native arrangements are proposed to made to fulfil the commitments?

THE MINISTER OF STATE IN THE MINISTRY OF COMMUNICATIONS (SHRI GIRIDHAR GOMANGO): (a) There is no shortage of Line material in general. There is of shortage of 'Sockets; which has affected the expansion of Telecom. network to some extent during 1988-89 and is still continuing.

(b) The shortage of 'Sockets' is due to short supply of Pig Iron. The case has been taken up with the Department of Steel, for improving the supply position. The total requirement for the year 88-89 was 37,5000 M.T. Against this, the allotment given by SAIL was 21,000 M.T. However the total quantity supplied as on date is 5421 M.T. Against our requirement of 38,000 M.T. of Pig Iron during the year 1989-90, the allotment received from JPC is only 20,000 M.T.

(c) The Shortage of 'Sockets' will be overcome only after there is increase in the supply of Pig Iron. The case is being pursued with the Ministry of Steel & Mines. As an alternative arrangement, the Chief General Managers Telecommunication Circles have been advised to explore possibility of using RCC or granite sockets.

Setting up of Mini-Hydel Plants in Orissa

8676. SHRI LAKSHMAN MALLICK: Will the Minister of ENERGY be pleased to state:

(a) whether Union Government have been provided funds to States for setting up mini-hydel plants;

(b) if so, the number of mini-hydel plants in different States so financed by Union Government during the last three years;

(c) the allocation made for those hydel plants, plant-wise; and

(d) the amount allocated to Orissa for

these plants during 1987-88 and 1988-89 and proposed to be allocated during 1989-90?

THE MINISTER OF ENERGY (SHRI VASANT SATHE): (a) to (d). The requisite information is being obtained and will be placed on the table of the House in due course.

Solar Thermal Projects

8677. SHRI LAKSHMAN MALLICK: Will the Minister of ENERGY be pleased to state:

(a) the number of projects which have been identified for solar thermal applications;

(b) whether feasibility studies in this regard have been started; and

(c) if so, when the reports of such studies are likely to be submitted to Government?

THE MINISTER OF ENERGY (SHRI VASANT SATHE): (a) to (c). Solar Thermal Devices can meet heat energy requirements in almost all the temperature ranges. Solar Thermal Devices for low temperature (less than 85 °C) applications have been successfully commercialised in the country. These devices are available to the users throughout the country through the State Nodal Implementing agencies. Till 31st March, 1989: 2315 Solar water Heaters. 3289 Domestic Solar Water Heaters, 35 Solar Air Heaters/Solar Crop Drvers, 39 Solar Timber Kilns, 7450 Solar Stills and over 1.10.000 Solar Cookers have ben installed in the country. These devices are capable of saving/generating approximately 313 million KW of thermal energy per annum.

The solar thermal technologies for medium temperature applications such as Solar Thermal Pump, Solar Refrigerator, solar Cold Storage etc. have also been developed and are currently under field demonstration. Two experimental Solar Thermal Power Plants of capacities 20 KW and 50 KW are working in the country at Salojipally village in Andhra Pradesh and Gwalpahari in Haryana respectively. The feasibility report for setting up of a large 30 MW Solar Thermal Power Station have also been prepared by the department and submitted for clearance. A number of states have requested for the setting up of such 30 MW capacity Solar Thermal Power Plants in their respective States.

World Bank loan for coal mine projects

8678. SHRIPARASRAMBHARDWAJ: Will the Minister of ENERGY be pleased to state: (a) whether Government have sought world Bank loan for implementing new opencast coal mine projects;

(b) if so, the amount likely to be made available by the world Bank and

(c) the details of the opencast mine projects proposed to be taken up with the help of this loan?

THE MINISTER OF STATE IN THE DEPARTMENT OF COAL IN THE MINIS-TRY OF ENERGY (SHRI C.K. JAFFER SHARIEF): (a) to (c). The following projects are being implemented under World Bank financial assistance:

S.No.	Project	World Bank Loan Amount
1.	Dudhichua OCP (NCL)	US \$ 151.00 million (Loan sanctioned in May, 1984)
2.	Jharia Coking Coal Projects (BCCL)	
	i) Block-II OCPii) Pootkee Bulliary UGiii) Pootkee washery	US \$ 248.00 million (Loan sanctioned in May, 1985)
3.	i) Sonepur Bazari OCP, ECL	US \$ 180.00 million
	ii) Gevra OCP, SECL	(Loan sanctioned in June, 1987)

No other loans have been sought from the World Bank for coal mining projects.

Utillsation of Solar Photovoltaic as Energy

8679. SHRI MULLAPALLY RAMA-CHANDRAN: Will the Minister of ENERGY be pleased to state:

(a) whether Government have commenced utilisation of solar photovoltaics as an alternative sources of energy;

(b) If so, the details of the main uses to which this power is being put;

(c) the States in which solar photovoltaics are now being utilised; (d) whether Government are considering setting up solar photovoltaics power generating units in Kerala; and

(e) if so, the areas proposed to be concerned?

THE MINISTER OF ENERGY (SHRI VASANT SATHE): (a) to (c). Solar Photovoltaic technology is already being used for water pumping for drinking water supply and micro-irrigation, electrification of villages and hamlets, powering rural telephone exchanges, TV transmitters (VLPTs) television, radio and microwave repeater stations, other applications include battery charging and power supplied for telemetry in oil platforms, cathodic protection of oil pipelines, Railway tracking circuits and cross gates,