FATALGRAM 11-04
Alaska Department of Labor & Workforce Development
Division of Labor & Safety Standards
Occupational Safety & Health

Date of incident: August 19, 2010

Industry: Electrical Power Distribution

Location: Arctic Village, AK

Summary: On August 19, 2010 an employee was electrocuted when he reached into the 7,200 voltage side of an electrical distribution system that was feeding a power transformer he was working on.

Description of incident: The fatal accident occurred when the victim had finished connecting a newly built house to the secondary voltage side of a power transformer and re-energizing the power transformer to the primary feeder. The power transformer was being energized by a 7,200 volt primary feeder. A fused cutout was opened by the use of a hot stick so that the power transformer would be de-energized while connecting the house to the 208/120 volt secondary side of the power transformer. Normally after a house is connected to the secondary voltage side of the power transformer, a hot stick is used to reconnect the fuse to tie the power transformer back into the primary voltage which then energizes the power transformer and the house connected to the secondary side of the transformer.

Alaska Occupational Safety & Health investigated the accident. Based upon the investigation it was determined that the fuse connecting the primary voltage to the power transformer had fallen out of the bottom fuse holder. The victim apparently came into contact with the primary voltage line when he was in the process of putting the fuse back into the bottom part of the fuse holder while working off of a fiberglass ladder. The victim was subsequently electrocuted.

Accident Prevention Recommendations:

- If working circuits are hot, the use of personal protective equipment such as hot gloves, hot sticks and wire guards are necessary to prevent accidental contact with energized conductors.

- Develop and implement a written Energy Control Program to ensure electrical circuits will be open and de-energized while working on them.

- Develop and implement a written training program and ensure employees working with potential electrical conductors have been properly trained and familiar with all hazards associated with working with electrical distribution systems.