GOVERNMENT OF INDIA
POWER
LOK SABHA

STARRED QUESTION NO:247
ANSWERED ON:09.12.2005
HYDRO POWER GENERATION
Scindia Shri Jyotiraditya Madhavrao

Will the Minister of POWER be pleased to state:

(a) whether the new power policy contemplates a shift in the emphasis from thermal to hydro-power;

(b) if so, the details thereof;

(c) whether the actual achievement in hydro-power capacity addition was dismal being only 1,435 MW against a target of capacity addition of 2,585 MW during 2004-05;

(d) if so, the reasons for such performance;

(e) whether Himachal Pradesh, Uttaranchal and North East Region hold rich promise for hydro-power generation;

(f) if so, the special efforts being made to augment hydro-power generation in these States; and

(g) the steps taken by the Government so far to encourage private sector investment in hydro power projects in the country and the results achieved there from?

Answer

THE MINISTER OF INFORMATION & BROADCASTING AND MINISTER OF PARLIAMENTARY AFFAIRS+(SHRI PRIYA RANJAN DASMUNSI)

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

STATEMENT

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (g) OF STARRED QUESTION NO. 247 TO BE ANSWERED IN THE LOK SABHA ON 09.12.2005 REGARDING HYDRO POWER GENERATION.

(a) & (b) : No, Sir. Even with full development of the feasible hydro potential in the country, coal would continue to remain the primary fuel for meeting the future electricity demand. However, the following steps have been envisaged in the National Electricity Policy for increasing hydro generation:

Maximum emphasis to be laid on the full development of the feasible hydro potential in the country.

Harnessing hydro potential speedily would also facilitate economic development of States, particularly North-Eastern States, Sikkim, Uttaranchal, Himachal Pradesh and Jammu and Kashmir, since a large proportion of our hydro power potential is located in these States.

Debt financing of longer tenure would be made available for hydro projects.

State Governments would review procedures for land acquisition and other approvals/clearances for speedy implementation of hydroelectric projects.

The Central Government would support the State Governments for expeditious development of their hydroelectric projects by offering services of Central Public Sector Undertakings.

The National Policy on Rehabilitation and Resettlement (R&R) will be implemented properly so that the concerns of project-affected families are addressed adequately.

Adequate safeguards for environmental protection with suitable mechanism for monitoring of implementation of Environmental Action Plan and R&R schemes will be put in place.

(c) & (d) : During 2004-05, the targeted hydro capacity addition could not be achieved. The hydro projects which had slipped are:

(i) Dulhasti H.E. Project (390 MW) of National Hydroelectric Power Corporation (NHPC) in Jammu & Kashmir (J&K) due to slow progress in execution of certain civil works and law and order problems;

(ii) Dhauliganga H.E. Project (280 MW) of NHPC in Uttaranchal due to non completion of transmission line on account of delay in getting Forest / Environment clearance;

(iii)Tehri Stage-I H.E. Project (3 Units - 750 MW) of Tehri Hydro Development Corporation (THDC) in Uttaranchal due to mishap in Tunnel-T3; and

(iv) Pykara Ultimate HE Project (150 MW) of Tamil Nadu Electricity Board (TNEB) in Tamil Nadu due to non- completion of transmission line due to delay in forest clearance from Forest Department of the State Government for felling of trees.

The Dhauliganga H.E. Project and the Pykara Ultimate H.E. Project have since been commissioned while the process leading to commissioning of the Tehri Stage- I H.E. Project has started with the commencement of impounding of the reservoir on 29th October, 2005. The Dulhasti H.E. Project is expected to commence generation in 2006.

(e) & (f) : In Himachal Pradesh, the identified hydro capacity is 18,820 MW, out of which about 52.4% of the capacity has either been developed or is under various stages of development.

In Uttaranchal, out of identified hydro capacity of 18,175 MW, about 23.1% has been developed or is under various stages of development.

In North Eastern region, out of the identified hydro capacity of 58,971 MW, about 6.8% of the capacity has already been developed or is under various stages of development.

The Status of the development of the hydro electric potential in the state of Himachal Pradesh, Uttaranchal and North-Eastern Region is given at Annex.-I.

The Government of India has taken many steps and measures to augment hydro power in the country including Himachal Pradesh, Uttaranchal and in the North Eastern region as given below :-

(i) Under the 50,000 Hydro Initiative, Preliminary Feasibility Reports (PFRs) of 162 hydro electric projects with an aggregate installed capacity of 47,930 MW spread over 16 states have been prepared. Out of these, 110 no. of projects aggregating to 39,026 MW are in the States of Himachal, Uttaranchal and North-Eastern Region. In the first phase, out of these 162 H.E. schemes, 77 of the most attractive schemes with an aggregate installed capacity of 33,951 MW have been taken up for detailed survey & investigation and preparation of Detailed Project Reports for eventual implementation. Out of these 77 schemes, 64 schemes aggregating to 29,801 MW are in the States of Himachal, Uttaranchal and North-Eastern region.

