

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY  
BELGAUM – 590018, KARNATAKA**



**Project Report**

**On**

**“IMPLEMENTATION OF NETWORK RECONFIGURATION  
TECHNIQUE FOR LOSS MINIMIZATION ON A 11KV  
DISTRIBUTION SYSTEM OF MRS SHIMOGA- A CASE STUDY”**

**Submitted By**

**ABDUL KAREEM.S.J  
AKSHATHA.D.S  
BHUVANESHWARLS  
SEETHARAMA**

**4PM10EE001  
4PM10EE003  
4PM10EE012  
4PM10EE407**

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**Under the Guidance of**

**Mr. Shivakumar.L.N**

Asst.prof, Dept.of EEE  
PESITM, Shivamogga



**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING  
PES INSTITUTE OF TECHNOLOGY & MANAGEMENT  
SHIVAMOGGA – 577204  
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## **ABSTRACT**

Feeder reconfiguration for loss reduction is a very important function of automated distribution system to reduce distribution feeder losses and improve system security. There are a number of closed and normally opened switches in a distribution system, and the number of possible switching operation is tremendous. Thus feeder reconfiguration becomes complex decision making and time consuming process for system operators. Network reconfigurations basically modify the network structure of distribution feeders by changing the open/close status of sectionalizing (normally closed) and tie (normally opened) switches.

In the present work, a simple approach for distribution reconfiguration was proposed standard switching indices are used for network reconfiguration and the algorithm is tested on a standard 32-bus system which has been taken as the benchmark problem for network reconfiguration in many IEEE papers. Also the algorithm is implemented on a typical 11kv distribution system which is radiating from main receiving station shivamogga. It has been observed that there is a considerable reduction of technical losses in reconfigured.