

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
STARRED QUESTION NO.466
TO BE ANSWERED ON 06.04.2017**

HYDRO ELECTRIC PROJECTS

***466. DR. SATYAPAL SINGH:
SHRI SANJAY DHOTRE:**

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

- (a) the details of Hydro Electric Projects which are 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 along with the time by which such projects are likely to be completed, State-wise and Project-wise;**
- (c) the details of the cost escalation of such projects due to delay in construction along with the manner in which such escalated cost is likely to be arranged, Project-wise;**
- (d) the extent to which the loss of generation of power occurred 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 Hydro Electric Projects across the country along with achievements thereof ?**

A N S W E R

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

(SHRI PIYUSH GOYAL)

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

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF STARRED QUESTION NO.466 TO BE ANSWERED IN THE LOK SABHA ON 06.04.2017 REGARDING HYDRO ELECTRIC PROJECTS.

(a) : As on 30th March, 2017, there are 43 under construction Hydro Electric Projects (above 25 MW) in the country, totalling to 11928.5 MW. The details of these projects, State-wise, is given at Annex-I.

(b) : Out of these 43 under construction Hydro Electric Projects, 16 projects, totalling to 5163 MW, are stalled/held up due to financial constraints and other reasons. The details of these projects alongwith the anticipated date of completion of these projects is given at Annex-II.

(c) : The project-wise details of cost overrun of the 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 CEA, the annual loss of energy generation from these stalled projects is about 15564 MU.

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

- Central Electricity Authority (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 to identify the constraints areas and facilitate faster resolution of inter-ministerial and other outstanding issues.**
- A Power Project Monitoring Panel (PPMP), set up by the Ministry of Power, independently follows up and monitors the progress of the hydro projects.**
- Issues are also raised in PRAGATI, for proactive governance and timely implementation, as and when required.**
- 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. With the intervention of Government of India, the works of Teesta-III HEP (1200 MW) in Sikkim which was held up, re-started in October, 2015 and the project has been commissioned in February / March, 2017.

ANNEX REFERRED TO IN PART (a) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 466 TO BE ANSWERED IN THE LOK SABHA ON 06.04.2017 REGARDING HYDRO ELECTRIC PROJECTS.

LIST OF UNDER CONSTRUCTION HYDRO ELECTRIC PROJECTS (ABOVE 25 MW) IN THE COUNTRY – STATE-WISE

(As on 30.03.2017)

Sl.	Name of Scheme	Sector	Installed Capacity	Capacity Under	Latest
No.	(Executing Agency)		(No. x MW)	Execution (MW)	Commissioning
Andhra Pradesh					
1	Polavaram (PPA)	State	12x80	960.00	2021-22 ##
Sub-total: Andhra Pradesh				960.00	
Arunachal Pradesh					
2	Kameng (NEEPCO)	Central	4x150	600.00	2017-18
3	Pare (NEEPCO)	Central	2x55	110.00	2017-18
4	Subansiri Lower (NHPC)	Central	8x250	2000.00	2020-21 *
5	Gongri(Dirang Energy)	Private	2x72	144.00	2020-21 *
Sub-total: Arunachal Pradesh				2854.00	
Himachal Pradesh					
6	Parbati St. II (NHPC)	Central	4x200	800.00	2018-19
7	Uhl-III (BVPCL)	State	3x33.33	100.00	2017-18
8	Sawra Kuddu (HPPCL)	State	3x37	111.00	2018-19
9	Sainj (HPPCL)	State	2x50	100.00	2017-18
10	Shongtong Karcham (HPPCL)	State	3x150	450.00	2019-20
11	Bajoli Holi (GMR)	Private	3x60	180.00	2019-20
12	Sorang (HSPCL)	Private	2x50	100.00	2017-18 *
13	Tangnu Romai (TRPG)	Private	2x22	44.00	2018-19 *
14	Tidong-I (NSL Tidong)	Private	100.00	100.00	2018-19 *
15	Chanju-I (IA Energy)	Private	3x12	12.00	2017-18
Sub-total: Himachal Pradesh				1997.00	
Jammu & Kashmir					
16	Kishanganga (NHPC)	Central	3x110	330.00	2017-18
17	Parnai (JKSPDC)	State	3x12.5	37.50	2020-21
18	Lower Kalnai (JKSPDC)	State	2x24	48.00	2020-21 *
19	Ratle (RHEPPL)	Private	4x205 + 1x30	850.00	2021-22 *
Sub-total: Jammu & Kashmir				1265.50	
Kerala					
20	Pallivasal (KSEB)	State	2x30	60.00	2019-20 *
21	Thottiyar (KSEB)	State	1x30+1x10	40.00	2019-20 *
Sub-total: Kerala				100.00	
Madhya Pradesh					
22	Maheshwar (SMHPCL)	Private	10x40	400.00	2017-19 *
Sub-total: Madhya Pradesh				400.00	
Maharashtra					
23	Koyna Left Bank (WRD,MAH)	State	2x40	80.00	2019-20 *
Sub-total: Maharashtra				80.00	
Meghalaya					
24	New Umtru (MePGCL)	State	2x20	40.00	2017-18
Sub-total: Meghalaya				40.00	
Mizoram					
25	Tuirial (NEEPCO)	Central	2x30	60.00	2017-18
Sub-total: Mizoram				60.00	
Punjab					
26	Shahpurkandi (PSPCL)	State	3x33+3x33+1x8	206.00	2019-20 *
Sub-total: Punjab				206.00	

