

**GOVERNMENT OF INDIA
POWER
LOK SABHA**

UNSTARRED QUESTION NO:723
ANSWERED ON:08.08.2013
GRID COLLAPSE INCIDENTS
Ponnam Shri Prabhakar

Will the Minister of POWER be pleased to state:

- (a) the details of the grid collapse incidents that took place in the country during the last three years and the current year along with the reasons for each such collapse;
- (b) the extent of losses estimated due to such incidents during the said period, State-wise; and
- (c) the steps being taken by the Government to avoid recurrence of such incidents in future?

Answer

THE MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF POWER (SHRI JYOTIRADITYA M. SCINDIA)

(a) : There was disturbance in the NER on 15th November, 2010, 22nd June, 2011 and 20th January, 8th May, 31st July, 14th December and 29th December of 2012. The disturbance on all the occasions was due to load – generation mismatch.

During 2012, two Grid disturbances occurred on 30.07.2012 and 31.07.2012 resulting in collapse of the Northern, Eastern and North-Eastern Regional grids barring a few areas. The Enquiry Committee constituted by the Ministry of Power found that the disturbances of July, 2012 were due to the following combination of factors:

- (i) Weak inter-regional corridors due to multiple outages;
- (ii) High loading of available links;
- (iii) Inadequate response by State Load Despatch Centres (SLDCs) to Regional Load Despatch Centres (RLDCs) instructions to reduce overdrawl by the Northern Region utilities and Underdrawal/overinjection by the Western Region utilities; and
- (iv) Loss of 400 kV Bina -Gwalior link.

(b) : As per the report of the Enquiry Committee headed by Chairperson, CEA, the estimated loss of load was about 36,000 MW in Northern Region and about 48,000 MW in Northern, Eastern and North-Eastern regional grids during grid disturbances of 30th and 31st July, 2012 respectively.

Estimated loss of load in NER during the above grid collapses in 2010-11, 2011-12 & 2012-13 varied in the range of 766 MW to 1230 MW.

(c) : The Enquiry Committee headed by Chairperson, CEA had made a number of recommendations so as to prevent future recurrence of such grid disturbances. The Ministry of Power has taken a number of steps for implementation of the recommendations of the Enquiry Committee. These inter- alia, include tightening of frequency band from 49.5-50.2 Hz to 49.7-50.2 Hz; introduction of congestion charges in events of line outages by STUs; control of unscheduled drawl; independent third party protection audit; corrective action by PGCIL to renovate and upgrade their system; installation of optic-fiber network between all substations of PGCIL for advanced real time communication; preparation of Islanding Schemes in different States for sustained supply in emergency; revision of Transmission Planning Criteria (TPC); coordinated outage planning of inter-state and inter-regional transmission elements; introduction of frequency control through governor mode of operation by the generating companies; and introduction of Ancillary Services for Frequency control and voltage management.