(ii) The Hydro Policy was announced by the Government in August, 1998 incorporating several steps and measures to facilitate accelerated development of hydro power. The Policy also encourages greater participation by the private sector. It lays emphasis on basin wise development of hydro potential, evolving a consensus on inter-state issues, mitigation of geological risks, simplified procedure for transfer of concurrence, promoting joint venture arrangements etc.

(iii) A number of Hydro Power Corporations in the Central Sector and Joint Ventures with State Governments have been set up for development of hydro power.

(iv) The Government has also approved a 3-Stage clearance procedure for expeditious execution of hydro electric projects in the Central Sector.

(v) As per Section 8 of the Electricity Act, 2003 the Central Electricity Authority before concurring any scheme will examine only the aspects of best ultimate development of the river or its tributaries for power generation consistent with the requirements of drinking water, irrigation, navigation, flood control or other public purposes and satisfy itself that an adequate study has been made of the optimum location of the dams and other river works and that the proposed scheme meets the norms regarding dam design and safety.

(vi) Regular review and coordination meetings are taken with the State Governments to review the development of hydro electric potential in the States.

(g) : Some of the steps taken by the Government to attract private sector investment are:

(i) The Electricity Act, 2003 which contains several measures to attract private investment in the power sector. The Act has removed restrictions on setting up of fresh generating capacity and permits direct commercial relationship between generating companies and consumers/ electricity traders. The Act also provides the generating companies the right to open access to the State and Central transmission network for wheeling electricity.

(ii) The Government has also initiated the process of reforms and restructuring of power sector which would improve the finances of the power utilities thereby attracting private investments still further.

(iii) Upto 100% Foreign Direct Investment has been permitted on the automatic approval route in projects for generation, transmission and distribution of electricity.

(iv) The Government has issued a tariff notification incorporating several incentives to hydro projects which broadly covers incentives for better availability of machines, for generation of energy over and above the design energy, compensation for hydrological risks etc.

(v) The Government has also been assisting the private sector power projects in achieving financial closure. An Inter Institutional Group (IIG) comprising senior representative from the financial institutions as well as from the Ministry of Power, has been constituted to facilitate financial closure of IPPs.

(vi) To facilitate setting up of large size hydro power plants in the country and to derive the economies of scale, the Government has further liberalized the mega power policy with effect from 1.3.2003. All inter-state hydel projects with the capacity of 500 MW and above are being treated as mega power projects subject to fulfillment of the required conditions and would be extended the concession of `Zero` customs duty on import of capital goods. Income Tax holiday has been continued with the provision that the tax holiday period of ten years can be claimed by a promoter in any block of ten years within the first fifteen years. The State Governments have also been requested to exempt supplies made to mega power plants from sales tax and local levies.

(vii) Central Electricity Regulatory Commission and the State Electricity Regulatory Commissions have been set up to fix tariffs in an objective and transparent manner.

As a result of the above efforts and incentives offered to attract private sector investments in hydro-electric projects, the private sector participation in the development of hydro power is expected to increase further.

As per information available with CEA, at present, 14 hydro stations (above 3 MW capacity) with an aggregate installed capacity of 903 MW are in operation and 5 hydro stations (above 25 MW capacity) with an aggregate installed capacity of 2322 MW are under construction in the country in the Private Sector.

ANNEX

ANNEXURE REFERRED TO IN PARTS (e) & (f) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 247 TO BE ANSWERED IN THE LOK SABHA ON 09.12.2005 REGARDING HYDRO POWER GENERATION.

STATUS OF HYDRO ELECTRIC POTENTIAL DEVELOPMENT

Region/ State	Identified hydro capacity		Capacity developed		Capacity under development		Capacity developed + Under Development	
	(MW)	(MW)	(%)	(MW)	%	(MW)	(%)	
Northern Region								
Himachal Pradesh	18820	5947	31.6%	3905	20.7%	9852	52.4%	
Uttaranchal	18175	1352	7.4%	2854	15.7%	4206	23.1%	
North Eastern								
Meghalaya	2394	185	7.7%	84	3.5%	269	11.2%	
Tripura	15	15	100.0%	0	0.0%	15	100.0%	
Manipur	1784	105	5.9%	90	5.0%	195	10.9%	
Assam	680	275	40.4%	100	14.7%	375	55.1%	
Nagaland	1574	99	6.3%	0	0.0%	99	6.3%	
Arunachal Pradesh	50328	416	0.8%	2600	5.2%	3016	6.0%	
Mizoram	2196	0	0.0%	60	2.7%	60	2.7%	
Total NER	58971	1095		2934	4029			