केंद्रीय विद्युत प्राधिकरण

(जल विद्युत स्कंध)



निर्माणाधीन जल विद्युत परियोजनाओं की प्रगति

(विद्युत अधिनियम, 2003 के तहत के.वि.प्रा. के दायित्व की पूर्ति में)

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अप्रैल ~ जून, 2024

जल विद्युत् परियोजना प्रबोधन प्रभाग

नई दिल्ली

जुलाई -2024

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Executive Summary

ALL INDIA POWER SECTOR INSTALLED CAPACITY (AS ON 30.06.2024)

Installed Capacity (IC)	MW	Percentage of total IC
Thermal (Coal, Lignite, Gas & Diesel)	242996.91	(54.47%)
Renewable		
a) Large hydro (above 25MW)	46928.17	(10.51%)
b) Other Renewables (solar, wind, biomass small hydro etc.)	148084.64	(33.19%)
Nuclear	8180.00	(1.83%)
TOTAL (IC)	446189.72	

Sector wise Hydro Capacity under Execution: A hydro capacity (from hydro projects >25 MW) of **18087.5** MW is under execution, of which 14037.5 MW is conventional Hydro and 4050 MW is Pumped Storage. The Sector wise summary is given as under: -

Part A – Hydro

Sector	Under	construction
	Nos	MW
Central	15	11056
State	12	2591.5
Private	2	390
Total:	29	14037.5

Part B - PSP

Sector	Under construction			
	Nos	MW		
Central	1	1000		
State	2	1850		
Private	1	1200		
Total:	4	4050		

Monitorable Targets for Hydro Capacity Addition for the year 2024-25:

Monitorable Targets for hydro capacity addition for the year 2024-25 is **3200 MW** (1000 MW of Conventional hydro and 2200 MW of Pumped Storage). Details are as under:

Sl. No.	Name of Project	State/ Implem. Agency	Unit No.	_	acity W)	Capacity Addition
				Target	Actual	As Programmed/ Anticipated
	Central Sector					
1	Parbati-II /NHPC (4*200=800 MW)	Himachal Pradesh/NHPC	U-1 U-2 U-3 U-4	200 200 200 200 200	0	Dec'24 Dec'24 Dec'24 Dec'24
2	Tehri PSS/THDC (4*250=1000 MW)	Uttarakhand/THDC	U-1 U-2 U-3 U-4	250 250 250 250 250	0	Sept'24 Oct'24 Nov'24 Dec'24
3	Subansiri Lower / NHPC (8x250=2000 MW	Arunachal Pradesh/Assam/ NHPC	U-1 U-2 U-3	250 250 250	0	Mar'25 Mar'25 Mar'25
		Sub- total (Central):		2550	0	
	State Sector					
4	Pallivasal (2x30= 60 MW)	Kerala/ KSEB Ltd.	U-1 U-2	30 30	0	Sept'24 Sept'24
5	Thottiyar (1x30 + 1x10 = 40 MW)	Kerala/ KSEB Ltd.	U-1 U-2	10 30	0	Sept'24 Sept'24
6	Uhl-III (3*33.3=100 MW)	Himachal Pradesh/BVPCL	U-1 U-2 U-3	33.3 33.3 33.3	0	Oct'24 Nov'24 Dec'24
		Sub- total (State):		200	0	
	Private Sector					
7	Pinnapuram 4X240+2X120 =1200 MW Andhrapradesh/M/s Greenko Energies Pvt. Ltd.		U-1 U-2 U-3 U-4 U-5 U-6	240 240 240 240 120 120	0	Dec'24 Dec'24 Jan'25 Feb'25 Feb'25 Mar'25
		Sub-total (Private):		1200	0	
	Total (CS+SS+PS)		3950	0	

 $CHAPTER-1 \\ Plan \ wise \ Hydro \ capacity \ Target \ Vs \ Achievement \ since \ 4th \ Plan$

Target (MW)	Capacity	% Achieved
(Original)	Addition (MW)	
3518.00	1058.39	30.08
4654.00	3867.77	83.11
548.00	550.9	100.53
4768.00	3076.05	64.51
5541.25	3828.41	69.09
1006.50	445.5	44.26
754.30	436	57.8
9282.15	2427.65	26.15
9817.70	4538.25	46.23
14393.20	7886	54.79
15627.00	5544	35.48
10897.00	5479	50.28
		00,20
1305.00	795	60.92
1303.00	173	00.72
840.00	140	16.67
0.10.00	110	10.07
1190.00	300	25.21
1170.00	300	25,21
606.00	510	84.16
000.00	310	04.10
493.00	393	79.72
1080	120	11.11
660.00	60	9.09
	(Original) 3518.00 4654.00 548.00 4768.00 5541.25 1006.50 754.30 9282.15 9817.70 14393.20 15627.00 10897.00 1190.00 493.00	(Original) Addition (MW) 3518.00 1058.39 4654.00 3867.77 548.00 550.9 4768.00 3076.05 5541.25 3828.41 1006.50 445.5 754.30 436 9282.15 2427.65 9817.70 4538.25 14393.20 7886 15627.00 5544 10897.00 5479 1305.00 795 840.00 140 1190.00 300 606.00 510 493.00 393 1080 120

