GOVERNMENT OF INDIA
MINISTRY OF HEAVY INDUSTRIES AND PUBLIC ENTERPRISES
DEPARTMENT OF HEAVY INDUSTRY

RAJYA SABHA
UNSTARRED QUESTION NO. 3125
TO BE ANSWERED ON 07.08.2014

New products manufactured by BHEL

3125. SHRI ISHWARLAL SHANKARLAL JAIN:

Will the Minister of HEAVY INDUSTRIES AND PUBLIC ENTERPRISES be pleased to state:

(a) whether Bharat Heavy Electricals Limited (BHEL), which manufactures heavy electrical equipments in the country, is stressing on the development of new technology and products;
(b) whether in view of rising consumption of electricity in the country, BHEL and other companies are developing new techniques to manufacture electricity saving equipments; and
(c) if so, the details thereof and if not, the reasons therefor?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF HEAVY INDUSTRIES AND PUBLIC ENTERPRISES (SHRI PON. RADHAKRISHNAN)

(a) : Bharat Heavy Electricals Limited (BHEL) has been continuously laying strong emphasis since 1970's on the assimilation, innovation, design and developmental efforts of new and better technologies / products / processes / systems that address the needs of its customers as also the market.

(b) & (c): BHEL has been actively developing and acquiring technologies with a view to improve the performance and energy efficiency of its product offerings. Towards this, the Company has developed and introduced several products in the recent past in its areas of operation, which inter-alia include :

- upgraded modules of sub-critical thermal sets of 150 MW, 270 MW, 300 MW, 525 MW and 600 MW, and also the super-critical thermal sets of 660 MW, 700 MW and 800 MW ratings with enhanced efficiency suiting the local conditions
- Advanced Class Gas Turbines with better efficiency
- Higher rating sets for Nuclear & Hydro Power projects

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- energy efficient single cylinder non-reheat steam turbine for 100-140 MW application to harness waste heat from process plants
- insulated-gate bipolar transistor (IGBT) based devices for traction (for Railways) and industries which saves energy/ electricity
- 765 kV and 1,200 kV transmission equipment (Transformers & Reactors) to address bulk power transmission over long distances at higher voltages and lower losses
- FACTS devices (eg. STATCOM) to improve power factor in high energy and fluctuating loads thus helping in saving energy
- Permanent Magnet Motors and Generators which are compact energy efficient equipment
- Solar photo-voltaic equipment & systems

In addition, BHEL in partnership with Indira Gandhi Centre for Atomic Research (IGCAR) and NTPC Ltd. is developing Advanced Ultra Super Critical (Adv-USC) technology under National Mission for Clean Coal (Carbon) Technologies. For this the objective is to undertake R&D and other aspects of Adv-USC Technology for Thermal Power Plants in order to improve power plant efficiency, reduce carbon-dioxide emissions and reduce coal consumption as well as establishing a demonstration power plant of 800 MW capacity based on the developed technology.

Also, Bureau of Energy Efficiency (BEE) under its Standards & Labelling Programme has formulated efficiency norms to enhance energy efficiency of some categories of electrical equipment like distribution transformers, induction motors, electric lamps, etc.

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