

# CONDITION MONITORING

## Contract or DIY?

**M**uch has been written in recent issues regarding the appropriateness of performing Partial Discharge testing 'in house'. We can all agree that getting it wrong can have major implications on plant reliability and safety and while there is no substitute for experience, HV Diagnostic Services believe that contracting services can happily co-exist with the supply and support of customer instruments in the field.

This is the philosophy from EA Technology, the world authority on Condition assessment and Partial Discharge Detection in Medium to High Voltage Electrical systems. The UltraTEV Detector for example was designed as a first pass tool for switchgear; the factory set thresholds allow relatively unskilled operators to identify any unreasonably high levels.

Our Expert whose specialist knowledge comes from having located PD all round the country over the past decade, can be called in to comprehensively identify the cause and solution.

### GREATER LEVEL OF INFORMATION


The newer UltraTEV Plus+ is a sophisticated instrument providing a greater level of information, the data becoming more useful as the Technician / Engineer increases their practical experience using it. Additionally, optional sensors extend its Ultrasonic capabilities such as the parabolic dish for overhead inspection work. It can be used for detailed Transient Earth Voltage (TEV) investigations while the inclusion of headphones are invaluable for better interpretation of surface activity.

### ANNUAL CALIBRATION CHECKS

Based in Christchurch, HV Diagnostic Services have the facility to provide annual calibration checks for these handhelds avoiding the costly and time-consuming return to the UK. We are happy to assist with training for your new detector and this can be 'bundled' at the time of purchase, negotiated separately or allowed for during any subsequent visit.

### ANNUAL EQUIPMENT SURVEYS

With regular contracts from Whangarei near the top of NZ's North Island to Invercargill in the deep South, many of our Utility clients operate their own test programs while contracting HV Diagnostic Services to conduct annual surveys on their critical equipment. For those without the time or resources to invest themselves like our Industrial customers, outsourcing this function to the ESI's premier Partial Discharge practitioner makes good technical and financial sense.

With a T950 Ultrasonic detector, the PD Locator, UltraTEV Plus+ and two PD Monitors amongst our kit, we are enviably equipped to deliver a qualified and professional service. So regardless of whether you wish to run your own instrument and test programs or prefer to rely entirely on our expertise, HV Diagnostic Services can work with you to offer the best solution while giving impartial and honest advice. 

**CONTRACTING PARTIAL DISCHARGE DISTRIBUTION**

**Online Switchboard Surveys**  
TEV & Ultrasonic Location  
Continuous PD Monitoring  
Kiosk & Termination Testing

**Offline VLF Cable Mapping**  
Aged Cable Assessment  
New Circuit Acceptance

**EA Technology Consultancy**




**UltraTEV Detector**  
**UltraTEV Plus+**  
**UltraTEV Alarm**  
**Cable Sniffer**  
**Calibration Checks**

**NZ Supplier - EA Technology**



Innovators in Power Engineering 

T 64 3 962 0225    F 64 3 366 0680    www.hvds.co.nz    E glinton@hvds.co.nz    M 64 21 663 491