PQ Meter Testing
Scope of Work
Attachment L-8

This scope of work is shared by UPS, Eaton DC, Eaton PDU/PDR/RPP/STS, Flywheel, Non Eaton UPS and Distributed Bypass. The following is an outline of general procedures and tests, if applicable, that are normally performed by Field Service Personnel during the course of PQ Meter Testing. All checks and processes may not be applicable to all equipment models. Method of procedure is written assuming a UPS is being tested.

PQ METER

During the course of the testing a PQ metering device will be used to record voltages, currents, and harmonic content at the output of the UPS. Any irregularities will be noted and included in a subsequent written report.

METHOD OF PROCEDURE

1. Receive approval from the electrician and/or site personnel to proceed with transferring the UPS off line.
2. Transfer critical load to bypass.
3. Transfer critical load to maintenance bypass (if applicable).
4. Shut down UPS module(s).
5. Lockout tag-out performed (if applicable).
6. Remove covers from the UPS to safely expose the output terminals or distribution.
7. Connect PQ meter to monitor the output and perform meter setup as required (Delta/Wye etc.)
8. Restart UPS module(s) and transfer to bypass.
9. Transfer critical load from maintenance bypass to bypass.
10. Restart UPS module(s) and transfer to normal mode.
11. Monitor output of the UPS for anomalies for 1 hour.
12. Perform a battery discharge (period of up to 4 minutes) by opening the rectifier input to the UPS system.
13. Monitor the UPS operating parameters during the battery discharge.
14. Restore rectifier input to the UPS system and allow for battery recharge.
15. Transfer UPS system to bypass.
16. Monitor output of the UPS for anomalies.
17. Transfer UPS system to normal.
18. Transfer UPS to bypass.
19. Transfer critical load to maintenance bypass (if applicable).
20. Shut down UPS module(s).
21. Lockout tag-out performed (if applicable).
22. Remove PQ meter from the UPS.
23. Replace covers removed in step 6.
24. Restart UPS module(s) and transfer to bypass.
25. Transfer critical load from maintenance bypass to bypass.
26. Restart UPS module(s) and transfer critical load to normal mode.
27. Procedure is complete.

A report shall be provided to the customer documenting test results.