Sikkim					
27	Bhasmey (Gati Infrastructure)	Private	3x17	51.00	2019-20
28	Dikchu (Sneha Knietic)	Private	2x48	96.00	2017-18
29	Rangit-IV (JAL Power)	Private	3x40	120.00	2019-20 *
30	Rangit-II (Sikkim Hydro)	Private	2x33	66.00	2019-20 #
31	Rongnichu (Madhya Bharat)	Private	2x48	96.00	2019-20
32	Tashiding (Shiga Energy)	Private	2x48.5	97.00	2017-18
33	Teesta St. VI (LANCO)	Private	4x125	500.00	2021-22 *
34	Panan (Himagiri)	Private	4x75	300.00	2020-21 *
Sub-total: Sikkim				1326.00	
Telangana					
35	Pulichintala (TSGENCO)	State	4x30	90.00	2017-18
Sub-total: Telangana				90.00	
Uttarakhand					
36	Lata Tapovan (NTPC)	Central	3x57	171.00	2021-22 *
37	Tapovan Vishnugad (NTPC)	Central	4x130	520.00	2019-20
38	Tehri PSS (THDC)	Central	4x250	1000.00	2019-20
39	Vishnugad Pipalkoti (THDC)	Central	4x111	444.00	2019-20
40	Vyasi (UJVNL)	State	2x60	120.00	2018-19
41	Phata Byung (LANCO)	Private	2x38	76.00	2019-20 #
42	Singoli Bhatwari (L&T)	Private	3x33	99.00	2019-20 #
Sub-total: Uttarakhand				2430.00	
West Bengal					
43	Rammam-III (NTPC)	Central	3x40	120.00	2020-21
Sub-total: West Bengal				120.00	
Total:				11928.50	

* **Subject to restart of works**

Subject to active start of works

Subject to award of E&M works

ANNEX REFERRED TO IN PART (b) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 466 TO BE ANSWERED IN THE LOK SABHA ON 06.04.2017 REGARDING HYDRO ELECTRIC PROJECTS.

Stalled Under Construction Hydro Electric Projects

(As on 30.03.2017)

Sl. No.	Name of Project/ Executing Agency / Capacity (MW)	Sector	Reasons for Stalling	Likely Commissioning
Arunachal Pradesh / Assam				
1	Subansiri Lower NHPC Limited 8x250=2000 MW	Central	-Since 16.12.2011 work stopped due to agitation by various activists, fearing dam safety and downstream impact of dam. -Case in Hon'ble NGT, Kolkata Bench.	4 years after resumption of work.
Arunachal Pradesh				
2	Gongri Dirang Energy Pvt. Ltd. 2x72=144 MW	Private	Work stopped since 2 nd week of April, 2016 due to fund flow problem with promoter / lenders. Work restarted in July-2016 but again stalled since October, 2016 due to fund constraints with developer.	3½ years after active start of work.
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.	4 years after the start of work.
4	Tidong-I NSL Tidong Power Generation Ltd. 2x50=100 MW	Private	Works are stalled since July, 2016 due to funds constraints with developer	1½ years after the start of work.
5	Sorang Himachal Sorang Power Ltd. 2x50=100 MW	Private	Work is stalled since 18.11.2015 due to rupture in the surface penstock pipe when unit#2 was under trial run.	1 year after the start of work.
Jammu & Kashmir				
6	Lower Kalnai JKSPDC 2x24=48 MW	State	The work has been stalled due to financial issues with contractor. The contractor, M/s. Coastal Projects Ltd. has gone under CDR.	About 4 years after the re-start of work.
7	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 resumption of work.
Kerala				
8	Thottiyar KSEB 1x30+1x10=40 MW	State	- Work is almost standstill since Nov, 2015. The contractor has put 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.	4 years after resumption of work.

