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ANALYTICAL METHOD FOR DISTRIBUTION SYSTEMS RELIABILITY EVALUATION

ABSTRACT

One of the most important problems in distribution system (DS) planning are the choice and estimate of system's reliability. Reliability of DS's work is realized with providing of certain source's reserve and power transmission reserve. Higher level of reliability will provoke unnecessary investments in DS, but low level of investments will provoke no economical work, bad quality and unjustified damage of loads. There for in modern engineer practice choice of optimal reliability is getting more and more subject of interest. In the current text will be shown methodology for analytical computing reliability of DS.

Keywords: DS, RDN, failure rate, repair rate, reliability, availability, damage function, energy not supplied.