



## Preventive Maintenance For DC Plants

### Scope Of Work

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- Includes four quarterly rectifier and control unit preventive maintenance inspections scheduled during normal business hours
- Includes four quarterly preventive maintenance inspections on the associated battery system
- Includes 24 hour emergency service availability
- Includes free telephone technical support
- Repairs and corrective maintenance is not included but is available at discounted contract customer rates.
- Subject to all Terms & Conditions as noted in the 24/7 Technology Maintenance Agreement.

### **DC Plant Preventive Maintenance – Detailed Check List**

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| 1. Measure room ambient temp and check ventilation. | 9. Check calibration of meters                              |
| 2. Measure and record AC input voltage              | 10. Check rectifiers for load sharing                       |
| 3. Measure and record DC output voltage             | 11. Verify proper alarm functions*                          |
| 4. Measure and record AC ripple voltage             | 12. Verify integrity of fuses                               |
| 5. Measure and record DC current                    | 13. Remove one rectifier module and verify redundancy*      |
| 6. Measure and record output KW                     | 14. Identify any loose connections and correct as necessary |
| 7. Estimate redundancy remaining in plant.          | 15. Check operation of fans                                 |
| 8. Check continuity of battery racks to ground      | 16. Clean unit  |
- \* Where possible

### **Battery Preventive Maintenance – Detailed Check List**

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| 17. Perform safety evaluation of battery, racks, protective equipment and environment. Note and report any discrepancies.          | 21. Measure and record the full string charging voltage and current.             |
| 18. Record the ambient temperature of the battery room.  | 22. Measure and record the AC ripple voltage and current.                        |
| 19. Clean normal cell dirt/dust accumulation. Note: some environments may not allow for practical management of dust accumulation. | 23. Measure and record the voltage to ground for each string/cabinet.            |
| 20. Inspect each jar for signs of cracks, excessive bulging and leakage.   | 24. Measure and record the float voltage across each cell/jar.                   |
|  | 25. Measure and record the conductance of each cell /jar.                        |
|  | 26. Check for corrosion on battery terminals and connectors. Clean as necessary. |
|  | 27. Re-torque battery connections to manufacturers specs annually                |