Smart Grid Technology in India

The development and execution of a smart grid for power supply is one of the important issues in modern energy economy, given high national priority and huge investments, although the entire subject is still in its initial stage. Smart grid delivers energy from producers to the consumers in a bi-directional way. Bidirectional technology allows the utilities to take over the control of appliances in the consumer's houses and industries to save energy and to increase the overall efficiency of the electrical grid. A smart grid includes an intelligent monitoring system that keeps track of all the electricity that flows in the system.

- Dr N Kumarappan, Vigneysh T and Arulraj R

In India, the present day power system is the integration of generation, transmission and distribution system with centralized control. Due to their old infrastructure, the losses associated with the current system are very high. As the investment on the grid is less and due to manual operations, the reliability and continuity of the supply is reduced. So, it is essential to improve the reliability of the supply and to modify the infrastructure of the present day power system. It can be achieved by modifying the old grid into a smart