

An Overview and Advancement of Electricity Peak Load Saving Methods: A Review



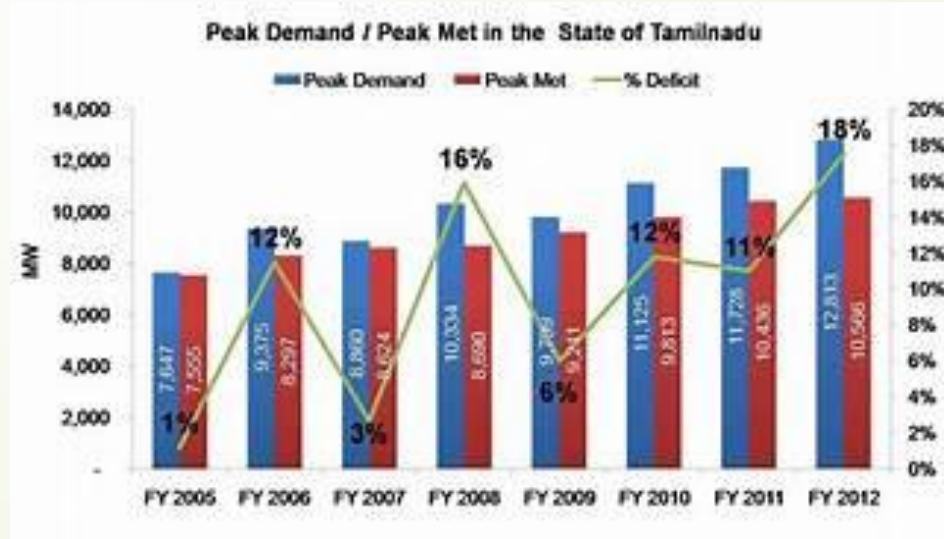
P.Sridharan

Project Guide: A. Singaravelan

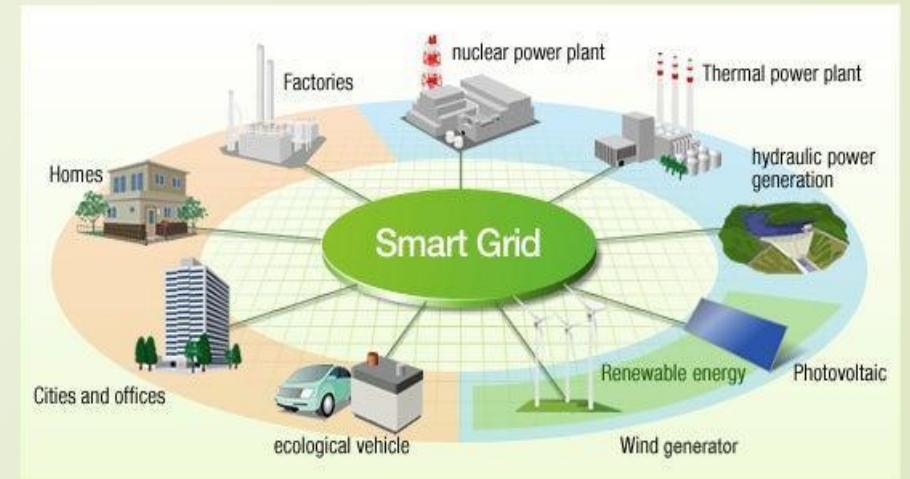
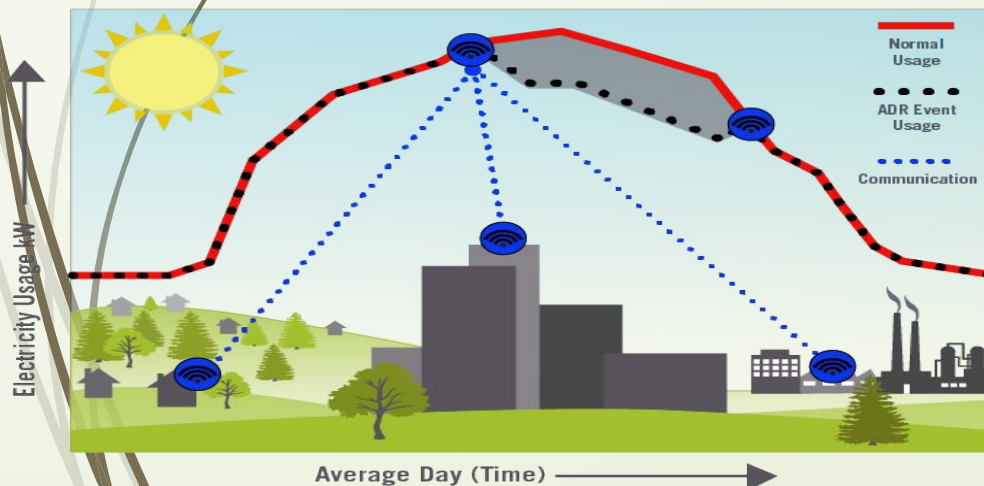
ABSTRACT

