

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 2471
TO BE ANSWERED ON 01.08.2018

VIABILITY OF NUCLEAR POWER PROJECTS

2471. SHRI CHARANJEET SINGH RORI:
SHRI C. MAHENDRAN:

Will the PRIME MINISTER be pleased to state:

- (a) the details about the target fixed by the Government for power generation through new nuclear power projects in the next three years;
- (b) whether the cost of implementation of nuclear projects is higher with lesser power capacity through nuclear power plants;
- (c) if so, the details thereof and whether the Government is planning an alternative source of power generation to reduce the cost input for implementation of nuclear power plants and if so, the details thereof and if not, the reasons therefor;
- (d) whether the Government is of the opinion that atomic power is more eco-friendly than other power sources and if so, the details thereof;
- (e) whether the Government is facing any difficulties in installation of new atomic power plants; and
- (f) if so, the details thereof and the steps taken by the Government in this regard?

ANSWER

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

- (a) In the next three years, a capacity of 3300 MW is expected to be added by completion of three projects under construction viz. Kakrapar Atomic Power Project (KAPP) 3&4 (2X700 MW) at Kakrapar, Gujarat, Rajasthan Atomic Power Project RAPP 7&8 (2 X 700 MW) at Rawatbhata, Rajasthan and Prototype Fast Breeder Reactor (PFBR) (500 MW) at Kalpakkam, Tamil Nadu. However, as the targets for nuclear power generation are set on an annual basis as a part of Nuclear Power Corporation of India Limited's

(NPCIL's) annual Memorandum of Understanding (MoU) with Department of Atomic Energy (DAE), the targets of generation including from these units for the next three years will be set in the MoUs of the respective years.

(b)&(c)The capital cost of nuclear power plants is higher than that of other base load electricity generating technologies. However, the energy (fuel) cost is much lower. Thus, the tariff of electricity generated by nuclear power plants is comparable to that of other contemporary base load technologies like coal and gas. Nuclear power projects are thus viable.

Nuclear power is a clean, environment friendly technology available 24X7. It has huge potential and can ensure long term energy security of the country in a sustainable manner. It is thus being pursued along with other technologies.

The effort to reduce capital cost of nuclear power projects is ongoing. The efforts to optimize the cost include standardization of design, reducing gestation period and adopting appropriate business models to arrive at an optimal cost in case of projects to be set up with foreign cooperation.

- (d) Nuclear power is eco-friendly and does not emit greenhouse gases. The life cycle greenhouse gas emissions of nuclear power are comparable to those of renewable like wind power.
- (e) There are no difficulties in setting up new nuclear power plants. However, the pre-project activities like land acquisition at new sites, obtaining statutory environmental clearances, arriving at project proposals in respect of reactors to be set up with foreign cooperation etc. are long drawn and take time.
- (f) The pre-project activities are being expedited to enable early start of work on the projects.
