List of Figures

1.1	Single line network with two loads
1.2	SMIB model
1.3	SMIB model with additional load
1.4	Random network with three loads on multiple voltage levels
	Complete transformer circuit
1.6	Reduced transformer circuit
1.7	Transformer Pi circuit
2.1	Example: Control block diagram

1 Grids

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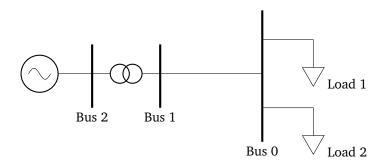


Figure 1.1: Single line network with two loads



Figure 1.2: SMIB model

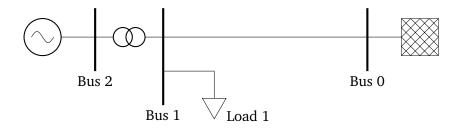


Figure 1.3: SMIB model with additional load

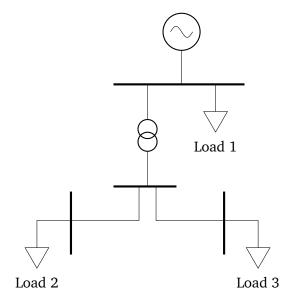


Figure 1.4: Random network with three loads on multiple voltage levels

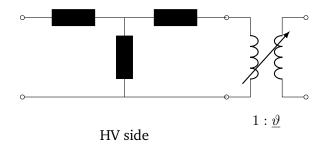


Figure 1.5: Complete transformer circuit

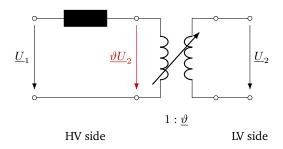


Figure 1.6: Reduced transformer circuit

$$\underline{Z}_{12} = \frac{1}{\underline{\vartheta}} \cdot \underline{Y}_{\mathrm{T}}; \, \underline{Z}_{21} = \frac{1}{\underline{\vartheta}^*} \cdot \underline{Y}_{\mathrm{T}}$$

$$\underline{Z}_{10} = \frac{1}{\underline{\vartheta}} \cdot \underline{Y}_{\mathrm{T}}$$

$$\underline{U}_{1}$$

$$\underline{Z}_{20} = \frac{1}{\underline{\vartheta}} \cdot \underline{Y}_{\mathrm{T}}$$

$$\underline{U}_{2}$$

Figure 1.7: Transformer Pi circuit

2 Control Blocks

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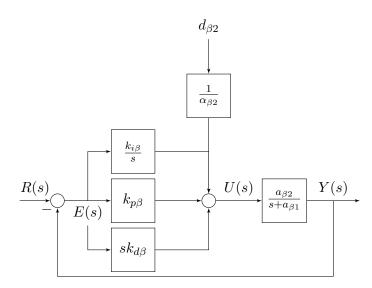


Figure 2.1: Example: Control block diagram

3 Others

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