Name-Chetanya Gupta

Subject-PSA

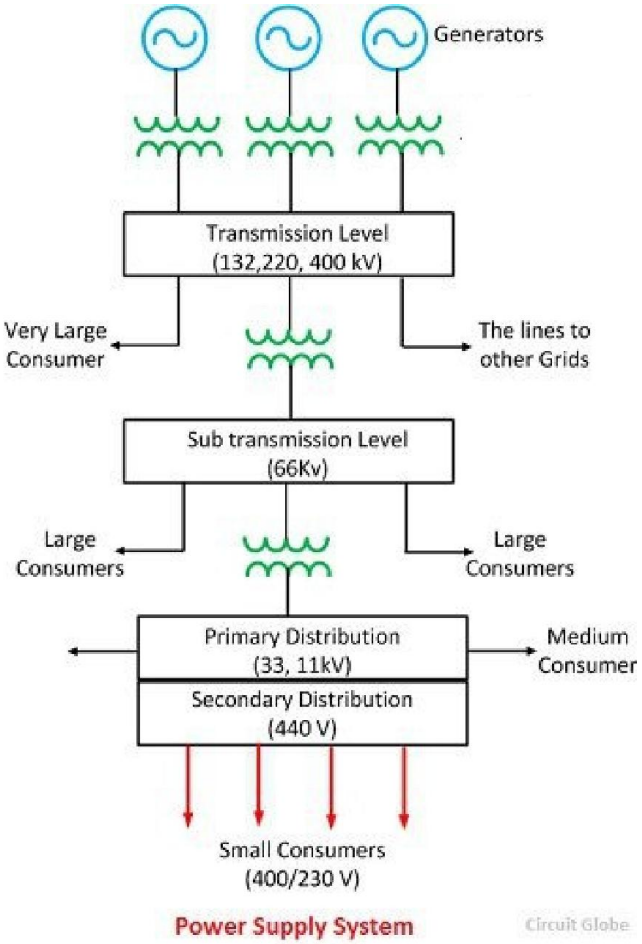
B-tech 5th Sem EEE.

POWER SYSTEM ANALYSIS

Single line diagram of power system-The single line diagram is nothing but the simplified representation of power system components with each other, with each component represented by its Symbol.

A power system consists number of generator,transformer,transmission line and load etc. Connected together.when we drawing a single line diagram of such a system,the equipmentis shown by standard symbols and their main connections and the arrangement of such component.Any particular components may or may not be shown depending on the information required in the system study. For example,circuit breakers need not be shown in a load flow study but are must for protection

Single line diagram of an electric power system is given below.



Transmission and Distribution

Electrical power is transmitted to long distances with the help of transmission line.On the basis of distance I.e.Long transmission,medium transmission short transmission. In India the standard voltage transmission is 132KV,220KV,400KV,765KV,

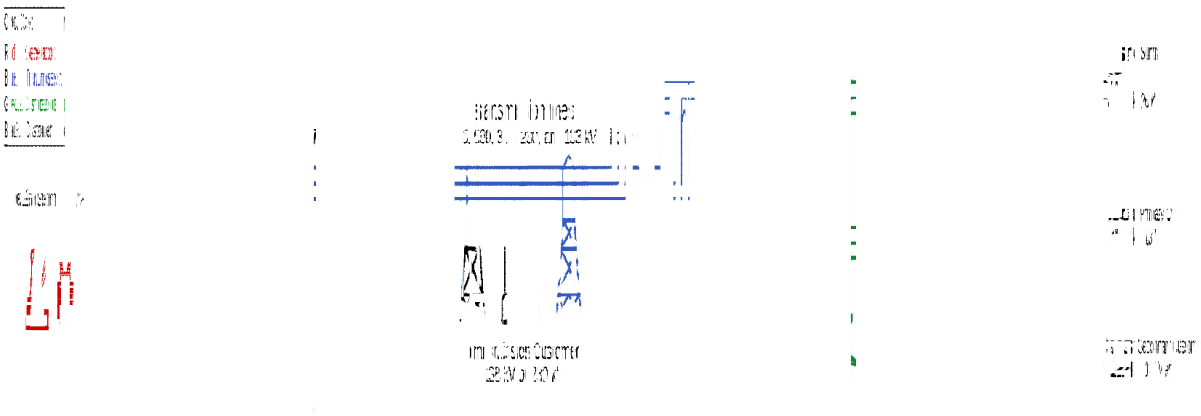
After In the power transmission and distribution is most important things.After generation of transmission,the electrical power is distributed with the help of distributors

The function of an electrical power system is to connected the power station to the consumer load by means of interconnected system of transmission and distribution network.Therefore,an electrical power system consists of three principle components

1. The power station
2. The transmission line
3. The distribution system

The transmission lines are the connecting link between the power station and distribution system.A distribution system connected all the individual loads in a given locality to the transmission lines

The figure shown below



For more you can read book power system analysis C.L Badwa.