Intern Assignment Description:

Assist the Vacuum Interrupter (VI) product line sustaining engineering/testing department with the validation, testing and optimization of existing products and design enhancements. Perform measurements and statistical validation of current product to establish a baseline and evaluate potential design changes intended for cost-reduction, quality & reliability improvements, and increased design robustness. Improve and create National Instrument (NI) LabView routine embedded in the testing equipment. Learn the existing product design, requirements & test methods, and test experimental solutions. Evaluate new or modified design solutions for needed product enhancements. Assemble and test proposed Electrical and Mechanical solutions and evaluate test sample performance. Statistically demonstrate reliability and compliance to requirements. The assignment may include high Voltage High Power testing of the VI operating mechanism and various subsystems. Perform measurement systems analyses (MSAs) to qualify equipment for use in checking important quality characteristics of circuit breakers and components.

Functional and Leadership Development Opportunities:

Learn the process of product sustaining and the importance of statistically validating product designs to ensure reliability and robustness to meet product requirements. Perform statistical analysis on key parameters to support design for improvement of testing capabilities.

Assist in analytical and problem solving skills and apply academic engineering knowledge to design, cost-optimization and manufacturing situations. Build test laboratory skills and gain experience in a manufacturing environment. Learn quality methods including design for six sigma. Perform numerous diversify test in a control environment.

Learn circuit breaker including VI product components and the operation of the devices, in addition to the requirements and standards. Learn how circuit breakers function in applications with other components in electrical distribution systems.

Opportunity to develop communication skills (both oral and written) providing project updates and other key information to peers and management.

Development of technical expertise in a state of the art testing facility. Improve NI Labview and electrical knowledge through hand on testing with opportunities to provide technical reports of data collected/observed to team and management.