Case study - Norweigian Hydropower

KraftPowercon secure operations of sluice gates

Case

The hydropower plant is located in southern Norway and has a drop of 20 meters. The total installed capacity is 208 MW and the annual generation is 900 GWh.

Turbine Hall



Challenge

To secure a controlled water flow, the sluice gates at the power station need to handle intake and spill water at any time, even in case of power interruption to the motors.

During an upgrade of the power station, the old DC motors for the sluice gates were replaced with motor drive for three phase AC-motors.

Solution - Uninterruptible Motor Drive (UMD™)

UMDTM by KraftPowercon
Hydro Power Sluice Gate

3~ 400V *
Image: Constraint of the state of

To ensure the emergency operation of the AC motors, UMD[™] system secures operation of the AC-motor from both the mains and battery supply.

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Uninterruptible Motor Drive

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UMD[™] is the most reliable way to power your motor and secure the operation of a standard AC-motor. The UMD will be backed up by existing batteries on site and thereby replace the old DC motor solution.

The transition from mains supply to battery supply is automatic and seamless

Benefits

- Standardized, Type Tested Systems
- Highest Possible Availability
- Eliminates Single Point of Failure

"KraftPowercon has decades of experience and we meet high expectations and demands within the industry. In this case we replaced the old DC-motors and provided an Uninterruptible Motor Drive solution for standard three phase AC-motors."

Håkan Rydenborg -Technical Sales Manager KraftPowercon

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