SAFETY OPERATIONS ON MEDIUM VOLTAGE SWITCHGEAR
Barry Gass
ACTOM Protection and Control
HAZARDS - Operation of Electrical Equipment

• Electrical Shock
• Electrical Burns
• Fire and Explosion
• Heat Build Up
• Mechanical Hazards
LV Accident
LV Accident
Fire and Explosion
Fire and Explosion
Fire and Explosion
Heat Build up
Close Proximity

The minimum distance any part of a person's body or work tool may encroach to any bare unearthed LV conductor or to any unscreened unearthed MV/HV conductor.
Close Proximity
Unscreened Unearthed
Unscreened Unearthed
Unscreened Unearthed
Unscreened Unearthed
Unscreened Unearthed
ISITE

- Identify the correct operating location
- Identify the correct operating device
- Switch
- Isolate
- Test
- Earth
Identify the Correct Operating Location
Identify the Correct Operating Device
Check Gas level before Operating RMP/MSS
Check Oil Level Before Operating RMP/MSS
Flash Suit
Flash Suit
Flash Suit
Remove the Hazard
Isolation

• Physically disconnect from all possible sources of electrical potential

• Can be obtained by:
Removing of Fuses
Striker Pin Fuses
Opening of Links
Don’t Open Links on Load
Don’t open Links on Load
Check load before Racking out
Withdraw Truck Type S/G
Lock off ALL Live Shutters
Multiple Lock Out Devices
Effectively Locked Out?
Lockout Station
Danger Tag

This lock/tag may only be removed by:

Name:
Dept.:
Expected Completion:


AMERICAN ELECTRICITY DISTRIBUTION INDUSTRY

ACTOM
Safety Test - Correct PPE?
‘S’ Type Voltage Detector
Phasing Sticks
Phase Comparison
Electrical Phasing

- New equipment installed which necessitates breaking into a ring feed e.g. new substations.
- After the repair to any cable which forms part of a ring feed.
- Whenever a cable which forms part of a ring feed is terminated.
- An existing cable (to be returned to service) is being joined and/or terminated.
Proximity Tester
Earth

• Connected to the general mass of earth in such a manner as to ensure an immediate safe discharge of electrical energy
Integral Earthing
Integral Earthing
Earthing Carridge

CB FITS INSIDE CARRIDGE
Earthing Truck
Earthing Attachments
Lock Off Earth
Portable Earths
Portable Earths
Portable Earths

- Securely connect the flexible lead to an earth bar/conductor.
- With assistance of link stick touch each of the phases of the mains/apparatus to be earthed.
- On removing the earths, disconnection from the earth bar made last.
Portable Earths
Portable Earths
Contact Details

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