

THE TECHNOLOGY & DATA TO PREDICT

Early Warning & Detection of Problematic Conditions



PRIORITIZE CRITICAL SYSTEM REPAIRS BASED ON TRUE FIELD CONDITIONS

Predictive based Maintenance (PdM) is a reliability strategy that monitors and assesses the condition of equipment while in service to identify weakened components and determine appropriate maintenance operation.

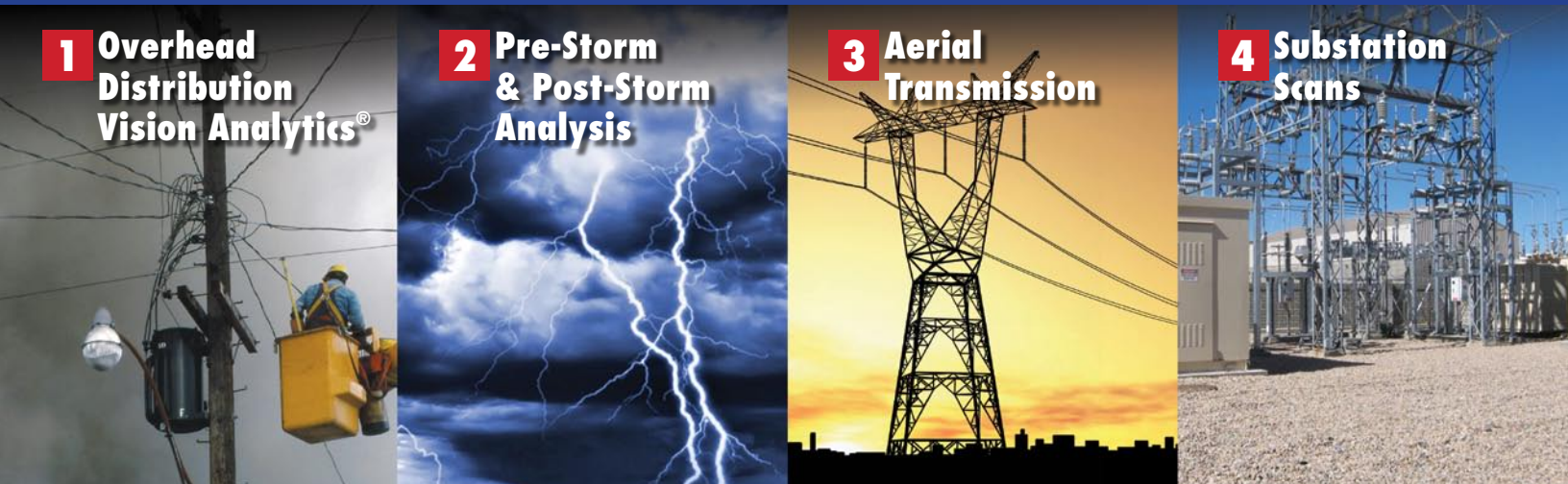
Exacter's patented technology and predictive process enables utilities to prioritize maintenance operations based on the impact to system performance and reliability. PdM focuses on improving system performance and reliability by removing components showing early signs of contamination or degradation prior to component failure.

The key to Predictive based Maintenance is obtaining the "right information at the right time." Using Exacter as a PdM tool for condition monitoring of equipment provides utilities an advanced warning to potential problems that would adversely impact customers, system performance, and system reliability.

Exacter Condition Monitoring identifies and pinpoints locations where arcing, leaking, and tracking occur on overhead systems

"Committing to the process of early identification of problematic conditions and removing them from the system is why PdM assures continuous reliability improvement."





EXACTER PREDICTIVE TECHNOLOGY LOCATES PROBLEMATIC CONDITIONS ON OVERHEAD SYSTEMS

PREDICTIVE SOLUTIONS

1 Vision Analytics for Distribution

- Process to identify circuits with equipment-related outages
- Optimizes project design to assess worst performing circuits as they relate to equipment for greatest impact on reliability

2 Storm Analysis


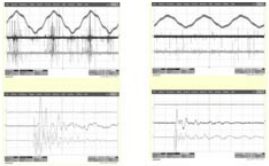

- Pre-storm assessment and system performance baseline
- Post-storm assessment to identify conditions caused by weather event(s)

3 Substation

- Scan of critical substation infrastructure to identify and eliminate emissions prior to failure at critical point on distribution system

4 Aerial Transmission

- Utility owned or (partner) helicopters used to assess cross country transmission lines not easily accessible via paved ROWs

RF	ANALYTICS	ULTRASONIC/ACOUSTIC
 <p>RF Technology scans large geographic areas in just weeks</p>	 <p>Signal analytics discern true problematic emissions from spurious signals</p>	 <p>Ultrasonic Acoustic technology pinpoints specific problematic component</p>

Patented Radio Frequency (RF) Technology

Captures Partial Discharge (PD) & Electromagnetic Interference (EMI) emissions and correlates with GPS location data.

Proprietary Analytics with Failure Signature Library

Failure Signature Analysis discriminates and eliminates emissions that are not related to the overhead system. The analysis identifies specific structures and locations where problematic conditions are present.

Ultrasonic Acoustic Technology

Field Engineers visit identified structures and utilize ultrasonic technology to confirm and pinpoint the exact component(s) responsible for the problematic conditions.

Data gathered at structure include:

- Hi-Res photo
- Pole ID
- GPS coordinates
- Physical Address
- Additional attributes of component