



NATIONAL ELECTRIC COIL®

Our Experience Generates Results!

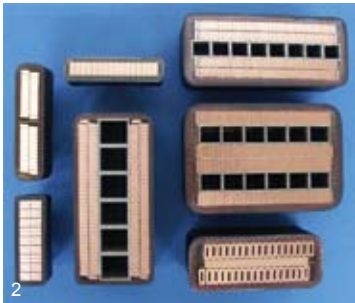
800 King Avenue, Columbus, Ohio 43212 • 3330 East 14th Street, Brownsville, Texas 78521



TMM 402: Stator Winding Data Banking

Application

Generators owners can benefit from NEC's Stator Winding Data Banking Service. When the OEM is the only holder of detailed winding data, owners may find themselves with few qualified bidders that can supply a quality replacement winding. With NEC's Data Banking Service, owners can create a competitive bidding situation between the OEM and NEC. This service includes measurement of your stator winding so that new coils can be manufactured at any time in the future. It is available for all generator makes and models, from 1 MW to 1,000 MW, and typically, is available to owners at no cost.



NEC's Technical Maintenance Memo™ Recommendations

We utilize proprietary data taking techniques, refined over 90 years of coil manufacturing. Depending on machine characteristics, we use tools ranging from a simple tape measure or scale, to laser tracking equipment and coordinate measuring machines. Our requirements are that the generator rotor is removed and that the machine is isolated, tagged out and safe to enter. The process takes six to eight hours, depending on machine size and type. It can be done during a scheduled maintenance outage. Before our technician leaves your site, our engineering team critically reviews the data for 100-percent accuracy, comparing your unit's against data we hold on similar units and against our proprietary design rules.

NEC actively takes data for both turbogenerators and hydrogenerators. We make the highest quality coils utilizing an ISO 9001:2000 certified quality management system. This includes windings for all OEM machines, including air- or hydrogen-cooled machines; inner-cooled machines with single- or double-tube-stack bars; or machines with water-cooled bars. Owners wishing further savings in schedule and budget for expedited replacement windings may want to take advantage of our **Coil Ready Package** program. This program jump starts the manufacturing process with early completion of the engineering design and prototype manufacturing and testing stages. See our Specialized Engineering Solution™ document, SES 401, for more information. Highlights of this program are detailed in the far left column.

Coil Ready Package Highlights

- Complete engineering design and analysis
- Manufacture of coil tooling
- Prototype coil manufacture, complete through testing
- Verification of fit in mock stator core
- Procurement and storage of long lead items
- Documentation package of prototype coil test results, including photo documentation of tooling and coil manufacture
- Visit to NEC's High Voltage Coil Facility to witness prototype coil manufacture or testing



NEC Qualifications & Resources

An industry leader in generator rewinds and repairs, National Electric Coil has specialized in the manufacture of stator and rotor windings for the last 90 years. NEC is recognized in the industry by owners and insurers as a qualified alternative to the OEM, because of its expertise in designing and manufacturing windings and servicing generators.

Call Us Today!

If you have additional questions about our Stator Winding Data Banking Service or our Coil Ready Package program, please call or email Bill Moore at (614) 488-1151x125, bmoore@national-electric-coil.com or Steve Jeney at (614) 488-1151x105, sjeney@national-electric-coil.com.

(1) For some data taking jobs, NEC's engineers utilize Coordinate Measuring Machines (CMM) or Laser Tracking Machines for data taking and verification. (2) NEC manufactures any type of high-voltage stator bar. (3) Water-cooled coils installed in mock stator core to verify fit and alignment.



Technical Maintenance Memo™ 402-FL-0306