

**GOVERNMENT OF INDIA
POWER
LOK SABHA**

UNSTARRED QUESTION NO:4381
ANSWERED ON:19.05.2006
TRANSMISSION AND DISTRIBUTION LOSSES
Gandhi Smt. Maneka

Will the Minister of POWER be pleased to state:

- (a) whether transmission and distribution losses in the distribution system at the National level during the financial year 2004-05 were reduced from 34.54 per cent to 34.53 per cent;
- (b) if so, the details thereof;
- (c) whether the poor techno-economics of the APDRP scheme justifies the huge investment being made by the Government in this scheme;
- (d) if so, whether any scientific study has been conducted to fix the responsibility and to identify the causes of such alleged inefficient use of APDRP funds; and
- (e) if so, the details thereof?

Answer

THE MINISTER OF POWER (SHRI SUSHILKUMAR SHINDE)

(a) & (b) : The Aggregate Technical & Commercial (AT&C) losses were 36.84 percent during 2002-03 which were reduced to 34.78 percent during 2003-04 and 33.82 percent during 2004-05.

(c) : Considering the poor financial health of the State Electricity Boards (SEBs) with losses reaching Rs. 29,331 crore in 2001-02 which then were estimated to reach Rs. 40,000 crores in next five years, an old and weak sub-transmission and distribution system with no investment forthcoming from the utilities, and high AT&C losses, the Government launched the Accelerated Power Development and Reforms Programme (APDRP) in 2003-04 for revival of the SEBs/Utilities. APDRP focused on strengthening and upgradation of sub-transmission and distribution system in densely electrified zones in the urban and industrial areas and improvement in commercial viability of SEBs/Utilities. Under investment component of APDRP, funds are provided for taking up projects for strengthening and upgradation of the sub-transmission & distribution system while under incentive component funds are provided as 'grant' to encourage/motivate utilities to reduce their cash losses.

To help the SEBs/Utilities in efficient and professional implementation of the APDRP, the Ministry of Power appointed NTPC Ltd. and Power Grid Corporation of India Ltd (PGCIL) as lead Adviser cum Consultants (AcCs) for the State Utilities. The main functions of the AcCs is in assisting the SEBs/Utilities in the areas of preparation of feasible and viable Detailed Project Reports (DPRs), scrutiny & validation of the DPRs prepared by the State Utilities, supervision of implementation of schemes under APDRP, MIS development, GIS mapping, monitoring of project, implementation etc. To avail funds under the investment component of APDRP, a Utility has to prepare a DPR and forward it to Ministry of Power through their AcC concerned. The DPRs are appraised technically by the AcC based on the payback period, the impact of the capital equipments on loss reduction. The DPRs as recommended are then considered by the Steering Committee headed by Secretary (Power).

The Government has sanctioned 583 projects amounting to Rs. 19180.46 crores under investment component of APDRP so far, out of which APDRP component is Rs. 9264.65 crores and the Government has already released an amount of Rs. 6131.70 crores under this component of programme. An aggregate amount of Rs. 1536.64 crore has been released as incentive to eight States under incentive component of APDRP. To make the programme more effective, the following measures were initiated:

the utilities were asked to sign Memorandum of Agreement (MOA), to commit improvements in set of benchmark parameters.

Linking of securitisation under Tripartite Agreement to secure CPSUs dues for assistance under APDRP.

A massive programme for training of utility personnel.

Ranking of SEBs/utilities by independent agencies viz CRISIL & ICRA.

Dissemination of best practices amongst the utilities through national level workshops.

As a result of implementing APDRP, the commercial losses of State Power Utilities which were Rs. 29,331 crore in 2001-02 have been reduced to Rs. 22,129 crore in 2004-05. The billing efficiency at national level has improved from 68.37 percent during 2002-03 to 69.87 percent during 2004-05. The national average collection efficiency has also improved from 92.68 percent during 2002-03 to

94.72 percent during 2004-05. With this improvement in billing and collection efficiency, the national average AT&C loss of the distribution companies has reduced from 36.63 percent in 2002-03 to 33.82 percent in 2004-05. The details are shown below:

Year Billing Efficiency (%) Collection Efficiency (%) AT&C Loss (%)

2002-03	68.37	92.68	36.63
2003-04	68.80	94.80	34.78
2004-05	69.87	94.72	33.82

Monitoring of the AT&C loss of towns covered by APDRP has shown that AT&C loss has been reduced below 20 percent in 212 towns. Among them, 169 towns have shown loss below 15 percent as under:

Towns showing AT&C loss below 15 percent

Sl. No. State No. of Towns

1	Andhra Pradesh	94
2	Chhattisgarh	1
3	Gujarat	5
4	Himachal Pradesh	3
5	Karnataka	17
6	Madhya Pradesh	1
7	Maharashtra	6
8	Punjab	7
9	Rajasthan	3
10	Tamil Nadu	32

Total 169

Further, 43 towns as shown below have achieved AT&C loss between 15 & 20%:-

Towns showing AT&C loss between 15 percent & 20 percent

S. No. State No. of Towns

1	Andhra Pradesh	2
2	Chhattisgarh	1
3	Gujarat	6
4	Goa	1
5	Himachal Pradesh	3
6	Karnataka	14
7	Kerala	4
8	Maharashtra	2
9	Punjab	4
10	Tamilnadu	4
11	Tripura	1
12	Uttar Pradesh	1

Total 43

(d) & (e) : Evaluation of the 66 APDRP projects where more than 50% of the work was completed, has been assigned to five independent evaluation agencies namely Administrative Staff College of India (ASCI), Hyderabad, The Energy and Resources Institute (TERI), New Delhi, Indian Institute of Management (IIM), Ahmedabad, SBI Capital Markets Ltd, Mumbai and TATA Consultancy Services (TCS), New Delhi. Their major findings and suggestions are as below:

Findings:

Technical intervention activities under APDRP schemes have resulted in a declining trend in distribution losses.

Utilities are now having a better understanding of their functions and performance with the introduction of Key Performance Indices (KPIs) in the APDRP schemes. The indices are now being monitored through periodic reviews to identify areas for improvement and underlying contributing and mitigating factors.

State Governments have taken steps to control commercial losses like anti-theft legislation, metering, consumer indexing, feeder level energy accounting and audit. However, some more steps need to be taken like 100% metering, 100% consumer indexing, GIS mapping, Distribution Transformer (DT) level energy accounting and audit etc.

Unmetered consumption, primarily agricultural consumption continues to be a major issue.

Many of conditions as specified in Memorandum of Understanding (MoU)/ Memorandum of Agreement (MoA) have been implemented in some of the scheme areas but not rolled out to the enterprise level.

Suggestions:

Information technology should be used effectively to enhance the benefits from APDRP.

Funds from the Central Government should be released directly to the Utility / State Electricity Board (SEB) concerned, instead of going through State Government, to cut down approval & disbursement time.

Funding from the Government must be linked to achievement of specific benchmark parameters, rather than based on the incurred expenditure.

Project plan with time schedule for different activities should be pre-defined at Detailed Project Report (DPR) stage only.

Project implementation should be done on turnkey basis only.

Measures for increasing accountability and measuring performance should be the main focus areas for attaining commercial turnaround.