

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
STARRED QUESTION NO.336
TO BE ANSWERED ON 03.01.2019**

HYDRO ELECTRIC PROJECTS

***336. SHRI SANJAY DHOTRE:
SHRI BHARTRUHARI MAHTAB:**

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

- (a) the number of Hydro Electric Projects under construction across the country, as on date, State-wise;**
- (b) whether a large number of such projects are held up due to financial constraints and other reasons and if so, the details thereof, State and Project-wise along with the time by which such Projects are likely to be completed;**
- (c) the details of the cost escalation of such projects due to delay in construction, Project-wise along with the manner in which such escalated cost is likely to be arranged;**
- (d) the extent of shortage/loss of generation of power across the country due to delay in construction of the said projects; and**
- (e) the steps taken/being taken by the Government for timely completion of such projects along with the achievements thereof?**

A N S W E R

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

(SHRI R.K. SINGH)

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

STATEMENT

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF STARRED QUESTION NO.336 TO BE ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING HYDRO ELECTRIC PROJECTS.

(a) : As on 30th November, 2018, there were 37 under construction Hydro Electric Projects (above 25 MW) in the country, aggregating to 12178.50 MW. The details of these projects, State-wise, is given at Annex-I.

(b) : Out of these 37 under construction Hydro Electric Projects, 16 projects, aggregating to 5950 MW, are stalled / held up due to financial constraints and other reasons. The State-wise details of these projects along with the anticipated date of completion of these projects is given at Annex-II.

(c) : The project-wise details of cost overrun of such stalled under construction Hydro Electric projects is given at Annex-III. For financing the cost overrun, equity is being arranged by the developers and debt is raised by developers through loan / commercial borrowings.

(d) : As per calculation made by Central Electricity Authority (CEA), the annual loss of energy generation from these stalled projects is about 18761 Million Units (MUs).

(e) : The action taken by the Government for early completion of these projects are:

- **CEA monitors the progress of under construction power projects through frequent site visits and interaction with the developers and equipment suppliers. CEA holds review meetings periodically with the developers and other stakeholders to identify and resolve issues critical for commissioning of Projects.**
- **Regular reviews are also undertaken in Ministry of Power (MoP) to identify the constraints areas and facilitate faster resolution of inter-ministerial and other outstanding issues.**
- **In case of CPSU's, the project implementation parameters / milestones are incorporated in the annual MoU signed between respective CPSU's and MoP and the same are monitored during the Quarterly Performance Review (QPR) meetings of CPSU's and other meetings held in MoP/ CEA.**
- **The issues related to erection and supply of Electro-Mechanical equipment is expedited in various meetings held in CEA / MoP and other local issues affecting the progress of works are taken up with respective State Governments by the Concerned CPSU / MoP.**

The Government of India is pursuing proactively for early resolution of issues with stakeholders.

ANNEX REFERRED TO IN PART (a) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 336 TO BE ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING HYDRO ELECTRIC PROJECTS.

List of Under Construction Hydro Electric Projects in the Country (above 25 MW) - State wise

(As on 30.11.2018)

