

**GOVERNMENT OF INDIA  
POWER  
LOK SABHA**

UNSTARRED QUESTION NO:1771

ANSWERED ON:25.07.2002

POWER SHORTAGE IN MAHARASHTRA DUE TO TECHNICAL FAULT

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**Will the Minister of POWER be pleased to state:**

- (a) whether a severe power crisis had taken place in Maharashtra and neighbouring States due to technical fault in the Western grid on May 23, 2002;
- (b) if so, the details thereof;
- (c) whether any enquiry was conducted or is being conducted in this regard;
- (d) if so, the details thereof; and
- (e) the steps taken or being taken to prevent such incidents in future?

**Answer**

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

(a) & (b) : Two partial grid disturbances occurred in Western Regional Grid one at 0613 hours and the other at 0854 hours on 23rd May, 2002 affecting power supply in Western Maharashtra.

The Western Regional grid was operating in alert condition due to non-availability of 400 KV Chandrapur-Parli triple circuits, 400 kV Jabalpur – Itarsi circuits I & II, 220 kV Korba (E) – Bhilai single circuit (s/c) and 220 kV Raipur-Bhatapara single circuit (s/c) because of tower collapses caused by cyclone storm on 15th / 17th May, 2002. In addition, 400 kV Dhule-Kasor s/c and HVDC Chandrapur-Padghe Pole 2 were out prior to the disturbances. Non-availability of the lower 400 kV corridor in MSEB system, coupled with outages of other important lines mentioned above, resulted in major transmission constraints in flow of power from eastern part to western part of the grid. Existence of low voltage conditions in the early hours of 23/05/2002 coupled with the morning load getting incident on the system caused voltage instability and power swings resulting in tripping of transmission lines and consequently grid disturbances. On the first occasion i.e. 0613 hours, the western grid split into two parts and one part collapsed causing power interruption in western Maharashtra area. On the second occasion i.e. 0854 hours, the Western Grid split into five parts. The areas in Western Maharashtra and North Mumbai were affected. The power supply to Goa was also affected on both the occasions. However, Goa managed its demand from supply from Southern Region at reduced level.

(c) & (d) : Yes, Sir. An enquiry committee was constituted by Central Electricity Authority under the Chairmanship of member Secretary, Western Regional Electricity Board with members from MSEB, WRLDC and WREB. The Committee has submitted its report to Central Electricity Authority.

(e) : The Committee has made a set of recommendations to avoid the recurrence of such disturbances and improve the security of the grid which inter-alia include the following important recommendations :

- (i) Shunt capacitors should be installed as per targets given by study committee of WREB and the targets set by the task force on HT shunt capacitor.
- (ii) Grid discipline is maintained at all times specially during alert state of operations.
- (iii) Generating units should be put on Free Governor Mode of Operation (FGMO).
- (iv) The operating frequency should be maintained as stipulated in Indian Electricity Grid Code i.e., 49.0-50.5 Hz by carrying out necessary load shedding and proper operational planning.
- (v) Disturbance recorders and Sequence Event recorders should be provided at all 400 kV sub-stations and kept in operative condition with time synchronization with NPL/GPS signal.