

Continuous supply of power is one among the key objectives of the Smart Grid. With the spread of the internet network, connection of Wi-Fi-based Wireless Sensor Networks (WSN) and the AMR system is bound to advance. Demand response can significantly reduce peak load by using the connection between energy price and energy need for the buyer and producers benefit. Advanced Metering Infrastructure (AMI) permits utilities to gather, monitor, and examine energy consumption data for grid management, line or generator outage notice, and billing purposes using bidirectional communication links. Although a valuable consumer asset, AMI networks require a momentous investment and have yet to be implemented in most consumer-based applications. Some researchers have briefly reviewed the data transmission methods. Thanks to the characteristically interconnected and interdependent nature of the grid, enhancing wide area monitoring and situational awareness is important to achieve this aim. AMI are often improved to deliver consumers with historical energy consumption data, contrasts of energy use throughout the day, real-time cost information, and enhancement of energy consumption during peak load times. Although, Automatic Meter Reading (AMR) already exists, it only utilizes unidirectional communication to realize meter reading chiefly for billing functions.