- (b) if so, the details thereof;
- (c) whether it is a fact that the proposed laboratory will be of a generic nature; and
 - (d) if so, the details thereof?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (SHRI V. NARAYANASAMY): (a) and (b) Yes Sir, The Department of Atomic Energy (DAE) has a plan to build a repository in the depth range of 500-1000m for disposal of vitrified high level waste in future. The need of such repository would arise only after 40-50 years. This is because the inventory of radioactive waste generated is small for the current nuclear power programme of the country for which the present interim storage facilities are felt adequate.

A proposal to construct an Underground Research Laboratory (URL) is included in the current Five Year Plan to develop the required indigenous technology, needed for building the repository.

(c) and (d) Yes, Sir. The proposed laboratory is of generic nature. The laboratory would comprise of experimental tunnels, rooms/chambers at depth and would be exclusively used for non-radioactive experiments and applications that would form a scientific basis for the construction of a deep underground repository in future. Such laboratories are also used for development of methodology and technology related to emplacement of solidified waste in the repository.

Kudankulam Nuclear Power Plant

1249. SHRI N.K. SINGH: Will the PRIME MINISTER be pleased to state:

- (a) whether the first reactor of the Kudankulam Nuclear Power Plant has been commissioned;
 - (b) if so, the details thereof;
 - (c) whether the concerns of the protesters have been sufficiently addressed;
- (d) whether an agreement for the third and fourth reactor in the Kudankulam Nuclear Plant was signed with Russia during the visit of India's Prime Minister;
 - (e) if so, the details thereof;

- (f) if not, the details thereof; and
- (g) the estimated cost due to the delay in commissioning of the plant?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (SHRI V. NARAYANASAMY): (a) and (b) The Unit-1 of Kudankulam Nuclear Power Project is at an advanced stage of commissioning. The permission for initial fuel loading and first approach to criticality was accorded by the Atomic Energy Regulatory Board (AERB) on August 10, 2012. Currently, preparations for fuel loading are taken up. After completion of the fuel loading in the reactor, activities to approach the first criticality (start of the fission chain reaction for the first time), a major milestone, will be taken up in line with the approved procedures and AERB stipulations. After criticality, the full power operation of the unit will be achieved in steps in accordance with the laid down procedures.

- (c) Yes, Sir. The Expert Group of eminent persons constituted by the Central Government has addressed all the legitimate concerns of the local people, Government have also enhanced the public outreach activities, using a multipronged approach to address the genuine apprehensions of the local people.
- (d) to (f) The Inter-Governmental Agreement (IGA) between India and the Russian Federation on cooperation in the construction of additional nuclear power plant units at Kudankulam site as well as in the construction of Russian designed nuclear power plants at new sites in India was signed on December 5, 2008 during the visit of Russian President to India.
- (g) The cost of Kudankulam Nuclear Power Plant, Units 1 and 2 is estimated to go up from Rs. 13171 crore to Rs. 17270 crore, due to delay in commissioning of the plant.

Installation of mobile radiation detection system

1250. DR. V. MAITREYAN: Will the PRIME MINISTER be pleased to state:

- (a) whether Government has installed or proposes to install mobile radiation detection system and special radiation detection vehicles in various cities of the country; and
 - (b) if so, the details thereof and the aims and objectives of the same?