Computerization of Electrical Distribution Network for BEST

Industry: Utility - Electricity Distribution Company
Location: Mumbai, India

Summary

BEST is an electricity distribution company supplying power to the city of Mumbai, catering to 0.9 million customers. It maintains around 9,000 Ckt km of underground cables. BEST provides efficient and reliable services to end consumers by way of guaranteed electric supply with minimum interruptions, proper voltage and quick restoration at a reasonable cost. At BEST, Electric Network data was maintained in hardcopy format, which was decentralized and confined to limited users. Network analysis was made through complex algorithms which was an immensely time consuming task. Further, data security was also a major concern for the organization. Most importantly, in emergency cases, field crew was required to refer to sketches of local outages, which were deteriorating due to frequent handling. Reproducing these drawings was extremely cumbersome, monotonous and time consuming. Rolta was approached to solve all of these problems, and provide a Utility GIS solution which could be integrated with power analysis and streetlight analysis softwares. Rolta provided a turnkey solution for the computerization of BEST's electrical distribution network of 33KV/11KV and LT lines. The solution also enabled the computerization of legacy data sketches which could be easily shared across the enterprise. Rolta also developed a computerized mapping interface which utilized spatial data for a smooth decentralization process, and provided enterprise wide access.

Details of Rolta's solution

- Supply of GIS, Network Analysis and Streetlight Analysis software
- Configuration of an advanced feature model as per BEST requirements
- Creation of land & electric network database
- Hyper linking of scanned images to digital network
- Customized GIS applications and integration of GIS with Network Analysis software
- Generation of customized reports
- Training,commissioning, implementation and handholding

Key Solution Innovation

Integration of Planning, Design, Build & Maintenance workflows

Impact

- Enabled rapid access to network assets, leading to better management of field resources, and in turn,reduced OPEX
- Enabled field crews to locate the exact source of the fault through the best response time and generating greater revenue
- Eliminated the duplication of work processes
- Significantly reduced preservation costs with minimum dependency on hard copy sketches
- Led to improved communication between all departments involved with improved enterprise level data access
- Reduced data redundancy

About Rolta

At Rolta, we envision a better future, and then design technology to create that future. Our innovative IT solutions span various verticals, including Utilities, Transportation, Process, Power, Banking and Insurance. Through our cutting edge software for mapping and earth sciences, we also provide a complete array of solutions for Defense and Homeland Security, including C4ISTAR information systems, Military Communications, Digital Soldier and Vehicle Systems. Our team diligently works to exceed our customers' expectations, and has successfully executed strategic projects in over 40 countries.