in Eastern and North Eastern States during the last five years, State-wise; and

(b) the number of schemes taken up or to be taken up during the current year?

THE MINISTER OF STATE IN THE MINISTRY OF POWER AND MINISTER OF STATE IN THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI S. VENUGOPALACHARI): (a) Ministry of Non-Conventional Energy Sources has been implementing a wide range of non-conventional energy programmes/

schemes/projects, such as, Biogas Programme, Biomass Gasification Programme, Solar Energy Programme, Improved Chulha Programme, Small Hydro Projects and Wind Energy Programme to generate energy from non-conventional sources in the whole country including in the Eastern and North-Eastern States. State-wise non-conventional energy systems and devices installed through such programmes in those States during the last 5 years are given in the attached Statement. All these scheme would continue during the current year also

## STATEMENT Non-conventional Energy Sources in Eastern and North-Eastern States

Programmes/scheme-wise achievements during the last 5 years.

S No	Eastern and North-Eastern State concerned	Family Biogas Plants (Nos.)	Community/ Insti- tutional Biogas Plants (Nos.)	Impro- oved Chulha (Nos.)	(Nos )	Gas	55 61- r 9a- y	Water Pump- ing Wind- mills	Stand alone Syst- ems	Solar Coo- ker	Solar Ther- mal Devi- ces (m <sup>2</sup> Colle- ctor area)	Hy Po P e	mall ydro ower roj cts No. MW)	Solar Phot- ovol- taic Ligh- ting Systems (Nos.)	SPV* Power Plants (KW)
1.	Andhra Pradesh	194		24829	28	3 (	120)			355 98	7	(16)	1957	5.2	
2.	Assam	7699		16852	52	5	(23)	3	6	80	150	3	(1.45)	844	
3.	Bihar	28718.	3	366953	1	2	(20)	30		730	1006	2	(1.00)	5906	
4.	Manipur	603	-	30440				-		72	440	2	(0.20)	560	-
5.	Meghalaya	210		2000	2				-	332	152	6	(9.90)	1420	27 7
6	Mizoram	498	•	15500				-		48	33	2	(3.10)	2442	-
7	Nagaland	298		3648				-				6	(8.62)	-	-
8.	Orissa	58652	21	767415			-		-	1645	501	1	(3.00)	2385	4
9.	Sikkim	1067	-	22576			-		-	-	170	1	(0.10)	122	
10.	Tripura	424	-	10957	a		-		-	-	107	3	(5.50)	539	-
11.	West Bengal	50925	14	25939	17	5	(55)		-	3175	9334			2901	39

<sup>\*</sup> Solar Photovoltaic

## Improvement in Transmission System

. 1726. SHRI N.J. RATHWA: Will the PRIME MINISTER be pleased to state:

- (a) whether any agreement has been signed between the National Power Transmission Corporation Limited and the Central Power Research Institute for the improvement of transmission system and designing of power plants:
  - (b) if so, the details thereof; and
  - (c) the time by which it is likely to be implemented?

THE MINISTER OF STATE IN THE MINISTRY OF POWER AND MINISTER OF STATE IN THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI S. VENUGOPALACHARI): (a) to (c). A Memorandum of

Understanding was signed between Powergrid (earlier named as National Power Transmission Corporation Ltd.) and Central Power Research Institute (CPRI). Bangalore on 29th June, 1992, aiming at long term participative cooperation in respect of R and D efforts related to High voltage Transmission System. The following two R and D projects were identified and taken up jointly with CPRI:

- Measurement of AC/DC fields in Transmission lines and sub-stations.
- ii. Performance evaluation of insulator string with-defective insulators.

Both the projects were successfully completed and final report have been submitted by CPRI in November, 1996.