

# ON-SITE GENERATOR ASSESSMENT

- Fee-based Field Engineer visit to capture precision on-rotor and mechanical measurements (transmitter location, clamp forces, clearances) for end shaft or split collar installations
- Custom mounting-adapter designs and detailed drawings so parts are manufactured ahead of outage windows for a fast, low-risk installation
- Engineered antenna placement, conduit routing, and receiver enclosure siting to ensure uninterrupted telemetry and reliable electronics performance
- Fastening specification analysis to prevent slip, imbalance, or mechanical wear—designed to remain secure for decades
- A comprehensive site report, prioritized recommendations, and a firm system instrumentation quote—installation ready deliverables that streamline commissioning and support our three year warranty

## APPLICATIONS

- Turbo generators with brushless excitors
- Synchronous condensers
- Synchronous & DC motors

## PRECISION MEASUREMENTS, RELENTLESS RELIABILITY

Accumetrics Generator Ground Fault Detection for power generation provides rotor-level monitoring that protects assets and lets operators run with informed risk. The Generator Assessment is the essential first step — a focused, fee based engineering visit that captures the precise mechanical and electrical measurements we use to design and manufacture a purpose-built system.

During the assessment, an Accumetrics Field Engineer performs on-rotor inspections and precision mechanical measurements to determine the optimal transmitter approach and the least invasive connections to rotor bus bars. For split collar installs, we verify clamp forces, fastening methods, and clearances so the assembly will remain secure for decades. We also engineer antenna placement, protected conduit routing to the receiver enclosure, and receiver siting away from high temperature zones to guarantee reliable signal and electronics performance.

The difference our customers see is actionable data, not just an alarm: continuous field resistance, excitation voltage, and rotor temperature channels, plus trend history, let operations distinguish real ground faults from sensor faults and make confident run/stop decisions that preserve revenue and asset life.

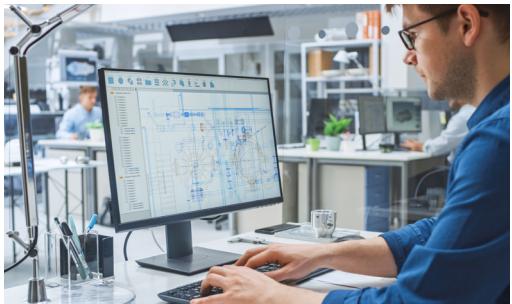
We back our systems with a three year warranty. The warranty is not conditional on investing in a Generator Assessment, but the assessment measurements are essential to our ability to offer it, because they document fit, balance, and mounting integrity.

# ENGINEERING PROCESS



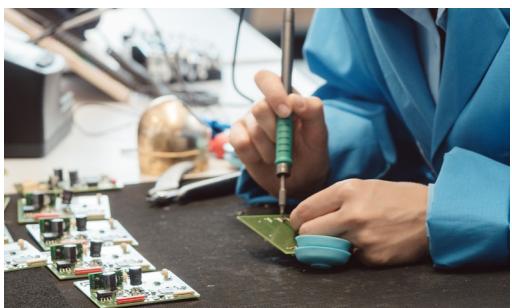
## GENERATOR ASSESSMENT

An Accumetrics Field Engineer comes to site to make precise mechanical measurements of rotor diameter, existing bolt hole patterns and distances. The generator is evaluated to determine ideal transmitter mounting location and antenna installation.



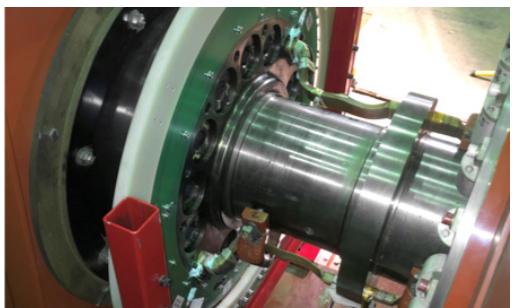
## SYSTEM DESIGN

Utilizing measurements taken during the Generator Assessment, Accumetrics' engineering team designs the EFREM transmitter, antenna, mounting hardware and protective coverings. Drawings of the finalized design are shared, and system installation is reviewed.



## SYSTEM MANUFACTURING & TESTING

Three stages of quality testing are performed. Electrical components undergo initial testing before being potted into the transmitter using a hard coat epoxy. Testing occurs again before additional soft potting is added. Upon completion, the system is tested once more for quality. The transmitter is meticulously designed and built to withstand high g-forces.



## INSTALLATION & COMMISSIONING

An Accumetrics Field Engineer returns to site for turn-key installation of the complete Earth Fault Monitoring System onto the generator. Signal is routed from the antenna to the installed receiver enclosure. The technician simulates various field resistances and confirms accurate measurement and alarm operation.