

13 Tips for Emergency Power Performance

The following questions form a basic checklist for evaluating an emergency power supply system (EPSS) against physical threats. These should be considered during the design and commissioning of a new system or when evaluating the vulnerabilities on an existing emergency power system.

1. Does the EPSS have enough viable power supplies for a worst-case disaster? What disasters will the EPSS be protecting against?
2. Are the valuable power supplies essentially independent or can they be disabled for the same reason?
3. Is there enough fuel stored or available from a supplier for a worst-case event? In case of a disaster, does the fuel supplier have the capability and commitment to provide fuel needs?
4. Has the emergency power system been tested for a time period that is as long as the worst-case disaster scenario?
5. Has the system been subjected to a "cold Turkey" utility outage test?
6. Has it been thoroughly tested since the last time modifications were made?
7. Are the indoor components of the EPSS protected from elements if the building enclosure fails?
8. Are the indoor components protected from wind-blown missiles? At what speed?
9. If engine-generators have compressed air starting, are redundant engine and motor-driven air compressors available?
10. Does the system meet the requirements of NFPA: 70 National Electrical Code, NFPA 110: Standard for Emergency and Standby Power Systems, and the local and state codes?
11. Is the automatic transfer switch in working order?
12. If the system floods, is the EPSS likely to stay in service at least as long as the emergency loads?
13. Where does the facility fall in the priority scheme of the utility? (For example, a hospital is the first load to which a utility typically restores power.) How close to the power source is the facility?