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From: PHMC_Lessons_Learned@rl.gov
Subject: Yellow Alert- Electrical Near Miss
Sender: owner-doe_ll_listserv@maillist.lanl.gov

Title: Yellow Alert- Electrical Near Miss

Date: July 18, 2002 Identifier: 2002-RPP-HNF-SN-02-09

Lessons Learned Statement: Basic work control concepts apply to all work regardless of the performer.

Discussion of Activities: A subcontract electrician received flash burns to his forearm and neck when a screwdriver he was using shorted across the breaker he was attempting to install and an energized 480V AC bus, causing an electrical arc across several other breakers in the panel as well. The worker received medical attention at a local immediate care facility and was released back to work later that day.

Analysis: Investigation reveals the following facts:

- The Job Safety Analysis (JSA) for the project indicated that such work required either a lockout/tagout or an Energized Work Permit.
- The worker had read and signed the JSA "just days" before.
- The work was not on the Plan of the Day.
- The worker and the foreman discussed to work to be performed that day, which did not include installation of the breaker.
- The Foreman had not authorized the work.
- The worker attempted to install the breaker with the breaker in the closed position.

Recommended Actions: All workers, including subcontractors should be briefed on this event, emphasizing that:

- Only work authorized by line management is to be performed
- Work on electrical components requires either a lockout/tagout or extraordinary work controls specified in an approved work package

Priority Descriptor: Yellow/Caution

Work / Function: Conduct of Operations; Maintenance; Construction; Electrical

Hazards: Electrical

ISM Core function: Analyze Hazards; Develop/Implement Controls

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Authorized Derivative Classifier: N/A

Keywords: Electrical safety, near miss, work control

References: EIT 48-Hour Report EIT-2002-032

ORPS Report RP-CHG-TANKFARM-2002-0075

HNF-IP-0842, Vol. 2, Sec. 4.9.1, "Lockout/Tagout Program"

HNF-IP-0842, Vol. 9, Sec. 4.28, "Electrical Safety"

FOLLOW-UP ACTIONS: Information in this report is accurate to the best of our knowledge. As a means of measuring the effectiveness of this report, please contact the originator of significant actions taken as a result of this report or of any technical inaccuracies you find. Your feedback is appreciated.