(b) if so, the reasons therefor;

(c) the total expenditure incurred on this project so far; and

(d) the steps being taken to expedite the designing of this project ?

## THE PRIME MINISTER (SHRIMATI INDIRA GANDHI) : (a) No, Sir.

(b) Does not arise.

(c) BARC studies various types of nuclear reactors including small-sized compact reactors which can be used as mobile power packs as well as for ship propulsion as part of its general research and development activities. It is, therefore, not possible to segregate expenditure incurred in this regard.

(d) The progress achieved so far in this regard is satisfactory.

## India's Nuclear Programme

333. SHRI MADHAVRAO SCINDIA : Will the PRIME MINISTER be pleased to state :

(a) whether it is a fact that India's nuclear programme as projected at the 12th Congress of the World Energy Conference greatly impressed the participants at the session;

(b) if so, the details of the Programme; and

(c) how far the programme depends upon the external assistance both by way of material and consultancy services for its implementation ?

THE MINISTER OF STATE IN THE DEPARTMENTS OF SCIENCE AND TECHNOLOGY, ATOMIC ENERGY, SPACE, ELECTRONICS AND OCEAN DEVELOPMENT (SHRI SHIVRAJ V. PATIL): (a) Yes, Sir.

(b) The immediate plans envisage building a number of 235 MWe units in multi reactor clusters to be followed by 500 MWe units. The target is to install 10,000 MWe of nuclear power by the year 2000 A.D. Fast breeder reactors will play an important role in meeting the growing demands of electricity beyond 2000 A.D.

(c) No external assistance is required for design and building the nuclear power stations. However, some materials need to be imported, which are not produced in the country. In terms of cost, this accounts for about 10 to 15% at present.

## **Exploitation of Nuclear Energy Resources**

334. SHRI MADHAVRAO SCINDIA : Will the PRIME MINISTER be pleased to state :

(a) whether it is a fact that the World Energy Conference held in New Delhi in September this year had stressed the need for optimum exploration and exploitation of nuclear energy resources;

(b) if so, what the percentage of world energy is presently contributed by nuclear power and the percentage of India's requirements presently met from nuclear power plants; and

(c) the steps, both long term and short term, contemplated by Government in that direction ?

THE MINISTER OF STATE IN THE DEPARTMENTS OF SCIENCE AND TECHNOLOGY, ATOMIC ENERGY, SPACE, ELECTRONICS AND OCEAN DEVELOPMENT (SHRI SHIVRAJ V. PATIL): (a) Yes, Sir,

(b) Nuclear power constitutes about 10% of the electricity produced in the world and in the case of India it is about 3%.

(c) It is envisaged that about 10% of our electrical power requirement by the turn of the century will be met from nuclear power plants. The programme will be based primarily on heavy water reactors of 235 MWe size followed by 500 MWe size built as multiple unit stations. The design of 235 MWe unit has been standardised.

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