

ELECTRICAL MAINTENANCE SPECIFICATION E-190

UNINTERRUPTIBLE POWER SUPPLY (UPS) MAINTENANCE

1. OBJECTIVE

To ensure that uninterruptible power supplies are operational and function in accordance with their design and Ministry standards.

2. DETAILED PERFORMANCE SPECIFICATIONS

2.1 Routine Maintenance Services

The Contractor must:

- a) repair or replace non-functioning UPS and their components, including but not limited to batteries, in conformance with manufacturers' recommendations. Batteries must be replaced when their charge falls below 80% of their rated capacity;
- b) repair or replace UPS and their components that constitute or have the potential to constitute an immediate Safety Hazard to the highway user or cause a Traffic Disruption, and Respond within 1 hour;
- c) repair or replace UPS and their components that do not operate as per their original design intent but are not immediate Safety Hazards, and Respond on the next Work Day;
- d) repair or replace UPS and/or their components that operate as per the original design intent, do not create a Safety Hazard, and are structurally sound but have identified deficiencies, and Respond within 30 days;
- e) perform Preventative Maintenance annually, with the exception of battery testing which must be done at 6 month intervals;
- f) notify the RTMC of any malfunctioning UPS causing Traffic Disruption within 5 minutes from the time the malfunction was detected by or reported to the Contractor and notify the RTMC when repaired;
- g) remove or cover graffiti in accordance with the performance time frames listed in the *Highway Maintenance Specification – Litter Collection and Graffiti Removal*; and
- h) document all activities related to electrical maintenance of UPS including but not limited to field inspections, Patrols, testing, complaints received / responses made, and all changes made to the UPS in a timely manner to the Province's satisfaction.

2.2 Materials

Refer to Article 3 of the Introduction to the Specifications.