Teaching Distance Relay using Matlab/Simulink Graphical user Interface

Abstract

This paper describes the modeling of distance relay using Matlab/Simulink package. SimPowerSystem toolbox was used for detailed modeling of distance relay, transmission line and fault simulation. Inside the modeling, single line to ground (SLG) fault was choose to be the fault type and Mho type distance characteristic was choose to be as the protection scheme. A graphical user interface (GUI) was created using GUI package inside Matlab for the developed model. With the interactive environment of graphical user interface, the difficulties in teaching of distance relay for undergraduate students can be eliminated.