



## TEST SERVICES

### Test

At Brush Transformers every transformer is subject to a comprehensive series of tests in compliance with the latest requirements contained in all relevant specifications. All the testing is carried out on site within one of Brush's fully equipped test areas.

The test facilities include a 7.5MVA generator driven by a 2500HP motor, a 2.8MVA power regulator used in conjunction with capacitor banks (60 MVA currently installed). These ratings can provide sufficient power for short circuit temperature rise testing at full ratings, for transformers up to 100MVA.

Brush also has two multi-ratio plant transformers of 38MVA and 14MVA, a 2MVA 200Hz alternator for induced over-voltage testing and a Haefely SGΔA 1200-120 impulse testing system comprising of:

- 1200kV, 120kJ per stage generator
- 2000kV voltage divider IEC 60060 – 1
- 1200kV multiple chopping device
- Hias 743 high resolution impulse analysing system
- 600kV overshoot compensation filter

Test area is equipped with:

- High voltage capacitance dividers and AC peak voltmeters used for measurements up to 600kV
- Capacitance and Tan delta bridge for measurement of capacitance and loss angles.
- Three phase ac power analysers used in conjunction with precision current and potential transformers for the accurate measurement of transformer losses.
- Bruel Kjaer sound level measuring equipment used for the measurement of transformer noise and spectrum frequency analysis.
- Partial discharge measurements can be made in pico-coulombs or micro-volts.

All the instrumentation is of a high standard and is calibrated and checked at regular intervals.

