### GOVERNMENT OF INDIA MINISTRY OF POWER

# LOK SABHA UNSTARRED QUESTION NO.1574 TO BE ANSWERED ON 09.03.2017

#### **CAPACITY OF HYDRO POWER GENERATION**

# †1574. DR. RAMESH POKHRIYAL "NISHANK": SHRI RAM CHARAN BOHRA: SHRI BHARAT SINGH:

Will the Minister of POWER be pleased to state:

(a) total hydro power generation capacity in the country presently;

(b) the total hydro power being generated in various States in the country presently, State/UT-wise;

(c) whether the Union Government has accorded the responsibility to survey the hydro power potential in the country to various agencies and if so, the details thereof;

(d) total number of projects pending in the country due to various reasons and total amount spent on those projects till date;

- (e) whether the Government has estimated the loss due to pendency; and
- (f) if so, the details thereof, State-wise?

#### ANSWER

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

#### (SHRI PIYUSH GOYAL)

(a): As on 25.02.2017, total hydro power generation capacity in the country is 44413.42 MW in respect of hydro project above 25 MW\* capacity.

(b): The total hydro power generation in the country (from Hydro Electric Projects (HEPs) above 25 MW capacity) during the year 2016-17 (upto 25.02.2017) is 113.53 Billion Units and the state-wise generation in respect of hydro project above 25 MW capacity is given at Annex-I.

(c): The Government has sanctioned the proposal regarding Basin wise Reassessment of Hydro Potential in the country. The work has since been taken up by Central Electricity Authority through WAPCOS Ltd. (a public sector undertaking under Ministry of Water Resources, River Development & Ganga Rejuvenation (MOWR, RD & GR) for completion in about 30 months period.

(d) to (f): Out of 44 HEPs (above 25 MW) under construction presently, 20 HEPs totalling to 6329 MW are stalled / stressed and an amount of Rs. 30,147.08 crores has already been spent on these HEPs, as per State-wise details given at Annex-II.

\* HEPs below 25 MW capacity come under the purview of Ministry of New & Renewable Energy.

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# ANNEX REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 1574 TO BE ANSWERED IN THE LOK SABHA ON 09.03.2017.

# The state-wise generation in respect of hydro power project above 25 MW capacity

STATE	Installed Capacity (as on 25.02.2017) (MW)	Annual Energy Generation (upto 25.02.2017)* (MU)
Himachal Pradesh	9578.02	35484.79
Jammu & Kashmir	3119.00	13955.97
Punjab	1096.30	3614.51
Rajasthan	411.00	860.42
Uttar Pradesh	501.60	1082.85
Uttarakhand	3756.35	12546.03
Chhattisgarh	120.00	151.85
Gujarat	1990.00	3739.87
Madhya Pradesh	2235.00	6663.70
Maharashtra	3047.00	5343.71
Andhra Pradesh	1610.00	1600.14
Telangana	2306.60	1213.29
Karnataka	3657.40	5627.05
Kerala	1881.50	3636.52
Tamil Nadu	2203.20	2240.16
Jharkhand	210.00	156.13
Odisha	2142.25	4518.47
Sikkim	1965.00	3958.66
West Bengal	1341.20	2672.90
Assam	375.00	1612.50
Meghalaya	282.00	695.96
Nagaland	75.00	254.30
Arunachal Pradesh	405.00	1197.72
Manipur	105.00	705.58
TOTAL	44413.42	113533.08

\*Tentative

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# ANNEX REFERRED TO IN REPLY TO PARTS (d) TO (f) OF UNSTARRED QUESTION NO. 1574 TO BE ANSWERED IN THE LOK SABHA ON 09.03.2017.

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#### **Stalled Under Construction Hydro Electric Projects**

