

**GOVERNMENT OF INDIA  
POWER  
LOK SABHA**

UNSTARRED QUESTION NO:2478

ANSWERED ON:08.12.2006

DEMAND AND SUPPLY OF COAL AND GAS FOR POWER GENERATION

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

- (a) whether there is a huge shortage of coal and gas for power generation in the country;
- (b) if so, whether any study has been conducted regarding demand and supply of gas and coal for power generation;
- (c) if so, the details thereof;
- (d) the measures taken by the Government in this regard; and
- (e) the advantage/disadvantages of natural gas as a fuel over the fuel for power generation?

**Answer**

MINISTER OF THE STATE IN THE MINISTRY OF POWER ( SHRI SUSHILKUMAR SHINDE )

(a) to (d) : Presently, there is marginal shortage of coal supply from domestic sources but there is significant shortage of gas for power generation in the country.

The feasible capacity addition during 11th Plan has been assessed as 66,463 MW including 42,625 MW coal, 2,114 MW Gas / LNG and 1,375 MW lignite. Coal requirement for power utilities during 2011-12 is expected to be of the order of 537 million tonnes (MT) whereas the projected availability of coal for to power sector from domestic sources has been assessed as 478 million tonnes (CIL 382.35 MT; SCCL 29.40 MT; Captive Block and others 65.95 MT). Gas requirement for power generation at normative PLF works out to about 69 Million Metric Standard Cubic Metre per day (MMSCMD) during 2011-12. The gas availability scenario is not clear at present. While, the gap between demand for coal and its supply from domestic sources is being bridged through import of coal, shortage of gas is being mitigated through fall back arrangements made by NTPC for supply of Re-gassified Liquefied Natural Gas (RLNG) and procurement of Liquefied Natural Gas (LNG) from time to time through spot market.

In addition, new coal blocks are being allocated to power producers/utilities for captive mining to meet requirement of their power plants in the coming years.

Ministry of Petroleum and Natural Gas has initiated following actions to improve the availability of gas :

1. Augmenting production of natural gas from the existing gas fields/ wells.
2. Increasing availability of gas from domestic sources by awarding gas blocks for exploration & production (E & P) activities in various basins of the country under the New Exploration Licensing Policy (NELP).
3. Encouraging import of gas in the form of Liquefied Natural Gas (LNG).

(e) : The advantages/disadvantages of natural gas as fuel over coal are as under :

# Thermal efficiency of natural gas based power plants is higher (about 43-46 %) as compared to 35-40 % of coal based power plants.

# Capital cost of natural gas based power plants is much less as compared to coal based power plants.

# Requirement of land and water is much less for Natural gas based power plants as compared to coal-based power plants.

# Natural gas is environment friendly due to absence of ash generation and less green house gas emission.

# Gestation period for Natural gas based power plants is less i.e. about 24-28 months as compared to 30-48 months for coal based power plants.

However, availability of gas at reasonable prices is a critical issue not only for the projects which are due for commissioning but also for the existing gas based capacity in the country. There is generation capacity of over 13,580 MW based on gas and liquid fuels, bulk of which constitutes base load and runs under combined cycle operation. Due to shortage of fuel, PLF of these plants remains very low at about 54% as compared to 90% at which they are capable of operating and generation loss of about 18 Billion Unit was experienced during April – November, 2006.