Functions of protective relaying, protective zones, primary and backup protection

Functions of Relays

- Auxiliary.
- Protection.
- Monitoring.
- Control.

Zones Protection

It is not clear from this diagram what is being protected or what function is being performed. Usually a designation number is put into the circles that Figure shows as 'R'. The power system protection is divided into zones based on the type of equipment and location, as shown in Figure

Overlapping these zones increases protection reliability; if one protection system fails to perform, another is ready to provide the needed protection. Each protection zone consists of a sensing current transformer, a power control breaker that can de-energize the protected zone.

The CTs shown in Figure 1 and Figure 2 have polarity marks to indicate that positive current flow is into the mark. CTs are necessarily outside the protection zone.

Fig. 1

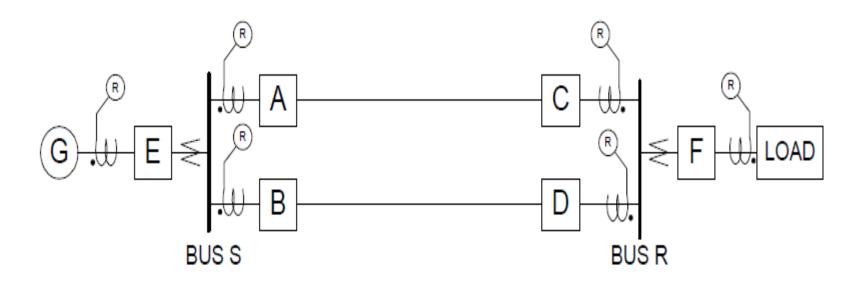


Fig.2 Zones Protection

