

Power outage/blackouts

This is the most business interruption. Possible causes include severe weather, electrical equipment failure, human error and sabotage.

Preventive steps:

- Determine the length of the usual outage.
- Determine outage history for your facility. Keep in mind that some utilities do not count an outage of less than one minute as an outage.
- Determine legal requirements for emergency power.
- Determine your facility needs for standby power in addition to legal requirements. Consider priorities/load requirements with respect to length of time required. For instance, some computers can be shut down while others must remain operational.
- Determine how long you think you may require or want emergency or standby power.
- Determine prime mover fuel – natural gas or diesel.
- Construct adequate fuel storage facilities.
- Protect critical applications with UPS systems backed-up with generators.
- Size on-site generation equipment to handle existing load requirements and add capacity for growth.
- Determine load transfer sequence, the most critical loads should be transferred to standby power first.
- Test operation at least monthly.
- Train key electricians on all operational phases of load transfer and emergency generation equipment operation.
- Have backup generations available – either purchased or leased through a generator supplier open 24 hours a day – as a last resort.
- Construct access for easy connection of back-up generators to existing electrical system. A pre-wired transfer switch and external receptacle can save time in an emergency. Coordinate plug details with the generator supplier.
- Be sure electrical staff is trained to connect back-up generation to existing electrical system.
- Arrange for back-up fuel for generators should the outage last longer than expected.
- Keep a stockpile of batteries and flashlights throughout the facility.
- Monitor and maintain all key electrical equipment for the facility. Since transformers 500 kVA and larger are not usually manufacturer stock items, consider purchasing spare transformation for critical loads or arranging with local utility for emergency lend/lease.
- Use battery-operated radios, cell phones and beepers.
- Maintain a current list of telephone numbers including local utility provider.

After the power outage:

- Determine if problems is confined to your facility or is local or regional in nature.
- Turn off all non-essential loads.
- Establish a load start-up procedure when returning to normal power.
- Decide if occupants should be sent home or relocated.