

**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3015  
TO BE ANSWERED ON 04.08.2016**

**HYDRO POWER PROJECT**

**3015. SHRI PRATHAP SIMHA:  
KUMARI SHOBHA KARANDLAJE:**

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

- (a) whether it is a fact that 65% of the total hydro power potential of the country still remains to be tapped and if so, the details thereof, State/UT-wise;**
- (b) the significant achievements made by National Hydroelectric Corporation Ltd. (NHPC) during the last three years;**
- (c) the expansion plan of NHPC;**
- (d) the key goals and priorities of NHPC; and**
- (e) the steps proposed to be taken by NHPC in pursuance of these plants/goals/ priorities?**

**A N S W E R**

**THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,  
COAL, NEW & RENEWABLE ENERGY AND MINES**

**( SHRI PIYUSH GOYAL )**

**(a) : As per reassessment study conducted by Central Electricity Authority, India has a total hydro potential of 1,45,320 MW (above 25 MW). Projects with 38062 MW are in operation while HE Schemes with an aggregate capacity of 12357 MW are under construction. However, a total hydro potential of about 94900 MW still remains to be tapped in the country, which is about 65% of the total hydro power potential. State-wise details of the estimated hydro power potential yet to be tapped in the country is given at Annex.**

**.....2.**

**(b) : National Hydroelectric Power Corporation (NHPC) has made following significant achievements during the last three years:**

<b>Particulars</b>	<b>2015-16</b>	<b>2014-15</b>	<b>2013-14</b>
<b>Generation MU</b>	<b>23404</b>	<b>22038</b>	<b>18386</b>
<b>Capacity Index/PAF(Plant Availability Factor)%</b>	<b>81.6</b>	<b>77.3</b>	<b>77.7</b>
<b>Sales of Energy Rs (In Crore)</b>	<b>7347</b>	<b>6737</b>	<b>5335</b>
<b>Net Profit Rs (In Crore)</b>	<b>2440</b>	<b>2124</b>	<b>979</b>
<b>Dividend Rs (In Crore)</b>	<b>1661</b>	<b>664</b>	<b>332</b>
<b>Capacity Addition (in MW)</b>	<b>80 MW TLDP-IV (2 Units)- 80 MW</b>	<b>130 Parbati-III (1 Unit)- 130 MW</b>	<b>708 MW TLDP-III (1 Unit) - 33 MW Parbati-III (3 Units) - 390 MW Nimoo Bazgo - 45 MW Uri-II - 240 MW</b>

**(c) : During the 13<sup>th</sup> Plan, capacity addition of 2995 MW (Parbati-II – 800 MW, Subansiri Lower – 2000 MW, Kotli Bhel-1A – 195 MW) is anticipated on its own and 1624 MW (Pakal Dul – 1000 MW and Kiru – 624 MW) by Joint Venture Company of NHPC.**

**(d) & (e) : The primary goal of NHPC is to develop hydro power in the country in a sustainable manner. In addition, NHPC would also focus on the following:-**

- 1. Promotion of consulting and advisory services - Consulting services from concept to commissioning in India and abroad.**
- 2. Maintenance of Environmental and Corporate Social Responsibilities – Community development, environment protection, Catchment Area Treatment etc.**
- 3. Renovation and Modernization of Plants - Life cycle stretching without reduction in installed capacity.**
- 4. Diversification into Renewable Energy – Diversification in solar and wind power projects.**

**NHPC is moving forward in pursuance of the above goals and priorities.**

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**ANNEX REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 3015 TO BE ANSWERED IN THE LOK SABHA ON 04.08.2016.**

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**STATUS OF HYDRO ELECTRIC POTENTIAL DEVELOPMENT  
( In terms of Installed capacity - Above 25 MW)**

