

**GOVERNMENT OF INDIA
POWER
LOK SABHA**

STARRED QUESTION NO:516
ANSWERED ON:11.05.2012
HYDRO POWER GENERATION
Dhruvanarayana Shri R.

Will the Minister of POWER be pleased to state:

- (a) whether hydro power generation tends to be expensive due to geological uncertainties and the consequent rise in capital expenditure;
- (b) if so, the details thereof; and
- (c) the steps being taken to correct the situation in the Twelfth Five Year Plan?

Answer

THE MINISTER OF POWER (SHRI SUSHILKUMAR SHINDE)

(a) to (c) : A Statement is laid on the Table of the House.

STATEMENT

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (c) OF STARRED QUESTION NO. 516 TO BE ANSWERED IN THE LOK SABHA ON 11.05.2012 REGARDING HYDRO POWER GENERATION.

(a) : Yes, Madam. Geological uncertainties along with a number of other reasons like natural calamities such as floods, earthquake etc. lead to rise in capital expenditure of hydro-electric projects, which influence the cost of generation.

(b) & (c) : Several hydro-electric projects have encountered difficulties relating to geological uncertainties during the course of their implementation. Examples include projects such as Kol Dam (800 MW), TapovanVishnughad (520 MW), Kameng (600 MW), Rampur (412 MW) etc. The hydro-electric projects are site specific and involve construction of major civil structures like dam, head-race tunnels, tail-race tunnels, surge-shaft, high pressure tunnel, underground power house etc. Geological investigations relating to these works are duly undertaken as per prescribed norms of Geological Survey of India and Central Water Commission. Nevertheless the element of uncertainty in the sub-surface geology leads to geological uncertainties being encountered during actual construction. While geological surprises can be minimized, it is difficult to be free of them.