



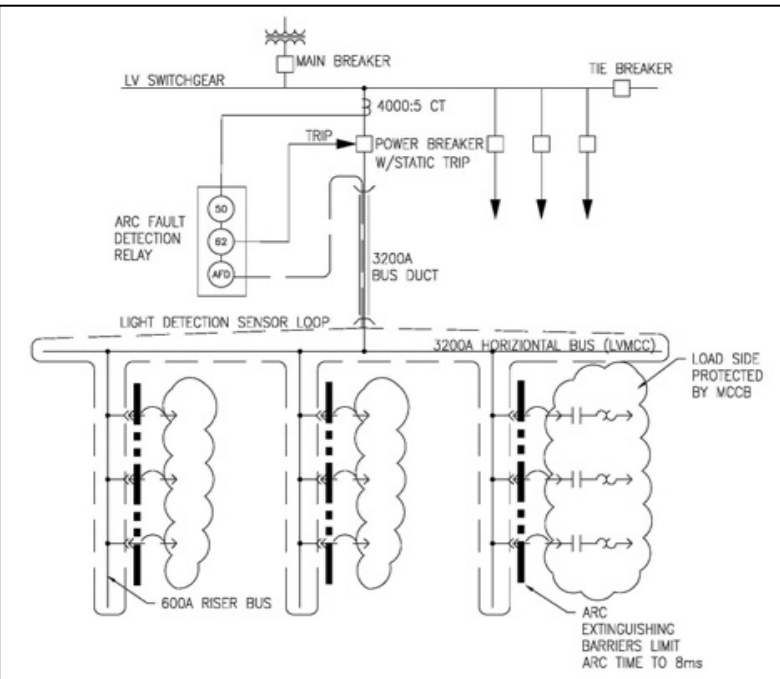
## Electrical Process Substation Upgrade Specialist

### Offering the LVMCC SelfEx Program as a Safety Upgrade for Existing Equipment

#### Why upgrade your LVMCC?

- LVMCC typically have high arc flash values exposing workers to hazards
- Most electrical injuries occur around troubleshooting LVMCC due to door being open to access components
- It is not practical to de-energize due to continuous process operation
- More cost effective than replacement

**MMT Services has a tested, proven method to reduce arc flash hazards below 1 Cal/cm<sup>2</sup> for open door access to LVMCC.**



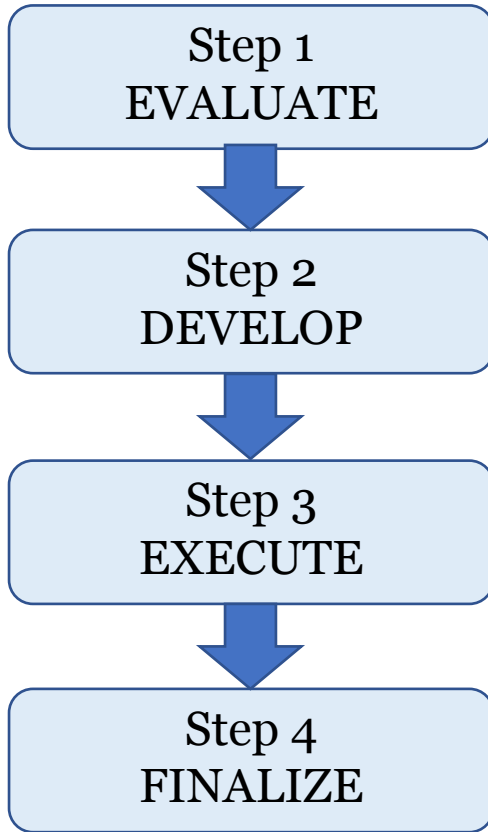
#### How we do it..

- Add Self Extinguishing barriers within each LVMCC bucket
- Add light detection sensors in the rear of the LVMCC
- Add Arc Flash Detection Relay to feeder device

**Adds arc flash protection *without* impacting existing time-current relay settings.**

This equipment upgrade is an engineered solution per NFPA70E and ANSI/AIHA Z10 that minimizes arc flash exposure by eliminating the major sources of arc flash hazards within the LVMCC assembly.

## LVMCC SelfEx Program Process



- ✓ Asset Management Plan
- ✓ Thermography Scan to determine problem areas
- ✓ Review of existing documentation
- ✓ Schedule and scope development
  
- ✓ Drawings and schematics
- ✓ Execution Plan
- ✓ Record Documents required
- ✓ Approval
  
- ✓ Complete upgrade program
- ✓ Documentation
- ✓ Field testing and verification
  
- ✓ Update IEEE 1584 Arc Flash Calculations
- ✓ Securely label equipment to reflect upgrade
- ✓ Training

After the upgrade, users can safely troubleshoot LVMCC circuits utilizing standard PPE without impacting existing time current protection schemes

NFPA 70E Risk Assessment can utilize reduced likelihood and severity in calculations

The reduced clearing time of this system significantly reduces MTTR in the unlikely event of a bus fault within the LVMCC