Sl. No.	Name of Scheme (Executing Agency)	Sector	Installed Capacity (No. x MW)	Capacity Under Execution (MW)	Latest Commissioning
Andhra Pradesh					
1	Polavaram (APGENCO/Irrigation Dept., A.P.)	State	12x80	960.00	2021-23 (Mar'23)
Sub-total: Andhra Pradesh				960.00	
Arunachal Pradesh					
2	Kameng (NEEPCO)	Central	4x150	600.00	2019-20 (Jun,19)
3	Subansiri Lower (NHPC)	Central	8x250	2000.00	2022-23 *
4	### Gongri (Dirang Energy)	Private	2x72	144.00	2022-23 *
Sub-total: Arunachal Pradesh				2744.00	
Himachal Pradesh					
5	Parbati St. II (NHPC)	Central	4x200	800.00	2021-22 (Dec'21)
6	Uhi-III (BVPCL)	State	3x33.33	100.00	2018-19 (Mar'19)
7	Sawra Kuddu (HPPCL)	State	3x37	111.00	2019-20 (May'19)
8	Shongtong Karcham (HPPCL)	State	3x150	450.00	2024-25 (Apr'24)
9	Bajoli Holi (GMR)	Private	3x60	180.00	2019-20 (Aug'19)
10	Sorang (HSPCL)	Private	2x50	100.00	2020-21 *
11	Tangnu Romai (TRPG)	Private	2x22	44.00	2021-22 *
12	Tidong-I (Statkraft IPL)	Private	100.00	100.00	2021-22 (Oct'21)
Sub-total: Himachal Pradesh				1885.00	
Jammu & Kashmir					
13	Pakal Dul (CVPPL)	Central	4x250	1000.00	2023-24
14	Parnai (JKSPDC)	State	3x12.5	37.50	2021-22 (Mar'22)
15	Lower Kalnai (JKSPDC)	State	2x24	48.00	2022-23 *
16	# Ratle (RHEPPL)	Private	4x205 + 1x30	850.00	2023-24 *
Sub-total: Jammu & Kashmir				1935.50	
Kerala					
17	Pallivasal (KSEB)	State	2x30	60.00	2020-21 (Dec'20)
18	Thottiyar (KSEB)	State	1x30+1x10	40.00	2020-21
Sub-total: Kerala				100.00	
Madhya Pradesh					
19	## Maheshwar (SMHPCL)	Private	10x40	400.00	2020-21 *
Sub-total: Madhya Pradesh				400.00	
Maharashtra					
20	Koyna Left Bank (WRD,MAH)	State	2x40	80.00	2022-23 *
Sub-total: Maharashtra				80.00	
Punjab					
21	Shahpurkandi (PSPCL/Irrigation Deptt., Pb.)	State	3x33+3x33+1x8	206.00	2021-22 (Nov'21)
Sub-total: Punjab				206.00	

Sikkim					
22	Bhasmey (Gati Infrastructure)	Private	3x17	51.00	2021-22 *
23	Rangit-IV (JAL Power)	Private	3x40	120.00	2021-22 *
24	Rangit-II (Sikkim Hydro)	Private	2x33	66.00	2020-21 *
25	Rongnichu (Madhya Bharat)	Private	2x48	96.00	2019-20 (Mar'20)
26	Teesta St. VI (LANCO)	Private	4x125	500.00	2021-22 *
27	Panan (Himagiri)	Private	4x75	300.00	2022-23 *
Sub-total: Sikkim				1133.00	
Tamil Nadu					
28	Kundah Pumped Storage	State	1x125	125.00	2022-23
Sub-total: Tamil Nadu				125.00	
Uttarakhand					
29	Lata Tapovan (NTPC)	Central	3x57	171.00	2022-23 *
30	Tapovan Vishnugad (NTPC)	Central	4x130	520.00	2020-21 (Dec'20)
31	Tehri PSS (THDC)	Central	4x250	1000.00	2021-22 * (May'21)
32	Vishnugad Pipalkoti (THDC)	Central	4x111	444.00	2021-22 (Dec'21)
33	Naitwar Mori (SJVNL)	Central	2x30	60.00	2021-22 (Dec-21)
34	Vyasi (UJVNL)	State	2x60	120.00	2019-20 (Mar'20)
35	Phata Byung (LANCO)	Private	2x38	76.00	2021-22 *
36	Singoli Bhatwari (L&T)	Private	3x33	99.00	2019-20 (Jun'19)
Sub-total: Uttarakhand				2490.00	
West Bengal					
37	Rammam-III (NTPC)	Central	3x40	120.00	2021-22 (Feb'22)
Sub-total: West Bengal				120.00	
Grand Total:				12178.50	

* Subject to restart of works

Govt. of J&K, PDD have terminated PPA on 09.02.2017 and directed JKSPDC to take over the project.

PFC as lead lender have acquired majority equity i.e. 51% in the SMHPCL w.e.f. 1st June, 2016. Matter Sub-judice.

State Govt. terminated the agreement with developer for execution of project.

ANNEX REFERRED TO IN PART (b) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 336 TO BE ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING HYDRO ELECTRIC PROJECTS.

Stalled Under Construction Hydro Electric Projects

(As on 30.11.2018)

