

(c) and (d) The Government plans to meet the requirement of power during the 12th Plan as follows:

- (i) A capacity addition of 75,785 MW (63781 MW Thermal, 9204 MW Hydro and 2800 MW Nuclear) has been proposed by the Working Group on Power in 12th Plan for consideration of Planning Commission.
- (ii) Adoption of more efficient super-critical technology for thermal power generation.
- (iii) Coordinated operational and maintenance of hydro, thermal, nuclear and gas based power stations to optimally utilize the existing generation capacity.
- (iv) Development of Ultra Mega Power Projects of 4000 MW each to reap benefits of economies of scale.
- (v) Renovation, modernization and life extension of old and inefficient generation units.
- (vi) Strengthening of Inter-State and inter-regional transmission capacity.
- (vii) Strengthening of sub-transmission and distribution network through Re- Acceleration Power Development Programme (R-APDRP) as a major step towards loss reduction.
- (viii) Energy Conservation, energy efficiency and demand side management measures.

Conservation of sea water into portable water

*635. SHRI RAJKUMAR DHOOT: Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether it is a fact that a new Low-Temperature Thermal Desalination (LTTD) technology is being promoted by Government for conversion of sea water into potable water which has an operating cost of nearly 10 paise per litre;

(b) if so, the details thereof;

(c) whether Government proposes to set up LTTD plants in Mumbai and other coastal areas of Maharashtra to solve the potable water problem in those areas of the State; and

(d) if so, the details thereof and if not, the reasons therefor?

THE MINISTER OF EARTH SCIENCES (SHRI VILASRAO DESHMUKH): (a) Yes, Sir.

(b) The National Institute of Ocean Technology (NIOT) an autonomous body of the Ministry of Earth Sciences has indigenously designed, developed and demonstrated desalination technology for conversion of sea water into potable water based on Low Temperature Thermal Desalination (LTTD) technology. The LTTD is a process under which the warm surface sea water is flash evaporated at low pressure and the vapour is condensed with cold deep sea water. This technology is efficient and suitable for island territories of India. Till date, 4 LTTD plants have been successfully commissioned in the country, one each at Kavaratti, Minicoy, Agatti, Lakshadweep and at North Chennai Thermal Power Station (NCTPS), Chennai. The capacity of each of these LTTD plants is 1 lakh litre per day of potable water. The cost per litre of desalination would depend on the technology used and cost of electricity which varies from place to place. According to the cost estimates made recently by an independent agency for LTTD technology, the operational costs per litre of desalinate water currently works out to be 19 paise for island based plants.

(c) As on date, there is no proposal to set up such plants in Mumbai and other coastal areas of Maharashtra.

(d) The required thermal gradient of 12°C-14°C between surface and deep sea water for setting up a LTTD plant in coastal area is not available near the Mumbai coast and along Maharashtra coast line.

Reduction of coal production

*636. DR. K.V.P. RAMACHANDRA RAO: Will the Minister of COAL be pleased to state:

(a) whether it is a fact that during 2011-12, coal production has declined showing a negative growth;

(b) if so, the details thereof and the reasons therefor; and

(c) what was its impact on the economy?

THE MINISTER OF COAL (SHRI SHRIPRAKASH JAISWAL): (a) No Sir. All India coal production during 2011-12 has increased from 532.694 million tones in 2010-11 to 539.794 million tones (Provisional) showing a positive growth of 1.33%.

(b) and (c) Does not arise in view of point (a) above.