

**CONDITION MONITORING & DIAGNOSTIC TESTING**

**GENERATOR (> 5 MW) (OFF-LINE TESTING)**

• **Test on Stator**

**Following tests can be performed in assembled condition of machine:**

- Insulation Resistance and Polarization Index Measurement at recommended test voltage.
- Capacitance and Tan delta Measurement at 10 kV or U<sub>0</sub> Voltage whichever is less.
- Partial Discharge Measurement at 10 kV or U<sub>0</sub> Voltage whichever is less.
- DC / AC Leakage current Measurement (Hi-Pot test).
- DC Winding Resistance Measurement at 1A /10A DC constant source.

**The following tests are advanced tests, which requires the machine to be opened up and rotor threaded out:**

- Visual Inspection

• **Test on Rotor**

- Insulation Resistance and Polarization Index Measurement at recommended test voltage.
- DC Winding Resistance Measurement at 1A /10A DC constant source.
- AC Winding Impedance Measurement.
- RSO Test (Recurrent Surge Oscillograph test).

• **Tests on Exciter Stator and Rotor**

- Insulation Resistance and Polarization Index Measurement at recommended test voltage.
- DC Winding Resistance Measurement at 1A /10A DC constant source.
- Checking of diodes and fuses.

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- **Tests on PMG**

- Insulation Resistance and Polarization Index Measurement at recommended test voltage.
- DC Winding Resistance Measurement at 1A /10A DC constant source.
- AC Winding Impedance Measurement