

Laborer Electrocuted by Energized Crane

A 26-year-old construction laborer was electrocuted when he tripped and came into contact with a crane. The crane had become energized through accidental contact with a high voltage line overhead.

The crane was in an area with both telephone and high voltage lines, and the crane operator was aware of them. Earlier in the day, the crane had brushed against telephone lines and had to be repositioned. However, at this time in the late afternoon, the operator's vision of the high voltage lines was obstructed because of the sun's position. The auxiliary line of the crane made contact with the high voltage line. The auxiliary line burned in two and the ball/hook assembly fell to the ground. Voltage was 16,000 volts.

The laborer was carrying a wire rope over to be used to attach a pile of plywood to the crane's hook. The crane operator and laborer were both startled by the fall of the ball/hook assembly. The boom of the crane momentarily drifted, contacting the high voltage line directly.

At the same moment, the laborer tripped and brushed against the corner of the energized crane. Cardiopulmonary resuscitation was immediately administered by co-workers until paramedics arrived. However, the laborer wass pronounced dead.

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What should have been done to prevent this accident?

Preventive Measures

Cal/OSHA investigated this accident and made the following recommendations.

Employers should:

- Provide information to workers on what kinds of hazards to look for and how to avoid them.
- Develop and implement strict safety procedures when working with a crane in the vicinity of high voltage power lines.
- Contact the local electric power company and have the power turned off when working within a certain distance of high voltage power lines.

This Case Study is based on an actual California incident. For details, refer to California Dept. of Health Services, Occupational Health Branch, Fatality Assessment and Control Evaluation (FACE) Report #CA92006.