4	S. No.		Name of the Project	e Installed Capacity (KW)					
	M	AN	IPUR	1	1				
	1.		imakhong	<b>600</b>	600				
		(2)	tage-I)	600	600				
	M	EGI	HALAYA						
	1.	Sh	illong	$3 \times 500$	1500				
	2.	· Ur	ntru	$4 \times 2800$	11200				
			JRA						
	1.	Gı	ımti	$2 \times 5000$	10000				
	NA	AG/	LAND						
	1.	Dz	uz-a.Nallah	$3 \times 500$	1500				
	SIKKIM								
	1.	Ro	gniani	2100					
	2.	Ri	mbi	200					
			otak .	200					
	4.	Lo	wer Lagyap	$2 \times 6000$	12000				

## High Voltage Direct Current Transmission Scheme

2750. SHRI A. C. DAS: Will the Minister of ENERGY be pleased to state:

- (a) whether Government have a proposal for the introduction of High Voltage Direct Current Transmission Scheme in the country;
- (b) if so, when the above (HVDC) transmission system is going to be introducted;
- (c) the main purpose of the introduction of such system; and
- (d) the details about the other efforts proposed to be made by Government to help improve the economics of power transmission in the country?

THE MINISTER OF STATE IN THE MINISIRY OF ENERGY (SHRI VIKRAM MAHAJAN): (a) to (c). High Voltage Direct Current Transmission technology has certain inherent technical advantages

which make it a viable technical alternative to AC transmission. However, the terminal costs are high and at present indigenous manufacturing capability does not exist. Long-term planning studies are being carried out to evaluate the technoeconomic feasibility of introduction of HVDC Transmission systems in the country.

(d) The efforts to improve voltage conditions in the power systems by providing reactive power compensation are being identified. Efforts ars also being made on a continuous basis to accelerate the transmission programmes to the extent possible. It is expected that these efforts would result not only in improving the quality of power supply but also in reducing the transmission losses.

## Opening of more Telephone Exchanges in Maharashtra

SHRIRR. BHOLE · Will the Minister of COMMUNICA-TIONS be pleased to state:

- (a) the number of new telephone exchanges proposed to be opened in the State of Maharashtra during the year 1982-83;
- (b) the number of telephone exchanges proposed to be modernised and expanded during the same period in the State of Maharashtra;
- (c) whether it is a fact that Bombay Telephone authorities do not attend to complaints from subscribers promptly and much difficulty is experienced on this account; and
- (d) the steps Government propose to take to see that complaints about faulty telephones are attended to on the same day?

THE MINISTER OF STATE IN THE MINISTRY OF COMMUNI-(SHRI YOGENDRA CATIONS MAKWANA): (a) About 70, depending on availability of equipment.

(b) 5 exchanges are proposed to be automatized and 15 exchanges are proposed to be expanded in 1982-83. As regard a large telephone system in Maharashtra, these are likely to be expanded as under:—

Bombay 32.000 lines
Pune 2,200 lines
Nagpur 1,800 lines

(c) and (d). Prompt action is taken to attend to the complaints from subscribers. Of the 3000 to 4000 complaints received per day regarding faulty telephones, about 70% are cleared within 21 hours. About 90% of the total complaints are cleared in 48 hours. Progress of fault clearance is closely monitored by senior officers of Bombay Telephones.

## Generation of Power from various sources and per capita availability

2752. SHRI BHOGENDRA JHA: Will the Minister of ENERGY be pleased to state:

- (a) what is the latest position with regard to power generation separately from thermal, hydel and nuclear sources as compared to the total generating capacity and also to the performance during the last three years in the country as a whole and in Bihar in particular; and
- (b) what is the latest per capita availability of power for India as a

whole, for the whole of Bihar, for North Bihar and rest of Bihar, respectively?

THE MINISTER OF STATE IN THE MINISIRY OF ENERGY (SHRI VIKRAM MAHAJAN): (a) the present installed capacity in the country in utilities is 31316.68 MW consisting of 12171.22 MW 860 MW nuclear 18285.46 MW thermal. The actual energy generation in the country during the period April 81 to February, 1982 was 112134 MU consisting of 45623 MU hydro, 2867 MU nuclear and 63644 MU thermal. The details of installed capacity and energy generation in the country during the period 1978-79, 1979-80 and 1980-81 are given in the statement attached.

The present installed capacity of Bihar is 927.7 MW consisting of 778.5 MW thermal and 149.2 MW hydro. The actual generation in Bihar during the period April, 1981 to February, 1982 was 2370 MU Consisting of 2204 MU thermal and 166 MU hydel.

(b) The per capita availability of electricity in the country during the year 1980-81 was 155.62 Kwh as against 14.82 Kwh for North Bihar, 43.4 Kwh for South Bihar, 249.06 Kwh for Chotta Nagpur and 82.48 Kwh for Bihar State.

## Statement.

Statement showing installed capacity and energy generation during 1978-79, 1979-80 add 1980-81

1.7 (4)						
20	Installed capacity	generated	Installed capacity	genc-	Installed capacity	Energy gene-
	as on	during	as on	rated	as on	erated
	31/3/79	1978-79	31/3/80	during	31/3/81	1980-81
	MW	MU	MW	79-80 MU	MW	MU
All India (Utili	ties)	- 1				
1. Hydro	10833:07	47158.86	11383.97	45477.55	11791.22	46532.52
2. Thermal	15206.99	52593.98	16423.86	56273.12	17562.46	61287.48
3. Nuclear	640,00	2769.68	640.00	2876.59	860.00	3001.34
Total (All India)	26680.06	102522.52	28447.83	104627.26	30213.68	110821.34