

## **ME24\_18 – Current limiting fuses evaluation on low voltage secondary selective systems**

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**Abstract** - Current Limiting Fuses (CLFs) have been utilized in low voltage systems to limit short circuit currents to meet short circuit duty requirements. For the facility under consideration, CLFs have been used as an integral part of power circuit breakers within secondary selective switchgears operating with normally closed tie breakers. CLFs was selected to limit the short circuit current contribution to downstream equipment such as motor control centers. The application was based on the fact that current limiting fuses would reduce the through fault current to an appropriate value provided that the fault current is within the current limiting range of the CLF. Without this limiting effect, the MCCs would have been underrated from a short circuit duty standpoint. Research paper published in the early nineties proved the CLF's current limiting effect can be impaired when circuit breakers located within the downstream MCC buckets are of repulsive contact type.