

**GOVERNMENT OF INDIA**  
**MINISTRY OF POWER**  
**RAJYA SABHA**  
**QUESTION NO 30.11.2009**  
**ANSWERED ON**  
**HYDRO POWER POTENTIAL .**

1175

Shri Shanta Kumar

Will the Minister of COAL/COALPOWER be pleased to state :-

- (a) the hydro power generation potential of the country;
- (b) the details of the hydro power potential exploited so far till 2007-08, State-wise;
- (c) by what proportion hydro power is cheaper and more useful in terms of environmental, costs and other means;
- (d) the proportion of investment being made by Government in hydro power sector;
- (e) the proportion of foreign assistance thereto; and
- (f) the proportion of thermal/atomic and hydro power in total power generation?

**ANSWER**

THE MINISTER OF STATE IN THE MINISTRY OF POWER

( SHRI BHARATSINH SOLANKI )

(a) : The total hydro electric potential of the country as assessed by Central Electricity Authority is 1,48,701 MW.

(b) :The details of quantum of exploitation of hydro power potential State wise till 2007-08 is given at Annex.

(c) :The quantitative comparison is not feasible, as most of the environmental costs are unquantifiable. However, there are certain environmental benefits associated with hydropower generation, which makes it cheaper and more useful in terms of environmental costs and other means.

The All-India average rate of sale of power for hydro, thermal and nuclear generating stations for the last two years is given below:

Average rate of sale (paise/unit)

Sector	2006-07	2007-08
Hydro	127	154
Thermal	204	203
Nuclear	219	228

Average rate of sale = (Total revenue earned)/Total energy sold).

(d) :The working group on power for 11th Plan had worked out a total fund requirement for 11th Plan (including advance action funds for 12th Plan projects) amounting to Rs.410896 crores. Out of the above, fund requirement for hydro projects is Rs.131105 crores which is 31.91% of the total fund requirements.

(e) :As on date, foreign assistance of Rs.12,903 crores has been committed for construction of 12 hydro power projects and Renovation & Modernisation of 2 hydro power projects from World Bank, Asian Development Bank, JICA (Japan) and KfW (Germany). An exchange rate of 1USD=Rs.46/- and 1 Euro=Rs.70/-has been assumed.

(f) :The total installed potential of the country including Atomic is 153694.09 MW as on 31.10.2009. The ratio of thermal, atomic, hydro and Renewable Energy Sources (RES) is given below:

a) Thermal	99378.48 MW	64.66%
b) Atomic	4120.00 MW	2.68%
c) Hydro	36885.40 MW	24.00%

d) Renewable Energy Sources@ (Ministry of  
Non -Renewable Energy) 13310.21 MW 8.66%

Total = 153694.09 MW

@ Based on data as on 30.09.2008.