

TITLE: System Tester

ORGANIZATION UNIT: Energy Delivery Technical Services
System Relay Services

APPLICABLE TO: AmerenUE

A. DUTIES:

Under general supervision, to be responsible for and to direct the work of an Assistant Relay Tester, a Junior Tester and at times to train and direct the work of a trainee; to test, calibrate and repair relays and meters associated with generation, the transmission system and customer equipment; to perform construction testing of the metering, protective and control devices associated with Company and customer plant and substation installations; to trace out, locate and repair the trouble associated with generation, the transmission system and customer equipment; to make tests on electronic components used in relays, meters, control devices and other related equipment to determine the condition of such components; to prepare clear and concise reports covering all of the above types of work; and to do similar and less skilled work as required. In this connection, to perform details of work such as:

Test, calibrate and repair relays for temperature, VAR, voltage regulation, power, current, voltage, directional current, differential current, current balance, frequency and other relays at locations outlined above.

Make complete and comprehensive sequence, operational and load check tests of all metering, protective and control devices on Company and customer plant and substation installations directly concerned with apparatus and circuit protection and its related control and determine the overall fitness of the equipment for service.

Install and test temporary control schemes used to bridge over a breakdown of equipment or to provide protection during cutover, expansion or alteration of existing installations.

Test, calibrate and repair three phase oil circuit reclosers in the field.

Make operation and performance tests on 345kV circuit breakers.

Perform tests such as current transformer ratio tests, ground tests, sound tests, trip checks, wire checks and high current tests.

Do switching necessary to clear equipment for work and perform operating duties as required with Workman's Protection Assurance responsibilities.

To perform work on any thermal converters, transducers, panel indicating, graphic, interchange interstate or generator meters.

B. SPECIAL RESPONSIBILITIES:

For service continuity and quality to the extent that these factors depend on accurate adjustment and proper functioning of the relays or other control equipment which is tested, adjusted or repaired by the System Tester.

For equipment to the extent that its protection, when operating, depends on the proper functioning of relays and other devices which are tested, adjusted and repaired by the System Tester.

In emergencies for quickly and accurately correcting faulty operation of control equipment and for clearing faulty apparatus and restoring service in substations and power plants

For special care to prevent personal errors in the testing and calibrating of meters, relays and other control devices and in reporting data.

For accurate testing and interpretation of test results to reveal defects and permit immediate corrective measures.

For the safety of others to the extent that Testers must be sure that equipment to be worked on is clear before an assistant or others start to work, and also to the extent that proper functioning of controls protects others by accurately and quickly isolating apparatus during fault conditions. Testers are expected to obey all safety rules and regulations.

To drive a vehicle carrying tools and test equipment. For special care to prevent damage to the vehicle and the test equipment to the extent its operating is critical for calibration / testing of relays and meters.

C. CONTACT:

With employees of other departments, customer representatives, outside contractors and other utilities.

D. WORKING CONDITIONS:

Subject at times to outside weather conditions or work in unheated building; however, outdoor work is normally suspended in specially inclement weather. Subject at times to high temperatures, dirt, vibration, noise and to working in high places.

E. HAZARDS:

Hazards result principally from the possible failure of nearby electrical or steam equipment and the dangers from any relaxation of the care required while working around high voltage apparatus.

Subject to the danger of falling while performing tests on equipment located at various heights above ground, while climbing steel structures or working atop oily transformers, circuit breakers, etc. Subject to possible electrical shock while working on equipment under test.

F. QUALIFICATIONS:

Successfully complete the System Tester in Training Program or equivalent.

Have above average alertness and carefulness of observation and ordinary physical strength and able-bodiedness.

Must be able to secure and maintain the applicable Commercial Drivers License (CDL).

Must be able to meet the applicable requirements for working at the Callaway Plant when assigned.