4. Daltongani

### Arunachal Pradesh

- 1. Itanagar
- 2. Tuting
- 3. Machuka
- 4. Vijayanagar

#### Jammu & Kashmir

- 1. Kishtwar
- 2. Surankot
- 3. Kargil

#### Himachal Pradesh

- 1. Lahaul
- 2. Dharamshala

#### Mizoram

1. Lunglai

### Punjab

- 1 Jallundhar
- 2. Pathankot
- 3. Patiala
- 4. Ferozepur

#### Orissa

- Gopalpur
- 2. Jharsuguda

### Sikkim

1. Gangtok

## Union Territory

1. Diu

# [English]

# Non-Conventional Energy Plants

2311. SHRI PYARELAL KHAN-DELWAL: DR. A.K. PATEL:

Will the Minister of ENERGY be pleased to state:

- (a) whether non-conventional energy plants are proposed to be set up in various States during the Eighth Plan Period;
- (b) if so, State-wise details of such projects, their locations, estimated cost and energy output alongwith the probable time schedule under the heads of Tidal power, solar power and wind power:
- (c) their comparative installation cost and generation cost with conventional modes of power generation;
- (d) the estimated potential of each of the above non-conventional modes of power in the country; and
- (e) the experience about each mode of power generation in regard to the financial performance and environmental aspects?

THE MINISTER OF ENERGY AND MINISTER OF CIVIL AVIATION (SHRI ARIF MOHAMMAD KHAN): (a) and (b). Several programmes, including R&D and demonstration programmes, for production of energy from new and renewable sources of energy (NRSE) are being implemented in

various States. The details of the NRSE projects to be undertaken during the Eighth Plan period have not been finalised. The Working Group of NRSE has inter-alia envisaged installation of about 3500 MW capacity from sources such as solar, wind, blomass, mini/micro hydel, etc. The programmes contemplated would require a budgetary allocation of the order of Rs. 6932 crores in the Central Sector.

(c) to (e). The costs of installation, generation and supply of energy from non-conventional energy sources depend on several factors, such as the type of energy source, location and site conditions, size of installation, state of technology, and utilisation of capacity. In certain cases, the cost of energy supply from these sources is comparable with conventional power based on diesel and thermal power generation.

Nine wind farms demonstration projects with an aggregate capacity of over 10 MW have been set up in Maharashtra, Guiarat, Tamil Nadu, Orissa, Andhra Pradesh and Karnataka, and a total of about 220 lakh units of electricity from these farms has been fed to the respective State grids. No project for supplying energy on a commercial basis from tidal or solar plants have been approved so far. A proposal to set up a 900 MW tidal power project in the Gulf of Kutch at an estimated cost of about Rs. 1310 crores (at 1987 price level or id betaken up for implementation after all necessary inputs, such as the availability of resources and technoeconomic approval, have been tied up. Under the Solar Photovoltaic Programme a total capacity of about 3 MW has been installed or is under installation as demonstration programme. A megawatt size solar thermal power plant is also proposed to be installed on an experimental basis.

The potential of tidal, wind, and solar power in the country can be estimated with a degree of accuracy after development and

stablisation of technologies for the economic generation and supply of power from these sources.

By and large, the non-conventional sources of energy do not have an adverse effect on the environment.

### **Paris Convention on Patents**

2312. SHRI ARVIND NETAM: SHRI P.R. KUMARAMANGALAM:

Will the Minister of INDUSTRY be pleased to state:

- (a) whether suggestions have been received that India should join the Paris Convention on Patents; and
- (b) if so, the strategy adopted by Government in this regard?

THE MINISTER OF INDUSTRY (SHRI AJIT SINGH): (a) and (b). Suggestions have been received by the Government from time to time for and against India's joining the Paris Convention for Protection of Industrial Property. Government has not taken any decision in this matter.

# Electrification of Villages in Eighth Plan

2313. SHRI ARVIND NETAM: Will the Minister of ENERGY be pleased to state:

- (a) whether Government propose to provide electricity to every village in the country during Eighth plan period; and
- (b) if so, the year-wise details in this regard?

THE MINISTER OF ENERGY AND MINISTER OF CIVIL AVIATION (SHRI ARIF MOHAMMAD KHAN): (a) and (b). All the remaining villages in the country are likely to