(b) Delhi has a share of 1639 MW based on installed capacity power from the Central Sector generating stations in the Northern Region (total capacity-8086 MW). During last week. Delhi's drawal has been in the range of 1150-1300 MW from the Northern Grid.

(c) Supply of power to Delhi from Northern Grid is commensurate with the actual generation in the Central Sector Generating Stations, which varies depending on planned shut down for maintenance and forced outages.

(d) With DVB's own generation of 400 MW (expected to be stepped upto 450 MW). 550 MW at BTPS and import of 1150-1250 MW from the Northern grid, the total availability of power to Delhi is likely to be of the order of 2100-2200 MW. However, during the ensuing summer months the peak demand for power is expected to touch 2400 MW while the total availability would be 2100-2200 MW leaving a shortfall of 200-300 MW for which scheduled load shedding in a rotational manner has been introduced by DVB.

Gas Turbine at Barak Valley in Assam

3615. SHRI KARNENDU BHATTACHARJEE: Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that the Gas Turbine at Adham Tilla and Bins Kandi at Barak Valley in Assam has not been commissioned within the stipulated date; and

(b) what are the reasons therefor and by when this turbine would be commissioned?

THE MINISTER OF STATE IN THE MINISTRY OF POWER (DR. S. VENUGOPALACHARI): (a) Yes, Sir.

(b) The commissioing of the projects has been delayed due to delay in land acquisition delay in shifting of the machinery to the site due to disruption in road communication (due to flood). The rescheduled commissioning dates of the units are as follows:

Adamtilla open cycle	:	31.3.1997
Combined Cycle	:	31.7.1997
Banskandi open cycle	:	30.6.1997
Combined cycle	:	30.9.1997

Transmission and Distribution Losses

3616. SHRI RAJ NATH SINGH 'SURYA':
SHRI O.P. KOHLI:
SHRI SANJAY NIRUPAM:

Will the PRIME MINISTER be pleased to state:

(a) what have been the transmission and distribution losses incurred by the State Electricity Boards (SEBs) during the last three years;

(b) whether it is a fact that these losses are more than double as compared to those incurred by the power utilities in advanced countries;

(c) what emergent steps Government propose to take to ensure that SEBs reduce these losses drastically; and

(d) what steps Government are taking to encourage use of energy efficient equipments and materials by the SEBs?

THE MINISTER OF STATE IN THE MINSTRY OF POWER (DR. S. VENUGOPALACHARI): (a) A statement showing State Electricity Board-wise Transmission & Distribution losses from 1992-93 to 1994-95 is enclosed as statement-I. (See below) The detailed information for 1995-96 and 1996-97 is yet to be received and compiled.

(b) Transmission and distribution losses in the advanced countries of the World have been ranging between 5% to 14%. A statement showing T&D losses in developed countries is enclosed as statement-II. (See below) The T&D losses in India are about 22% but the figures are not comparable with advanced countries as system operating conditions there are different from those obtaining in our country.

(c) CEA has issued following guidelines for reduction of technical T&D losses.

(i) installation of additional capacitors.

(ii) installation of energy efficient equipments like amorphous core transformers and aluminium alloy condouctors.

(iii) augmentation & strengthening of such transmission & distribution systems.

(iv) reducing the length of low voltage lines by optimising network configuration through scientific planning.

Government has taken following steps taken to reduce non-technical losses (commercial losses and losses due to theft):—

a. installation of reliable and high quality meters.

b. improve billing and collection procedures.

c. switching over from flat rate tariffs to metered electricity supply.

d. theft of electricity has been made a coqnizable offence under Indian Electricity Act. 1910.

e. Under the Common Minimum National Action Plan for Power (CMNAPP). the following steps have been initiated:

* Compulsory metering at substations and on all major feeders. Compulsory metering of all new electrictiy connection as also of connections to agricutlural sector exceeding 10HP. All electric supplies would be metered by 2002 AD.

* Compulsory annual energy audit of large consumers. i.e. 100 KVA and above would be undertaken.

* Time of the day metering would be introduced for big power consumers for better load management.

(d) Government is taking following steps to encourage use of energy efficient equipments:—

i. Use of energy efficient equipments is encouraged through concession custom duties and reduction of duties and taxes.

ii. Grants/subsidy is provided for demonstration projects and energy audit projects for system improvement by MOP.

iii. Various agencies like EMC and CBIP. etc. are conducting seminars/workshops and training programmes to create awareness and to educate the engineers of SEBs for using energy efficient equipments.

iv. Ninth Plan sub-group on Energy Conservation has recommended the amount of Rs. 3000 crores for T&D system improvement schemes in the Ninth Plan by installation of energy efficient materials and equipments.

Statement—I

Percentage Transmission, Transmission & Distribution (Including Commercial Losses such as Pilferage etc.)

