

4.6 EMERGENCY POWER PERIODIC TESTING

Applicability

6-19-75

Applies to the periodic testing and surveillance of the emergency power sources.

Objective

To verify that the emergency power sources and equipment will respond promptly and properly when required.

Specification

- 4.6.1 Monthly, a test of the Keowee Hydro units shall be performed to verify proper operation of these emergency power sources and associated equipment. This test shall assure that:
- a. Each hydro unit can be automatically started from the Unit 1 and 2 control room.
 - b. Each hydro unit can be synchronized through the 230 kV overhead circuit to the startup transformers.
 - c. Each hydro unit can energize the 13.8 kV underground feeder.
- 4.6.2 Annually, the Keowee Hydro units will be started using the emergency start circuits in each control room to verify that each hydro unit and associated equipment is available to carry load within 25 seconds of a simulated requirement for engineered safety features.
- 4.6.3 Annually, a simulated emergency transfer of the 4160 volt main feeder buses to the startup transformer (i.e., CT1, CT2 or CT3) and to the 4160 volt standby buses shall be made to verify proper operation.
- 4.6.4 Quarterly, the External Grid Trouble Protection System logic shall be tested to demonstrate its ability to provide an isolated power path between Keowee and Oconee.
- 4.6.5 Annually, it shall be demonstrated that a Lee Station combustion turbine can be started and connected to the 100 kV line. It shall be demonstrated that the 100 kV line can be separated from the rest of the system and supply power to the 4160 volt main feeder buses.
- 4.6.6 Batteries in the 125 VDC systems shall be tested as follows:
- a. The voltage and temperature of a pilot cell in each bank shall be measured and recorded five times per week for the Instrument and Control, Keowee Hydro, and Switching Station batteries.
 - b. The specific gravity and voltage of each cell shall be measured and recorded monthly for the Instrument and Control, Keowee Hydro, and Switching Station batteries.