10 things everyone need to know about UPS Safety

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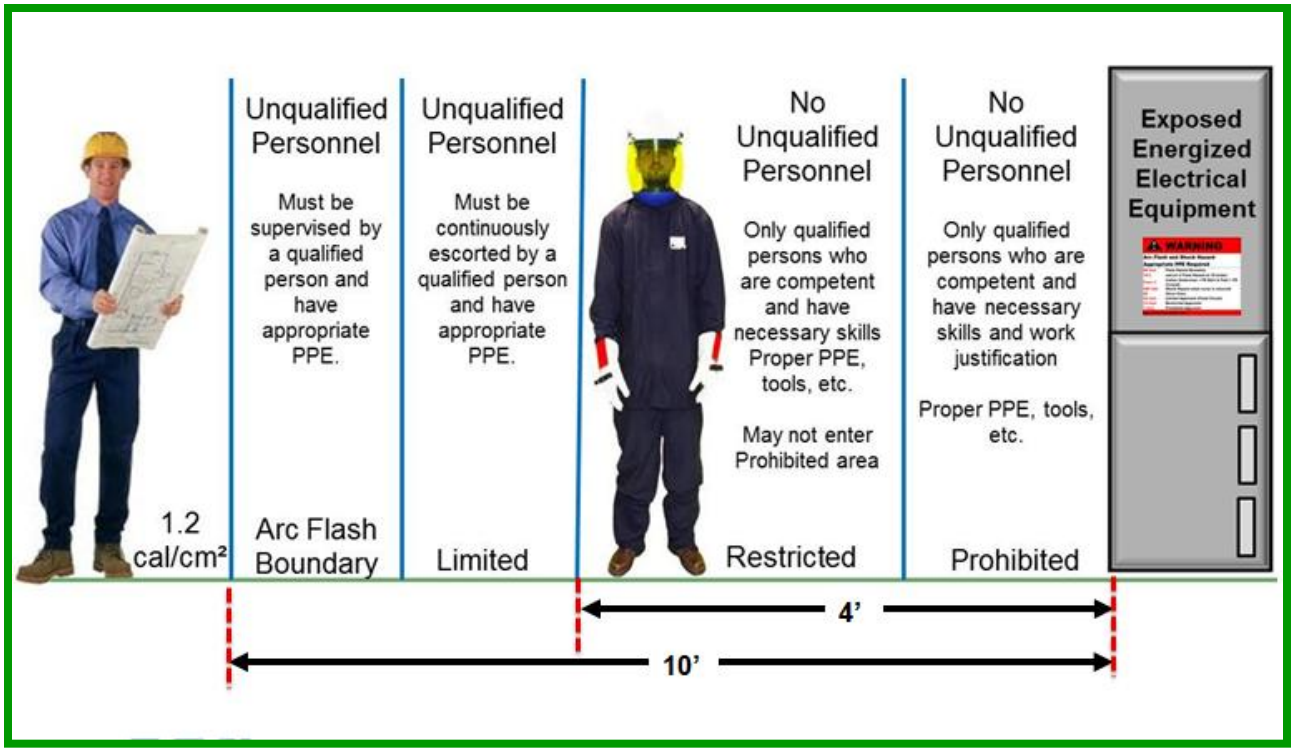
1. What types of services do UPSs need and who performs it?

Preventive maintenance, battery maintenance and repair service. The more complicated the equipment, the more important it is to have experts perform maintenance.

2. So, we can’t do it ourselves?

Without the right safety training, extensive (and often complex and proprietary) diagnostic, analysis and connectivity tools, UPS owners can perform only very limited service themselves.

3. Keep appropriate distance from the unit



Annex D of the National Fire Protection Association (NFPA) 70E standard provides a calculation to determine exact boundaries. Eaton has a conservative rule of 10' for the arc flash boundary.

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4. Field technicians should have appropriate training and certification

Training should cover electrical hazards such as arc flash, and procedures for incident reporting, PPE, hazard recognition and communication, waste handling and more.

At a minimum, training programs should include instruction in:

OSHA 10/30 general industry/construction requirements

NFPA 70E arc flash safety protocols

Electrical safe work practices, including proper use of personal protective gear

Lockout-tagout (LOTO) safety procedures

First aid and cardio-pulmonary resuscitation (CPR)

5. Field technicians must wear protective gear

Even when working with a de-energized unit, field technicians should be wearing non-conductive safety glasses, specially designed safety clothing and leather safety boots. When working with an energized unit, Level 4 protection is required.

6. Prepare ahead and keep good records

Keep diagrams up to date, so there's a reliable record of the data center or facility's electrical system. Implement employee training and hold pre-job meetings to brief employees on safe work practices.

7. Configure each UPS with a maintenance bypass

A maintenance bypass provides an alternate power path that allows technicians to safely service or replace a UPS without interruption without danger of electrical shock.

8. Implement arc flash reduction strategies

Arc flash mitigation programs should begin with a hazard analysis usually performed with a qualified power systems engineer.

9. Post signage to warn of arc flash danger

NFPA 70E standard requires employers to post signage notifying employees of potential arc flash dangers. Mark arc flash hazard zones on the floor so workers can see how far they must keep away from equipment.

10. Select a service vendor with a strong safety record

Choose a provider with a proven track record of safe performance.

Reduce liability and injury risking by asking to see records of solid safety records during RFP process.