

Renewal and reinforcement of short-circuit generator systems for high-power testing

Purpose:

To maintain the testing ability of the high-power test facilities, generator control systems, making switches, gas insulated bus and outdoor disconnectors will be renewed successively. In FY 2009, the short-circuit generator systems were renewed and reinforced.

Outline:

Countermeasures for insulation deterioration in a short-circuit generator and an induction motor, reinforcement of protection and monitoring systems of generator, and renewal of monitor and control panels were carried out.

Specifications:

- (1) Countermeasures for insulation deterioration of the short-circuit generator and the induction motor

To prevent the deterioration of a short-circuit generator due to salt and humidity, the cooling system was changed from open-air type cooling system to closed circulation system. Additionally the noise from the short-circuit generator was reduced by a quarter compared to the old system.

The rotor and stator of the induction motor were washed and dried and then the insulation was recovered.

- (2) Reinforcement of protection and monitoring systems of generator

Bearing jack-up system of the short-circuit generator, monitoring system of vibration of bearings and alarm transmission system of abnormal conditions of the short-circuit generator in operation using mobile phone were installed.

- (3) Renew of monitoring and control panels

The monitor and control panels of the short-circuit generator, board panels for the generator building and circuit-breaker panels were renewed and operation and auto-control systems were reinforced.

Location and Date of Installation:

Yokosuka Area, March 2009