REGION	STATE ELECY. BOARD/ ELECY. DEPTT.	1992-93	1993-94	1994-95
NORTHERN REGION	1. HARYANA	26.78	25.00	30.80
	2. HIMACHAL PRADESH	19.51	18.31	18.21
	3. JAMMU & KASHMIR	48.28	45.69	48.74

REGION	STATE ELECY. BOARD/ ELECY. DEPTT.	1992-93	1993-94	1994-95
	4. PUNJAB	19.24	19.37	16.70
	5. RAJASTHAN	22.74	25.00	24.78
	6. UTTAR PRADESH	24.43	24.08	41.69
	7. CHANDIGARH	26.21	27.27	28.44
	8. D.E.S.U.	23.56	31.79	34.56
WESTERN REGION	1. GUJARAT	22.03	20.34	20.02
	2. MADHYA PRADESH	21.35	20.26	19.61
	3. MAHARASHTRA	17.83	16.22	16.33
	4. D. & N HAVELI	17.98	12.64	11.35
	5. GOA	21.85	24.50	26.87
	6. DAMAN & DIU	15.67	22.34	16.30
SOUTHERN REGION	1. ANDHRA PRADESH	19.88	19.91	17.95
	2. KARNATAKA	19.55	19.55	19.41
	3. KERALA	21.95	20.00	20.05
	4. TAMIL NADU	17.50	17.18	17.11
	5. LAKSHADWEEP ISLS.	18.72	16.99	17.84
	6. PONDICHERRY	15.31	15.80	15.00
EASTERN REGION	1. BIHAR	22.00	20.35	19.76
	2. ORISSA	25.25	22.43	23.03
	3. SIKKIM	22.55	22.60	21.22
	4. WEST BENGAL	24.87	20.82	21.51
	5. A. & N. ISLS	23.62	23.71	22.38
NORTH EASTERN REGION	1. ASSAM	21.41	22.44	24.18
	2. MANIPUR	22.35	23.92	25.30
	3. MEGHALAYA	11.79	18.03	18.47
	4. NAGALAND	27.26	33.45	36.12
	5. TRIPURA	30.64	30.53	31.96
	6. ARUNACHAL PRADESH	32.32	42.04	45.30
	7. MIZORAM	29.04	31.89	29.76
ALL INDIA	(UTILITIES)	21.80	21.41	21.13

Statement—II

Percentage Transmission and Distribution Losses in Various Developed Countries (Public Utilities)

S. No.	COUNTRY	1989	1990	1991	1992
1.	AUSTRIA	7.19	7.34	7.44	7.19
2.	BELGIUM	5.64	5.59	5.59	5.51
3.	CANADA	9.45	8.44	8.74	8.44
4.	CZECHOSLOVAKIA	7.91	7.86	8.08	8.50
5.	DENMARK	5.65	5.17	6.92	6.70

S. No.	COUNTRY	1989	1990	1991	1992
6.	FINLAND	5.64	5.91	5.04	5.09
7.	FRANCE	8.25	8.18	8.28	7.64
8.	GERMAN DR	8.05	9.15	—	—
9.	GERMAN FR	4.18	4.65	—	—
10.	GERMANY	—	—	5.17	4.87
11.	GREECE	8.12	9.05	8.88	7.92
12.	HUNGARY	11.11	11.09	11.06	9.43
13.	IRELAND	9.70	9.78	10.00	9.71
14.	ITALY	8.54	7.83	8.15	7.84
15.	NORWAY	8.53	10.43	7.40	9.71
16.	POLAND	10.58	9.83	12.43	13.85
17.	SPAIN	9.10	10.00	10.01	10.65
18.	SWEDEN	7.20	7.00	6.57	7.11
19.	SWITZERLAND	8.63	7.97	7.97	8.93
20.	U.S.S.R.	9.45	9.32	—	—
21.	RUSSIAN FDN	—	—	8.98	9.59
22.	U.K.	8.53	8.25	8.80	9.20
23.	U.S.A.	5.70	3.68	7.93	8.97
24.	INDIA	23.28	22.89	22.83	21.86

SOURCE:

1. FROM ANNUAL BULLETIN OF ELECTRIC ENERGY SO RISRICS FOR EUROPE, U.N. FOR DITTERENT YEARS.

2. GENERAL REVIEW — PUBLISHED BY CEA.

NOTE:

1. @ — FOR FINANCIAL YEARS

Modernisation of State Electricity Boards

3617. SHRI YERRA NARAYANASWAMY: Will the PRIME MINISTER be pleased to state:

(a) whether there are any proposals to assist the streamlining and modernisation of State Electricity Boards;

(b) whether any efforts have been made to utilise the experience of these State Electricity Boards; and

(c) if not, the reasons therefor?

THE MINISTER OF STATE IN THE MINISTRY OF POWER (DR. S. VENUGOPALACHARI): (a) The Government of India in the Ministry of Power have finalise a Common Minimum National Action Plan for Power based on the consensus reached the Chief Ministers Conferences held on 16.10.1996 and 3.12.1996. The Action Plan. *inter-alia.* includes autonomy to the State Electricity Boards, improvement in the management practices and of physical parameters of State Electricity Boards.

(b) and (c) The Action Plan has already been circulated to all the State/UT Governments for implementation of the proposals containd in the Action Plan.

Power Generation in Gujarat

3618. SHRI GOPALSINGH G. SOLANKI: Will the PRIME MINISTER be please to state:

(a) the total consumption and annual power generating capacity of Gujarat;

(b) the total extra requirement of power of the State;