

## **An analytical method for optimal sizing of different types of DG in a power distribution system**

### **ABSTRACT**

This paper presented a hybrid method to find the optimal size of the distributed generation by considering different type of renewable sources in the distribution power system. The proposed method is based on the combination of two methods like the sensitivity analysis and continues power factor method. The simulated method is done on the Matlab environment by applying in the 16-bus distribution system. The result illustrated the accurate and reliable size of the different types of the distributed generation in a power system.

**Keyword:** Continuous power flow; Exact loss formula; Optimum size; Optimum location; Different types of DG