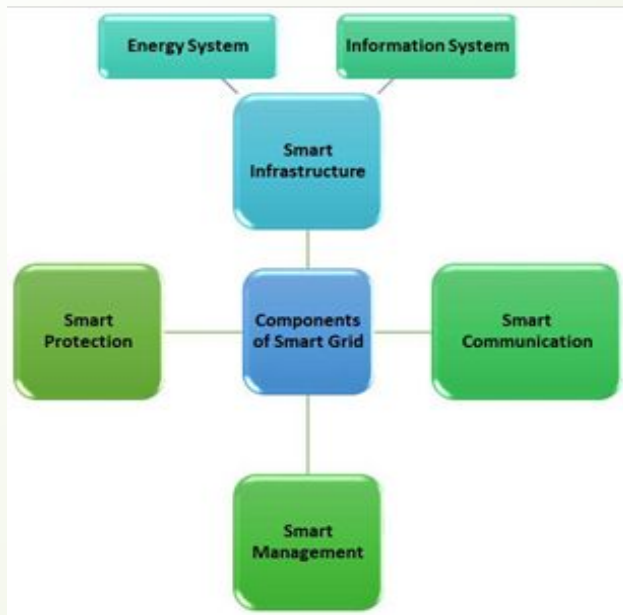
- ❑ Frequent peak demand occurring on the power system due to the growing energy needs of the world
- ❑ Blackout, brownout, voltage instability, and surge/slack fluctuation occurs when the generated power is not matched with the required load demand
- ❑ A detailed review was done to identify the latest technology to overcome the peak demand problems on power system.
- ❑ This study concludes that the peak demand can be efficiently controlled with a proper demand response program with the help of latest smart grid technology.

