

CASE STUDY: GENERAL LOW-VOLTAGE DISTRIBUTION SWITCHBOARDS

Wind farm in the United States



November 2021

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Wind farm in the US

Main challenge:

Project in the United States carried out by a Spanish company: **need for compliance with NEC regulations**

■ UL891

The manufactured equipment must comply with the safety standards defined by the UL891 standard

■ ARC-FLASH

Ensure the safety of operations and maintenance personnel in the event of an internal arc fault

■ ISSUE

REGULATORY COMPLIANCE

Strict compliance with UL 891 safety standards. In addition, an internal arc resistant system prepared for shipping in a sea container in a single transport unit is required



Safety in case of internal arc fault



NEC Compliance



Shipping in a single transport unit

Wind farm in the US

Solution – Power+ distribution switchboard:

MES proposed its Power+ solution with **EATON** low-voltage switchgear and **CUBIC** enclosures. An efficient solution that, in addition to ensuring compliance with the **NEC**, maximises the safety of operations and maintenance personnel

■ SOLUTION

UL891 Switchboards

1. Assembly mounted on a single transport unit
2. **EATON** switchgears and **CUBIC** enclosures
3. Comprehensive test plan to ensure quality of supply

■ RESULT

Compact solution



Hazard Risk Category 2

100% compliance
with standards



Short-circuit current

65 kA

Degree of protection

NEMA Type 12

Wind farm in the US

Benefits of the solution:

Compliance with the U.S. Electrical Standards and Regulations

BENEFITS



NEC Compliance



UL 891 safety standard compliant



Maximum safety for operations and maintenance personnel

Power+: A UL-compliant solution, ensuring NEC code compliance and a high degree of safety for maintenance and operations personnel. Highly flexible design that adapts to space limitations without affecting performance.



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