

Smart Grid Services

Dedicated Partners in Maximizing Your Efficiency



Is it possible to reduce risk, shorten critical timelines and increase customer satisfaction?

The Landis+Gyr Smart Grid Services team delivers unrivaled expertise in all aspects of the Smart Grid to maximize investment value and help meet business objectives.

HIGHLIGHTS:

- **Streamlined execution:** experienced, quality-driven and globally-accredited professionals
- **Unrivaled expertise:** deep, first-hand knowledge of products and solutions
- **Reduced cost:** minimizes need for hiring, training and retaining internal talent
- **Reduced business risk:** follows industry best practices
- **Additional bandwidth:** provides subject matter experts to allow utilities to focus on core business activities
- **World class, future-ready solutions:** continual investments in technology and operational upgrades, processes and certifications
- **Long-term partnership:** committed to our customers' long-term success

"As part of our Smart Grid strategy through our AMR operations and AMI migration, we've been able to take advantage of Landis+Gyr SaaS and Smart Grid Services offerings to identify opportunities to optimize our infrastructure and business processes. It has helped reduce our overall costs by leveraging shared and extensible infrastructure and right-sizing systems based on utilization trends."

Manager Field and Meter Systems, JEA

Expertise and Options for Efficient Utility Operations

Application Operations

Proactive monitoring and management of AMI network to achieve optimal performance.

- Daily remote monitoring of Command Center
- Exception handling of issues identified per daily monitoring
- Verifying successful read data and daily file delivery, demand reset and exception reporting
- Event and Error monitoring
- Delivery of a daily status report

Database Service

Experienced Database Administrator ensures proper database configuration for scalability, overall system performance and regular maintenance. This may include one or both of the following:

Database Assessment Report

- Complete review of current system and database status, including server configuration, database configuration, partitioning details and table review
- Summary report of issues and recommendations for improvement

Database Service

- Support for implementation of recommendations from Assessment Report

Integration Service

Custom support for integration of complimentary software applications.

- Experienced resources who understand the software and the integration adapters (transport and message formatting) to create the needed integration component
- May include custom interfaces based on the unique requirements
- May also include business process best practice consulting, troubleshooting of interface conflicts and vendor interoperability service

IT Monitoring

Access to a standard IT monitoring tool that enables proactive alerts of KPIs for applications, servers and network health. Service can be enhanced to provide proactive support for trouble-shooting.

Tier I- Programming Alerts

Standard Packages

- Server Health: Server Ping, Disk Space, I/O, Memory, CPU
- Application Health: GUI Login Check, Basic Service Availability, Queue Monitoring, App Pools
- Network Backhaul & Components: Monitoring of network backhaul availability via network provider, firewall, web gateway (bluecoat), & internal routers
- RF Collectors & Routers: Device Ping, Port Availability, Traffic Flow

Custom Packages

- Premium Server Health: GUI Login Check, Basic Service Availability, Queue Monitoring, App Pools
- Premium Application Health: Advanced security certificate management, File Level Monitoring, custom solutions
- File Exchange: Status of incoming & outgoing file transfer, file size checks, Checksum File, plus other premium FTP services

Tier II- Programming- Monitoring Support (Monthly Fee)

- In the event of a notification, a Service Desk Representative will reach out to proactively help troubleshoot issues

Network Optimization

Planning, surveys, and documentation to help optimize RF network performance. Periodic network optimization is recommended.

Network Validation Report

(Assessing Current State of Network)

- Baseline network validation: Map of network to determine general health, along with lat/longs, power settings, and antenna directions
- Benchmark of network health: Review of router settings, validation of lat/longs, and review of capacity utilization of collectors

Recommendations Report

- Recommended infrastructure changes: What equipment should be added, moved to support better connectivity and/or more network bandwidth
- System Recommendations: Firmware/DCW Upgrades, maintenance releases, CC recommendations

Implementation Service

- Implementation of recommended infrastructure changes: Adding, moving or removing equipment from the network
- Implementation of System Recommendations: Firmware/DCW Upgrades, maintenance releases, CC recommendations
- Optimization Health Check: Network health check on any additional equipment, measuring performance improvement

Network Upgrades

Upgrade and validation of RF network devices and endpoint/meter firmware upgrades.

