Battery Regeneration Test Plan

Test Battery : AGM Type Battery for UPS

- 10 terminals, 12V 100A, (Narada)
- 10 terminals, 12V 105A, (FIAMM)

Test Period : 3 days

Test Procedure

- 1. Physical Inspection
 - ✓ Checking whether the battery is badly damaged and broken in appearance and it has a trace to the electrolyte flows through the broken gap.
- 2. Checking Battery Status by Battery Checker
 - ✓ Battery Voltage
 - ✓ Internal Resistance (Standard: approx. 6.31 m Ohm)
 - ⇒ Classify A, B and C Group depending on Battery Status
 - ⇒ C Group batteries would be excluded for Initial Battery Test
 - Charging & full Discharging cycle test will be required for C Group Battery before trying to regenerate, because it has high possibility for them to be damaged inside.
- 3. Select one battery for Sample Test and preparation for Regeneration Test
 - ✓ To prove and check battery characteristic and Regenerating & Charging curve based on Battery Specification Sheet.
 - ✓ Discharging for A and B Group Battery to erase existing memory effect of the batteries.
- 4. Select 3 or 4 batteries from each brand and Regenerate
 - ✓ To regenerate 3 or 4 battery simultaneously.(same brand and same voltage & ampere)
 - ⇒ Approx. 10 to 15 hours depending on battery pattern.
- 5. Constant current Discharging Test (Finalizing Test)
 - ✓ Narada : 5Hours, Cutting Voltage 10.5V, discharging current 18.5 A
 - ✓ FIAMM : 3Hours, Cutting Voltage 10.5V, discharging current 28.4 A
 - ➡ More than 80% of design discharging time will be qualified for more than 1 year using.
- 6. Charging again_ option (if it has time within limited period)