

Title: YELLOW - Metal Tape Measure Makes Contact with Crane Feed Rail

Lesson ID: Y-2012-FBPORTS-1102 (*Source: User Submitted*)

Originating Organization or Contracting Company: Ken Whittle, Stabilization and Deactivation, 740/897-2410

Date: 1/31/2013 **Contact:** Ken Whittle, Stabilization and Deactivation, 740/897-2410

Classifier: Reviewer: Doug Fogel, PA Manager, 740/897-4561

Statement: Task hazard analysis needs to evaluate other known hazards in the work area not directly associated with the task and ensure appropriate controls are implemented.

Discussion: At 1530 hours on August 23, 2012, a mechanic's metal retractable tape measure inadvertently made contact with a crane electrical feed rail causing a 480 volt breaker to trip, de-energizing the crane. No injuries resulted from the event. The mechanic was taking a measurement from the crane cab over a cell bypass housing to evaluate the clearance of a proposed fixture to lift cell housings. After the mechanic extended the tape measure upward approximately three feet in preparation for taking the measurement the tape measure bent. When the mechanic attempted to straighten the tape measure, it went into the one-inch wide opening of the crane feed rail housing, located about three feet behind and to the right of the mechanic.

Analysis: The cause of the event was determined to be Work Organization and Planning LTA; job scoping did not identify special circumstances and/or conditions. Personnel did not identify the crane feed rail as an electrical hazard for the measurement activity although they knew the crane feed rail was energized. The energized crane feed rail was protected by a sheet metal housing and was not directly in the work area; the distance to the feed rail was the same as it would be for normal crane operations. Therefore, no special or additional electrical safety precautions were identified. The potential for the metal tape measure to move or bend and contact the feed rail was not identified as a possible condition.

Actions: The following corrective actions resulted from the incident investigation.

Actions completed at time of Lessons Learned (LL) issuance:

- Shift Briefs with affected personnel regarding the need to mesh known parameters with unknown possibilities; reinforcing the need for a questioning attitude as it relates to hazard identification.
- Crane operation procedure has been revised to add a precaution about the energized crane feed rail
- A drill has been developed to reinforce the proper actions for supervisors in response to a similar type crane event.

Actions scheduled to be completed:

Reinforce use of the Work Process Determination Evaluation Checklist for Cut and Cap personnel to help determine the appropriate work process and rigor to be implemented for proposed activities.

Savings: N/A

Keywords: CRANE FEED RAIL, HAZARD RECOGNITION

Hazard(s): Electrical / NEC

ISM Code(s): Analyze Hazards

Work Function(s): Conduct of Operations - Work Planning

References: Problem Report: FBP-PR-FY-12-1499 and ORPS EM-PPPO-FBP-PORTSDD-2012-0020

Priority Descriptor: Yellow / Caution