

PARADIGM CONTROLS OF TEXAS, LLC



Innovative Solutions for Electrical Equipment

Preventive Maintenance

- The care and servicing for the purpose of maintaining equipment in satisfactory operating condition by providing for systematic inspection, detection, and correction or prevention of unscheduled outages.
- Preventive maintenance tends to follow planned guidelines to prevent equipment and machinery breakdown
- Preventive maintenance, including tests, measurements, adjustments, parts replacement, and cleaning, performed specifically to prevent unexpected downtime from occurring

MV VFD

- Visual inspection and cleaning
 - a. Switch Gear
 - b. Transformer
 - c. Diode section
 - d. Inverter section
 - e. Control and output section
 - f. Split point
- Megger check
 - a. Transformer primary/secondary
 - b. VFD output.
- Voltage check
- Control circuit check
- Final verification of program
- Operation check

MV Switchgear

- While equipment is still energized check the following
 - a. Check illumination of all indicating lights
 - b. Listen for abnormal conditions (crackling or sizzling)
 - c. Smell for burning or acrid odors
 - d. Check protective relays for alarms
- Remove main power
 - a. Inspect all bus and cable connections for tightness and signs of heat stress.
 - b. Test continuity of all fuses.
 - c. Test all breakers and contactors bolted electrical connections.
 - d. Test all breakers and contactors for mechanical operation.
 - e. Complete insulation test of all bussing.

UPS

- Perform visual inspection
 - a. Printed circuit boards
 - b. capacitors
- Internal operating parameters
 - a. Rectifier bridge
 - b. Power supply voltages and waveform
- External operating parameters
 - a. System input/output voltages
 - b. DC charging voltages
- Environmental parameters
 - a. General cleanliness of UPS area
 - b. filters
- Battery cabinet checks

HVAC

- Refrigerant system
 - a. Inspect operation and refrigerant pressures
- Lubrication system
 - a. Oil level in compressor
 - b. Oil lines for leaks
- Electrical systems
 - a. Operating controls
 - b. Motor terminals
- Operational checks
 - a. Condenser/evaporator coils
- Please keep spare filters on site at all times

Transformer

- Exterior visual inspection
 - a. Oil levels
 - b. Oil leaks
- Interior visual inspection
 - a. Termination tightness
 - b. Bushing condition
 - c. Overheating
- Testing
 - a. Meggering
 - b. Oil viscosity