- (c) The steps taken/being taken by the Government to bridge the gap between demand and supply of power in the country include the following:
  - (i) Acceleration in generating capacity addition during Twelfth Plan with a proposed target of 88,537 MW (excluding renewable) against an achievement of 54,964 MW during Eleventh Plan.
  - (ii) Rigorous monitoring of capacity addition of the on-going generation projects.
  - (iii) Development of Ultra Mega Power Projects of 4000 MW each to reap benefits of economies of scale.
  - (iv) Planning of generation capacity addition projects for Twelfth Plan.
  - (v) Augmentation of domestic manufacturing capacity of power equipment through Joint Ventures.
  - (vi) Coordinated operation and maintenance of hydro, thermal, nuclear and gas based power stations to optimally utilize the existing generation capacity.
  - (vii) Thrust on import of coal by the power utilities to meet the shortfall in coal supplies to thermal power stations from indigenous sources.
  - (viii) Renovation, modernization and life extension of old and inefficient generation units.
  - (ix) Strengthening of inter-state and inter-regional transmission capacity for optimum utilization of available power.
  - (x) Strengthening of sub-transmission and distribution network as a major step towards loss reduction.
  - (xi) Promoting energy conservation, energy efficiency and demand side management measures.

## Average PLF in thermal power generating units

2759. DR. JANARDHAN WAGHMARE:

SHRI N.K. SINGH:

Will the Minister of POWER be pleased to state:

- (a) the average Plant Load Factor (PLF) in thermal power generating units in the country for the last three years;
- (b) whether Government is proposing any mandatory measures for improving the PLF in thermal power generating units;
  - (c) if so, the details thereof;
- (d) whether Government conducts any review and assessment of plants which operate below the national average PLF; and
  - (e) if so, the details thereof?

THE MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI JYOTIRADITYA MADHAVRAO SCINDIA): (a) The national average of Plant Load Factor of Thermal Power Stations for the last three years and the current year 2012-13 (upto November, 2012) are as under:

Year	Plant Load Factor (in %)
2009-10	77.5
2010-11	75.1
2011-12	73.3
2012-13 (upto November, 2012)	69.2

- (b) and (c) The steps taken by the Government for improving the PLF in thermal power generating units include the following:
  - (i) Continuous interaction with plant authorities, BHEL and other concerned agencies for solving bottlenecks in Operation and Monitoring (O&M) activities.
  - (ii) Continuous interaction of CEA with better performing power utilities and the other power utilities for sharing better O&M practices.
  - (iii) Ministry of power and CEA along with State and Central Power Utilities has initiated external cooperation in the area of Energy Efficiency R&M (EE R&M) with foreign agencies such as USAID/JCOAL/IGEN/K-fW/ GIZ, etc.

- (iv) Renovation and Modernization, Life Extension and Uprating of various existing power projects operating at low PLF.
- (d) and (e) Based on the process of review and assessment of power plants which operate below the national average Plant Load Factor, such power generating plants are considered for R&M work and Life Extension and Operating from time to time.

## Vacancies in National Grid Operator

2760. SHRI SANJAY RAUT: Will the Minister of POWER be pleased to state:

- (a) whether the national grid operator continues to be grossly understaffed;
- (b) whether lack of adequate and timely interventions to curb overdrawing by northern region States was cited as one of the reasons for the consecutive grid failures that took place on 30 and 31 July, 2012; and
- (c) if so, the steps Government is taking to fill up the vacancies in the national grid operator?

THE MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI JYOTIRADITYA MADHAVRAO SCINDIA): (a) At present, there is no shortage of manpower for important Grid Operation function being done by the National Grid Operator, *i.e.* Power System Operation Corporation (POSOCO). POSOCO has adequate manpower at each Regional Load Despatch Centre (RLDC) and National Load Despatch Centre (NLDC). However, additional manpower is required in other functions of POSOCO like Market Operation, Regulatory and Legal functions.

- (b) No, Sir. The Enquiry Committee constituted by the Ministry of Power after the grid disturbances on 30th and 31st July, 2012 has found that disturbances were due to a combination of factors, *inter-alia*, weak inter-regional corridors due to multiple outages, high loading on some inter-regional links due to overdrwal by Northern Region (NR) Utilities and under drawal by WR Utilities, inadequate protection system and inadequate response by State Load Despatch Centres (SLDCs) to the instructions of RLDCs, etc.
- (c) Suitable action has already been taken to fill up vacancies in the National Grid Operator, *i.e.* POSOCO.