Network Infrastructure Preventive Maintenance

NetPerform™ Optimization Services

Take Control of Your Maintenance Budget With A NetPerform™ Preventive Maintenance Plan

Emerson understands your specific needs and has developed multiple contract packages that will meet or exceed all of your requirements.

Key Features

- Regular inspections, maintenance and testing of equipment at scheduled intervals by experts

- System status report available via secure web access on the Emerson Network Power FreedomCare™ website

- Recommendations for required repairs and corrective actions

- Full service or maintenance-only programs available

- Multi-site customized programs available backed by experienced program managers

- 24x7 technical support service and field technicians to provide prompt responses

- Guaranteed emergency on-site response time coverage available

Proactively catch costly emergency repairs with regular inspections of your network infrastructure.

Routine maintenance increases the life of your equipment in your telecommunications infrastructure network and identifies needed repairs and upgrades. Emerson Network Power serves as the single point of contact for all your power and facility maintenance needs allowing you to provide continuing service to your customers.

All Emerson preventive maintenance plans include complete documentation of system status and recommendations for corrective steps to prevent future problems. Enjoy peace of mind with a preventive maintenance plan to keep your power equipment running at maximum efficiency and optimal reliability.

Contact Emerson Network Power for all of your maintenance needs:

ESNA.FieldService@Emerson.com
800-800-5260

Frequent internal resistance testing indicates when batteries fall below 100% capacity and provides timely assessments of cell and string state of health to ensure network reliability.
DC Power Systems and Rectifiers
- Visual inspection of plant and connections
- Measure and record system capacity and load
- Measure and record system voltage
- Verify alarm set points and operation (local and remote)
- Calibrate meters
- Thermal scan/infrared analysis
- Measure and record noise level
- Inspect filter capacitors, as applicable
- Ensure proper operation of LVD, if equipped

Inverters
- Measure DC and AC voltages and currents
- Measure and record system capacity and load
- Measure and record system voltage
- Verify alarm set points and operation
- Thermal scan/infrared analysis
- Inspect filter capacitors, as applicable
- Test inverter transfer

Battery Maintenance
- Visual inspection
- Tightening and torquing of connections
- Measurements and readings of individual cell voltage, intercell connection resistance, internal cell resistance
- Rehydration of flooded cells
- Removal of dust and dirt
- Calculate estimated reserve time

As part of our comprehensive preventive maintenance plans, we offer on-site meter calibration to ensure proper readings to prevent costly repairs in the future.

By combining our different battery testing and maintenance techniques shown here, you will be able to maximize yield and improve remaining life prediction accuracy.
## Preventive Maintenance Agreements Service Levels

### DC Power Systems, Rectifiers, Inverters, Converters

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<thead>
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<th>Emergency Response</th>
<th>Coverage Details</th>
</tr>
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<td>Preferred</td>
<td>Four preventive maintenance visits scheduled 7 x 24</td>
<td>Four-hour emergency response to locations within 150 miles of an ESNA service center.</td>
<td>Full service coverage includes travel, labor and parts for required repairs. Replacement parts coverage is limited to minor parts only.</td>
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<td>Essential</td>
<td>Two preventive maintenance visits scheduled 8 x 5</td>
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1 Programs are subject to the terms identified in the Scopes of Work for each respective program and the General Assumptions and Terms of Conditions of Sales provided.

2 Emergency response is defined as “site down” or “battery on discharge” situations in response to calls received by the ESNA 24/7 Technical Assistance Center at 800-800-5260.

### Battery Systems

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3 Battery replacement service is billable on a firm price quote or time and material basis.
Additional Equipment We Service:

Emerson Network Power can also provide complete turnkey contracts for your entire network infrastructure needs including:

- HVAC
- UPS
- Fire Suppression
- VFDs
- Motors
- Lighting
- Generators
- Switchgear

Additional Field Service Offerings:

- Battery Life Cycle Management
- Battery replacement service (cell level or battery string)
- Component upgrades including capacitor, fan and contractor replacements
- Emergency and scheduled repair services
- Energy optimization
- Field and depot repair services
- IEEE Battery capacity testing
- On-site troubleshooting
- Power system expansion including battery additions, rectifier additions or replacements, etc
- Remote monitoring
- Replacement parts
- Site decommissioning
- Site inventory & Analysis
- Thermography

Available exclusively to our preventive maintenance customers, FreedomCare™, a secure customer website, provides the capability to view and download service and maintenance visit reports.

Contact Information
800-800-5260
ESNA.FieldService@Emerson.com
www.emersonnetworkpower.com/services