GOVERNMENT OF INDIA DEPARTMENT OF ATOMIC ENERGY LOK SABHA STARRED QUESTION NO. 263 TO BE ANSWERED ON 16.03.2016

NUCLEAR POWER GENERATION

*263. SHRI NAGAR RODMAL:

Will the PRIME MINISTER be pleased to state:

- (a) the total generation of power from the Nuclear Power Plants (NPPs) during each of the last three years and the current year, year and plant-wise;
- (b) the target set for generation of electricity from the nuclear power stations during the current Five Year Plan, year and plant-wise;
- (c) whether some of the nuclear power plants are generating electricity below their installed capacity and if so, the details thereof and the reasons therefor;
- (d) the share of nuclear power to the total energy mix along with long term perspective plan drawn for improving the ratio; and
- (e) the steps taken/being taken by the Government to promote nuclear power?

ANSWER

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND PRIME MINISTER'S OFFICE (Dr. JITENDRA SINGH):

(a) to (e) A statement is placed on the Table of the House.

Government of India Department of Atomic Energy

STATEMENT REFERRED TO IN REPLY TO LOK SABHA STARRED QUESTION NO.*263 DUE FOR ANSWER ON 16.03.2016 BY SHRI NAGAR RODMAL REGARDING NUCLEAR POWER GENERATION

- (a) The details are given in Annexure -1.
- (b) The targets for generation of electricity for the current five year plan were set in the year 2011. The details are given in Annexure -2.
- (c) No, Sir. The nuclear power plants are presently generating electricity as per their rated capacity.
- (d) The present (April 2015 to February 2016) share of nuclear power in the total electricity generation is about 3.3%. The share is proposed to be increased by adding more nuclear power capacity. In this regard, the government in July 2014 had set a target of tripling the then existing nuclear power capacity of 4780 MW in next ten years (by 2024). More nuclear power reactors are also planned in future.
- (e) The government has taken several enabling steps to increase the nuclear power capacity. These include accord of "In principle' approval of sites for locating future reactors based both on indigenous technologies and with foreign technical cooperation, entering into enabling agreements with foreign countries for nuclear cooperation including supply of fuel, amendment of the Atomic Energy Act to enable Joint Ventures of Public Sector Companies to set up nuclear power projects and creation of Indian Nuclear Insurance Pool (INIP).

<u>ANNEXURE – 1</u>

| | Generation, Million Units (MUs)* | | | | | |
|---|----------------------------------|--------------------|------------------------------|---------------------|--|--|
| Nuclear Power Plant | 2012 – 13 2013 – 14 | | 2014 – 15 2015-16 | | | |
| | | | | (Upto Feb- 2016) | | |
| Tarapur Atomic Power Station - 1 | 577 | 1322 | 718 | 669 | | |
| Tarapur Atomic Power Station - 2 | 1007 | 806 | 1297 | 500 | | |
| Tarapur Atomic Power Station - 3 | 4373 | 3739 | 4545 | 4128 | | |
| Tarapur Atomic Power Station - 4 | 3866 | 4017 | 3713 | 4178 | | |
| Rajasthan Atomic Power Station - 2 | 1584 | 1688 | 1282 | 1226 | | |
| Rajasthan Atomic Power Station - 3 | 1757 | 1946 | 1720 | 1682 | | |
| Rajasthan Atomic Power Station - 4 | 1926 | 1772 | 1995 | 1497 | | |
| Rajasthan Atomic Power Station - 5 | 1760 | 2041 | 1628 | 1781 | | |
| Rajasthan Atomic Power Station - 6 | 1819 | 1787 | 1109 | 1607 | | |
| Madras Atomic Power Station - 1 | 1485 | 1354 | 1318 | 1704 | | |
| Madras Atomic Power Station - 2 | 1257 | 761 | 1299 | 1214 | | |
| Narora Atomic Power Station - 1 | 1226 | 1490 | 1341 | 1639 | | |
| Narora Atomic Power Station - 2 | 1315 | 1214 | 1550 | 1463 | | |
| Kakrapar Atomic Power Station - 1 | 1832 | 1862 | 1943 | 1552 | | |
| Kakrapar Atomic Power Station - 2 | 1639 | 1891 | 1586 | 421 | | |
| Kaiga Generating Station - 1 | 1464 | 1587 | 1695 | 1757 | | |
| Kaiga Generating Station - 2 | 1270 | 1740 | 1450 | 1664 | | |
| Kaiga Generating Station - 3 | 1447 | 1759 | 1567 | 1901 | | |
| Kaiga Generating Station - 4 | 1259 | 1454 | 1751 | 1664 | | |
| Kudankulam Nuclear Power Plant Unit - 1 | | 1106 ^{\$} | 2243 ^{\$} + 2087 | 1622 | | |
| Total | 32863 | 35333 | 37835 | 33868 | | |

* The generation figures are rounded off to the nearest digit.

\$ This is infirm power generation before commercial operation.

ANNEXURE-2

XII Plan Generation Targets (set in 2011)

| Station | Capacity (MW) | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | XII PLAN TOTAL | | | | |
|--------------------------------|------------------|-------------|------------------------|-----------|------------|-----------|-------------------|--|--|--|--|
| NPCIL | | | | | | | | | | | |
| Stations with indigenous fuel | | | | | | | | | | | |
| MAPS-1&2 | 440 | 2698 | 2891 | 3084 | 3084 | 3084 | 14839 | | | | |
| NAPS-1&2 | 440 | 2698 | 2891 | Placed un | der IAEA s | afeguards | 5589 | | | | |
| KGS-1&2 | 440 | 2698 | 2891 | 3084 | 3084 | 3084 | 14839 | | | | |
| KGS-3&4 | 440 | 2698 | 2891 | 3084 | 3084 | 3084 | 14839 | | | | |
| TAPS-3&4 | 1080 | 6007 | 7096 | 7569 | 7569 | 8185 | 36424 | | | | |
| KAPS-3&4 | 1400 | | Under co | 4200 | 4200 | | | | | | |
| RAPS-7&8 | 1400 | | | 2100 | 2100 | | | | | | |
| Sub Total | 5640 | 16799 | 18659 | 16819 | 16819 | 23736 | 92832 | | | | |
| Stations under IAEA safeguards | | | | | | | | | | | |
| TAPS-1&2 | 320 | 2383 | 2383 | 2383 | 2383 | 2383 | 11914 | | | | |
| RAPS-2 to 6 | 1080 | 8042 | 8042 | 8042 | 8042 | 8042 | 40208 | | | | |
| KAPS-1&2 | 440 | 3276 | 3276 | 3276 | 3276 | 3276 | 16381 | | | | |
| NAPS-1&2 | 440 | With indige | With indigenous fuel 3 | | 3276 | 3276 | 9829 | | | | |
| KK-1&2 | 2000 | 7501 | 13808 | 14892 | 14892 | 14892 | 65985 | | | | |
| Sub Total | 4280 | 21201 | 27509 | 31869 | 31869 | 31869 | 144317 | | | | |
| NPCIL TOTAL | 9920 | 38000 | 46167 | 48688 | 48688 | 55605 | 237149 | | | | |
| BHAVINI | | | | | | | | | | | |
| PFBR | 500 | Unde | Under construction & | | | 2409 | 4599 | | | | |
| TOTAL | 9980 | 38000 | 46167 | 48688 | 50878 | 58014 | 241748 | | | | |

Generation in Million Units (MUs)
