Transmission losses in the country

3797. SHRI SOM PAL: Will the Minister of POWER be pleased to state:

(a) what has been the amount of overall line losses in our country since 1988 to-date and their year-wise and state-wise break-up;

(b) what are the reasons for such huge transmission losses;

(c) what is the proportion of such losses attributable to technical faults and theft of electricity;

(d) what are the State-wise and year-wise financial loss on this account; and

(e) what is the usual permissible limit of such losses and what is being done to confine transmission losses to this minimum permissible limit?

THE MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI KALPNATH RAI): (a) A Statement-I indicating State-wise percentage T&D losses from the year 1988-89 to 1990-91 is enclosed. (See below)

(b) The T&D losses comprise technical and commercial losses. The technical loss is due to energy dissipation in the conductors and equipments used in the system for transmission and distribution of power, weak and inadequate sub-transmission and distribution system, large scale rural electrification programme resulting in long lines and extention of distribution not work without adequate back up system, low power factor, unmetered supply to agricultural consumers and pilferage and theft of energy.

(c) It is difficult to seggregate the loss due to technical reasons and on account of theft of energy.

(d) A Statement-II showing financial losses on account of transmission and distribution loss for the years 1988-89 to 1990-91 is enclosed. (See below)

(e) No permissible limit has been fixed for T&D losses. However, taking into consideration the conditions existing in India such as development in the transmission and distribution sector, quality of T&D equipment and meters, maintenance practices, configuration of system, its special jurisdiction and nature of loads etc. energy losses between 8.25 per cent to 15.5 per cent are considered reasonable in different States.

In order to reduce the T&D losses, Comprehensive guidelines have been issued to the power utilities. These include, *inter-alia* conducting of the energy audit for identifying the system elements responsible for excessive losses, installing capacitors to improve the voltage profile, preparation of system improvement schemes for strengthening and improvement of their transmission and distribution systems, installing tamper proof meter boxes to check theft of energy and setting up vigilance squads to detect cases of theft of energy. The theft of energy has been made a cognizable offence from August, 1986 under the provisions of Section 29 of Indian Electricity Act, 1910. An Incentive Scheme was introduced by the Governmnet of India among State Electricity Boards from the year 1987, for bringing about reduction in the Transmission and Distribution losses.

Statement-I

Percentage Transformation Transmission & Distribution losses (Including commercial losses such as Pilferage etc.) in SEBs EDs

Region	State Electricity Board/Electricity Department	1988-89	1989-90	1990-91
1	2	3	4	5
Northern Region	1. Haryana . . .	26·62	29·19	27·59
	2. Himachal Pradesh . .	22·08	21·36	17·51
	3. Jammu & Kashmir . .	41.46	50·04	46·16

1	2	3	4	5
	4. Punjab	18.32	17.62	19.00
	5. Rajasthan . . .	25·34	25·41	24·89
	6. Uttar Pradesh . . .	27·41	27·12	26·08
Western Region	1. Gujarat . . .	18·61	22·11	22·05
	2. Madhya Pradesh . .	22·07	20·68	18.76
	3. Maharashtra . . .	15·77	16·37	15·52
	4. D&N Haveli . . .	16·05	11·44	17·74
	5. Goa	25·61	24·23	24·58
Southern Region	1. Andhra Pradesh . .	19·35	20·36	19·60
	2. Karnataka . . .	21·29	21·20	19·60
	3. Kerala	25·23	20·63	21·02
	4. Tamil Nadu . . .	17·66	17·99	18·40
Eastern Region	1. Bihar	23·96	24·36	21·07
	2. Orissa	27 52	27·72	24·00
	3. Sikkim	21·38	23·36	22·92
	4. West Bengal . . .	23·23	24·16	21·90
North Eastern Region	1. Assam	24·98	25·12	21·00
	2. Manipur . . .	35·71	30·26	20·50
	3. Meghalaya . . .	9·60	11·73	11·35*
	4. Nagaland . . .	29·00	21·46	22·00
	5. Tripura	30·57	29.03	29·00
	6. Arunachal Pradesh . .	24·89	22·29	20·00
	7. Mizoram ‡ . . .	29·66	32·04	23·00

1. $ Provisional.

2. * The Lower T&D Losses Figure in Respect of Meghalaya are due to Bulk sale of Energy to the Neighbouring States.

Statement-II

*Statement sho ing Tentative Financial loss on Account of Transmission & Distribution losses**

(Amount Rs. in crores)

Sl. No.	Name of SEBs	1988-89	1989-90	1990-91
1	Andhra Pradesh	196·91	252·97	303·54
2	Bihar	140·76	145·18	124·77
3	Gujarat	303·59	392·77	371·36
4	Haryana	127·46	131·00	183·73
5	Himachal Pradesh	16·58	20·90	30·88
6	Karnataka	184·02	203·50	208·71
7	Kerala	88·38	80·85	86·93
8	Madhya Pradesh	287·28	401·64	367·77
9	Maharashtra	385·93	504·55	670·51
10	Orissa	97·74	104·02	123·81
11	Punjab	110·18	148·07	184·25
12	Rajasthan	167·85	224·16	232·54
13	Tamil Nadu	195·81	235·47	312·40
14	Uttar Pradesh	409·12	481·38	567·88
15	West Bengel	149·26	155·02	161·29
16	Assam	33·92	38·90	41·62
17	Meghalaya	2·05	2·15	2·60
	TOTAL :	2896·84	3522·53	3996·15

*Information as available in C.E.A. from various Electricity Boards.

Completion of Dulhasti Hydel Project

3798. DR. SANJAYA SINH: Will the Minister of POWER be pleased to state:

(a) whether an agreement was signed in October, 1990 with M/s. CGEE Alsthom (France) for the completion of the Dulhasti Hydel Project in Jammu and Kashmir; and

(b) if so, what is the present status of the projects?

THE MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI KALP NATH RAI): (a) The commercial contracts for the execution of the Dulhasti hydro-electric project in J&K were concluded by the National Hydro-electric Power Corporation with a French Consortium eld by M/s O.GEE Alsthem in September, 1989.

(b) Excavation of the concrete dam and the intake structure has been completed and concreting is in progress. Tun-