9	Pallivasal KSEB 2x30=60 MW	State	- Work is almost standstill since Jan, 2015. The contractor has put 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.	4 years after resumption of work.
	Maharashtra			
10	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 original administrative approved cost level hence expenditure on the project is stopped and project work is stalled.	4 years after resumption of work.
	Madhya Pradesh			
11	Maheshwar Shree Maheshwar Hydel Power Corporation Limited 10x40= 400 MW	Private	Work suspended since Nov-11 due to cash flow problem with developer.	1-½ year after resumption of work.
	Punjab			
12	Shahpurkandi Irr. Deptt., Pb. & PSPCL 3x33+3x33+1x8 =206 MW	State	- Work of Dam (J&K side) stopped since 30.08.2014 due to inter-state disputes between Punjab and J&K Government.	4 years after resumption of work.
	Sikkim			
13	Teesta VI Lanco Teesta Hydro Power Ltd. 4x125=500 MW	Private	There is almost no progress since April, 2014. (Funds Constraints)	3 years after resumption of work.
14	Rangit-IV Jal Power Corp. Ltd. (JPCL) 3x40= 120 MW	Private	Work stopped since Oct-13 due to funds constraints with developer.	2½ years after the start of work.
15	Panan Himagiri Hydro Energy Pvt Ltd. 4x75 = 300 MW	Private	Major Civil Work could not start since April, 2014 for want of NGT Clearance	4½ years after the start of work.
	Uttarakhand			
16	Lata Tapovan, NTPC Limited 3x57=171 MW	Central	Construction work stopped vide Hon'ble Supreme Court order dated 7.5.14.	4 years after resumption of work.

Total = 16 Projects (5163 MW)

ANNEX REFERRED TO IN PART (c) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 466 TO BE ANSWERED IN THE LOK SABHA ON 06.04.2017 REGARDING HYDRO ELECTRIC PROJECTS.

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

(As on 30.03.2017)

Sl. No	Project Name / Installed Capacity / Executing Agency	Sector	Unit No.	Capacity (MW)	Original Commissioning Schedule	Anticipated Commissioning Schedule	Original Cost (Rs. in Crores)	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	2020-21 2020-21 2020-21 2020-21 2020-21 2020-21 2020-21 2020-21 (subject to re-start of works)	6285.33 (12/02)	17435.15 (02/16)
Arunachal Pradesh								
2	Gongri 2x72= 144 MW Dirang Energy (P)Ltd	Private	1 2	72 72	2017-18 2017-18	2020-21 2020-21 (subject to re-start of works)	1436.27	1535.91 (10/16)
Himachal Pradesh								
3	Tangnu Romai-I (2x22 = 44 MW) TRPGPL	Private	1 2	22 22	2014-15 2014-15	2018-19 2018-19 (subject to re-start of works)	255.00 (2006)	562.97
4	Tidong-I 2x50 =100 MW NSL Tidong	Private	1 2	50 50	2013-14 2013-14	2018-19 2018-19 (subject to re-start of works)	543.15 (08/05)	1286.27
5	Sorang (2x50 = 100 MW), HSPPL	Private	1 2	50 50	2012-13 2012-13	2017-18 2017-18	586.00 (2006)	586.00 (Under revision)
Jammu & Kashmir								
6	Lower Kalnai 2x24= 48 MW JKSPDC	State	1 2	24 24	2017-18 2017-18	2020-21 2020-21	576.87	576.87
7	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	2021-22 2021-22 2021-22 2021-22 2021-22 (subject to re-start of works)	5517.02	6257.00 (09/2013)
Kerala								
8	Thottiyar (1x30+1x10)= 40MW KSEB	State	1 2	30 10	2012-13 2012-13	2019-20 2019-20 (subject to re-start of works)	136.79 (2007)	150.02

9	Pallivasal 2x30 = 60 MW KSEB	State	1 2	30 30	2010-11 2010-11	2019-20 2019-20 (subject to re-start of works)	222.00 (1999)	284.69 (2007)
	Maharashtra							
10	Koyna Left Bank PSS 2x40 = 80 MW WRD, Maha	State	1 2	40	2017-18	2019-20 (subject to active start of works)	245.02	1494.94
	Madhya Pradesh							
11	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	2017-19 (subject to re-start of works)	1569.27 (96-97)	6793.00
	Punjab							
12	Shahpurkandi 3x33+3x33+1x8 =206 MW, Irrigation Deptt. &PSPCL	State	1 2 3 4 5 6 7	33 33 33 33 33 33 8	2017-18 2017-18 2017-18 2017-18 2017-18 2017-18 2017-18	2019-20 2019-20 2019-20 2019-20 2019-20 2019-20 2019-20 (subject to re-start of works)	2285.81	2285.81
	Sikkim							
13	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)	3283.08	7542.00
14	Rangit-IV HE Project (3X40 = 120 MW) JPCL	Private	1 2 3	40 40 40	2011-12 2011-12 2011-12	2019-20 2019-20 2019-20 (subject to re-start of works)	726.17	1692.60
15	Panan 4x75= 300 MW Himagiri Hydro Energy Pvt. Ltd.	Private	1 2 3 4	75 75 75 75	2018-19 2018-19 2018-19 2018-19	2020-21 2020-21 2020-21 2020-21 (subject to active start of works)	1833.05	2021.90
	Uttarakhand							
16	Lata Tapovan (3x57 = 171 MW) NTPC	Central	1 2 3	57 57 57	2017-18 2017-18 2017-18 (Aug'17)	2021-22 2021-22 2021-22 (subject to re-start of works)	1527.00	1801.07
	Total						27027.83	52306.20
