**Digital DISCOMs: Solutions for Financially-Sustainable Distribution Companies**

***Bangalore:***

Karnataka electricity distribution companies (DISCOMs) can cut down their losses by 2% on average, resulting in a savings of INR 700 crore per annum, if they identify the potential revenue from each feeder, commensurate to supply. Such a step might turn out to be a huge relief for debt-ridden DISCOMs. As of February 2020, DISCOMs in India owe power generators a whopping INR 92,693 crore.

The financial viability of DISCOMs has been plaguing the Indian power sector for a long time. Between 10-30% of DISCOM revenue is still financed through government subsidies. The government’s attempts to find a permanent solution to both the operational and financial struggles of the distribution companies through the Ujwal DISCOM Assurance Yojana (UDAY) has not helped much, forcing the Centre to mull privatisation of DISCOMs.

Technology-policy think tank, Center for Study of Science, Technology and Policy (CSTEP) undertook a study of the implementation of the UDAY scheme in two DISCOMs in Karnataka, including a feeder survey and a detailed analysis of the transmission and distribution losses. A key gap observed during the study was that feeder-level managers, who are involved in day-to-day operations and maintenance of infrastructure supplying electricity to consumers, are not accountable for revenue realisation.

At an event organised to share the findings of the 4-year-long study, CSTEP unveiled a tool—Feeder-wise Revenue Accounting and Monitoring of Energy Sales (FRAMES)—to identify potential revenue from each feeder, commensurate to supply. This can also help pave the way for greater revenue accountability at the feeder-manager level.

At the event, a GIS-based energy auditing tool was also introduced that can help in tracking loss-making feeders, making the electricity network more effective. Using GIS, DISCOMs can map feeders to distributions transformers and consumers to enable more transparent and efficient operations.

Rishu Garg, who led the CSTEP study, pointed out that the Karnataka state government can save INR 645 crore in subsidies, every year, if DISCOMs adopt a scientific approach to computing agricultural IP set consumption.

“The use of digital tools will not only ensure revenue accountability at the last-mile-supply level (feeder managers), but also help India turn around the financial state of DISCOMs,” she said.

“Digitalisation has helped many industries sustain their operations during the pandemic. Ensuring that our DISCOMs stay viable is a long-term endeavour. It is nice to see DISCOMs taking a lot of initiatives in this regard. However, there is more to be achieved,” said Dr Jai Asundi, Executive Director of CSTEP.

The report, detailing the study, was released at the event by Shri Mahendra Jain, Additional Chief Secretary, Energy Department. He observed that long-standing power purchase agreements were one of the reasons contributing to the high cost of power in Karnataka. “Much of Karnataka’s energy comes from renewable sources (63% including hydel); 46% of our consumption is from renewable energy sources. This has forced us to shut or ramp down power generation from thermal power plants. But regardless of whether we are scheduling the energy or not, we have to pay fixed charges to generators to the tune of INR 7000 crore. About half of this (approximately INR 3000 crore) is for energy we have not even consumed.”

He pointed out that, “Though billing and collection efficiency have increased under UDAY, Karnataka has been unable to reduce its average cost of supply – average revenue realised (ACS-ARR) gap due to these deep-rooted issues. Thus, along with digitalisation to improve operations, financial restructuring is also needed.”

During the panel discussion, Shri MR Sreenivas Murthy, Former Chairman, Karnataka Electricity Regulatory Commission (KERC) said that the FRAMES model could enable better revenue realisation at the operational level by plugging leakages. “DISCOMs need to address commercial losses on priority. Digitalisation can remove a lot of uncertainties and bring down losses. But there is also a need for better accountability for revenue realisation from the feeder-manager level to the consumer level to plug leakages in the system.”

Mr Sreenivasa Murthy was joined in the panel discussion by Shri Manohar Bevinamara, MD CESCOM and senior officials from BESCOM.

The complete report to the study is available on this [link](https://cstep.in/publications-details.php?id=1276).

This [video](https://youtu.be/mcoJTfUdGAU) provides a summary of our findings.

For more information on the study, please contact CSTEP at cpe@cstep.in