Working Near Overhead Power Lines

Current OSHA regulations require employers to take precautions when cranes, boomed vehicles and other construction equipment are operated near overhead power lines. Any overhead power line shall be considered energized unless the owner of the line or the electric utility company indicates that it has been de-energized and it is visibly grounded [29CFR 1926.550(a)(15)(vi)]. The OSHA regulations are summarized as follows:

Employers shall ensure that overhead power lines are de-energized or separated from the crane and its load by implementing one or more of the following procedures:

• De-energize and visibly ground electrical distribution and transmission lines [29 CFR 1910.333(c)(3); 29 CFR 1926.550(a)(15)].

• Use independent insulated barriers to prevent physical contact with the power lines [29 CFR 1910.333(c)(3); 29 CFR 1926.550(a)(15)].

• Maintain minimum clearance between energized power lines and the crane and its load [29 CFR 1910.333(c)(3)(iii); 29 CFR 1926.550(a)(15)(i), (ii), (iii)].

• Where it is difficult for the crane operator to maintain clearance by visual means, a person shall be designated to observe the clearance between the energized power lines and the crane and its load [29 CFR 1926.550(a)(15)(iv)].

• The use of cage-type boom guards, insulating links, or proximity warning devices shall not alter the need to follow required precautions [29 CFR 1926.550(a)(15)(v)]. These devices are not a substitute for de energizing and grounding lines or maintaining safe line clearances.

If the power lines are not de-energized, operate cranes in the area ONLY if a safe minimum clearance is maintained as follows:

• At least 10 feet for lines rated 50 kilovolts or below.

• At least 10 feet plus 0.4 inch for each kilovolt above 50 kilovolts; or maintain twice the length of the line insulator (but never less than 10 feet).