

Aside from our reliability programs, Transformer Clinic™ also offers a comprehensive line of a la carte on-line testing services, including:



ACOUSTIC EMISSION (AE) TESTING SERVICES AND CONTINUOUS MONITORING

AE is a powerful tool used to “listen” and register acoustic signals of different frequencies generated in a power transformer. Utilizing around-the-clock AE technology, AE monitoring provides continuous condition readings, processed and analyzed through proprietary software.



DGA AND OIL QUALITY TESTS (LABORATORY)

Provides valuable and reliable diagnostic information about the condition of the insulating system allowing identification of internal faults by analyzing the insulating oil. Combustible gas concentrations (PPM), and gas generating trends are calculated. Physical and dielectric properties of the oil are tested.



INFRARED (IR) TESTING SERVICES

Through thermographic imaging technology, Infrared imaging generates quick and accurate readings, locating and detecting abnormal heating signatures, or ‘hot spots’.



VIBRATION DIAGNOSTIC TESTING SERVICES AND CONTINUOUS MONITORING

Performed on in-service power transformers, Vibration tests serve as an additional method of continuous health status monitoring for the detection of mechanical deficiencies that typically do not lead to gas generation.



ELECTRICAL PARTIAL DISCHARGE

Electrical Partial Discharge detection uses High Frequency Current Transformers (HFCT). These sensors measure high frequency currents produced by partial discharge and/or arcing through a transformer grounding cable. The simultaneous use of AE and HFCT technologies allow the detection of electrical faults versus other sources.



SOUND MEASUREMENT SERVICES

Measurement of an audible sound originating from core and windings, which transmits through the dielectric fluid and/or structural supports to the outer shell or another solid surface, where it radiates as an airborne sound. The frequency spectrum of an audible sound consists primarily of the even harmonics of the power frequency.



TRANSIENT EARTH VOLTAGE (TEV) AND UT TESTING

Partial discharges can manifest in various ways. TEV sensors can be used to detect discharges from enclosed metal-clad switch gear. Ultrasonic sensors detect and measure surface discharges, and can determine asset conditions even without direct contact.