Sl. No.	Name of Project/ Executing Agency / Capacity (MW)	Sector	Reasons for stalling of construction	Likely Commissioning
Arunachal Pradesh / Assam				
1	Subansiri Lower NHPC Limited 8x250=2000 MW	Central	-Since 16.12.2011 works stopped due to agitation by various activists, fearing dam safety and downstream impacts of dam. -Case in Hon'ble NGT, Kolkata bench.	4 years after restart of works.
Arunachal Pradesh				
2	Gongri Dirang Energy Pvt. Ltd. 2x72=144 MW	Private	Works stopped since 2 nd week of April, 2016 due to fund flow problem with promoter / lenders. Works restarted in July-2016 but again stalled since October, 2016 due to fund constraints with developer.	3½ years after re-start of works.
Himachal Pradesh				
3	Tangnu Romai Tangnu Romai Power Generation 2x22=44 MW	Private	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.	3 years after the start of works.
4	Sorang Himachal Sorang Power Ltd. 2x50=100 MW	Private	Works are stalled since 18.11.2015 due to rupture in the surface penstock pipe when unit#2 was under trial run.	1 year after the re-start of works.
Jammu & Kashmir				
5	Lower Kalnai JKSPDC 2x24=48 MW	State	Works on all fronts at Dam and Power House site are stalled since 24.01.2018 due to payment dispute with subcontractors and due to non-settlement of extension of time of the contract by the JKSPDC.	4 years after restart of works.
6	Ratle GVK Ratle Hydro Electric Project Pvt. Ltd. 4x205+1x30=850 MW	Private	There is no progress since 11 th July, 2014. (R&R issues, Local issues, Law & order problem, Indus Water Treaty etc.)	5 years after restart of works.

Madhya Pradesh				
7	Maheshwar Shree Maheshwar Hydel Power Corporation Limited 10x40= 400 MW	Private	Works suspended since Nov-11 due to cash flow problem with developer.	1-½ year after restart of works.
Maharashtra				
8	Koyna Left Bank PSS WRD, Govt. of Maharashtra 2x40=80 MW	State	- Project stalled since July, 2015. The current expenditure on the project has already reached to 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.	4 years after restart of works.
Sikkim				
9	Teesta VI Lanco Teesta Hydro Power Ltd. 4x125=500 MW	Private	There is almost no progress since April, 2014. (Funds Constraints)	3 years after restart of works.
10	Rangit-IV Jal Power Corp. Ltd. (JPCL) 3x40= 120 MW	Private	Works stopped since Oct-13 due to funds constraints with developer.	3½ years after the re-start of works.
11	Panan Himagiri Hydro Energy Pvt Ltd. 4x75 = 300 MW	Private	Major Civil Works could not start since April, 2014 for want of NGT Clearance. NOC from NWLB.	4½ years after the start of works.
12	Rangit II Sikkim Hydro Pvt. Ltd. 2x33=66 MW	Private	Works are stalled since December, 2017 due to funds constraints with developer	2½ years after the start of works.
13	Bhasmey Gati Infrastructure 2x25.5=51 MW	Private	Works are stalled since Sept., 2016 due to funds constraints with developer	3 years after re-start of works.
Uttarakhand				
14	Lata Tapovan, NTPC Limited 3x57=171 MW	Central	Construction work stopped vide Hon'ble Supreme Court order dated 7.5.14.	4 years after restart of works.
15	Tehri PSS, THDC Limited 4x250=1000 MW	Central	Construction work stopped since April, 2018 due to funds constraints with Contractor (HCC).	3 years after restart of works.
16	Phata Byung Lanco 2x38=76 MW	Private	Works stalled since July, 2017 due to Financial crunch with the contractor / developer.	3 years after re-start of works.

Total = 16 Nos. (5950 MW)

ANNEX REFERRED TO IN PART (c) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 336 TO BE ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING HYDRO ELECTRIC PROJECTS.

**DETAILS OF STALLED UNDER CONSTRUCTION HYDRO ELECTRIC PROJECTS (ABOVE 25 MW)
HAVING TIME/COST OVERRUN**

(As on 30.11.2018)

Sl. No	Project Name / Installed Capacity / Executing Agency	Sector	Unit No.	Capacity (MW)	Original Commissioning Schedule	Anticipated Commissioning Schedule	Original Cost (Rs. in Crores)	Latest Cost/ Anticipated Completion Cost (Rs. in Crores)
1	2	3	4	5	6	7	9	10
	Arunachal Pradesh / Assam							
1	Subansiri Lower (8x250 = 2000 MW) NHPC	Central	1 2 3 4 5 6 7 8	250 250 250 250 250 250 250 250	2009-11 2009-11 2009-11 2009-11 2009-11 2009-11 2009-11 2009-11	2022-23 2022-23 2022-23 2022-23 2022-23 2022-23 2022-23 2022-23 (subject to re-start of works, 4 years)	6285.33 (12/02)	18559.49 (04/17)
	Arunachal Pradesh							
2	Gongri 2x72= 144 MW Dirang Energy (P)Ltd	Private	1 2	72 72	2016-17 2016-17	2022-23 2022-23 (subject to re-start of works, 3.5 years)	1436.27 (05/2012)	1535.91 (10/2016)
	Himachal Pradesh							
3	Tangnu Romai-I (2x22 = 44 MW) TRPGPL	Private	1 2	22 22	2014-15 2014-15	2021-22 2021-22 (subject to re-start of works, 3 years)	255.00 (01/2007)	562.97 (01/2017)
4	Sorang (2x50 = 100 MW), HSPPL	Private	1 2	50 50	2011-12 2011-12	2020-21 2020-21 (subject to re-start of works, 2 years)	586.00 (04/2005)	586.00 (Under revision)

