

## **Generator Technical Services**

(850) 471-1101

## **Minor Inspection**

An annual or bi-annual inspection that involves removing the upper outer and inner end shields or available access covers to gain entry to the end windings on either end of the generator. During a minor inspection the generator rotor remains in the unit which greatly limits the access to the inboard end windings and rotor itself. A minor inspection is typically used to monitor known problems and to plan for major outages. The electrical testing that accompanies a minor inspection is equally limited and only includes the minimum level of testing below:

- Stator
  - Insulation Resistance
  - DC Winding Resistance
  - Power Factor / Doble Testing
- Rotor
  - Insulation Resistance
  - DC Winding Resistance
  - Shorted Turn Detection
    - AC Impedance
    - Pole Balance / Voltage Drop
    - Recurrent Surge Oscillation

GTS can provide expertise and manpower to complete the minor inspection in a minimum time frame to limit your outage time frame. Please contact us to begin planning your next minor outage.

## **Major Inspection**

Major inspections typically follow a 5–6 year schedule. This inspection involves removal of both outer and inner end shields on either end of the generator as well as the generator field. A major inspection is used to determine any issues that might limit the working lifetime of the generator and to rectify those issues. Electrical testing during a major outage is typically much more in depth than a standard minor outage and will include the above electrical test scope plus additional tests such as a DC Leakage and ELCID.

GTS has the knowledge and expertise to complete a major inspection, provide recommendations on required repairs and execute those repairs in a timely and cost-effective manner while working to minimize downtime. Contact us today to plan the next major outage for your generator.

## **RIV Inspection**

In addition to a standard minor inspection GTS can, under certain circumstances, complete a visual inspection, wedge tap test and EL-CID with the generator rotor still in place. If your generator was in acceptable condition during the last major outage and the ensuing minor inspections have shown no indications or causes for concern then a rotor-in site inspection could be appropriate for your generator.

Please contact us for more information and to determine if an RIV inspection is appropriate for you.