

METROPOLITAN AREA DISTRIBUTION FEEDER NETWORK ANALYSIS FOR RELIABILITY INDICES

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ABSTRACT

The parameters of reliability of power distribution are the major goal lines to define the health status of any utility and its customer satisfaction. The reliability parameters of power distribution engineering are SAIDI, SAIFI, CAIDI and CAIFI, which are the primary contributors, which access the Utility-Customer dynamics in terms of credibility, accountability and satisfaction. In this paper, the reliability parameters for local Metropolitan Area Electricity Supply Company has been analyzed for the year 2014 starting from 1st January 2014 to 31st December 2014. These reliability parameters would be beneficial for the Utility to make major overhauling decision or adaptation of any latest technologies to enable a good customer relation as well as utility status. This parameter can also become the path way for implementing technology at the substation level, feeder level or at the customer end or in other words adoption of distribution system automation at the fundamental levels, basically in the form of substation automation, feeder automation and customer automation. This research activity demonstrates need for greater fault management system for improvement of distribution network reliability as well as customer satisfaction by the utility.

KEYWORDS: Bangalore Electricity Supply Company [BESCOM]