Name of Project/ Executing Agency/	State	Reasons for Stuck up	
Capacity (MW)			Expenditure incurred (Upto) (Rs. in crore)
Central Sector			
Lata Tapovan, NTPC Limited 3x57=171 MW	Uttarakhand	Construction work stopped vide Hon'ble Supreme Court order dated 7.5.14.	146.00 (Dec-2016)
Subansiri Lower NHPC Limited 8x250=2000 MW State Sector	Arunachal Pradesh / Assam	-Since 16.12.2011 works stopped due to agitation by various activists, fearing dam safety and downstream impacts of dam. -Case in Hon'ble National Green Tribunal (NGT), Kolkata Bench.	8766.63 (Dec-2016)
Kashang – II & III HPPCL 2x65 = 130 MW (1 unit already commissioned)	H.P.	-Works on KK Link tunnel could not commence since 2011, due to two separate cases (one for Environmental clearance and another for Forest clearance) which were pending in Hon'ble NGT. The case of Environmental clearance has been decided in favour of HPPCL, whereas in the case of Forest clearance, it has been directed by the Hon'ble NGT that the matter shall be placed before Gram Sabha in the presence of a Justicial Officer. The entire proceeding shall be completed not later than three months from the date of commencement of proceedings of Gram Sabha. HPPCL shall then submit the report to Hon'ble NGT. The application for challenging the Hon'ble NGT decision has been filed in the Hon'ble Supreme Court by HPPCL which has now been withdrawn as per the direction of Govt. of Himachal Pradesh on dated 08.09.2016.	1011.84 (Dec-16)
	Central Sector Lata Tapovan, NTPC Limited 3x57=171 MW Subansiri Lower NHPC Limited 8x250=2000 MW State Sector Kashang – II & III HPPCL 2x65 = 130 MW (1 unit already	Central SectorLata Tapovan, NTPC Limited3x57=171 MWSubansiri Lower NHPC LimitedArunachal Pradesh / Assam8x250=2000 MWState SectorKashang – II & III HPPCL 2x65 = 130 MW (1 unit already	Central Sector       Uttarakhand       Construction work stopped vide Hon'ble Supreme Court order dated 7.5.14.         Subansiri Lower       Arunachal       -Since 16.12.2011 works stopped due to agitation by various activists, fearing dam safety and downstream impacts of damCase in Hon'ble National Green Tribunal (NGT), Kolkata Bench.         State Sector       H.PC         Kashang - II & III       H.P.         HPPCL       -Works on KK Link tunnel could not commence since 2011, due to two separate cases (one for Environmental Clearance and another for Forest clearance) which were pending in Hon'ble NGT. The case of Environmental clearance is of Forest clearance, it has been directed by the Hon'ble NGT that the matter shall be placed before Gram Sabha in the presence of a Justicial Officer. The entire proceeding shall be completed not later than three months from the date of commencement of proceedings of Gram Sabha. HPPCL shall then submit the report to Hon'ble NGT. The application for challenging the Hon'ble NGT decision has been filed in the Hon'ble NGT action for challenging the Hon'ble NGT decision has been filed in the Hon'ble NGT action for challenging the Hon'ble NGT decision has been filed in the Hon'ble NGT action for challenging the Hon'ble NGT decision has been filed in the Hon'ble NGT decision

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4	Shahpurkandi	Punjab	- Works of Dam (J&K side) stopped	517.17 (May 2016)
	Irr. Deptt., Pb. & PSPCL		since 30.08.2014 due to inter-state	(May-2016)
	3x33+3x33+1x8 =206		disputes between Governments of	
-	MW	Kerala	Punjab and J&K.	52.88
5	Thottiyar	Kerala	- Works are almost standstill since	52.88
	KSEB		Nov, 2015. The contractor has put	( here 2040)
	1x30+1x10=40 MW		forward a proposal for foreclosure	(Jun-2016)
			of the Project due to their financial	
			stringency and a detailed note	
			regarding the same was submitted	
			to the Board for approval. It is	
			decided to foreclose the work and	
			the balance work may be re-	
			arranged through open tender or	
			through Govt. approved executing	
			agencies like Uralungal Labour	
			Contract Co-operative Society.	
6	Pallivasal	Kerala	- Works are almost standstill since	183.70
	KSEB		Jan, 2015. The contractor has put	(Dec-2016)
	2x30=60 MW		forward a proposal for foreclosure	
			of the Project due to their financial	
			stringency and a detailed note	
			regarding the same was submitted	
			to the Board for approval. It is	
			decided to foreclose the work and	
			the balance work may be re-	
			arranged through open tender or	
			through Govt. approved executing	
			agencies like Uralungal Labour	
			Contract Co-operative Society.	
7	Koyna Left Bank PSS	Maharashtra	- Project stalled since July, 2015.	334.59
	WRD, Govt. of		The current expenditure on the	(Nov-2016)
	Maharashtra		project has already reached to	
	2x40=80 MW		almost original administrative	
			approved cost level hence	
			expenditure on the project is	
			stopped and project work is	
			processing at very slow rate.	
			Revised cost is under approval by	
			State Govt.	
8	Lower Kalnai	J&K	The works has been stalled due to	71.98
	JKSPDC		financial issues with contractor.	(Nov-2016)
	2x24=48 MW		The contractor, M/s. Coastal	
			Projects Ltd. has gone under CDR	
			(Contract Debt Restructuring)	
			mechanism.	
	Private Sector			
9	Maheshwar	M. P.	Works suspended since Nov-11 due	3135.00
	Shree Maheshwar Hydel		to cash flow problem with the	(Mar-2015)
	Power Corporation		developer.	-
	Limited			
	10x40= 400 MW	1		

