THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (SHRI PRITHVIRAJ CHAVAN): (a) No, Sir.

(b) Not applicable in view of (a) above.

(c) A mix of indigenous nuclear power reactors and additionalities based on international cooperation are planned to be set up. The indigenous reactors planned are Pressurized Heavy Water Reactors (PHWRs) of 700 MWe, Fast Breeder Reactors (FBRs) of 500/1000 MWe and an Advanced Heavy Water Reactor (AHWR) of 300 MWe. Additionalities comprising of diverse Light Water Reactors (LWRs) of 1000 MWe or larger capacity of contemporary design are planned. These are planned to be set up in technical cooperation with the Russian Federation, France and USA.

New plants for A E

575. DR. E.M. SUDARSANA NATCHIAPPAN:

SHRI SANTOSH BAGRODIA:

Will the PRIME MINISTER be pleased to state:

(a) the number of new plants for Atomic Energy that are proposed to be established in the country during the next twenty years;

(b) the details of capacity, location thereof; and

(c) the details of year-wise production schedule?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (SHRI PRITHVIRAJ CHAVAN): (a) The Integrated Energy Policy of the country envisages reaching a nuclear power capacity of 63,000 MWe by 2032, which will require setting up large number of reactors. The XI Plan proposals envisages start of work on 8 indigenous Pressurised Heavy Water Reactors (PHWRs) of 700 MWe each, an Advanced Heavy Water Reactor of 300 MWe and pre-project activities for two Fast Breeder Reactos (FBRs) of 500 MWe each. In addition, start of work on 10 Light Water Reactors (LWRs) based on international cooperation, each of 1000 MWe or above is also planned. The reactors to be set up beyond XI Plan will be finalized in due course:

(b) The Government has accorded 'in principle' approval of the sites at Kakrapar, Gujarat (KAPP-3&4) and Rawatbhata, Rajasthan (RAPP-7&8) for setting up indigenous 700 MWe PHWRs and Kudankulam, Tamilnadu (KK-3&4) and Jaitapur, Maharashtra (JP-1&2) for setting up Light Water Reactors each of 1000 MWe and above based on international co-operation. Additional sites are under consideration of the Government.

(c) The gestation period of these reactors is expected to be about 6 years from the first pour of concrete to commercial operation. Depending on the actual starts, the reactors will start generation in about 6 years.

Nuclear Power Plant in AP

576. SHRI M.V. MYSURA REDDY: Will the PRIME MINISTER be pleased to state:

(a) whether it is true that Government has decided to set up 2,000 MW of nuclear power plant in Andhra Pradesh;

(b) if so, whether it is also true that APGENCO and NPCIL are going to sign the agreement very soon; and

(c) if so, the details of (a) and (b) above?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (SHRI PRITHVIRAJ CHAVAN): (a) No, Sir.

(b) and (c) Not applicable in view of (a) above. However, APGENCO and NPCIL are currently engaged in preliminary discussions on setting up a nuclear power plant in Andhra Pradesh in future.

Nuclear Power Plants

577. SHRI RAMDAS AGARWAL: Will the PRIME MINISTER be pleased to state:

(a) the number of nuclear power plants required to be set up in India during the current five year plan period;

(b) the investment expected to be made in next 10 years;

(c) in which part of the country nuclear plants would be set up indicating what would be expected production capacity, Plant-wise, location-wise and State-wise; and

(d) by when such nuclear plants would start producing power and whether these plants would be working with full capacity?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (SHRI PRITHVIRAJ CHAVAN): (a) The XI Plan proposals envisage start of work on 8 Pressurized Heavy Water Reactors (PHWRs) of 700 MWe, 10 Light Water Reactors (LWRs) each of 1000 MWe or larger capacity based on international cooperation and an Advanced Heavy Water Reactor (AHWR) of 300 MWe. In addition, pre-project activities on two Fast Breeder Reactors (FBRs) of 500 MWe are also planned.

(b) The exact investment to be made will depend on individual project cost. The overnight cost of indigenous PHWRs is about Rs. 6 crore / MWe at 2008 prices. Thus, the investment in respect of indigenous nuclear power reactors is expected to be about Rs. 50,000 crore at 2008 prices. The cost of LWRs will depend on the business model, extent of indigenization and commercial terms which will be known only after commercial agreements are negotiated.

(c) The Government has approved, in-principle, following sites for setting up future nuclear power reactors:

i. Kakrapar in Gujarat - 2 x 700 MWe PHWRs.

ii. Rawatbhata in Rajasthan - 2 x 700 MWe PHWRs.

iii. Kudankulam in Tamil Nadu - 2 x 1000 MWe LWRs.

iv. Jaitapur in Maharashtra - 2 x 1000 MWe LWRs.

In addition, the Site Selection Committee of the Department of Atomic Energy has evaluated sites for setting up future nuclear power plants from among the sites offered by State Governments and