

**GOVERNMENT OF INDIA
POWER
LOK SABHA**

STARRED QUESTION NO:187

ANSWERED ON:06.08.2010

AGGREGATE TECHNICAL AND COMMERCIAL LOSSES

Mahtab Shri Bhartruhari;Rama Devi Smt.

Will the Minister of POWER be pleased to state:

(a) whether the Central Electricity Authority (CEA) has prescribed any permissible limit for the Aggregate Technical and Commercial (AT&C) losses in a State;

(b) if so, the details thereof;

(c) the details of the actual commercial and Transmission and Distribution losses incurred by various States during the year 2009-10 and the current year, State/UT wise;

(d) whether the theft of electricity in the country is on the rise; and

(e) if so, the details thereof along with the steps being taken or proposed to be taken by the Government to reduce the theft of electricity and AT&C losses in the country?

Answer

THE MINISTER OF POWER(SHRI SUSHILKUMAR SHINDE)

(a) to (e) : A Statement is laid on the Table of the House.

STATEMENT

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF STARRED QUESTION NO. 187 TO BE ANSWERED IN THE LOK SABHA ON 06.08.2010 REGARDING AGGREGATE TECHNICAL AND COMMERCIAL LOSSES.

(a) & (b): Although Central Electricity Authority (CEA) has not prescribed any permissible limit for the Aggregate Technical and Commercial (AT&C) losses in the state, CEA has issued Guidelines for Development of Sub- transmission and Distribution Systems in November 2001. The Guidelines has prescribed proposed targets for economic loss levels (technical) as under –

Sl System component Levels for peak power losses
No

Target level % Maximum tolerable %

i Step up transformer and Extra High 0.50 1.00
Voltage (EHV – above 33KV) transmission
system

ii Transformation to inter-mediate voltage 1.50 3.00
level, transmission system & step down
to sub transmission voltage level (From
765KV/400KV/220KV/132KV/110KV to 33 KV)

iii Sub transmission system and step down 2.25 4.50
to distribution voltage level (33KV or
22KV to 11 KV)

iv Distribution lines and service connections 4.00 7.00
(LT 440 V and 220 V)

Total power losses 8.25 15.50

(c) : Transmission & Distribution (T&D) losses as measure of grid losses were replaced with Aggregate Technical & Commercial (AT&C) losses for better clarity. States/UTs-wise Aggregate Technical & Commercial (AT&C) losses for the year 2006-07, 2007-08 and 2008- 09 as contained in the 7th 'Report on Performance of State Power Utilities' published by Power Finance Corporation are given at Annex- A. The data for 2009-10 is not available with PFC.

(d) & (e): Electricity is a concurrent subject and the responsibility of sub-transmission and distribution segment rests with the States. Installation of energy meters on all feeders, Distribution Transformers and every segment of consumers has yet not been completed by state utilities. The data pertaining to quantum of theft of electricity is not available. All the losses i.e. technical and commercial including the theft are captured under AT&C losses. As indicated at Annex-A, AT&C loss at national level is decreasing.

Government of India has introduced the Electricity Act, 2003 which provides a legal framework for making theft of electricity a cognizable and non-bailable offence under section 151B. Under Section 135 of the Electricity Act, 2003, whoever dishonestly taps lines or cables or service wires, tampers, damages or destroys meters etc., shall be punishable with imprisonment for a term, which may extend to three years or with fine or with both. Provision is also there in Electricity Act 2003 for setting up special courts under Section 153. Police officer shall have all powers of investigation of the punishable offence under Section 151A of the act.

For the reduction of AT&C losses and improvement in power distribution sector, Government of India has launched Restructured-Accelerated Power Development and Reforms Programme (R-APDRP) during 11th Plan period as a central sector scheme. The focus of R-APDRP Scheme is on actual demonstrable performance by utilities in terms of sustained AT&C loss reduction. The projects under the scheme shall be taken up in two parts: Part-A & Part-B. Part-A of the scheme is dedicated to establishment of IT enabled system for achieving reliable & verifiable baseline data that shall enable evaluation of exact & verifiable AT&C losses in towns where Part-A of the scheme has been executed. Part-B of the scheme is for regular up-gradation and strengthening of sub-transmission and distribution system. The focus of Part-B schemes shall be on AT&C loss reduction on sustainable basis. The AT&C loss reduction under the scheme shall be measured from a year after the year in which first project of Part-A of scheme has been completed and verified by independent agency appointed by MOP. The AT&C loss reduction shall be measured for five years. The result of R-APDRP will be available only after completion of the projects. It is expected that on successful completion of the scheme, the AT&C losses will be reduced to 15% in the project areas.

A number of measures are being taken by the Distribution Utilities for reduction of AT&C losses and power theft-

- (a) Replacement of all consumer meters with static meters & improving metering, billing & collection efficiency;
- (b) Metering of all 11 KV feeders & Distribution transformers for energy auditing;
- (c) Augmentation of overloaded distribution system;
- (d) Implementation of HVDS (High Voltage Distribution System);
- (e) Use of Ariel Bunched Cable (ABC) in theft prone areas;
- (f) IT initiative like SCADA (Supervisory Control And Data Acquisition), GIS (Geographical Information System), AMR (Automated Meter Reading) etc.;
- (g) Segregation of rural & agriculture feeders; and
- (h) Implementation of stringent anti theft measures.