Safety Meeting Topic #6
Working Around /On Energized Equipment

Employees shall become familiar with the following general guidelines:

1. Only qualified personnel shall work on electrical equipment, systems, and installations. Direct any questions to your foreman.

2. Electrical systems and equipment shall be treated as energized until tested, grounded and locked out, tagged-out, or otherwise proven to be de-energized.

3. Electrical work shall be performed with great care to maximize personnel safety during and after completion of the task. **Shortcuts will not be tolerated.**

4. Electrical installations and maintenance of electrical systems and equipment shall be maintained in a **safe** condition in accordance to applicable guidelines: Cal OSHA/, OSHA, NEC, etc.

5. Supervisor/Foreman shall be responsible for the enforcement of electrical safety procedures.

6. Metal jewelry, belt buckles, etc., shall not be worn in close proximity to energized circuits, systems, equipment, or worn under rubber gloves.

7. Employees shall remain alert at all times when working around or near energized electrical equipment, systems, or circuits.

8. In the event an electrical accident/injury occurs, rescue/aid shall not be attempted until the systems or circuit have been de-energized or it is deemed safe to attempt aid by the rescuer upon examination of the scene.

9. Suitable eye protection and P.P.E. shall be worn by personnel whenever exposed to electrical flash, or arcing.

10. Safety devices and personal protection devices shall be properly used and stored by all employees. Employees shall verify "good condition" of all safety equipment before each use.

11. Never reach blindly into areas that may contain energized parts.

12. Cable reels shall be securely blocked so they cannot roll accidentally.
13. No materials or tools shall be carried on the shoulder when working around or near energized electrical equipment, systems, or circuits.

14. Employees shall become familiar with company/department work procedures and avoid creating shortcuts that may compromise safety. Your safety is paramount - follow safe work practices.

**Specific Procedures For Working On Energized Equipment**

1. Before any energized work is performed you must request an outage. If an outage is unreasonable and is denied, proceed following the Hayward Electric Energized Work Procedures as described below. However, if the work creates an unreasonable risk or compromises safety you may need to postpone the work until an outage is possible regardless of the clients' desire.

2. The Hayward Electric Energized Work Job Hazardous Analysis (JHA) (Refer to Appendix 2 - Forms) needs to be completed and reviewed before any work is done on or near energized wires, equipment, apparatus, etc., “NEAR” means close enough that you or your tools could accidentally make contact with the energized part because of the lack of appropriate barricades between you and the energized parts.

3. A. Work shall not be performed on or near exposed energized parts of equipment or systems until the following conditions are met:

   1. Responsible supervision has determined that the work is to be performed while the equipment or systems are energized.

   2. Involved personnel have received instructions on the work techniques and hazards involved in working on energized equipment.

   3. Suitable personal protective equipment must be provided and used. Suitable insulated gloves shall be worn for voltages in excess of 300 volts, nominal, and UV Rated Face Shield and suitable Flame Retardant Clothing (Flash suit or Nomex) must be worn.

   4. Suitable eye protection has been provided and is used.

   5. Where required, suitable barriers, barricades, tags, or signs are to be placed for personal protection.

   6. Warning signs and barriers shall be appropriately placed to isolate other personnel from the electrical hazards. Suitable barricade tape would be Red Tape with Black letters reading "Danger" or "Warning". Personnel shall obey the warnings.
7. Never re-position, remove, or tamper with warning signs or barricades unless authorized by your foreman.

8. Do not perform work on energized 480V equipment, circuits, or systems alone. A minimum of a two man crew is required.

B. After the required work on an energized system or equipment has been completed, an authorized person shall be responsible for:

1. Removing from the work area any temporary personnel protective equipment, and

2. Reinstalling all permanent barriers or covers.
SAFETY MEETING # 6 - WORKING AROUND/ON ENERGIZED EQUIPMENT
TRAINING QUIZ

1. It’s always okay to work on energized equipment if you need to.
   A. True
   B. False

2. Carrying your tools or materials on your shoulder around energized equipment is not allowed.
   A. True
   B. False

3. To work on energized equipment you must_______________________.
   A. Always wait for a co-worker to help you
   B. Use the proper PPE including hot gloves, Nomex, and face shield
   C. Have a request from the customer
   D. All of the above

4. Electrical systems should be___________________.
   A. Treated as energized until tested
   B. Treated as energized until grounded and locked out
   C. Treated as energized until tagged out
   D. All of the above

5. It’s okay to wear a watch or ring under rubber “hot” gloves.
   A. True
   B. False

6. Suitable rubber gloves must be worn for voltages over _________.
   A. 100 volts
   B. 300 volts
   C. 500 volts
   D. 1000 volts

7. You must be trained and authorized to do “hot work”.
   A. True
   B. False

8. You must have a two-person team to do “hot work” on _____________.
   A. 120 volts
   B. 240 volts
   C. 300 volts
   D. 480 volts

9. Electrical safety enforcement while someone is doing “hot work” is the responsibility of _____________.
   A. The foreman/supervisor
   B. The worker performing the “hot work”
   C. Everyone in the area
   D. All of the above
10. Failing to get authorization before working on energized equipment is grounds for termination.
   A. True
   B. False

11. You should never work on energized equipment when you are tired.
   A. True
   B. False

12. You should never reach into an area that may contain energized parts.
   A. True
   B. False

13. Wearing safety glasses is okay for doing “hot work”.
   A. True
   B. False

14. A responsible supervisor must determine if it is safe to work on energized equipment.
   A. True
   B. False

15. If an injury occurs while working on energized equipment, a rescue attempt should be made ________.
   A. After the equipment has been de-energized
   B. After a rescuer has determined it’s safe
   C. By trained rescue personnel
   D. Any of the above