A leading American power and energy company based out of Charlotte, North Carolina with asset in Canada. The company owns 58,200 megawatts of base-load and peak generation in the United States, which it distributes to its 7.2 million customers.

Predictive Asset Analytics for a Leading Power & Energy Company

Challenge

- Lack of visibility on the cost of internal and external labor including materials (bulbs, and poles)
- Manage availability of large fleet of commercial vehicles – Trucks for fleet owners with proactive maintenance

Solution

- Develop predictive models to understand which factors contribute to pole decay and to predict when inspections should be done to validate the structural soundness of poles
- Provide analytical dashboard to view and manage pole and light data discrepancies in Billing and GIS systems. The dashboard can be used to track asset, fleet and technician on ground
- Provide mobile app to report, track and categorize issue and provide real time information to customer

Outcome

- Analytics dashboard will help in determining pole/Light data discrepancy and ensure billing consistency, dashboard will also track the crew and fleet resulting in improving SLA. Detecting pole failures will reduce the number of required inspection. Mobile app will help in faster issue assessment and resolution and improve customer experience. Weather data will help in pro-actively mitigate potential damage to polls

Business Impact

- Ensure billing consistency
- Reduction in number of required inspection
- Faster issue detection and resolution
- Improved SLAs and reduce incorrect assignments
- Pro-active alerts to mitigate potential damage

Predictive Maintenance Application

Application Innovation

- Digital Field Apps
- Self Service Portals
- Crew Management & Scheduling
- Pole/Light Inspection Apps
- Supervisor Apps
- Intelligent Damage Assessment

Data Management

- Pole/Light Data Cleansing and Consolidation
- Data Integration
- Capture and process real-time data streams
- Weather details

Insights & Analytics

- Identify trends
- Real-time exception detection and management
- Predictive maintenance

Outcomes:

- Mobile app-based issue reporting and tracking
- View real-time location of assets, fleet and technicians on the ground
- Reduction in overall pole failure rates
- Reduction in number of manual inspections required resulted in cost savings
- Automated inspection plan generation with priority inspection classification
- Pro-active alerts and notifications