

being made for locking the switch "off" and tagging it. This precaution will prevent service interruptions in the main circuit when power must be shut off in the branch circuit, and it will also prevent accidental starting of extra equipment that is tapped in

### Employee Training

Few plants experience difficulty in selection and installation, but in maintenance and use of electrical equipment, deviation from safe practices is sometimes tolerated, with the usual result that unnecessary hazards are created and men are injured and killed. Therefore, for maximum effectiveness, the safety program should include thorough training of all employees who work with the electrical installation of the plant or operate electrical equipment. In addition to instructions on the hazards of electricity, employees should be trained in first aid, the use of warning signs, guards, and other protective devices, and in safe operational procedures. It is essential that they be trained in the mouth-to-mouth method of resuscitation and that distribution employees, especially, be

trained in the pole-top method of resuscitation.

The training program should consist not merely of generalization and indefinite recommendations, it should be based on the plant's electrical system and applied specifically to plant operations.

Supervisors should be given such instructions as may be necessary to acquaint them with the plant's electrical hazards, and they should be required to maintain close supervision over all operations which involve the use of electrical equipment. They should encourage employees to report immediately any electrical defects observed and this equipment should be repaired or replaced at once.

It is recommended that members of the plant safety department familiarize themselves with the codes and standards which apply to their equipment and operation and that someone from the electrical maintenance staff be an active member of the plant safety committee. The electrical maintenance crew should consist of qualified electricians and other technically trained personnel according to the type of electrical equipment required in the plant.

### References

- American Standards Institute, 1430 Broadway, New York, NY 10018  
*Definitions and General Standards for Wire and Cables*, C8 1  
*Dimensions of Caps, Plugs and Receptacles*, C73 (Also NEMA WD 1-1965)  
*Manual and Automatic Station Control, Supervisory and Associated Telemetering Equipment*, C37 2  
*Relays and Relay Systems Associated with Electric Power Apparatus*, C37  
*Requirements for Metallic and Associate Coverings for Insulated Cables* C8 15 (Also IPCEA S-54-401-1957 and NEMA WC2-1958)  
*Safety Rules for the Operation of Electric Equipment and Lines* C2 4 (Also NBS Handbook H34-1938)  
*Specifications for Rubber Insulating Tape* C59 6 (Also ASTM D119)  
*Specifications for Weather-Resistant Wire and Cable (URC Type)* C8 18  
*Specifications for Rubber Protective Equipment for Electrical Workers* J6
- Dalziel, Charles F.  
"Effect of Electric Current on Man" *Electrical Engineering*, February 1941  
"Scientific Facts Concerning Electrical Hazards" *National Safety News*, October 1947  
"Electricity—Good and Faithful Servant" *National Safety News*, September 1961
- McElroy, Frank E. "Check Up on Your Electrical Outlets" *Catholic Building and Maintenance* 15 92-98 (July-August 1963)