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## **Smart Grid based on Edge Cloud Computing**

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Abstract: Grid means power or energy supply. An electric grid with the information and communication technology (ICT) is called smart grid. To use smart grid, smart meters are installed, and helps to do two way communications i.e consumers to suppliers and then again to consumers. Smart grid with edge computing is the smart solution where the consumers can track the high power voltage and because of that there will be no loss of energy. All the data gets transmitted using wireless communication. In tradition method consumers had only access of paying electricity bills but Smart grid overcomes the drawback of traditional method by providing two way communication. The consumers can also find out the graph of power supply at home, company, etc using smart grid. In future the cost of smart grid will get reduced and AI implementation will be activated and it will reduce the need for grid storage, and the consumers will able to operate the smart meters, so that the loss of electricity will be in control.

Keywords: Smart Grid, Edge Computing, Smart meter, Sensors, PMU placement, Electricity

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