

Hydel projects in the Siang River Valley, Arunachal Pradesh

2161. SHRIMATI WANSUK SYIEM : Will the Minister of POWER be pleased to state :

(a) whether India's hydel power generation capacity is stagnant and currently adds up to just over 17 per cent of total power generation at 39,000 mw;

(b) whether in this backdrop Government felt it expedient to give its environmental nod to two proposed hydel projects in the Siang river valley of Arunachal Pradesh; and

(c) whether the hydel power generation potential in the North East is well in excess of 50,000 mw and much of it is in Arunachal Pradesh?

THE MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI JYOTIRADITYA MADHAVRAO SCINDIA) : (a) As on 31.01.2014, the total Installed Capacity in the country is 234601.94 MW out of which 39893.40 MW (17%) is from hydro projects (having I.C. above 25 MW). Of this, 903 MW hydro power capacity has been added in the Twelfth Plan period.

(b) Environment Clearance has been accorded so far to two HEPs (above 25 MW) in the Siang Basin on 11.03.2005 and 27.06.2011 respectively.

(c) As per the re-assessment studies of hydro-electric potential of the country completed by the Central Electricity Authority during 1978-87, the hydro power potential of Northeast Region in terms of Installed Capacity is estimated at 58356 MW (above 25 MW). Out of this, 50064 MW (above 25 MW) is in Arunachal Pradesh.

Norms for fixing power-tariffs in the Country

2162. SHRI N.K. SINGH : Will the Minister of POWER be pleased to state :

(a) the details of norms/criteria laid down by Government to fix the power tariff in the country;

(b) whether the power tariff in the country particularly that being charged

by the private power distribution companies is much higher when compared to the tariff in other developing/developed countries;

(c) if so, the details thereof along with the reasons therefor; and

(d) the remedial measures taken by Government to keep the power tariff low in the country?

THE MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI JYOTIRADITYA MADHAVRAO SCINDIA) : (a) Tariff is determined under Sections 61 to 64 of the Electricity Act, 2003 by the appropriate Regulatory Commission in line with the provisions of the Act and the policies made thereunder. Whereas the tariff for generation and transmission companies owned or controlled by Central Government is regulated by the Central Electricity Regulatory Commission, the tariff for generation, supply and transmission within the State is determined by the State Regulatory Commissions. Similarly, the State/Joint Electricity Regulatory Commissions (SERCs/JERCs) notify the terms and conditions of tariff fixation from time to time for both public and private distribution licensees. Section 61 of the Act provides for guiding principles which the Appropriate Commission is required to consider for specifying the terms and conditions of tariff. The relevant provisions of Section 61 are given in Statement-I (*See* below). As per Section 61(i), the Regulatory Commissions are also guided by the Tariff Policy notified by the Central Government while specifying the terms and conditions of tariff.

(b) and (c) A statement indicating price of electricity for households and industry in some of the countries is given in the Statement-II (*See* below). The details of average cost of supply in India, as indicated in the report of the Power Finance Corporation on Performance of State Power Utilities, are given in Statement-III (*See* below). As is evident, the average cost of power supply in India is not more than that in most of the other countries.

(d) Tariff of distribution companies are determined by the SERCs/JERCs based on the principles enunciated under the Electricity Act, 2003 and policies framed thereunder. There is no provision for direct regulation of the electricity tariff by the Government. However, through appropriate policy framework and

programmes, the Government is promoting efficiency in generation, transmission and distribution business as also supporting strengthening of the distribution infrastructure, with a view to reducing the Aggregate Technical and Commercial (AT and C) losses. These measures, along with the Government's emphasis on discovery of tariff through competitive bidding, contribute towards lowering of tariff rates.

Statement-I

Section 61 (Tariff regulations)

The Appropriate Commission shall, subject to the provisions of this Act, specify the terms and conditions for the determination of tariff, and in doing so, shall be guided by the following, namely:-

- (a) the principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees;
 - (b) the generation, transmission, distribution and supply of electricity are conducted on commercial principles;
 - (c) the factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments;
 - (d) safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;
 - (e) the principles rewarding efficiency in performance;
 - (f) multi year tariff principles;
 - (g) that the tariff progressively reflects the cost of supply of electricity and also, reduces cross- subsidies in the manner specified by the Appropriate Commission;
 - (h) the promotion of co-generation and generation of electricity from renewable sources of energy;
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- (i) the National Electricity Policy and tariff policy:

Provided that the terms and conditions for determination of tariff under the Electricity (Supply) Act, 1948, the Electricity Regulatory Commission Act, 1998 and the enactments specified in the Schedule as they stood immediately before the appointed date, shall continue to apply for a period of one year or until the terms and conditions for tariff are specified under this section, whichever is earlier.

Statement-II

Electricity Prices for Households for Selected Countries¹ (U.S. Dollars per Kilowatthour)

Last Update : June 10, 2010 Country	2001	2002	2003	2004	2005	2006	2007	2008
Argentina	NA	NA	NA	NA	NA	NA	0.023	NA
Australia	0.091	0.092	0.094	0.098	NA	NA	NA	NA
Austria	0.144	0.154	0.152	0.163	0.158	0.158	0.178	0.201
Canada	0.067	0.069	0.070	0.071	0.076	0.078	NA	NA
Chile	NA	NA	NA	NA	NA	NA	0.140	0.195
China	NA	NA	NA	NA	NA	NA	NA	NA
Chinese Taipei (Taiwan)	0.075	0.071	0.074	0.076	0.079	0.079	0.080	0.086
Indonesia	0.025	0.042	0.061	0.062	0.058	0.062	0.063	0.061
Korea, South	0.071	0.070	0.074	0.079	0.089	0.098	0.102	0.089
South Africa	0.036	0.032	0.048	0.060	0.061	0.059	NA	NA
Thailand	0.060	0.063	0.064	0.070	0.072	0.085	0.091	0.094
Turkey	0.084	0.099	0.106	0.111	0.118	0.111	0.122	0.165

1. Energy end-use prices including taxes, converted using exchange rates. Price includes State and local taxes, energy or demand charges, customer service charges, environmental surcharges, franchise fees, fuel adjustments, and other miscellaneous charges applied to end-use customers during normal billing operations. Prices do not include deferred charges, credits, or other adjustments, such as fuel or revenue from purchased power, from previous reporting periods.

NA = Not available.

Source: Table 9.9. International Energy Agency, Energy Prices and Taxes - Quarterly Statistics, Fourth -Quarter 2009, Part II, Section D, Table 22, and Part III, Section B, Table 19, 2008.

*Statement-III**Average cost of supply in India*

Country	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
India												
(Rs./ Kwh)	2.46	2.46	2.39	2.39	2.54	2.6	2.76	2.93	3.4	3.55	3.97	4.39
	(0.0403)*	(0.0403)*	(0.0392)*	(0.0392)*	(0.0416)*	(0.0426)*	(0.0452)*	(0.0480)*	(0.0557)*	(0.0582)*	(0.0651)*	0.0720)*

* Conversion rate US \$ = Rs. 61.00 Source: PFC