RF Network Analysis Report

(Planning and Preparation)

- Detailed Network Upgrade Plan with consideration of best practices, customer versioning and network deployment
- Internet Service Provider risk mitigation plan (if applicable)
- Plan reviewed in detail with customer followed by receipt of approval and sign-off

Upgrade Implementation

Option A

All network upgrade activities (including collector, router & meter upgrades, along with monitoring/ reporting) performed by customer with consulting support and training from Landis+Gyr throughout the process

Option B

All network upgrade activities (including collector, router & meter upgrades, along with monitoring/ reporting) performed by Landis+Gyr using best practice standards

"We found Landis+Gyr's Database Service to be very valuable, as we do not have a Database Administrator on staff. We found that their support engineers understood very well the issues we were having. They were patient with us in explaining our problems, offered to fix these issues, and provided preventative tools for future use. We were very pleased and will continue to use this service in the future."

Computer and Information Specialist, Dixie Power

"Landis+Gyr's System Health Check was a great success. The team came to our office, gained insight into our day-to-day operations and experienced first-hand how we conducted business. Landis+Gyr was then able to make suggestions based on the severity of the problem. Before the expert team left, we had seen significant improvements with our system. And, as we make the suggested changes, we feel confident in seeing even more benefits."

Technical Services Coordinator, Southwest Texas Electric Cooperative, Inc

"Our limited time and resources were put to the test after upgrading our load control system, including controls for over 200 irrigation systems. We soon learned that not monitoring your system for the quality of the downstream signal can result in a potential loss of hundreds of thousands of dollars in peaking charges due to lack of control. With Application Operations support from Landis+Gyr, they now monitor our entire system and provide daily and weekly reports. After a year, our employees attest to having a real comfort level with our system and the service that Landis+Gyr provides. This is a great bang for your buck!"

Manager of Power Quality and Metering, Crow Wing Power

"Although our internal resources are perfectly capable, we're able to focus on larger scope issues and projects while Landis+Gyr works daily to keep our system clean and performing at its highest potential. We've found their Application Operations service to be an effective way to balance our lean resources."

Supervisor, Distribution Automation and AMI Support, CLECO

“The System Health Check conducted with the Landis+Gyr Consulting Services Team was just what the Smart Grid doctor ordered! From the various meter programs to back office database recommendations and system settings, the team conducted a thorough review of all functional areas our Smart Grid System. The end result is a solution fine-tuned to support reliable performance and long term growth.”

Smart Grid Program Manager, NES

Report and Data Analytics

Custom support for reporting and analyzing data from the Smart Grid System.

- Experienced resources to create custom reports to meet specific requirements
- May include the analysis and correlation of data to identify system issues

Software Upgrades

Experienced resources providing best practice recommendations, planning, documentation and support for software upgrades. Custom support offering can be designed to include any or all of the following:

- **Configuration Analysis** – Complete analysis of environment/system configuration outlining all risks
- **Pre-Installation Verification** – Ensuring all recommended system requirements and configurations are met
- **Project Planning**
- **Installation Execution** – Implementation of project plan
- **Post Installation Verification** – Ensuring system integrity is maintained

System Health Check

An in-depth review of the current system setup/configuration – from meter programs to the integration layer.

Audit

- Meters and Meter Programs (Current meter programs and deployment)
- Current/Future Deployment Plans
- Database Performance and Maintenance (Data retention, archiving, back-up process and data continuity plan)
- IT Architecture (Application and web servers, logs and performance/ scalability)
- Command Center Performance and Settings (logs, settings and security appliances checkup)
- Business Process and Integration
- Security (Meter encryption state and RSA Key Manager)

Report

- Summary of audit results with recommendations based on best practices

Transition Service

Custom support for transitioning software applications (such as moving to the Cloud, a new data center, or moving from a physical server to a virtual environment)

- Experienced resources to perform a seamless transition based on data center best practices and ITIL procedures
- Ensures the transition has the least impact on the system users with minimal downtime and no data loss
- May include data and system IT design, mapping across data centers, data migration, backup, risk assessment, system restoration procedures, scheduling and planning for the transition