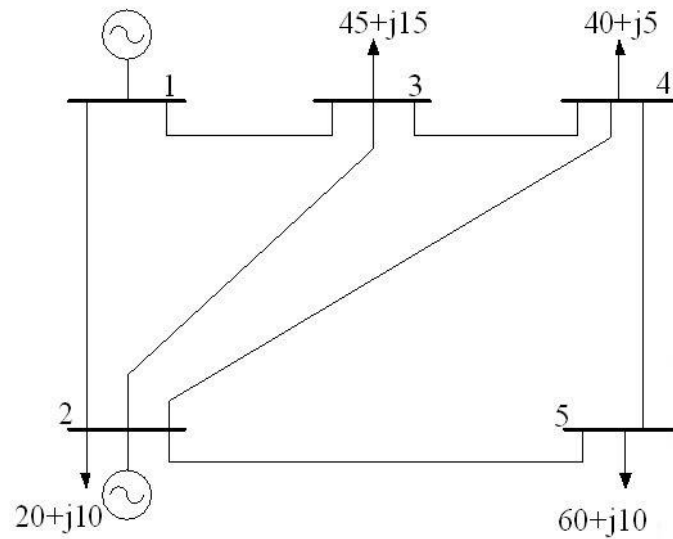


IEEE 5-Bus System Single Line Diagram



Bus Data for IEEE 5-Bus System

Bus No	Bus Voltage	Generation		Load	
		MW	MVar	MW	MVar
1	$1.06+j0.0$	0	0	0	0
2	$1.0+j0.0$	40	30	20	10
3	$1.0+j0.0$	0	0	45	15
4	$1.0+j0.0$	0	0	40	5
5	$1.0+j0.0$	0	0	60	10

Line Data for IEEE 5-Bus System

Line	Line Impedance		Line Charging
	R per unit	X per unit	
1-2	0.02	0.06	$0.0+j0.03$
1-3	0.08	0.24	$0.0+j0.025$
2-3	0.06	0.25	$0.0+j0.02$
2-4	0.06	0.18	$0.0+j0.02$
2-5	0.04	0.12	$0.0+j0.015$
3-4	0.01	0.03	$0.0+j0.01$
4-5	0.08	0.24	$0.0+j0.025$

IEEE 5-Bus System Load Flow Solution

Bus No	Generation		Load Demand		Bus Voltage	
	MW	MVar	MW	MVar	Voltage (pu)	Angle
1	129.59	-7.42	0	0	1.06	0
2	40	30	20	10	1.0474	-2.8063
3	0	0	45	15	1.0242	-4.997
4	0	0	40	5	1.0236	-5.3291
5	0	0	60	10	1.0179	-6.1503