

India's Power Sector is capable of conducting energy audits for effective power distribution throughout the country. Do you agree with this view? Critically analyse.

India's Power Sector is one of the most diversified in the world. Sources of power generation range from conventional <sup>source & non-cheapest</sup> sources. For example India's <sup>most abundant</sup> major power source is coal (74%). India's electric generation

Today Indian Power Sector is facing major challenges due to introduction of reforms & globalization. And the reason for energy crunch is due to population explosion & elevation in living standards. So, the time has come when each & every power user has to think for efficient use of power. The need of hour is therefore "Energy auditing".

Energy auditing: Energy audit is an engineering technique used to establish the pattern of energy use & identification of how & where the losses are occurring. Electrical energy is invisible, hence often it is wasted or made theft without being noticed except at the end of months when energy is reviewed.

Union Government published draft regulations for mandating conduct of energy audits of distribution companies (discoms) on yearly basis. The main object

The main objectives of energy audit: It distinctly addresses the problems of energy losses whether it is technical loss (Eg: Losses due to loose jump connection in line or due to ghost circuit loss & earth faults) and commercial loss (Eg: Mistake in billing or meters not recording correctly).

So audits would be conducted on 33 KV lines, 11 KV lines, at the feeder level & also at the distribution transformers (DTs). Hence it is also possible to improve upon the AT&C loss through higher billing & collection efficiency.

To read all the meters simultaneously, we would need the facility of smart-meters that can be read off-site, or at least the data should be logged.

Smart meters: The smart meters can be switched remotely between post paid & prepaid modes. The implementation of these meters may play a crucial role as it helps to reduce commercial losses of utility, reduce operation & maintenance cost and enhance quality of service. In addition, customers are able to monitor their consumption.

Disadvantages of Smart meters: - Additional fees of installation of new meter, more responsibility placed upon the consumer for maintenance.

Conclusion: With the application of IT, highly advanced communication technology & advance in energy meters in collecting & processing of energy information to reduce losses is very essential. I agree with the view, "I am confident that these meters will help discoms in showing up their finances".