

of Radiation Safety (DRS) under the Health and Family Welfare Department of the respective State Governments.

- (v) AERB has established Regional Regulatory Centers (RRC) at different locations in the country for decentralisation of regulatory functions.
- (vi) AERB regularly routinely promotes/participates in conferences/public awareness programmes organised by associations such as Indian Radiological Imaging Association (IRIA), Society of Indian Radiographers (SIR), Association of Medical Physicists of India (AMPI) etc., which helps in dissemination of radiation safety and regulatory information.

Shortage of Nuclear fuel

3080. SHRI AVINASH PANDE: Will the PRIME MINISTER be pleased to state:

(a) whether the operational nuclear power plants of the country are facing a shortage of nuclear fuel, if so, the details thereof; and

(b) whether Government has entered into any agreement with any countries for the supply of Uranium and/or Thorium and the quantity of nuclear fuel imported into India each year?

THE MINISTER OF STATE IN THE DEPARTMENT OF ATOMIC ENERGY (DR. JITENDRA SINGH): (a) Yes, Sir. The country has 20 nuclear power reactors under operation with an installed generating capacity of 4780 MWe. Under separation plan, ten reactors are currently placed under IAEA safeguards and are eligible for imported fuel. These reactors are RAPS 1 to 6 located at Rawatbhata, Rajasthan; KAPS 1 and 2 at Kakrapar, Gujarat and TAPS 1 and 2 at Tarapur, Maharashtra. These reactors normally operate at their full capacity. RAPS-1 is under extended shutdown for techno-economic assessment. In addition, two more reactors, Kudankulam (KKNPP) Unit 1 and 2, set up with the international cooperation with Russian Federation, at Kudankulam, in Tamil Nadu are also under IAEA safeguard.

Ten nuclear power reactors *viz.*, KGS 1 to 4 located at Kaiga, Karnataka; NAPS 1 and 2 at Narora, Uttar Pradesh; MAPS 1 and 2 at Kalpakkam, Tamil Nadu; and TAPS 3 and 4 at Tarapur, Maharashtra continue to use uranium sourced within the country. Due to a mismatch between demand and supply of domestic Uranium, the total power generated by these reactors is generally lower than their gross installed capacity of 2,840 MWe. So far, 2,11,473 tonne of U_3O_8 equivalent to 1,79,329 tonne of Uranium has been established by Atomic Minerals Directorate for Exploration and Research (AMD) in various States of India. Following extensive work for exploration of Uranium in the country, the identified *in-situ* reserves of uranium in the country have been progressing.

(b) Yes, Sir. Consequent upon India signing the Civil Nuclear Cooperation Agreement with United States of America on 10.10.2008, the Department of Atomic Energy (DAE) has been importing Uranium ore to supply fuel for Nuclear Reactors under IAEA

safeguards in the country as per the separation plan. As a part of this activity, Contractual Agreements were entered into with M/s. AREVA, France (during 2008), M/s. JSC TVEL Corporation, Russia (during 2009), M/s. NAC Kazatomprom, Kazakhstan (during 2009) and M/s NMMC, Uzbekistan (during 2013). As a result of import of Uranium, IAEA safeguarded nuclear reactors are running at optimum level. Entering into long term Agreements with foreign suppliers for supply of Uranium and building a stockpile has been planned to ensure uninterrupted supply. India does not need to import Thorium.

The year-wise details of the nuclear fuel imported from various firms/countries are furnished below:

(in metric tonnes)

Firm/Country	Quantity of Uranium imported as on July 25, 2014							
	Total Qty. Ordered	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
M/s. AREVA, France	300*	60.49	239.38	Nil	Nil	Nil	Nil	Nil
M/s. TVEL Corporation, Russia	2000**	Nil	150.33	179.79	296.08	295.64	296.31	118.57
M/s. NAC Kazatomprom, Kazakhstan	58@	Nil	58.29	Nil	Nil	Nil	Nil	Nil
	2100*	Nil	Nil	600	350	402.5	460	Nil
TOTAL	4458	60.49	448	779.79	646.08	698.14	756.31	118.57

* In the form of Natural Uranium Ore Concentrate.

** In the form of Natural Uranium Di-oxide Pellets.

@ In the form of Enriched Uranium Di-oxide Pellets.

Victims of atomic and nuclear accidents

3081. SHRI VIVEK GUPTA: Will the PRIME MINISTER be pleased to state:

(a) whether Government has or proposes to have any specific scheme in place to secure, insure and provide special aid for the victims of accidents at nuclear/atomic power plants in India and their families;

(b) if so, the number of beneficiaries of the same over the past five years, State-wise and scheme-wise thereof;

(c) the details of the number of accidents in nuclear and atomic power plants in India during the afore-mentioned period; and