10	Teesta VI	Sikkim	There is almost no progress since	3621.00
	Lanco Teesta Hydro Power Ltd. 4x125=500 MW		April, 2014. (Funds constraints)	(Dec-2016)
11	Rangit-IV Jal Power Corp. Ltd. (JPCL) 3x40= 120 MW	Sikkim	Works stopped since Oct-13 due to funds constraints with developer.	816.76 (Jun-2016)
12	Panan Himagiri Hydro Energy Pvt Ltd. 4x75 = 300 MW	Sikkim	Major Civil Works could not commence since April, 2014 for want of Clearance from Hon'ble NGT.	156.50 (Oct-2016)
13	Ratle GVK Ratle Hydro Electric Project Pvt. Ltd. 4x205+1x30=850MW	J&K	There is no progress since 11 <sup>th</sup> July, 2014. (R&R issues, Local issues, Law & order problem, Indus Water Treaty etc.)	1451.00 (Mar-2015)
14	Tangnu Romai Tangnu Romai Power Generation 2x22=44 MW	H.P.	The developer informed that the project suffered due to very poor geology in HRT, due to which project got delayed and cost had increased. Further Works stalled since January, 2015 due to fund constraints.	179.00 (Mar-2013)
15	Sorang Himachal Sorang Power Ltd. 2x50=100 MW	H.P.	Works are stalled since 18.11.2015 due to rupture in the surface penstock pipe when unit#2 was under trial run.	-NA-

Total = 15 Nos. (4984 MW)

In addition to above, the following projects are also stressed:-

SI. No.	Name of Project/ Executing Agency/ Capacity (MW)	State	Reasons for Stress	Expenditure Incurred (Upto)
	State Sector			
1	Polavaram Polavaram Project Authority(12x80 = 960 MW)	Andhra Pradesh	-Slow progress of works. - E&M works yet to be awarded. - Public hearing for construction of protective embankment to be held in Oddisha and Chhattisgarh as desired by MOEF &CC (Ministry of Environment, Forests & Climate Change).	7364.06 (Aug-2015)
	Private Sector			
2	Phata Byung M/s.Lanco 2x38=76 MW	Uttarakhand	<ul> <li>Works affected due to flash floods in June, 2013.</li> <li>Slow pace of works.</li> <li>High tariff due to time &amp; cost over-run.</li> </ul>	897.35 (Jan-2017)

3	Singoli Bhatwari M/s.L&T 3x33=99 MW	Uttarakhand	<ul> <li>Works affected due to flash floods in June, 2013.</li> <li>Slow pace of works.</li> <li>High tariff due to time &amp; cost over-run.</li> </ul>	920.41 (Jan-2017)
4	Gongri Dirang Energy Pvt. Ltd. 2x72=144 MW	Arunachal Pradesh	Works stopped since 2 <sup>nd</sup> week of April, 2016 due to fund flow problem with promoter / lenders. Works restarted in July-2016 but fund constraints still exist.	521.21 (Mar-2016)
5	Rangit-II Sikkim Hydro Power Ltd. 2x33=66MW	Sikkim	Works are stalled since 2014 due to non-release of funds by lenders because of power evacuation and land acquisition issues. Developer has to infuse equity into the project. Meanwhile, the promoter of the company 'Gammon India Ltd' is under CDR. Hence, Power Finance Corporation (PFC) is unable to disburse the loan. Talks between developer & lenders is under progress, however funds are not yet disbursed by banks. The developer re-started works w.e.f. September, 2016.	-NA-

Total = 5 Nos. (1345 MW) Grand Total = 20 Nos. (6329 MW) Total Amount Incurred till date= Rs.30147.08 Crs.

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