

## **Revised sequence components power system models for unbalanced power system studies**

### **Abstract**

The objective of this paper is to present a revised sequence decoupled power system models for analyzing unbalanced power systems based on symmetrical networks. In these models, the three sequence networks are fully decoupled with a three-phase coordinates features such as transformer phase shifts and transmission line coupling. The proposed models have been utilized to develop unbalanced power-flow program for analyzing both balanced and unbalanced networks. The power flow solution is identical to results obtained from a full phase coordinate three-phase power-flow program.