

Description

GE Energy's Substation/Remote Terminal Unit (RTU) Maintenance Service provides a complete analysis, management and support service to optimize Operations and Maintenance and capital expenditures.

This program focuses on high-level strategic planning and includes methods for Network Optimization, Risk Management, Maintenance and Asset Management to reduce down time for faults, and equipment failures.

The program also includes methods for optimizing equipment investments. This is accomplished by performing periodic system upgrades and maintenance, managing critical spares inventories, providing proper customer personnel training and by effectively escalating failures and dispatching GE Energy personnel for service support.

Project/service lifecycle summary

High level strategic planning

- Condition assessment
- Upgrade/planning consulting services
- GE Energy consulting

Detailed engineering designs

- Integrated substation control systems
- Transmission and industrial substations
- Substation automation
- Protection & control
- Relay setting design
- Design, engineering, manufacturing and testing

On-site construction

- Turnkey T&D substations
- Integration into existing substations

Installation and commissioning

- Testing, connecting and energizing new equipment
- Installation and commissioning
- As-built documentation and training

Optimal network operation

- Real time digital relay simulator
- Substation automation
- PowerLink Advantage™ HMI

Risk management

- Monitoring and diagnostics
- Remedial action
- Fault analysis and trending

Routine maintenance

- Inspection services
- Planned and unplanned maintenance
- Operational checks
- Spares management
- Portable test equipment

Asset management/maintenance

- Post delivery service agreements
- Relay/RTU call center access
- Response time guarantees
- Software/firmware upgrades

Depending on the level of support needed, services such as those shown below can be packaged together to meet your needs, from a transactional basis to a contractual service agreement. The service agreement structure details the elements found in a transactional service all the way through to a high-value Contractual Service Agreement (CSA). GE Energy can provide further details on how these can be set up to optimize your total cost of ownership.

To help assist you in determining what type of agreement and services may fit your needs, GE Energy experts will assist you in determining the correct type of service agreement and components best suited for you. From this consultation, a service agreement may contain the components described on the following page.

Service agreement structure

High-value service offerings

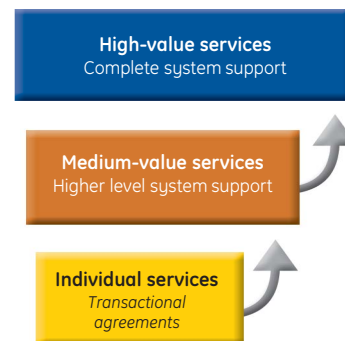
- Complete system service package
- 24x7 support
- On-site support
- High level performance metrics

Medium value service offerings

- Higher level system service package
- Combined/packaged basic service offerings
- Low level performance metrics

Individual service offerings

- Condition & security assessments
- Component upgrade services
- System maintenance
- Spare management
- Training
- Installation & commissioning of equipment
- Technical support services
- Monitoring & diagnostics
- Off-line testing



Typical Service Agreement Components

Condition/Security Assessment

- Condition/security evaluation of the networks using experience, knowledge and statistical analysis tools to identify risks and the current system status

Upgrade Service

- Upgrade/System Planning Consulting Services – System enhancements through new products, services and system re-design
- Supply and installation of firmware or software revision changes

Maintenance and Spares

- Operational Status Reviews – On-site visual inspection & service of equipment
- Performance of planned and unplanned maintenance
- Spares management, financing, and distribution programs

Training

- GE Energy product training courses at customer and/or GE Energy sites

Technical Support Services

Technical consulting support and diagnostics for RTUs and other related equipment

Telephone Support

- Standard 8:00 AM to 5:00 PM Mountain Time to 24/7 coverage
- Guaranteed on-site response times

Remote Support

- Remote configuration, consulting, and diagnostics for supported equipment

On-Site Support

- Fully-trained field specialist – local, regional, or in-country
- On-site response times

Substation/RTU Maintenance Service Benefits

Benefits for each service will be dependant on options selected; however, most service agreements will include the below benefits.

Individual Services

- CAPEX without Cash – provides component support through structured lease agreements/service fees
- Predictable cash flow – reduced maintenance, troubleshooting and implementation costs
- System reliability – ensures purchased equipment/system has maximum operational effectiveness, reliability and availability
- Staffing – relieves critical skill staffing concerns and provides immediate skilled staff for planned and unplanned events
- Staffing – optimizes resources by giving simpler operation, troubleshooting and repair

Medium/High Value Services

- All individual service benefits
- Single vendor selection – reduces execution costs, administrative costs and risks associated with multi-vendor integrations
- Technology plan/upgrades – deferred technology purchases and performance and reliability solutions to meet customer/regulatory requirements ... obsolescence and security management
- Security – solutions to meet customer/government system security requirements
- Guaranteed performance – risk sharing and goal alignment through performance incentives/indicators

For more information about this product, contact your GE Energy sales representative, visit gepower.com or email us at automation.solutions@ge.com.



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