Re: Marking of Electrical Equipment

Did You Know?

Proper labelling at all distribution points, circuit breakers, fuses and switches is required during installation, as well as whenever the system is modified (Rule 2-100). The Ontario Electrical Safety Code (OESC) also requires high voltage systems with the possibility of feedback to have updated single-line diagrams — both at the time of installation and after any modifications (Rule 36-006).

Why Is this Important?

Clear and accurate labelling directly impacts safety. When panels and disconnects are labelled properly, electricians and technicians can quickly isolate, verify and safely work on equipment. If panels and disconnects are mislabelled or not labelled at all, an electrician may be compelled to open disconnect switches and/or distribution panel doors or covers to identify circuits; if this task is performed live, it exposes electricians to shock and arc flash hazards that may be present at the live terminals, devices and/or conductors. Ultimately, proper marking and labelling prevents these hazards and keeps everyone safer on the job.

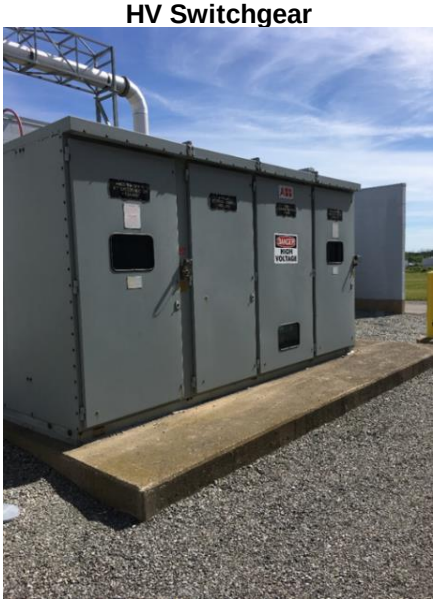
Field Example:

In 2018, a worker suffered hand burns while inspecting a 27.6 kV outdoor switch. A cubicle was supposed to be isolated by the utility, but the wrong pole-mounted switch was opened. The facility had two separate feeds which required a legible, up-to-date single-line diagram on site to confirm the correct isolation point. Proper labelling of the equipment, as well as an updated and legible single-line diagram, could have prevented the injury.

Resources & Training:

For more information about the proper marking of electrical equipment, please review Bulletin 2-30-* and all Bulletins pertaining Section 36.

HV Switchgear



Sample Single-Line Diagram