Energy utilities are progressively embracing newer technologies to operate more efficiently and sustainably in the current energy environment, characterized by stringent regulations, growing demand, fierce competition, & aging infrastructure. This has in turn led to a wider adoption of spatial technologies across the enterprise.
GIS Managed Services for Distribution Integrity Management

RMSI provides domain specific enterprise GIS solutions that seamlessly integrate with other systems to increase process efficiencies and streamline information flows across the business value chain. We partner with clients to help them meet their key challenges of improving operational efficiencies, reducing operational costs, improving asset management, optimizing capacity, mitigating risks, and meeting regulatory compliance requirements.

RMSI's key differentiator lies in its unique ability to automate processes, develop customized tools, and workflow management systems that help reduce the total cost of ownership and delivery time, while maintaining the highest levels of quality.

Solutions

**Network Design & Drafting**
- Proposed Network Design & Plotting (Designer Express)
- Cross-Section Profile Creation
- Bill of Material (BoM) Generation
- Existing Network Redraft

**Asset Data Management**
- As-built Conversion / Work Order Posting
- Data Maintenance (Asset & Landbase)
- Data Migration / Conflation
- Auto Services Plotting (CIS/GIS)

**Distribution Integrity Management**
- Legacy Records Conversion
- Historic Service Records Scanning and Indexing
- Cast Iron Replacements
- Pressure Test Records Data Consolidation
- Engineering Mark-ups / Call Before You Dig

**Enterprise GIS**
- Data Discovery & Gap Analysis
- Technology Migration / Upgradation
- GIS System Administration & Application Development

GIS Data Lifecycle Maintenance

The client wanted to ensure timely availability of network design drawings in GIS for faster permit approvals and a solution for traceable information from enormous volumes of historical service records.

Using the managed services delivery model with defined SLAs, RMSI is providing engineering drafting services as per municipal regulations, maintaining the gas facility network in GIS, and supporting the client with engineering mark-ups to support CBYD program.

Further, RMSI scanned, indexed & integrated information from hard copy historic service records into GIS to support various integrity management programs and regulatory requirements. RMSI also migrated the client's network and landbase to enterprise Esri GiS.

Facility Network Data Development & Accuracy Enhancement

Key project objectives included management and maintenance of hardcopies / scans related to historical asset information, and positional accuracy improvement of the client's gas network.

As part of their overall enterprise GIS initiative, RMSI improved the positional accuracy of the client's gas network with respect to updated county landbase / aerial images, incorporated all services and missing mains from existing paper maps (block cards) into ESRI / ArcFM geodatabase, and integrated pipeline pressure test records in GIS.
Integrated GIS for Managing Transmission & Distribution Networks

RMSI provides comprehensive GIS solutions from consulting & ideation, to actual implementation & post implementation support. Our solutions span the entire value chain from records conversion and management, to supporting critical engineering and business applications for electric transmission and distribution networks.

RMSI’s key value proposition is its unique ability to synthesize strong domain knowledge with technical capabilities. Our solutions are backed by proven expertise in consulting, analysis, design and implementation of enterprise solutions. Our technology-agnostic approach allows us to implement solutions grounds up or take over existing investments in technology by our clients.

Solutions

Asset Records Management
- Records Conversion and Integration
- Primary/Secondary Connectivity
- Reactive Change-out & Field Order Forms Update
- Asset Condition Assessment (ACA)

Enterprise GIS
- Data Migration
- Data Model/System Design, Development & Integration
- Application Development

Data Management
- Network Drafting
- T&D Network Mapping
- GIS Data Consolidation
- Work Order Processing and Posting into GIS
- Legacy Data Conversion and Migration
- Station Modeling
- Geoschematics Configuration
- Bi-directional Tool for CAD to GIS

GIS and Records Management

Key project objectives included streamlining processes to generate complete, accurate, and consistent information about electrical & civil assets on a near real time basis.

RMSI consolidated the client's asset records into a common GIS System and an Enterprise Asset Management System. Key solution highlights included converting maintenance schedule forms in GIS, AS-constructed drawings validation & registering in document management system, digitizing, revising, and fixing electrical & civil primary/secondary connectivity, & maintaining duct configuration for underground cables in GIS, underground & overhead legacy product feeder prints conversion, and updating missing cross reference between core systems for Asset Condition Assessment (ACA) and Non-ACA assets.

Network Data Consolidation & Geo-schematic Configuration

The client wanted to ensure uniformity and integration between GIS data and CAD information, and create a single consolidated GIS database from multiple disparate datasets.

RMSI developed a bi-directional integration application to convert information from CAD to GIS and vice-versa, and consolidated multiple datasets to a final destination GIS database. Key solution highlights included consolidation of data across 3000+ feeders, creation of geo-schematic configuration, and station modeling to represent station internals.
RMSI Value Proposition

- Guaranteed year-on-year efficiency gains
- Reduced total cost of ownership
- Proven rapid transition processes to achieve steady state of operations
- Rethink vs. replicate existing processes
- Faster turnaround and optimized infrastructure usage
- Robust client engagement model backed by best in class project management systems
- Flexible capacity to manage demand fluctuations

Key Industry Challenges

- Compliance with increasingly stringent safety regulations to establish better overall management of risks
- Conservative nature of engineering departments preferring traditional technologies like CAD
- Aging infrastructure, technology, and workforce management
- Asset planning and lifecycle management
- Efficiency, reliability, and performance improvement
- Ensuring public safety and customer delight
- Tighter integration of business systems with enhanced data integrity

Quick Facts

Serving 150+ active clients across 30 countries

Over 900 professionals work with us

Technology Partnerships – ESRI, Oracle, Microsoft, GE, BEA Systems


Strategically located three development centres in India, and five global offices in U.S, U.K, Canada, and Africa

Track record of having implemented multiple large scale GIS projects across the world

Technology Skill Sets

For more information, please contact info@rmsi.com, or visit www.rmsi.com