

ECE470 Power Systems I Hints for HW # 9

1. b) $V_{T1} = 1.2$ pu, $X_1 = 0.2218$, $X_2 = 0.1752$, $X_0 = 1.44$
c) Currents and voltages (pu) are:
 - i) 5.411 0
 - ii) 1.96 1.736
 - iii) 5.235 1.059 and 0.5297
 - iv) 5.226 1.488

2. b) 8.03 and 9.76

3. a) 1615 V vs. 269 V (Not OK)
b) $R_g = 4.45 \Omega$, so we have 890.4 V vs. 269 V (Still not OK)
c) 890.4 V vs. 1699V (OK)