King Fahd University of Petroleum & Minerals

Electrical Engineering Department

EE 620: High Voltage Engineering

(First Semester 051)

Project # 1

The three phase horizontal configuration transmission line shown in figure 1 is energized from a 230 kV. The height H is 12.2 m, phase spacing D is 10.4 m and conductor radius is 23.15 mm. Using the charge simulation method, calculate and draw the electric field at the ground plane.

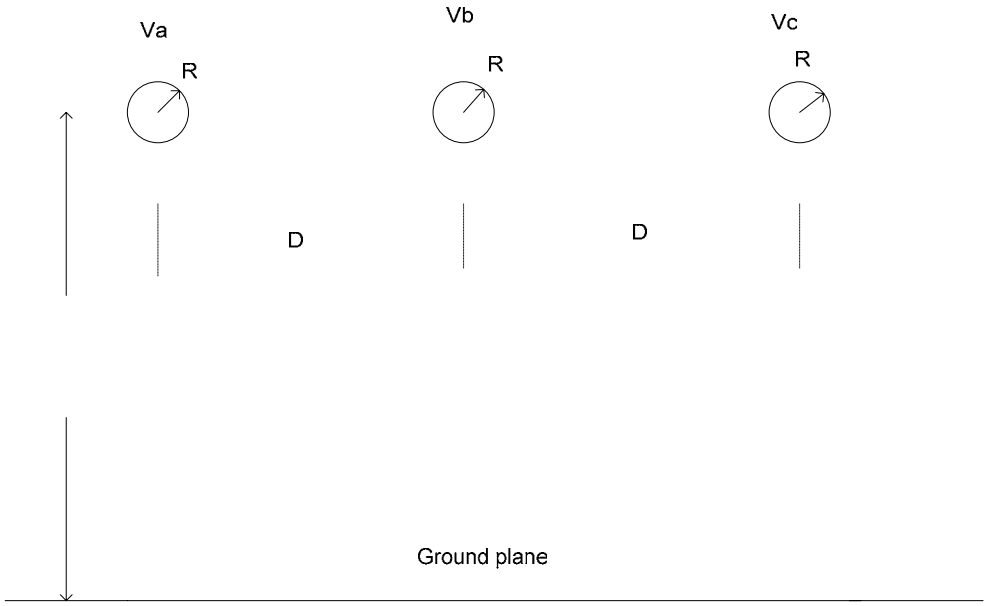

Figure 1: 3-Phase transmission line configuration