



Electrical Distribution Systems for Oil & Gas Facilities

Improve employee arc flash safety.
Increase reliability and minimize your operational costs.
Enjoy global service and support.



imagination at work

GE delivers electrical distribution solutions for the oil and gas industry that incorporate efficient, reliable system design; advanced, worker-friendly technology; and dedicated, ongoing attention and support.

New technology that improves arc flash safety can help to provide a better working environment for your employees.

In oil and gas facilities, proper design of the electrical distribution system is critical to operational reliability and reducing the costs associated with unplanned system downtime.

Continuing operations require a long-term relationship that does not end with the equipment sale.

Get a turn-key electrical distribution system

From the primary substation to the lighting panel and at every step in between, GE offers an all-in-one, integrated system assembled in a Power Control Room (PCR®) that is designed, installed and tested as a whole, in the factory, then shipped complete to your site.

Our system can provide Class 1 and Division 2 capabilities. The equipment solution includes:

- Power transformers up to 500 MV
- Secondary substation transformers up to 38kV
- MV Switchgear to 38kV
- LV Switchgear
- MV MCC to 7.2kV
- LV MCC to 600 V
- Bus Duct to 38kV
- HRG / NGR
- UPS / Battery / DC Supply
- MV/LV capacitors

From a simple diagram, we can engineer, design and build a UL approved PCR.

This solution gives you:

- a fully conditioned space – heating, cooling and positive pressure
- an integrated design that reduces space requirements
- reduced engineering and procurement costs
- full project management and coordination
- complete testing and inspection prior to shipment
- customizable to suit any location and application
- worldwide transportation services



Improve arc flash safety for your employees

Our solution provides low-voltage and medium-voltage safety features that allow equipment operators to perform their job in a better working environment. We can improve your employee safety by providing equipment that complies with NFPA 70E and by introducing innovations that lower HRC protective clothing levels for equipment operators.

Using Entellisys low-voltage switchgear increases safety by allowing operators to stay out of the arc flash zone and by including features that lower the arc flash incident energy.

- The Near-Gear Human Machine Interface (HMI) touch screen allows control, monitoring and diagnostics away from the lineup.
- A Remote Racking Device allows operators to rack circuit breakers between positions from outside the arc flash zone.
- Bus Differential Protection detects and quickly clears lower level arcing faults to minimize the arc flash energy while maintaining selectivity.
- Reduced Energy Let-Thru (RELT) mode lets operators easily implement minimum pick up and maximum speed settings to limit let-thru energy prior to working near the equipment.



Arc-resistant medium-voltage switchgear (5kV to 38kV) directs and controls arc flash energy to minimize injury to personnel and reduce damage to surrounding equipment. Additional features include:

- A safety racking system that will not engage unless the arc resistant door is closed and the latches are engaged. This enhances safety for maintenance personnel at all times.
- The footprint of the ANSI Type 1 and Type 2 construction is no larger than the standard offering. An integral top-mounted plenum and exhaust vents reduce the overall size of the equipment.
- Maintenance is simplified via pressure release vent panels, breaker position indicators on the panel door, and a compartment light and in-door window for viewing ease.

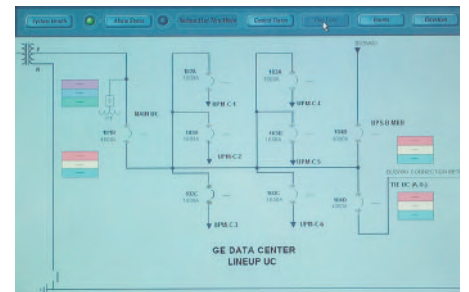


Minimize the costs of unplanned system downtime

Entellisys™ low-voltage switchgear provides redundant systems for protection, control, monitoring, metering and operations. It reduces unplanned system downtime through:

- synchronized event log and system-wide waveform capture that provide data for root cause analysis and fast recovery
- zone protection that eliminates the usual tradeoff between protection and selectivity to enhance power system reliability
- software that enables changes to be made from your remote computer to save you time and money

In addition, GE Multilin's Power Management Control System (PMCS) can provide centralized event identification that allows you to find a fault quickly and reduce system downtime. In addition, PMCS can provide monitoring, power quality analysis, cost allocation reports, and control and automation.





Enjoy global service and support

GE service starts during design and installation, when we employ a proven process to execute the project. A single project management point of contact will work with you from the coordination of design requirements and drawings to shipments, start-up and commissioning.

After we have completed the installation to your satisfaction, our service centers and field engineers across the Americas, Europe and Asia stand ready with a global reach and local solutions.

Our expert instructors can introduce and train operators to use the new equipment and systems, resulting in improved safety, work practices and productivity.

Experience counts, and GE has a long, successful record of providing electrical distribution equipment for oil, gas and chemical installations.

When you think of a major oil and gas company in any part of the world, it is very likely that they are a customer of GE.

PCR is a registered trademark of Powell Industries.

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