

Abstract Submission Form

Title: (To be Filled by the students/ contributors)

*Example: Modeling of Single Machine Infinite Bus (SMIB) using Modelica and OpenIPSL

Name of the Contributor: (To be Filled by the students/ contributors)

Institution/Organization: (To be Filled by the students/ contributors)

Abstract:

(Example Abstract)

The Single Machine Infinite Bus (SMIB) consists of one generator (the machine) connected to an infinite bus through the power lines. The aim of the model is to simulate different scenarios of the SMIB system under different operating conditions. The submitted model, implemented in Modelica language, presents the simulation scenario of a three phase balanced fault at one of the buses of the SMIB test system when the generator does not have any additional controls included in it. The fault is simulated for 0.06 sec. (starting from 0.5 sec. to 0.56 sec.). The result obtained from the simulation justifies the bus voltage profile during pre-fault and post-fault conditions.