

## **Determining islanding operation using micro grid phasor measurement unit parameters**

### **ABSTRACT**

For improving the reliability of the micro grid network, a robust islanding detection algorithm is required. For creating a vigorous islanding detection algorithm voltage angle and current angle should be detected appropriately from the grid. The main objective of this research is to determine and compare the voltage angle and current angle with normal operation and islanding operation of the micro grid to develop multilevel islanding detection algorithm to ensure the higher reliability. In this work, IEEE 30 bus network phasor measurement unit parameters have been determined in Power World Simulator. The result shows that the proposed methodology can appropriately determine the islanding event and the comparative study shows an incredible change in phasor measurement unit parameters when grid goes on islanding operation.

**Keyword:** Phasor Measurement Unit (PMU); Voltage angle; Current angle; Micro grid