

Integration of Smart Grid Technologies with Smart Phones for Energy Monitoring and Management

Authors : Arjmand Khaliq, Pemra Sohaib

Abstract : There is increasing trend of use of smart devices in the present age. The growth of computing techniques and advancement in hardware has also brought the use of sensors and smart devices to a high degree during the course of time. So use of smart devices for control, management communication and optimization has become very popular. This paper gives proposed methodology which involves sensing and switching unite for load, two way communications between utility company and smart phones of consumers using cellular techniques and price signaling resulting active participation of user in energy management .The goal of this proposed control methodology is active participation of user in energy management with accommodation of renewable energy resource. This will provide load adjustment according to consumer's choice, increased security and reliability for consumer, switching of load according to consumer need and monitoring and management of energy.

Keywords : cellular networks, energy management, renewable energy source, smart grid technology

Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development

Conference Location : Chicago, United States

Conference Dates : December 12-13, 2020