

New BEE Energy Audit Regulations for DISCOMS: Paper or Real Tiger?

BEE's new regulations that require electricity distribution companies to conduct periodic energy audits are good and should be implemented effectively

You cannot manage what you cannot measure, goes a clichéd but wise business adage. The Bureau of Energy Efficiency (BEE)'s latest regulations have the potential to ensure a better measurement and tracking of the transmission and distribution (T&D) losses of the electricity distribution companies (Discoms). A number of recent policies and schemes have focused on reducing Discoms' aggregate technical and commercial (AT&C) losses, of which T&D losses form a major part. However, despite the guidelines by the Central Electricity Authority, different Discoms use different methods to calculate AT&C losses without necessarily stating the underlying assumptions and data. This difference can be as high as 4 percentage points (the average reported AT&C losses are about 22-25%) making measurement and tracking of AT&C losses difficult. BEE's new energy audit regulations can change this situation.

What are BEE's new energy audit regulations?

Last year BEE had notified all the Discoms as 'Designated Consumers' under the Energy Conservation Act, 2001 requiring them to conduct periodic energy audits and undertake energy conservation measures. Recently, BEE notified regulations that prescribe the manner in which Discoms should conduct these energy audits and provide the relevant data. First, Discoms are required to submit energy accounting reports every quarter and an audited energy report every year to the BEE in prescribed formats. This includes data on energy input and consumption at each voltage level by all users including Discom consumers, open access and captive users, as well as distribution franchises. This enables a better estimation of T&D losses based on the actual energy handled by the system. Disaggregated energy data at feeder and distribution transformer (DT) level is also required to be submitted. Such data can be useful in identifying areas of significant losses. It can also help reveal any Discom malpractices of fudging T&D losses by mis-reporting unmetered consumption.

Second, the regulations stipulate clear timelines for the Discoms to upgrade their metering infrastructure at the feeder, DT, and consumer levels. For instance, all the feeders are required to have functional communicable meters by December 2022 whereas all the DTs should be metered by December 2025. Discoms are required to provide status of the metering infrastructure in the annual energy audit reports. Furthermore, Discoms are also required to submit the share of the reported energy data which has been manually recorded. This can keep track of the installed but non-functional communicable metering infrastructure. This is particularly important since the status of metering for consumers and the distribution infrastructure is still not reported in a systematic manner anywhere. This mandate for regular reporting can put pressure on Discoms to ensure complete metering and also provides necessary inputs regarding accuracy of audit reports.

Third, the regulations also prescribe certain processes to ensure compliance. It requires Discoms to create a centralized energy accounting and audit cell with adequately qualified personnel. They are also required to submit the audited annual report to the BEE and the state designated agency and publish it on their website within four months.

These regulations do tick all the right boxes to ensure detailed and accurate energy auditing by the Discoms. However, having good regulations in place is only half the job done. They need to be implemented effectively.

What can be done to ensure effective implementation?

The first key requirement for effective implementation is ensuring upgradation and regular maintenance of metering systems through appropriate investments. For this, the Discoms can avail funds under the recently launched revamped distribution reform scheme. Reporting of the status under these regulations is vital in holding the Discoms accountable on progress.

Second, non-compliance with the provision under these regulations can attract a penalty of Rs 10 lakhs with Rs. 10,000 per additional day of non-compliance as per the Energy Conservation Act. This is loose change for the Discoms whose annual revenues are in thousands of crores. This penalty should be revised to act as a serious deterrent. Furthermore, BEE has traditionally been an organization with limited resources and hence, limited ability to track and deter non-compliance. The Ministry of Power (BEE's parent ministry) needs to strengthen BEE with higher allocation of resources. BEE needs to have regional offices and more staff to coordinate with state designated agencies to monitor compliance with its regulations.

Finally, the State Electricity Regulatory Commissions (SERCs) can play a key role in the effective implementation of the regulations. Many SERCs already require Discoms to submit data on energy accounting in their tariff petitions. They can mandate the Discoms to submit the data in the formats required by BEE's regulations and monitor compliance.

These regulations have a potential of making headway in dealing with the Power sector's long-standing problem of high T&D losses. But it is by no means a silver bullet and requires concerted efforts from all the actors to make it a success. Otherwise, it will be a wasted opportunity.

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