Eaton Three-Phase Lithium Solution
Start-Up Scope of Work
Attachment L-13

The following is an outline of general procedures and tests, if applicable, that will be performed by Field Service Personnel during the course of a standard start-up of a Lithium battery system. All checks and processes may not be applicable to all equipment models. This service does not cover installation of physical cabinets and cabling

1.0 VISUAL INSPECTION

1.1 Visually inspect all equipment for signs of damage and/or foreign materials.
1.2 Check all battery cells for damage
1.3 Observe type of ventilation, room cleanliness, use of proper signs and any safety related items that may be noteworthy
1.4 Check for proper cell interconnections with respect to polarity throughout the battery system.

2.0 MECHANICAL INSPECTION

2.1 Verify internal power connections in battery cabinet for proper torque according to manufacturer specifications.
2.2 Check all control wiring terminations and plugs in battery cabinet, battery cabinet to cabinet, and from the UPS equipment for tightness and/or proper setting.
2.3 Check to see that all battery modules are secure and all packing materials have been removed.
2.4 Verify the battery system grounding meets manufacturer specifications.
2.5 Verify the battery cabinet/rack has been anchored according to the manufacturer specifications.

3.0 ELECTRICAL PRECHECK

3.1 Check battery cabinet for grounds.
3.2 Check DC bus for short circuits.
3.3 Check for power wiring polarity between parallel battery cabinets or racks.

4.0 CONNECT AND CONFIGURE SYSTEM COMPONENTS (UPS & Battery Management Systems)

4.1 Connect to the Battery Management System
4.2 Perform installation checks
4.3 Confirm, prepare, and configure the Battery Management System configuration
4.4 Program the UPS for proper battery application settings.

5.0 SYSTEM & COMMUNICATION VERIFICATION (Contingent on Customer Availability at Startup)

5.1 Install customer supplied network communication cable.
5.2 Provide reference to the MODBUS register map.
5.3 Configure IP address
5.4 Perform system-data check using the manufactures BMS software.
5.5 Verify the customer supplied EPO operation.

Prior to leaving the site, the Customer Support Engineer will familiarize customer personnel in the operation of the battery system. The familiarization will take 1 hour to 8 hours as determined by Eaton. Familiarization time required will depend on site personnel, equipment type and equipment availability.