INTRODUCTION

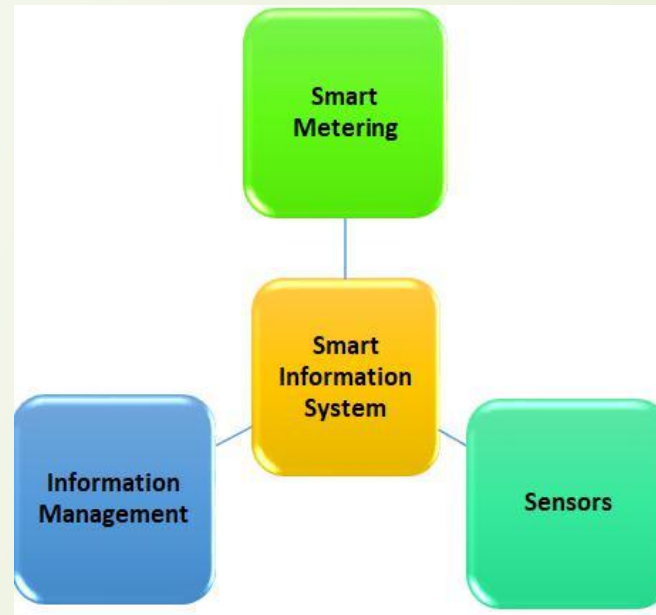


Automated Demand Response

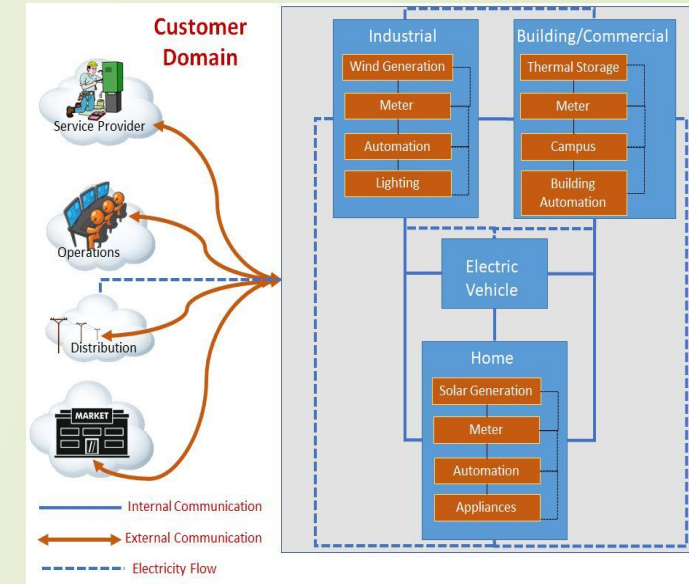




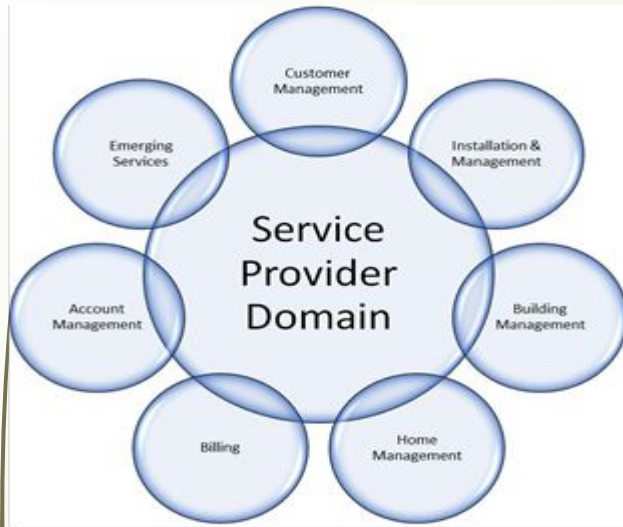
Smart grid components



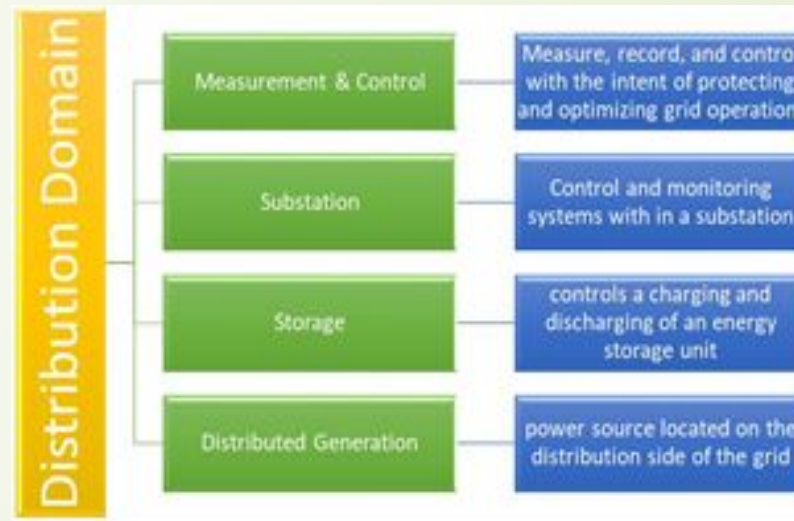
Smart Info System



Smart grid infrastructure with consumer domain



. Smart grid for market domain



. Smart grid for distribution domain

CONCLUSION

- ❑ RTP demand response program will efficiently save the peak demand and consumption cost.
- ❑ No real-time experiment on home appliances is done to test the efficiency of this method.
- ❑ HEM with considering both consumer comfort level and reduction in peak demand was not available in the literature
- ❑ A combination of the smart plug with the standby power saving method is not available in the literature.

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