

SAFETY ALERT



A contractor scaffold crew was assigned several scaffold installation task areas. Unit 2 electrical areas were related to the installation of cable and new cable tray. The foreman was responsible for two separate crews because an existing foreman was on vacation. One task was to finish scaffold installation over the existing transformer that feeds the 480-volt bus to coal handling. Only two workers returned after first break to finish covering open areas under existing cable tray and scaffold. The workers were covering the last open area and using a battery-operated skill saw atop the scaffold to cut plywood to fit the area. Due to the tight and congested nature of the area, the worker was attempting to cut the plywood while on his knees. He angled the plywood with his left hand and cut with the other. While cutting in a downward motion just above the cable tray, plywood blocked view of cable tray, the worker lost control of the plywood causing the saw to cut into the 4160-volt armored cable. This resulted in an arc flash against the saw blade beneath the plywood. The workers hastily left the area and reported the incident to their foreman. This ultimately led to the plant losing power to the 480-volt bus that primarily feeds coal handling and other smaller systems. The E&CS Electrical Department determined that the worker had only cut one phase resulting in an arc-flash of phase to ground. It was also determined the worker cut over 1/8" of an inch into the first phase and was less than 5/16" of an inch shorting the cable phase to phase. Had this situation occurred, it would have more than likely resulted in a large explosive arc-flash situation. The E&CS Electrical Department assisted plant operations in the repair and testing of the cable, which was placed back in service after midnight.

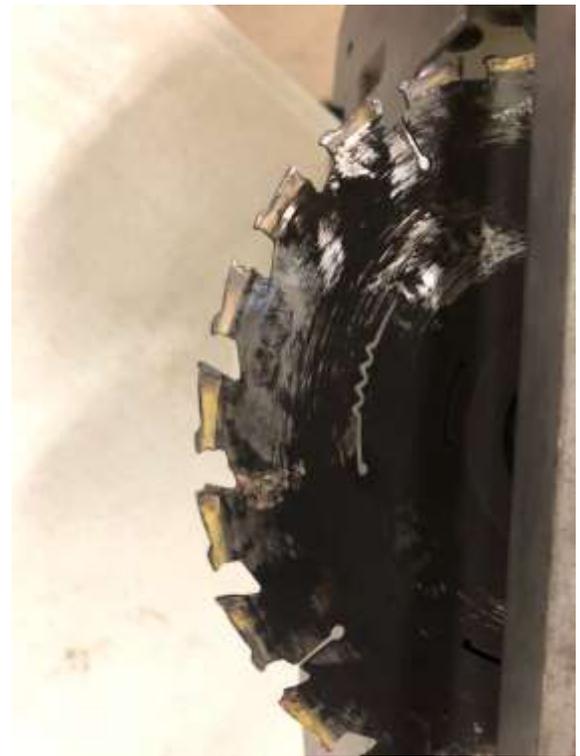
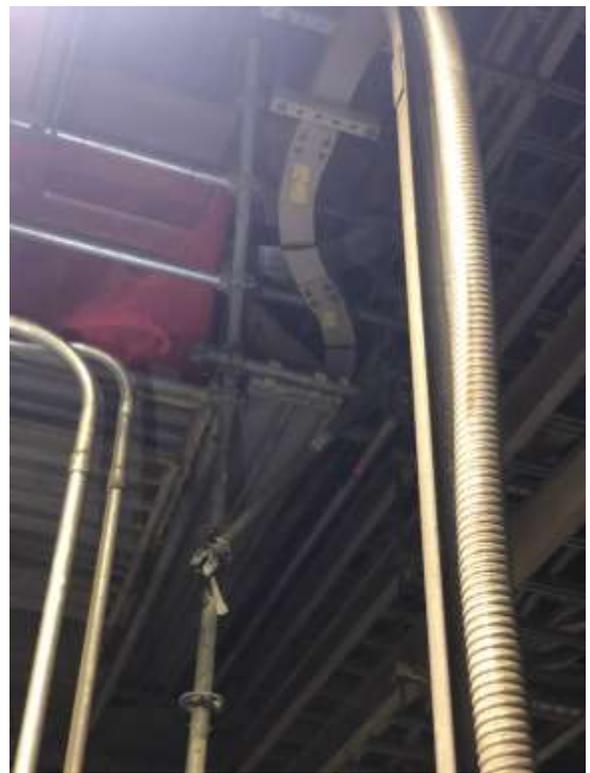
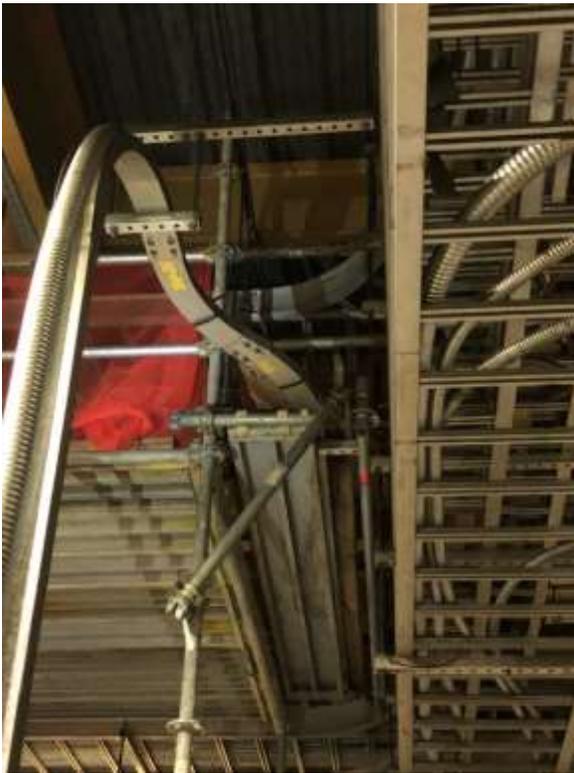
Contributing Factors:

- Tool – Improper use and set up
- Insufficient Planning – Hazard Potential not identified or clearly communicated
- Close Clearance – Congested work area, workplace geometry
- Training – Circumstances not addressed in training

Preventing Recurrence:

- The contractor will prohibit the use of skill saw on scaffolds or other elevated work platforms. Most work should be performed below with proper work station set up. Circular saws used atop scaffolds should be the exception and not the practice.
- Contractor to revise power tool training to include emphasis on manufactures guidelines, not holding material in hand, proper work station required, proper saw blade, and setting depth of blade for circular saw use.
- Contractor to develop a section on scaffold request form that requestor is to include significant hazards associated with the work area and potential solutions or mitigations.
- Contractor to re-emphasize STOP work policy: When question arises from anyone about work or potential concern, all work shall stop until visual confirmation and/or correction is made.
- Contractor to develop a continual awareness process like 20/20/20. Every twenty minutes take twenty seconds to review twenty feet within immediate work area. What if?

Jul 23, 2018



Culpability Result:

- System-Induced Error or Blameless Error

Jul 23, 2018