

Abstract

The paper compares different power channel models used for modeling power line system. The models compared are Zimmermann and Dostert, Philipps, Anatory *et al* and generalized TL approach. The validity of the modeling was compared with ATP-EMTP which also uses transmission line approach. It is found that for a power-line network with one branch Philipps, Anatory *et al* and generalized TL approach have similar results with ATP-EMTP, however Zimmermann and Dostert model indicates the same amplitude with other model but different time delay. It is observed that when the numbers of branches were increased only generalized TL approach results were comparable with ATP-EMTP results. The results in paper can read to the improvements in BPLC system design.