Exacter VISION ANALYTICS®

GIS DATA

OVERHEAD EQUIPMENT

VEGETATION

Data ·····► **MEANINGFUL ANALYTICS** ·····► **ELIMINATE PROBLEMATIC CONDITIONS & IMPROVE SYSTEM PERFORMANCE AND RELIABILITY**

VISION ANALYTICS®

Overlaying GIS connectivity and asset data with Exacter health assessment data allows utilities to evaluate their overhead distribution system and the impact problematic conditions will have on system reliability. Vision Analytics gives you the power to choose which maintenance operation to perform.

# SYSTEM HEALTH ASSESSMENT + DETAILED ANALYTICS = IMPROVED RELIABILITY

"Vision Analytics delivers a conditions-based assessment of system health, and identifies specific points of weakness for actionable improvement in system reliability & performance"

New Insights for Impacting System Reliability

Exacter's patented system health assessment technology and proprietary data analysis provide utilities with unique insights for improving system reliability and performance. Exacter Vision Analytics® reveals the location where arcing, leaking, and tracking are present on overhead distribution systems, including the structure and specific component responsible for the conditions.

The Power to Choose

When correlated with GIS connectivity and asset management data, Vision Analytics can identify a criticality measure, the number of customers that would be impacted by an equipment failure. The criticality measure allows utilities to make strategic decisions and perform the appropriate maintenance operation to achieve desired improvements in system reliability and performance.
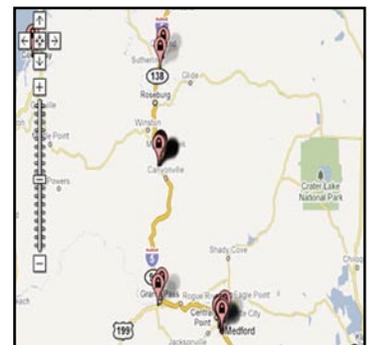
Health assessments of large geographic areas can be accomplished very quickly – identifying and mapping points of weakened conditions.

Exacter VISION ANALYTICS®

1 Pre-Assessment Data Analysis
Using utility data, identify circuits with most potential for reliability and performance gains. Analysis will include predictive metrics for impacting reliability indices.

2 System Health Assessment
Patented Exacter technology and proprietary analytics identify problematic conditions present on overhead infrastructure.

3 Criticality Measure & Trend Analysis
Identify impact on system reliability and performance, track maintenance operations, and measure improvements and benefits to system.

"Like an MRI body scan that reveals physical injuries, Vision Analytics scans distribution overhead to identify and pinpoint components responsible for problematic conditions present on the system."

VISION ANALYTICS PREDICTIVE PROCESS

1. Pre-Assessment Data Analysis

Exacter analyzes interruption data to identify where equipment related outages occur on the overhead distribution system. The project scope is optimized to assess the minimum number of overhead miles to realize long-term improvement in system reliability and performance.

2. Exacter System Health Assessment

Patented Exacter technology and proprietary analytics discriminate, identify, and pinpoint locations where problematic conditions (arcing, leaking, and tracking) are present on the overhead distribution system.

- **Patented Radio Frequency Technology (RF)** – Captures Partial Discharge (PD) and Electromagnetic Interference (EMI) emissions and correlates emission data with GPS location data.

- **Failure Signature Analysis** – Exacter has developed the Failure Signature Library, proprietary analytics that use time-domain and frequency-domain analysis to detect and discriminate emissions and identify locations where arcing, leaking and tracking are present.

- **Ultrasonic Acoustic Technology** – Exacter Field Engineers visit structures identified by RF assessment and Failure Signature analysis. Using Ultrasonic acoustic technology, engineers confirm and pinpoint the component(s) that are responsible for the problematic conditions.

3. Criticality Measure & Trend Analysis

With utility provided connectivity data, Exacter will identify the number of customers that would be impacted by equipment failure caused by the identify conditions. The criticality measure can help prioritize maintenance operations and identifies potential improvement in performance and reliability. Exacter will work with the utility to trend system performance and improvements in reliability.