Tailgate Safety Talks

Overhead Wire Safety

The hazards associated with overhead electrical lines on Department projects impact your safety, as well as the well being of those working with you and the public. The Department requires an electrical safety plan be established for each project where equipment or work operations may contact or disrupt power lines. Each project is to have a plan that provides identification and marking of all electrical lines. Procedures must be established and followed to ensure that all workers, equipment operators, and truck drivers are fully aware of these hazards, and take the necessary steps to avoid them.

This tailgate safety talk is intended as a reminder of the potentially serious or even deadly consequences that may result if electrical safety procedures are overlooked, as well as what to do should an electrical line be contacted or knocked down.

The importance of conscientiously addressing electrical safety requirements on all construction projects, as well as addressing safety procedures for contacted or knocked down wires, is for your safety, the well being of those working with you and the public.

Reference:
New York State Department of Transportation Policy stipulates High voltage power line safety accidents are 100% preventable. Overhead electrical wire safety requirements are stated in Standard Specification 107-05(J), which reiterates requirements from New York State High Voltage Proximity Act and OSHA 1926 include:

1) Electrical systems shall be assumed to be energized high voltage until verified otherwise by the Utility.
2) The Contractor shall identify and reference all potential electrical hazards and document such actions to the Engineer as part of the Project Safety and Health Plan.
   a) Notify the Utility at least 5 working days before any work begins which requires the Utility to identify voltages and clearances, or de-energize, insulate or relocate lines.
   b) Ensure employees are not placed in dangerous proximity to high voltage. Dangerous proximity applies to the individual and any conductive object.
   c) Dangerous proximity is defined as within 3 m (10ft) for voltages up to 50 kilovolts, and an additional 0.1m for every 10 kilovolts over 50 kilovolts.
   d) Post warning decals on equipment regarding 3 m (10ft) minimum clearance.
   e) Ensure that when any equipment operator is unable to assess clearances, a "spotter" observes for clearance and directs the operator.
   f) Inform employees of the hazards and corresponding precautions when working near high voltage.
3) Prior to the start of work where contact with energized electrical systems is possible, the Contractor shall identify existing facilities and reference their location to prominent physical features:
   a) In advance of work, the Utility shall be called upon to identify energized facilities, and to determine the need to de-energize, insulate, or otherwise protect the facilities against accidental contact.
4) Workers and equipment will not work within 10 feet of energized power lines or equipment.  
   a) No portion of any piece of equipment or any tool or any person is allowed within 10 feet of energized power lines or equipment.  
   b) You can not move High voltage power lines out of your way without appropriate arrangements with the applicable power company.  
   c) Always consider all high voltage power lines as energized high voltage power lines.

5) All equipment capable of coming within dangerous proximity of a high voltage line in the course of its operation shall have a warning sign reading:

   DANGER
   UNLAWFUL TO OPERATE ANY PART OF THIS EQUIPMENT
   WITHIN 10 FEET OF HIGH VOLTAGE LINES

6) If a utility line is contacted or knocked down:  
   a) Keep everyone away from the wire - place guards around the wire to warn others.  
   b) Call the utility immediately.  
   c) Do not attempt to move the wire.

7) If someone contacts an energized wire:  
   a) Do not touch the victim if still in contact or close proximity with the wire.  
   b) Call the utility immediately.  
   c) Call EMS  
   d) Administer CPR, if necessary, when the victim is no longer in contact or close proximity or the wire is de-energized.

8) If wires come in contact with equipment:  
   a) Occupants should remain inside equipment and wait for the utility company to de-energize contacting wires.  
   b) If necessary to leave the equipment, leap with both feet together as far away from the equipment as possible.

June 2006