30.06.2016

Region/ State	Identified Capacity as per reassessment study		Capacity In Operation		Capacity Under Construction		Capacity In Operation + Under Construction		Capacity yet to be taken up under construction	
	Total (MW)	Above 25 MW (MW)	(MW)	%	(MW)	(%)	(MW)	(%)	(MW)	%
<b>NORTHERN</b>										
Jammu & Kashmir	14146	13543	3119.0	23.03	1180.0	8.71	4299.0	31.74	9244.0	68.26
Himachal Pradesh	18820	18540	9373.0	50.56	2151.0	11.60	11524.0	62.16	7016.0	37.84
Punjab	971	971	1206.3	100	206.0	21.22	1412.3	100.00	0.0	0.00
Haryana#	64	64	0.0	0	0.0	0.00	0.0	0.00	0.0	0.00
Rajasthan##	496	483	411.0	85.09	0.0	0.00	411.0	100.00	0.0	0.00
Uttarakhand	18175	17998	3756.4	20.87	1430.0	7.95	5186.4	28.82	12811.7	71.18
Uttar Pradesh*	723	664	501.6	75.54	0.0	0.00	501.6	75.54	39.0	5.87
Sub Total (NR)	53395	52263	18367.3	35.14	4967.0	9.50	23334.3	44.65	28928.8	55.35
<b>WESTERN</b>										
Madhya Pradesh.	2243	1970	2395.0	100	400.0	20.30	2795.0	100.00	0.0	0.00
Chhattisgarh	2242	2202	120.0	5.45	0.0	0.00	120.0	5.45	2082.0	94.55
Gujarat###	619	590	550.0	100	0.0	0.00	550.0	100.00	0.0	0.00
Maharashtra	3769	3314	2487.0	75.05	0.0	0.00	2487.0	75.05	827.0	24.95
Goa	55	55	0.0	0.00	0.0	0.00	0.0	0.00	55.0	100.00
Sub Total (WR)	8928	8131	5552.0	68.28	400.0	4.92	5952.0	73.20	2179.0	26.80
<b>SOUTHERN</b>										
Andhra Pradesh	2366	2341	1746.8	74.62	1010.0	43.14	2756.8	117.76	0.0	0.00
Telangana	2058	2019	591.0	29.27	200.0	9.91	791.0	39.18	1228.0	60.82
Karnataka	6602	6459	3585.4	55.51	0.0	0.00	3585.4	55.51	2873.6	44.49
Kerala	3514	3378	1881.5	55.70	100.0	2.96	1981.5	58.66	1396.5	41.34
Tamilnadu	1918	1693	1782.2	100	0.0	0.00	1782.2	100.00	0.0	0.00
Sub Total (SR)	16458	15890	9586.9	60.33	1310.0	8.24	10896.9	68.58	4993.2	31.42
<b>EASTERN</b>										
Jharkhand	753	582	170.0	29.21	0.0	0.00	170.0	29.21	412.0	70.79
Bihar####	70	40	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Odisha	2999	2981	2027.5	68.01	0.0	0.00	2027.5	68.01	953.5	31.99
West Bengal	2841	2829	352.2	12.45	200.0	7.07	552.2	19.52	2276.8	80.48
Sikkim	4286	4248	765.0	18.01	2526.0	59.46	3291.0	77.47	957.0	22.53
Sub Total (ER)	10949	10680	3314.7	31.04	2726.0	25.52	6040.7	56.56	4639.3	43.44
<b>NORTH EASTERN</b>										
Meghalaya	2394	2298	282.0	12.27	40.0	1.74	322.0	14.01	1976.0	85.99
Tripura	15	0	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Manipur	1784	1761	105.0	5.96	0.0	0.00	105.0	5.96	1656.0	94.04
Assam	680	650	375.0	57.69	0.0	0.00	375.0	57.69	275.0	42.31
Nagaland	1574	1452	75.0	5.17	0.0	0.00	75.0	5.17	1377.0	94.83
Arunachal Pd	50328	50064	405.0	0.81	2854.0	5.70	3259.0	6.51	46805.0	93.49
Mizoram	2196	2131	0.0	0.00	60.0	2.82	60.0	2.82	2071.0	97.18
Sub Total (NER)	58971	58356	1242.0	2.13	2954.0	5.06	4196.0	7.19	54160.0	92.81
<b>ALL INDIA</b>	<b>148701</b>	<b>145320</b>	<b>38062.8</b>	<b>26.19</b>	<b>12357.0</b>	<b>8.50</b>	<b>50419.8</b>	<b>34.70</b>	<b>94900.2</b>	<b>65.30</b>

Note:- 1. Does not include pumped storage schemes

2. In some states the total of the capacity developed and balance capacity is different from the potential assessed . This is due to change in capacity of the schemes, addition/ deletion of the schemes and merger of two schemes into one etc.

\* Eastern Yamuna Canal project (35 MW) has been developed in 2 stages each having Installed Capacity below 25 MW

# Western Yamuna Canal project (64 MW) has been developed in 4 stages each having Installed Capacity below 25 MW

## Two schemes namely Mahi Bajaj Sagar I & II were identified for I.C. of 97 MW has been developed with I.C of 140 MW. Gandhi Sagar (115 MW) scheme was identified in Rajasthan but has been developed in Madhya Pradesh with same capacity.

### Two schemes namely Ukai Dam and Sardar Sarovar were identified for an I.C. of 590 MW. However as per actual, the I.C. is 550 MW.

#### Identified project namely East Gandak Canal has been developed with installed capacity below 25 MW

3. In addition to above 9 PSS ( 4785.6 MW) are under operation, 2 PSS (1080 MW) are under construction, DPR of 1 PSS (500 MW) returned to project developer and 1 PSS (1000 MW) is under Examination in CEA

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