Title: Modeling and Simulation of 181 bus TNEB Power System using OpenModelica and OpenIPSL

Name of the Contributors: J.Abinaya, H.Dhinisha, P.Pavithra, P.Tharshana Priya Institution: St.Xavier's Catholic College of Engineering, Nagercoil, TamilNadu, India. Email: abinaya22012000@gmail.com, dhinisha99@gmail.com, ppavithra2707@gmail.com, priyarajesh2017@gmail.com

Abstract:

This project aims to simulate 181-bus Indian Power System (TNEB System) under faulty conditions and variable load conditions. The selected real time system consists of 34 generators, 159 transmission lines, 76 transformers and 77 loads. The objective of this work is to simulate three phase fault at selected buses for certain time interval and analyze the performance of all the buses under faulty condition. The work also includes analysis of system performance under variable load conditions at selected buses. The simulation will be done using OpenModelica and OpenIPSL.