

E70Guide UPS System Inspection

FREQUENCY: Annual

Application:

This guide card applies to those systems which provide an alternate or emergency power supply in the event that commercial electrical service is lost. This alternate power supply is provided by a storage battery system, and the UPS system uses an inverter to convert DC to AC power.

Special Instructions:

1. Obtain and review manufacturer's instructions.
2. Review "as-built" electrical drawings for locations of connections and all major breakers.
3. Schedule PM for UPS and related components for the same date.
4. Check input power to main transfer switch before tripping in order to ensure availability of power to computer room when outside utility power is disconnected.
5. Make all adjustments in accordance with manufacturer's instructions.
6. All tests shall conform to the appropriate manufacturer's test procedures and the values used as standards shall conform to GSA and ANSI specifications.
7. Schedule power transfer with operating personnel and occupant agencies.
8. Utilize proper lock out/tagout procedures.

Checkpoints:

1. Check UPS inverter frequency and output voltage for compliance with manufacturer's instructions. Record findings.
2. Start and operate system under load by shutting off main power to computer room.
3. While system is under load, check all gauges for proper readings in accordance with manufacturer's instructions. Record findings.
4. While system is in emergency operation, thoroughly observe system for any signs of malfunctions, defects, or imbalance in the load.
5. Operate unit for 12 minutes for maximum operation.
6. Record all gauge readings, malfunctions, voltage and current input and output, and sequence of operation of related sub-systems.
7. After system is returned to normal operation, check all breakers, switches, LED's, and gauges to ensure secured connections and proper readings.
8. Remove tags and locks and return all circuits to normal service.
9. Perform all check points under Semi annual PM Guide.

Tools & Materials:

1. Tool group B
2. Locks and tags
3. LED's
4. Vacuum or dry low pressure unit
5. Torque wrenches

E70Guide UPS System Inspection

6. Ladder
7. Appropriate Lubricants
8. Micro-ohmmeter
9. Megger