

Please Post



Abstract of a Mishap

Accident Type: *Electrical Flash Burn*
Injury: *First Aid, First/second Degree Burn*
Type of Work: *Exterior Insulation Installation on Four Story Structure*
Equipment: *Hand Tools, Personal Protective Equipment*

DESCRIPTION OF THE MISHAP:

A purchase Order contractor was repairing a (480V 3 Phase) 600 Amp Onan automatic transfer switch. Two PW employees were assisting the Contractor in transferring power back from a temporary generator to house power. While the employees were waiting for the Contractor to finish his work, the generator ran out of fuel and stopped. The contractor that was servicing the emergency transfer switch said he had completed his work for the day and would have to complete the repairs another day. The employees proceeded to disconnect the generator lead from the panel and prepare the normal power cables for installation. One of the employees assuming that the feeds were dead was in the process of re-attaching one of the feeds from the transfer switch into a lug and was tightening it down when the Allen wrench he was using came into contact with the other conductor, shorting it out. The arc from the fault caused first and second degree burns to his right arm. This process had been performed on at least two earlier occasions to support contractor outage requirements requiring power to be transferred to a temporary generator. Employees said the Contractor had exercised the switch gear and they were unaware of the switches position. The Contractor left the switch in a different alignment than when previously reconnected.

DIRECT CAUSE:

- ◆ Failure by the employee to test circuit prior to attempting to reconnect leads. ORM was not utilized to identify associated hazards.

INDIRECT CAUSE:

- ◆ Energy control procedures were not utilized (LOTO was not performed by the Contractor or PW employees)
- ◆ There was a lack of communication between the Contractor performing the work and the PW employees performing the change over.
- ◆ Failure to follow Energy control requirements outlined in outlined in Job Plan: Project safety check list contained within the Project Job Plan required the lockout of energy sources. Under special conditions it states: "All work performed within the scope of this project will adhere to the guidelines of UFC 3-560-01 (Unified Facilities Criteria).
- ◆ Employee was not wearing appropriate PPE (FR Clothing and Electrical gloves)
- ◆ Failure to properly supervise work. Proper supervision would have identified poor safety work practices by workers. Failure to test circuit would have been identified as a problem.

ROOT CAUSE:

- ◆ Ineffective Supervisor enforcement of LOTO procedures on the worksite: A recent review of Shop LOTO logs during annual audit indicated the shop had not been performing LOTO procedures. Records also indicate supervisor had not been performing annual audits as required. Safety enforcement actions were not carried out. This led to low expectations regarding the adherence to safety regulations. Training had been conducted as required and verbal warnings for safety violations were applied by Management but were inadequate.

LESSONS LEARNED:

- ◆ Safe working practices, particularly energy control measures must be utilized at all times to work safely around electricity. Adherence to established re-energizing guidelines would have prevented the mishap from occurring.
- ◆ Safety performance by workers is a direct result of on site leadership and management. Effective safety enforcement systems implemented by managers and supervisors can ensure proper safety practices are followed.

YOUR SAFETY CONTACT IS....

