

**GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA**

UNSTARRED QUESTION NO:1306
ANSWERED ON:30.07.2003
GENERATION OF POWER FROM THORIUM
BRAHMANAND MANDAL

Will the Minister of ATOMIC ENERGY be pleased to state:

- (a) whether there is any proposal with the Government to generate atomic power from thorium;
- (b) if so, the details thereof;
- (c) the difference in the cost of production of thorium generated electricity and uranium generated electricity; and
- (d) the details thereof?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF PLANNING, MINISTER OF STATE IN THE MINISTRY OF STATISTIC PROGRAMME IMPLEMENTATION, MINISTER OF STATE IN THE DEPARTMENT OF ATOMIC ENERGY, MINISTER OF STATE IN THE DEPARTMENT OF SPACE AND MOS IN THE MINISTRY OF COMMERCE AND INDUSTRY (ADDITIONAL CHARGE) – (SHRI S.B. MOOKHERJEE)

(a) Yes, Sir.

(b) An Advanced Heavy Water Reactor (AHWR) to generate atomic power from thorium is being developed at BARC. The Reactor will be mainly utilising thorium as fuel for about two-thirds of its electricity generation. On the basis of research and development work carried out so far on design and development of major sub-systems involved, a detailed project report containing the major highlights of design, safety and other related aspects for this reactor has been completed. Being the first of its kind in the world, detailed peer review of the design is being carried out by expert groups.

(c) AHWR is still under development. However considering the features built in the design and rich thorium reserves in India, the cost of nuclear power using thorium is expected to be competitive in the long run.

(d) Does not arise.