

**GOVERNMENT OF INDIA
POWER
LOK SABHA**

UNSTARRED QUESTION NO:489

ANSWERED ON:04.12.2003

POWER FAILURE IN MAHARASHTRA

ADHIR RANJAN CHOWDHURY;BHASKAR RAO PATIL;MOHAN RAWALE;NARESH KUMAR PUGLIA;PRAKASH V. PATIL;PUTTASWAMY GOWDA

Will the Minister of POWER be pleased to state:

- (a) whether there was a breakdown for the second time in Western Grid;
- (b) if so, whether several region across Maharashtra and Gujarat were hit by power failure on 5th November, 2003;
- (c) if so, the details thereof and the reasons of power failure;
- (d) whether on 6th October, 2003 areas across Western Maharashtra, Vidarbha and Marathwada witnessed a power breakdown after grid failure due to improper maintenance of high tension lines;
- (e) the steps Union Government have taken to ensure uninterrupted power supply;
- (f) whether there has been no addition of power in Maharashtra and Gujarat in the last decade;
- (g) if so, the measures taken by the Union Government to increase production of power in Maharashtra and Gujarat;
- (h) whether any inquiry was conducted to go into the causes thereof; and
- (i) if so, the outcome thereof?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF POWER (SHRIMATI JAYAWANTI MEHTA)

(a) : In the recent past, partial grid disturbance occurred in the Western Region (WR) on 6th October, 2003, 5th and 7th November, 2003.

(b) : According to Maharashtra State Electricity Board (MSEB), during the grid disturbance on 5th November, 2003, power supply was affected in western Maharashtra comprising part of Pune, Sholapur, Satara, Sanghi, Kolhapur and part of Thane and Raigad districts. Gujarat system islanded and survived with load shedding.

(c) : Low voltage in EHV system on account of high import of power from Eastern Region (ER) on AC transmission lines and high reactive load attributable to rabi agricultural pumping load coupled with excessive line loadings in some areas of the western regional grid led to the grid disturbance on 5th November, 2003. During the above grid disturbance, western regional grid had split into five separate parts (islands).

(d) : A partial grid disturbance occurred in Western Maharashtra on 6th October, 2003 due to bus fault at 400 KV Kalwa sub-station of MSEB, as informed by MSEB, affecting power supply in Aurangabad, parts of Pune, Nasik, Dhule, Thane Raigarh, Sindhudurg, Satara, Sangli, Solapur and Kolhapur in Western Maharashtra and part of Goa connected to western regional grid. However, power supply in Vidharbha and Marathwada area was not affected.

(e) : The matter relating to grid incident of 6th October, 2003 was discussed at the Western Regional Electricity Board (WREB) forum when the concerned authorities were advised to take corrective measures such as regulation of loading on transmission lines and improve substation maintenance.

Following the grid disturbances on 5th & 7th November, 2003, Secretary, Ministry of Power, Government of India took a meeting with all the constituents of WR and Central Public Sector Undertakings concerned at Mumbai on 12th November, 2003, when immediate preventive measures to be taken by the constituents of WR in order to contain low voltage and overloading of lines were identified. It was agreed that the WR States will install shunt capacitors in their respective system as per targets fixed for 2003- 04 by WREB and expedite implementation of approved transmission lines. Further, it was decided that the Standing Committee of WR power system planning will also analyze and suggest short, medium and long term measures for augmentation/strengthening of transmission system in WR.

(f) : Power generating capacity of 3600MW and 4200MW have been added in the States of Maharashtra and Gujarat respectively during the period 1992-93 to 2002-03 in State Sector, Private Sector and Central Sector (power stations situated in these States).

(g) : The following generation capacity addition is planned in the 10th Plan in the States of Maharashtra and Gujarat during the 10th Five Year Plan:

Maharashtra Gujarat

State Sector	500 MW	431 MW		
Private Sector	1444 MW	500 MW		
Entitlement in Central Sector Projects	1100 MW	945 MW		
Share in Joint Sector Project	391.5 MW	232 MW		

(Sardar Sarovar HEP - 1450 MW) (27%) (16%)

In addition, other steps like improvement in generation through Renovation & Modernization and Life Extension works of old and inefficient generating units, supply of adequate coal etc. are also being taken to increase the production of power from the existing power stations.

(h) : The Central Electricity Authority constituted an Enquiry Committee under the chairmanship of Member Secretary, WREB to enquire into the reasons of grid disturbances which occurred on 5th and 7th November, 2003.

(i) The above Committee has concluded as under:-

The grid disturbances on 5th & 7th November, 2003 were mainly caused due to low voltage profile which existed in WR grid prior to disturbance. The cause of low voltage profile was high quantum of power import by the WR from the ER over AC links to meet the gap between availability-and-requirement and high reactive agricultural load in view of Rabi season. This resulted in excessive loading of EHV transmission lines in some areas of the grid on account of the above and inadequate shunt capacitance compensation in the system causing severe shortage of reactive power in the grid lead to the grid disturbances.