

One Line Diagrams

One-line diagrams are a simplified graphical representation of a three-phase power system. These diagrams are tools employed to guide studies of the power grid. For further explanations of the following devices refer to PSS/E Lab 2 and supplements for Ch 8 and 27.

Buses



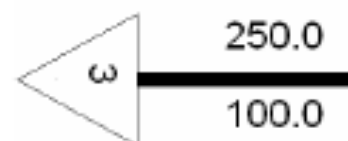
Buses as show above are the graphical representation of the substations and taps on the transmission lines.

Branches



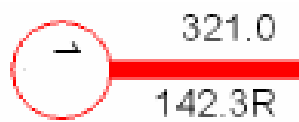
Branches are the graphical representation of the three phase transmission and distribution lines.

Loads

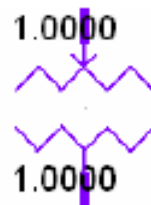


A load acts as a sink on the power system.

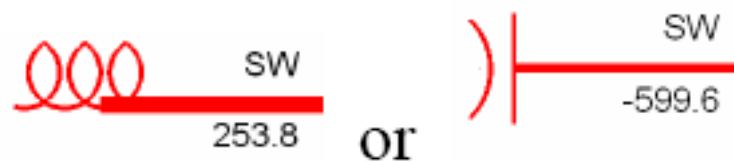
Machines



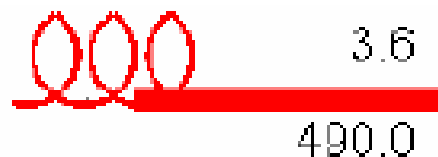
Two Winding Transformers



Switched Shunts



Reactor Bank



Capacitor Bank

