Voltage sensing and load compensation

Power system stabilizer

Voltage sensing

DC regulator

DC voltage adjust

AC regulator

AC voltage adjust

Exciter

Field shorting

Generator

Field-shorting circuits are applicable to ac and static exciters only.

Some systems have open-loop dc regulator.

Overexcitation limiter may also be used with dc regulator

Figure 8.14 Excitation system control and protective circuits

Figure 8.11 Typical time response to step input. © IEEE 1990 [7]