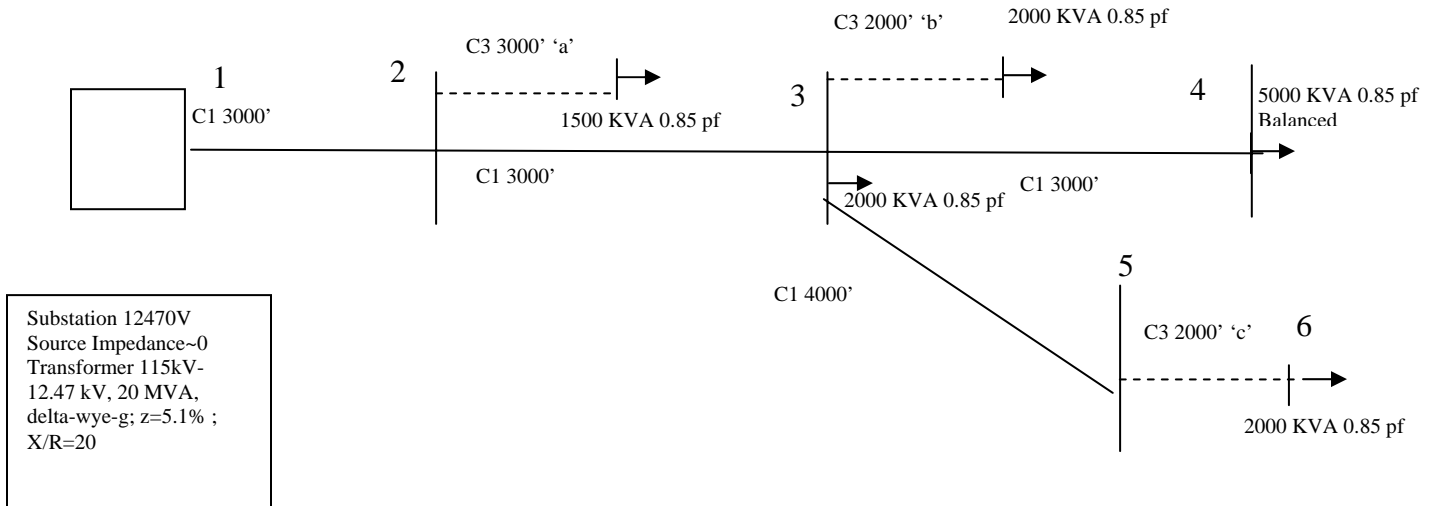


EE494 Test

Consider the system in HW5 with following changes



1. Assuming 12470 V at the sub determine all voltages (use your program if you wish) Identify voltage issues and fix them.
2. Determine the impedance settings of a compensator for the substation transformer LTC if we wish to maintain 1.01 pu voltage at the load center(Bus 3)
3. Find the fault current for a bolted line- ground fault at bus 6
4. When a fault occurs at a bus the voltage sags at all buses. Estimate the voltage sag (nominal voltage- voltage during fault) at bus 4 for a SLG fault at bus 6
5. What is the voltage dip at bus 4 if I try to start a 500 HP Induction motor.
6. I want to protect sections 3-5 and 5-6 with fuses. Select fuses and show me that they coordinate.