



SuccessSTORY



Country: France

Customer: EDF Hydraulic Engineering Centre

Products: Relays

**Energy production,
transmission and
distribution**

**Eliminating untimely switching of PLC
input/output optocouplers**



Customer

EDF's CIH Hydraulic Engineering Centre designs and builds water control installations in France and internationally. It renovates and modernizes existing facilities and helps to maintain the hydro-electric installations in operation.

Goals

- Eliminate untimely switch of PLC input/output optocouplers during the storm season. These optocouplers are particularly sensitive to electromagnetic waves
- Limit unscheduled shutdowns of hydro-electric power stations which lead to operating losses
- Devise a long-term solution using relays to avoid the electromagnetic disturbances caused:
 - 2 relays and 4 contacts
 - Response time > 15 ms
 - Consumption > 1 W
- As the loads to be switched are low, the contacts must be capable of switching 3 mA at 24 Vdc
- As socket implementation and cabling time must be kept to a minimum, EDF is seeking a spring-mounted solution

The Enerdis Solution

Installation of **190 RCME12 relays avec their PAIR080 sockets on the dam at Serre Ponçon (Hautes Alpes, France)**. Since the installation of the solution two years ago, no faults have been observed and no untimely switching of the PLC optocouplers has occurred.

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