Electromagnetic Core Imperfection Detection (EL CID) is the comprehensive method of testing the interlaminar insulation of the stator core. When eddy currents are elevated, hot spots appear in the stator core that may cause deterioration of the core lamination insulation. If the hot spots are not discovered, permanent damage may occur to the stator winding insulation and core iron.

EL CID testing identifies and localizes existing damage that reduces planned or forced outages.

Advantages

- Setup time and safety hazards are greatly reduced over the traditional high current loop ring flux testing
- Identifies further damage
- Reduces safety hazards
- Extremely low excitation power demand

Causes of Stator Iron Core Damage

- Physical damage caused by the rotor core
- Compression plate relaxation
- Loose bars and wedges
- Foreign magnetic objects
- Thermal core creeping
- Interlaminar iron core insulation failure
- Oil contamination
- Incorrect wedging system installation