

s. No.	State	Allocation		(Rs. lakhs)
		Centre	State	Total
23.	TRIPURA	237.46	59.37	296.83
24.	UTTAR PRD.	33867.93	8466.98	42334.91
25.	WEST BENGAL	12455.47	3113.87	15569.34
26.	A&N ISLANDS	84.41	0.00	84.41
27.	D&N HAVELI	45.81	0.00	45.81
28.	DAMAN & DIU	26.99	0.00	26.99
29.	LAKSHADWEEP	42.32	0.00	42.32
30.	PONDICHERRY	82.64	0.00	82.64
TOTAL		179000.00	44679.46	223679.46

**Expansion of Bharat Petroleum Limited and IOC in Andhra Pradesh**

1800. SHRI SATYANARAYANA DRONAMRAJU: Will the PRIME MINISTER be pleased to state:

(a) whether the Bharat Petroleum Limited and the Indian Oil Corporation have any expansion plans in Andhra Pradesh;

(b) if so, the details thereof;

(c) whether the proposal to lay pipeline between Vijayawada-Visakhapatnam has been grounded; and

(d) if not the details thereof alongwith the estimated cost and by when it is likely to be completed?

THE MINISTER OF STATE IN THE MINISTRY OF PETROLEUM AND NATURAL GAS (SHRI T.R. BAALU): (a) Yes, Sir.

(b) Bharat Petroleum Corporation Ltd. has plans to put up tank wagon loading and black oil handling facilities at Visakhapatnam and laying of tanker discharge lines from jetty to Visakhapatnam installation, construction of a new depot at Cherlapalli and Ongole and setting up of coastal installation at Kakinada. Similarly, the Indian Oil Corporation Ltd. has plans to put up two terminals at Vijayawada and Rajamahendravaram, two port terminals at Visakhapatnam and Kakinada and

four grass root bulk depots at Peddapalli, Cuddapah, Nizambad and Ongole.

(c) No, Sir.

(d) Govt. has approved the proposal of the Hindustan Petroleum Corporation Limited to lay 356 Kms. long and 18" diameter product pipeline of 4 million tons per annum capacity from Visakhapatnam to Vijayawada at an estimated cost of Rs. 521.61 crores. The project is likely to be completed in June, 1998.

**Safety of Nuclear Installations**

1301. SHRI ASHOK MITRA: Will the PRIME MINISTER be pleased to state:

(a) whether Government's attention have been drawn to the recent statement by Professor A. Gopala Krishnan, formerly the chief functionary of the Atomic Energy Regulatory Board (AERB), suggesting lack of concern for safety in the country's atomic energy establishments;

(b) whether the Department of Atomic Energy is in general agreement with the contents of Dr. Gopala Krishnan's observations; and

(c) whether the International Atomic Energy Authority has issued any guidelines for the maintenance of safety in nuclear installations that the Department of Atomic Energy has failed to conform to?

THE MINISTER OF STATE OF THE MINISTRY OF PLANNING AND PROGRAMME IMPLEMENTATION AND MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI YOGINDER K. ALAGH): (a) Yes, Sir.

(b) Government have noted the contents of Dr. Gopalakrishnan's statements and are conscious of the need for ensuring safety in all nuclear installations. All safety issues are discussed in the Plant and Unit Level Safety Committees of the Atomic Energy Regulatory Board and in the Safety Review Committee for Operating Plants (SARCOP) and are resolved at the respective levels.

(c) No, Sir.

#### **Vertical Solar Energy Pannels**

1802. DR SHRIKANT

RAMCHANDRA JICHKAR:

SHRIMATI BASANTI SARMA:

Will the PRIME MINISTER be pleased to state:

(a) whether vertical Solar Energy Pannels are available in the country;

(b) if so, where and what is its unit cost;

(c) whether Government are aware that vertical pannels would be more popular; and

(d) if so, what steps are being taken to popularise such pannels?

THE MINISTER OF STATE IN THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (DR. S. VENUGOPALACHARI): (a) and (b) Flat plate panels for solar energy conversion through the photovoltaic and thermal routes are manufactured in the country by a number of public and private sector companies. These panels are normally mounted at an inclination so that maximum possible solar energy incident on the panel surface can be utilised. The unit cost of a photovoltaic module is about Rs. 175/- per watt. The unit cost of

a solar thermal collector is about Rs. 4,000/- per sq. meter of collector area.

(c) and (d) Flat plate solar panels for photovoltaic and thermal applications are already in use in the country. An aggregate area of 4.0 lakh sq. meters of solar collectors has been installed in the country for water heating, drying and desalination. An aggregate of over 18 MW of photovoltaic systems have been installed for applications such as lighting, water pumping, telecommunication, etc.

A number of fiscal and other incentives are available for the manufacture and use of solar energy products, such as 100% depreciation for income tax purposes, exemption from excise duty, concessional rates of custom duties and soft loan. In addition, subsidy is also available for some solar energy applications.

#### **Selection on sites for establishing Oil Refineries**

1803. SHRIMATI

JAYANTI

PATNAIK: Will the PRIME MINISTER be pleased to state:

(a) whether Government have selected sites for the establishment of oil refineries in the country;

(b) if so, the sites selected for the purpose in Orissa;

(c) the number of oil refineries proposed to be set up during the 8th and 9th Five Year Plans;

(d) the details of steps taken to expedite the establishment of those oil refineries?

THE MINISTER OF STATE IN THE MINISTRY OF PETROLEUM AND NATURAL GAS (SHRI T.R. BAALU): (a) to (d) New Refineries Projects to be set up/under implementation by PSUs/ JVCs during the 8/9th Plan period in Public /Joint Sector are as follow:—

#### **Name of the refinery Public Sector**

1. Panipat Refinery.