



Herb Whittall  
EGSA Technical Advisor

## A Shortage of Trained Personnel

I often find it surprising that, despite the fact that I live in a small town, issues impacting our industry are often reported on by my local newspaper. Recently, for example, my local paper ran two articles that dealt with a problem currently facing our members: the lack of trained workers in the electrical field. The first was announcement of a “Basic Line Worker Boot Camp” run by the local Community College (IRCC) and Employ Florida Banner Center for Energy. This is a 200-hour course offered free. The second mention came in the classified section: “Three Programs Help Workers Get Into Energy” discussed the same program funded by the “Workforce Board.” This is the first time I have seen anything like this in the local paper so it may mean that the utility industry needs to train electrical equipment workers and their trainees may be available for our members also.

### Problems With NEC?

Don Dunavant of D Square Generators in Seattle is having trouble with changes in the National Electric Code 2008 edition. Article 702 Optional Standby Systems Section 5 Capacity and Rating was changed from “An optional standby system shall have adequate capacity and rating for the supply of all equipment intended to be operated at one time.... The user of the optional standby system shall be permitted to select the load connected to the system.” to Section 702.5 (B) System Capacity. “The calculation of load on the standby source shall be made in accordance with article 220 or by another approved method.” What this has done in some Authority Having jurisdiction’s eyes is to remove the ability of the owner of the standby system to choose which equipment needs to be serviced by the standby systems. Now everything that might be in the circuit needs to be taken into consideration when sizing the standby system. In Don’s case, houses that used to order a 5 to 10 kW standby system need to have a 30 kW system even when the water heater and system furnace are gas fired. If any of you are having the same problem we need to get a comment written to NFPA to change back to the 2005 wording. According to NFPA, the house outlets should be considered as “lighting loads” and not have a value of 180 watts per outlet. NFPA also said the panel thought the user—if he did not want his complete system on the emergency standby system and used an automatic transfer and startup of the emergency standby system—should have the loads he wanted connected brought out to a sepa-

rate panel and have the emergency standby system connected to that panel. Please let me know is a problem for you; email me at [hwhittall@comcast.net](mailto:hwhittall@comcast.net).

There is a new Article 708 in the 2008 edition of the National Electric Code. It was written at the request of the Homeland Security Department and is titled “Critical Operations Power Systems.” The article’s scope references NFPA codes we usually deal with—NFPA 99, 101 and 110—but it also references and has extracted text from NFPA 1600 “Standard on Disaster/Emergency Management and Business Continuity Programs.” This article deals with Critical Operation Power Systems (COPS) which it defines as “power systems for facilities or parts of facilities that require continuous operation for the reasons of public safety, emergency management, national security or business continuity.” The systems covered are classified such by municipal, state, federal or other codes by any governmental agency or engineering documentation showing the need for such a system. Article 708 goes into Risk Management, Identification of Hazards and Protection from Physical Damage, Testing and Commissioning. It covers the power source, wiring and means of disconnection. Interestingly, Article 708.20 (F) 6 says: “Where the COPS is supplied by a single generator, a means to connect a portable or vehicle-mounted generator shall be provided.” Article 708.22 (A) states: “A portable, temporary or redundant alternative power source shall be available for use whenever the COPS power source is out of service for maintenance or repairs.” Selectivity is also required in Article 708.52 (D) which says: “Ground fault protection for operation of the service and feeder disconnecting means shall be fully selective such that the feeder device, but not the service device, shall open on ground faults on the load side of the feeder device.”

### NFPA 99 Meets

The meeting for NFPA 99 and 110 ROP was held in January. For NFPA 99, the major issue was the rewrite of chapter 4 by ASHE. The proposal was rejected because it was not written in code language. For NFPA 110, the major issue was acceptance testing and yearly testing. New and unoccupied buildings would be tested using the normal circuit breakers and transfer switches. Occupied buildings should be tested without disrupting power to essential loads. The meeting to discuss the comments generated from the ROP will be in Chicago in late September, 2008. □