	Jammu & Kashmir							
5	Lower Kalnai 2x24= 48 MW JKSPDC	State	1 2	24 24	2017-18 2017-18	2022-23 2022-23 (subject to re-start of works, 4 years)	576.87 (12/2012)	576.87 (12/2012)
6	Ratle (4x205+1x30) = 850 MW Ratle HEP Pvt .Ltd.	Private	1 2 3 4 5	205 205 205 205 30	2017-18 2017-18 2017-18 2017-18 2017-18	2023-24 2023-24 2023-24 2023-24 2023-24 (subject to re-start of works, 5 years)	5517.02 (03/2012)	6257.00 (09/2013)
	Maharashtra							
7	Koyna Left Bank PSS 2x40 = 80 MW WRD, Maha	State	1 2	40 40	2014-15 2014-15	2022-23 2022-23 (subject to re- start of works, 4 years)	245.02 (1999)	1494.94 (2014)
	Madhya Pradesh							
8	Maheshwar (10x40 = 400 MW) SMHPCL	Private	1 2 3 4 5 6 7 8 9 10	40 40 40 40 40 40 40 40 40 40	2001-02 2001-02 2001-02 2001-02 2001-02 2001-02 2001-02 2001-02 2001-02 2001-02	2020-21 (subject to re-start of works, 1.5 years)	1569.27 (96-97)	8121.00 (2016-17)
	Sikkim							
9	Teesta Stage VI (4x125 = 500 MW) Lanco Energy Pvt. Ltd.	Private	1 2 3 4	125 125 125 125	2012-13 2012-13 2012-13 2012-13	2021-22 2021-22 2021-22 2021-22 (subject to re-start of works, 3 years)	3283.08 (2008)	5748.00 (07/2018)
10	Rangit-IV HEProject (3X40 = 120 MW) JPCL	Private	1 2 3	40 40 40	2011-12 2011-12 2011-12	2021-22 2021-22 2021-22 (subject to re-start of works, 3.5 years)	726.17 (2011-12)	1692.60 (06/2016)

11	Panan 4x75= 300 MW Himagiri Hydro Energy Pvt. Ltd.	Private	1	75	2018-19	2022-23	1833.05 (2009)	2516.00 (09/2016)
			2	75	2018-19	2022-23		
			3	75	2018-19	2022-23		
			4	75	2018-19	2022-23		
						(subject to active start of works, 4 years)		
12	Bhasmey 2x25.5=51 MW Gati Infrastructure	Private	1	25.5	2012-13	2021-22	408.50 (2012-13)	690.30
			2	25.5	2012-13	2021-22		
						(subject to re-start of works, 3 years)		
13	Rangit-II 2x33=66 MW Sikkim Hydro Power Ltd.	Private	1	33	2015-16	2020-21	496.44	496.44 (Under revision)
			2	33	2015-16	2020-21		
						(subject to re-start of works, 2.5 years)		
Uttarakhand								
14	Lata Tapovan (3x57 = 171 MW) NTPC	Central	1	57	2017-18	2022-23	1527.00 (07/2012)	1801.07 (Under revision)
			2	57	2017-18	2022-23		
			3	57	2017-18 (Aug'17)	2022-23		
						(subject to re-start of works, 4 years)		
15	Tehri PSS 4x250=1000 MW THDC	Central	1	250	2010-11	2021-22	1657.60 (12/2005)	3939.11
			2	250	2010-11	2021-22		
			3	250	2010-11	2021-22		
			4	250	2010-11	2021-22		
						(subject to re-start of works)		
16	Phata Byung 2x38=76 MW Lanco	Private	1	38	2012-13	2021-22	520.00 (2013-14)	1225.53
			2	38	2012-13	2021-22		
						(subject to re-start of works, 3 years)		
Total							26922.62	55803.27

Note: Latest Cost/ Anticipated Cost of the project is as per data submitted by the project authorities to CEA.
