

## **BIFURCATION OF HEAVY LOADED 11KV FEEDER TO REDUCE TECHNICAL LOSSES IN DISTRIBUTION SYSTEMS OVER WIRED NETWORKS**

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### **Abstract:**

The electrical power system consists of generation, transmission and distribution systems. The loss of power and energy in distribution systems are more as compare to the power and energy loss in other systems. In this paper, an 11 kV distribution feeder running on excess loading position due to more length and small capacity usage of conductor has been analysed. This feeder results in energy loss and drop of voltages throughout the network. Therefore, it is necessary to examine the methods which can reduce these losses. Bifurcation is one of the methods which can reduce the technical losses. The main objective of this research is to develop a methodology and guide lines for distribution utilities to show that by decreasing the loss of energy in distribution networks the existing system capacity may be enhanced without adding additional capacity.

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