

Given line-line voltage = 4400.0000 V

Line-neutral voltage = 2540.3412 V

Impedance of the load = 20.0000 /_ 30.0000 ohms

Impedance of the line = 1.4000 /_ 75.0000 ohms

$V_{an} = 2540.3412 /_ 0.0000$ V

$I_{an} = 127.0171 /_ -30.0000$ V

The line to neutral voltage at the substation = 2669.0452 /_ 2.7002 V

The magnitude of the voltage at the substation bus = 4622.9218 V