

**GOVERNMENT OF INDIA  
POWER  
LOK SABHA**

UNSTARRED QUESTION NO:3649  
ANSWERED ON:12.12.2002  
REGIONAL GRID DESPATCH CENTRES BY PGCIL  
AMBATI BRAHMANAIAH

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

- (a) whether the Power Grid Corporation operates the Regional Grid Despatch Centres;
- (b) if so, the extent to which the Power Grid Corporation has been able to ensure stable operations;
- (c) the reasons for frequent break-down of the Regional Grids;
- (d) whether such break-downs can be avoided; and
- (e) if so, the steps proposed to be taken to improve the functioning of the Regional Grids?

**Answer**

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

(a) to (c) : Power Grid Corporation of India Limited (PGCIL), as the Central Transmission Utility has been able to ensure stable operation of the five Regional Load Despatch Centres in the country. Grid disturbances in the regional grids are not a frequent phenomena. The few grid disturbances that have occurred in the past are on account of various reasons, primary among which are :

- (i) Lower generation availability vis-à-vis the demand leading to over-drawals by the constituents and low frequency operation,
- (ii) Transmission constraints,
- (iii) Rendering ineffective, protection devices such as under frequency relays by the constituents,
- (iv) Low voltage operation due to inadequate reactive power compensation.

(d) & (e) : These grid disturbances can be minimized by maintaining the grid discipline by the constituents. Unified Load Despatch & Communication Schemes have been implemented in Northern and Southern Regions and similar schemes are being implemented in other regions. Indian Electricity Grid Code (IEGC) has been introduced for proper functioning of the grid system. Availability Based Tariff (ABT) has been introduced in Western and Northern Regions. ABT is being introduced in other regions also in a phased manner. With these measures, the grid functioning is expected to improve considerably. The following additional steps by the constituents would further improve the working of regional grids:

- (i) Provision of under frequency relays,
- (ii) Free governor mode of operation of the generating stations,
- (iii) Augmentation/strengthening of transmission system and system improvement,
- (iv) Installation of shunt capacitors for improving voltage profile,
- (v) Provision of communication system/Supervisory Control and Data Acquisition (SCADA),
- (vi) Provision of Disturbance Recorders (DRs)/Event Loggers (ELs).