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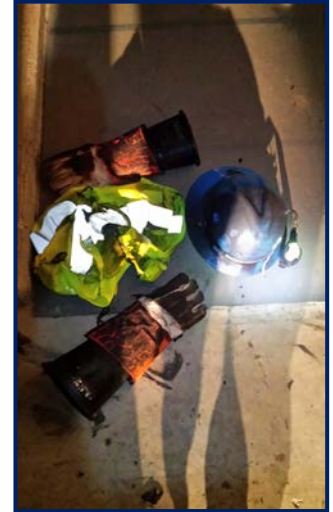
Fatal Fact Lesson Learned

Accident Type: Electrical Arc Flash

Injury: Severe Burns

Type of Work: Electrical

Equipment: Improper Test Meter



DESCRIPTION OF THE ACCIDENT:

During planned electrical outage an electrician while not wearing arc flash protection gear was testing a 4160 line side buss bar of a main breaker inside switch gear after taking the back of cabinet covers off using a Fluke 179 True-rms meter low voltage meter. Arc flash occurred causing Fluke 179 Multimeter to explode causing 2nd and 3rd degree burns on his face, upper arms and chest/stomach area.

DIRECT CAUSE:

- ◆ Electrician not wearing arc rated PPE, placed his 1,000 volt meter on the energized 4,160 volt bus bar

ROOT CAUSE:

- ◆ Failure to follow established company and contract safety procedures

INDIRECT CAUSE:

- ◆ Failure to use proper arc rated PPE required to perform energized voltage testing
- ◆ Failure to follow NFPA 70E safety requirements for working inside a limited approach zone
- ◆ Failure to follow NFPA 70E safety requirements for working inside the prohibited approach zone
- ◆ Failure to have a meeting with all involved contractors before work started, to discuss the work to be performed and roles and responsibilities

LESSONS LEARNED:

- ◆ **ALWAYS** follow manufactures safety instructions for use of electrical testing meters
- ◆ Employees must be qualified to work on the voltages they will be exposed to
- ◆ Required Arc flash gear must be worn as all times when working on energized electrical equipment
- ◆ Employees working on or near energized equipment must be trained to the level of voltage present
- ◆ Employees must know voltage of system they are preparing to work on prior to working on system.
- ◆ Pre-work brief must clearly inform workers of the potential voltage they could be exposed to