

**GOVERNMENT OF INDIA
POWER
LOK SABHA**

UNSTARRED QUESTION NO:4381
ANSWERED ON:24.04.2000
BREAKAGE OF SHAFT BEFORE AVERAGE LIFE
AKHILESH SINGH

Will the Minister of POWER be pleased to state:

- (a) whether the Government are aware that a shaft worth lacs of rupees for power generation in the Bairasiul Hydro Electric Power Project, Himachal Pradesh has broken down much earlier than its average life in 1999;
- (b) if so, the details thereof and the reasons therefor;
- (c) the total losses incurred so far as a result thereof;
- (d) whether the Government have enquired into the matter and taken action against those found guilty in this regard;
- (e) if so, the details thereof and if not, the reasons therefor; and
- (f) the steps taken by the Government to make the above project operational?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRIMATI JAYAWANTI MEHTA)

(a) & (b) : The shafts of turbine of generating Units No. 3 & 1 of Baira Siul HE Project, developed cracks on February 06, 1999 and March 20, 1999 respectively. These Units were

The cracks were hairline to deep at the location of the turbine guide bearing journal. The Units were supplied by BHEL. BHEL contended that the cracks cannot be repaired and the machines cannot be operated with the cracks and advised replacement of these shafts. BHEL supplied new shafts (2 Nos.) at a cost of Rs.210 lacs (ex-work, Haridwar) and the Units were re-commissioned on September 07, 1999 and December 11, 1999.

(c) : The loss of generation on this account would amount 220 Million Units (MUs) compared to corresponding period in the previous year/spilling of water limited to design energy. The revenue loss would be Rs. 804 lacs.

(d) & (e) : An expert committee comprising of Shri A.N. Singh, Ex-Chairman, CEA and two other experts from hydro field was constituted on February 23, 1999 and the preliminary report of the committee has attributed the cause of cracks to be on account of excessive abrasive silt in water and erosion of underwater parts such as labyrinth rings. The Committee has in its preliminary report considered the excessive vibration and increased thrust due to larger labyrinths clearances to be possible reasons for crack formation. The final report of the committee is expected shortly. No specific cause of failure was termed as technical. Fixing of responsibilities and action as may be required would be considered after receipt of the final report.

(f) : Both the Units 3 & 1 have already been re-commissioned on September 07, 1999 and December 11, 1999 respectively and their performances so far is satisfactory.