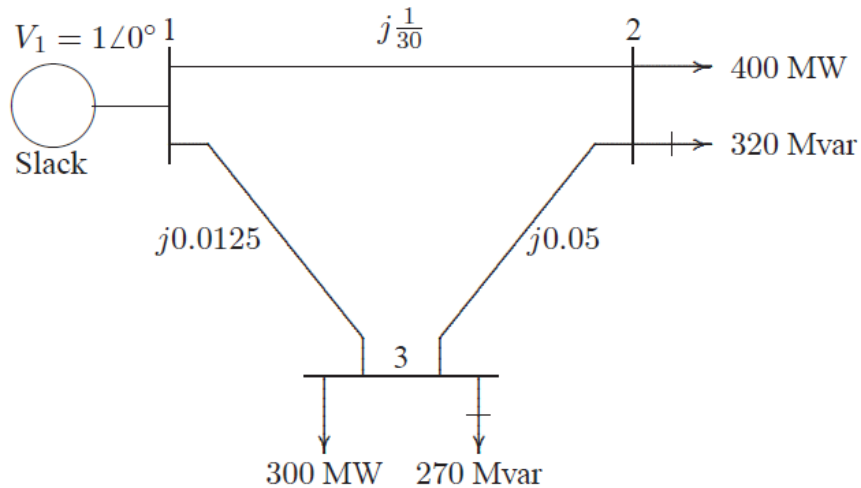


TUGAS ANALISA ALIRAN DAYA

- Line impedances are marked in per unit on a 100 MVA base. For the purpose of hand calculations, line resistances and line charging susceptances are neglected. Determine the bus admittance matrix (Y_{BUS}).



- Determine the bus admittance matrix (Y_{bus}) for the three-phase power system shown in Figure 6.23 with input data given in Table 6.11. Assume a three-phase 100 MVA per unit base.

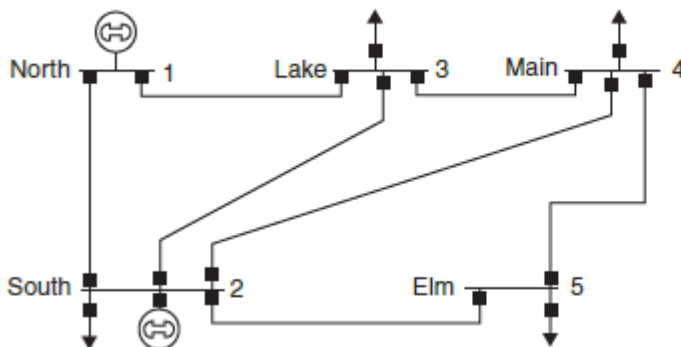


FIGURE 6.23

Sample System
Diagram for
Problem 6.30

Bus-to-Bus	R per unit	X per unit	B per unit
1-2	0.02	0.06	0.06
1-3	0.08	0.24	0.05
2-3	0.06	0.18	0.04
2-4	0.08	0.24	0.05
2-5	0.02	0.06	0.02
3-4	0.01	0.04	0.01
4-5	0.03	0.10	0.04

TABLE 6.11