



## Stator End Winding Stability System

### Inspection/Tests Performed:

- Visual Inspection.
- End Winding Frequency Response Analysis or "Bump Test".
- Stator winding tests - Insulation Resistance (IR), Polarization Index (PI), DC Leakage, Winding Resistance, Power Factor and Tip-up, Wedge Tightness, and Core Testing as Specified.

### Stability System Installation:

- This system consists of a support structure composed of glass ropes that are fitted to the end windings, injected with epoxy, and cured.
- The Stator End Winding Stability System incorporates the following key components: Inboard Circumferential Cone Rope Structure, Long Ties in the Winding Cone Structure, Outboard Cone Rope Structure, End Winding Thermal Expansion Slip Plane.

### Benefits:

- Prevents abnormal end winding vibration, especially in the 120 Hz range.
- Prevents generator degradation due to vibration, abrasion, and looseness.
- Generator life extending qualities.

### Final Report:

- Standardized format provided electronically (CD or electronic mail).
- Photographs of critical areas in the stator windings, core, and rotor windings.
- Stator End Winding Frequency Response Analysis performed both before and after the installation of the Stability System.
- Summary of all insulation tests and inspections performed.

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