

This paper presents the assessment of the voltage dip phenomenon of a practical system in Saudi Arabia. There is a substantial body of literature available about voltage dips, but there is no clear and formal international standard on the phenomenon. There exists no international standard as to the acceptable voltage dip magnitude, and duration. The study utilized some of the widely used international experiences of South African Electric Utility (ESKOM) criterion. This criterion is used by many utilities world wide to measure the performance of their networks. The number of voltage dip incidents during the years 1997-2000 was analyzed. The system study result indicates that the number of three-phase and SLG faults are acceptable when compared with the ESKOM limits.