Best Practices being followed by WBSEDCL in low voltage mitigation and AT&C loss reduction by implementing schemes at customer care center level

R&EM Cell of WBSEDCL have implemented around 5,000 small schemes throughout the State of West Bengal as per the R&EM Cell guidelines. The salient features of this scheme are as follows:

i. Small size scheme: costing around Rs.50,000/- to Rs.5 lakhs
ii. Job satisfaction : Planning and formulation of projects based on the practical site problems.
iii. Sense of responsibility and ownership to site engineers
iv. Being a small scheme, it is easy to do cost benefit analysis and get quick results
v. Payback period around six months to 2 years
vi. Replicate the success stories in other areas

Indicative list of some of the activities taken under these schemes

1. Changing bare LT lines to Aerial Bunched Conductors (ABC)
2. Changing Single phase 2 wire system to 3 phase 4 wire system
3. Addition of Distribution Transformers (DT) say additional 100 KVA or 63 KVA / Augmentation of overloaded DT capacity (say 25 KVA to 63 KVA or 63 KVA to 100 KVA etc.)
4. Shifting of load to New DT, if lightly loaded
5. Reconductoring say AAC 30 sqmm to ACSR 50 sqmm
   bare conductor to PVC cable etc
6. Tightening of jumpers at junction points in 11 KV feeders to reduce tripping / breakdown of feeders
7. Use of HVDS and reducing the LT line length

Scheme Cost

Appx. Rs.50,000/- to 5 lakhs (Average around Rs.2 lakh)

Consumer base in each scheme

Around 50 to 300/400

Benefits from the Scheme

1. Voltage improvement
2. Increase in number of consumers on the concerned feeder (hooking by customers reduced)
3. AT&C loss reduction
4. T&D loss reduction
5. Increase in billed energy
6. Number of fuse calls reduced drastically
7. DT failure rate reduced

8. Collection efficiency improved
9. DT running with a balanced load

Payback period

Six months to one / two years

The above methodology may serve as morale booster to the engineers who can plan for their system improvement (DT or feeder level) and in turn can easily demonstrate the results. This would further inculcate the competitive environment amongst the engineers. Discoms willing to know further details of above scheme, may contact WBSEDCL.

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