

**Stationary Battery Capacity Testing :** ONEAC service technicians are thoroughly trained in capacity testing and can monitor individual cell voltage and connection resistance. Our factory-trained team can provide you with experience, on-site recommendations, and practical corrective actions.

#### **A diagnostic tool for battery maintenance**

At ONEAC we recognize capacity testing as an important diagnostic tool for battery maintenance. It is used to project capital expenditures and determine actual capacity and proper equipment function. Per IEEE Standard 450, capacity testing should be performed within two years of installation, and for wet batteries, every five years thereafter until degradation. VRLA batteries should be tested annually until degradation per IEEE standard 1188.

#### **Capacity testing can help answer questions**

Will your battery provide the needed protection time it was designed for? When should you budget for a new battery? Does your equipment work properly when the battery decreases below a set voltage? Is your battery providing the capacity claimed by the manufacturer? Is your present maintenance program providing adequate care?

When combined to the loss of data, or damaged equipment, capacity testing is very cost-effective. And it can help you plan for future purchases. If a battery's capacity is determined to be less than 85% of the manufacturer's rating, replacement should be considered.

#### **Why have ONEAC capacity test your batteries?**

ONEAC service technicians are thoroughly trained in capacity testing and can monitor individual cell voltage and connection resistance. Our factory-trained team can provide you with experience, on-site recommendations, and practical corrective actions.

Our technicians use the most modern testing equipment and techniques that can provide 15-20% improved accuracy over manually-monitored equipment. Inaccurate testing can lead to an incorrect diagnosis of battery failure, or in the worst case, data loss and equipment failure.

#### **Capacity testing**

ONEAC performs a complete battery inspection prior to capacity testing, in accordance with IEEE standards. This provides individual measurements of each cell and connection prior to testing, allowing ONEAC to uncover and correct problems before they cause test failure. Our Stationary Battery Capacity Testing Program includes a 19-Step Performance Test, a 15-Step Acceptance Test, or a 17-Step Service Test, with backup battery recharge optional, depending upon testing equipment.



# Stationary Battery Capacity Testing: Features and Specifications

| Test Features                                                   | Performance Test | Acceptance Test | Service Test |
|-----------------------------------------------------------------|------------------|-----------------|--------------|
| Equalize charge battery for 72 hours prior to test              | •                | •               |              |
| Measure and record resistance and torque values                 | •                | •               |              |
| Measure and record specific gravity readings (wet cells only)   | •                | •               | •            |
| Measure and record pilot cell and ambient temperature           | •                | •               | •            |
| Read and record battery terminal float voltage                  | •                | •               | •            |
| Assemble and connect load tester and monitor                    | •                | •               | •            |
| Connect cell sensing leads                                      | •                | •               | •            |
| Calibrate monitoring unit                                       | •                | •               | •            |
| Set up all test parameters in monitor unit                      | •                | •               | •            |
| Measure and record cell voltage readings via monitor            | •                | •               | •            |
| Connect backup battery (optional)                               | •                |                 | •            |
| Disconnect test battery                                         | •                |                 | •            |
| Connect load tester                                             | •                | •               | •            |
| Run test for specified time and current                         | •                | •               | •            |
| Recharge battery to with 0.25 volts of float voltage (optional) | •                | •               | •            |
| Connect test battery                                            | •                |                 | •            |
| Remove backup battery (if applicable)                           | •                |                 | •            |
| Disconnect cabling and equipment                                | •                | •               | •            |
| Submit report                                                   | •                | •               | •            |

## The ONEAC difference

ONEAC's BatteryCare™ Plans can be designed to fit any need – telecommunications, UPS, Utilities, Switchgear, etc. And our planned maintenance inspections can supplement capacity testing to assure that your system delivers maximum power when you need it.

ONEAC service and system support goes beyond offering a complete Stationary Maintenance program as recommended per IEEE standards. ONEAC also offers the following services as part of our every day customer support:

- **90 day warranty on all parts and labor;**
- **7 day, 24 hour response coverage;**
- **Toll-free number for emergency service response.**

## Total solution provider for service & system support

Contact ONEAC for detailed information on our complete Turnkey DC Power Installation and BatteryCare Plans.



ONEAC, in cooperation with its vendor partnerships, has the industry's most comprehensive lead-acid battery recycling program. Federal and state regulations require lead-acid batteries be recycled. Our battery recycling program ensures that you are in full compliance with all EPA, DOT and/or federal and state regulations. Our program is flexible enough to meet all your logistical needs. For instance, we can pick up your spent lead-acid batteries or you can deliver them to the nearest service center yourself. It's your choice. ONEAC's nationwide service organization can arrange pickup, transportation, and recycling at any one of our affiliated smelters.

ONEAC is a registered trademark and BatteryCare is a trademark of ONEAC Corporation. All other trademarks are the property of their respective companies.

ONEAC is a UL/BSI registered corporation —  
Certification No. A2900



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