. "In general, it is beneficial to replace larger motors and those running for more than 6,000 hours per year."

ABB (ABBN: SIX Swiss Ex) is a pioneering technology leader in power grids, electrification products, industrial automation and robotics and motion, serving customers in utilities, industry and transport & infrastructure globally. Continuing a history of innovation spanning more than 130 years, ABB today is writing the future of industrial digitalization with two clear value propositions: bringing electricity from any power plant to any plug and automating industries from natural resources to finished products. As title partner in ABB Formula E, the fully electric international FIA motorsport class, ABB is pushing the boundaries of e-mobility to contribute to a sustainable future. ABB operates in more than 100 countries with about 147,000 employees. www.abb.com

—

For more information please contact:

Layla Hewitt

Marketing Communications

Phone: 01925 741517

Email: layla.hewitt@gb.abb.com

ABB Ltd.

Daresbury Park

Daresbury

Warrington WA4 4BT

Emma Jenkinson

Armitage Communications

Phone 020 8667 2218

Email: emma.jenkinson@armitage-comms.co.uk