

# Generator Excitation System

The excitation system is essential for power station equipment. It provides excitation power to the exciter or excitation transformer.



## Overview

### Generator Excitation System

The generator excitation system is a critical component for power station equipment, ensuring stable and reliable operation of synchronous generators. It consists of an excitation power source and a comprehensive excitation device, which includes regulators, magnetic cabinets, and rectifier cabinets. This system maintains terminal voltage at a specified level during normal operation while providing essential control functions such as forced magnetization, de-magnetization, and de-excitation.

## Technical Architecture

### Key System Components

- Excitation Power Source
- Excitation Regulator
- Magnetic Cabinet
- Rectifier Cabinet

### Design Features

Microcomputer Control • High-Power Application • Forced Cooling • Modular Design

## Operational Functions

### Core Functions

Voltage Regulation, Forced Magnetization, De-magnetization, De-excitation