

## **DISTRIBUTED GENERATION SYSTEMS AFFECTED BY DELAY OF WIRELESS COMMUNICATION WHILE LOAD SHARING**

**RAJASHRI R. NARWADE & SONAL GAHANKARI**

Saraswati College of Engineering, Kharghar, Navi Mumbai, Maharashtra, India

### **ABSTRACT**

This paper is concerned with the control strategy for the parallel operation of distributed generation systems (DGS) rely on the underlying wireless communication channels to exchange power information among them for load sharing control. Study has shown that the time-varying wireless communication delay may have a significant impact on the performance of power inverters. In this, paper aim is to fill this gap and study the performance of distributed power inverters under the scenario of wireless-enabled smart microgrids and overcome this delay problem the proposed method used is a new controller design based on smith predictor to provide a smooth load sharing performance.

**KEYWORDS:** Distributed Generation Systems (DGS), Pulse Width Modulation (PWM) Inverters