CHAPTER - 1.1

.No.	Year	Target	Capacity	% Achieved	Remarks
).INU.	1 cai		-	70 Acmeved	Kemarks
		(Original)	Addition (MW)		
1	 lst Five Year Pla	n (1 1 51 to 31	12.55)		
1	1951	11.1.31 to 31	15.89		
2	1952		140.00		
3	1953		16.00		
4	1954		62.17		
5	1955		146.13		
	Total :		380.19		
2	2nd Five Year Pl	an (1.1.56 to 3			
6	1956		121.96		
7	1957-58		152.48		
8	1958-59		147.52		
9	1959-60		168.71		
10	1960-61		<u>386.51</u>		
	Total:		<u>977.18</u>		
3	Brd Five Year Pl	an (1.4.61 to 31	1.03.66)		
11	1961-62		502.44		
12	1962-63		517.25		
13	1963-64		230.67		
14	1964-65		221.71		
15	1965-66		<u>735.01</u>		
	Total :		<u>2207.08</u>		
A	Annual Plans (19	066-67, 67-68, 6	68-69)		
16	1966-67		633.48		
17	1967-68		729.70		
18	1968-69		419.99		
4	tth Five Year Pla	an (1.4.69 to 31	.03.74)		
19	1969-70		227.79		
20	1970-71		248.53		
21	1971-72		228.38		
22	1972-73		173.80		
23	1973-74		<u>179.89</u>		
	Total:	3518	<u>1058.39</u>	30.08	
	5th Five Year Pla	an (1.4.74 to 31	,		
24	1974-75		563.94		
25	1975-76		934.36		
26	1976-77		561.30		
27	1977-78		995.32		
28	1978-79		812.85		
	Total:	4654	<u>3867.77</u>	81.11	
	Annual Plan (197	1			
29	1979-80	548	550.90	100.18	

	6th Five Year Pla	n (1.4.80 to 3	1.03.85)		
30	1980-81		407.25		
31	1981-82		381.59		
32	1982-83		883.05		
33	1983-84		799.70		
34	1984-85		<u>604.46</u>		
	Total:	4768	<u>3076.05</u>	64.51	
	T	(1.40=	1.00.00	<u></u>	
	7th Five Year Pla	in (1.4.85 to 3	1		
35	1985-86		1012.00		
36	1986-87		704.525		
37	1987-88		1069.285		
38	1988-89		532.70		
39	1989-90		<u>509.90</u>	50.00	
	Total:	5541.25	<u>3828.41</u>	69.09	
	Annual Plans (19		T		
40	1990-91	1006.5	445.50	44.26	
41	1991-92	754.3	436.00	57.8	
	8th Five Year Pla	`	<u> </u>		
42	1992-93	372.95	372.95		
43	1993-94	957.65	797.15		
44	1994-95	1192.55	450.00		
45	1995-96	1846	147.05		
46	1996-97	4913	<u>660.50</u>		
	Total:	9282.15	<u>2427.65</u>	26.15	
	9th Five Year Pla	in (1.4.97 to 3	1.03.2002)		
47	1997-98	233	233.00		
48	1998-99	312	542.50		
49	1999-2000	1543	1371.50		
50	2000-01	2223	1285.00		
51	2001-02	5506.7	<u>1106.25</u>		
	Total:	9817.7	<u>4538.25</u>	46.22	
	10th Five Year P	`	r '		
52	2002-03	585	635.00		
53	2003-04	3740	2590.00		Highest till date.
54	2004-05	2401	1015.00		
55	2005-06	2010	1340.00		
56	2006-07	5657	2306.00		3rd Hightest
	Total:	14393	7886.00	54.79	
	11th Five Year P	,	f '		
57	2007-08	2423	2423		2nd Highest.
58	2008-09	1097	969		
59	2009-10	1805	39		
60	2010-11	1741	690		
C1	2010-11				
61	2011-12	8561	1423		
61			1423 5544.00	35.48	

62	2012-13	802	510		
63	2013-14	1198	1058		
64	2014-15	842	736		
65	2015-16	1691	1516		
66	2016-17	1714	1659		4th Highest
	Total:	10897	5479	50.23	
67	2017-18	1305	795	60.92	
68	2018-19	840	140	16.67	
69	2019-20	1190	300	25.21	
70	2020-21	606	510	84.16	
71	2021-22	493	393	79.72	
72	2022-23	1080	120	11.11	
73	2023-24	660	60	9.09	

Targets set at the beginning of the year from 2017-18.

Chapter- 1.1(a)

Hydro Capacity Addition during the Year 2014-15

Sl. No.	Particular	Unit Nos.	Capacity	(MW)	Commissioning		Domonico/Cuitical Issue
No.		Nos.	Target	Actual	As Programmed	Actual (A)/ Anticipated	- Remarks/Critical Issue
A. (Central Sector						
1	Parbati-III NHPC, HP 4x130= 520 MW	Unit # 4	130	130	Aug- 14	22.05.2014 (A)	Commissioned
2	Rampur SJVN Limited, HP.	Unit # 3 Unit # 4	68.67 68.67	68.67 68.67	Jun 14 May 14	31.07.2014(A) 12.06.2014(A)	Commissioned
	6x68.67 = 412 MW	Unit # 6	68.67	68.67	Apr 14	04.12.2014(A)	
Ou	t side the Programm	e					
3	Koldam NTPC, H.P. 4x200 = 800 MW	Unit # 1 Unit # 2	200 200	200 200	Mar-15 Mar-15	31.03.2015 (A) 30.03.2015 (A)	Commissioned
	Sub- total (A):		736	736			
B. S	State Sector			<u> </u>	<u> </u>		1
4	Lower Jurala TSGENCO, Telangana 6x40= 240 MW	Unit # 1 Unit # 2 Unit # 3 Unit # 4	40 40 40 40	0 0 0 0	Jul14 Jul14 Oct14 Mar15	Slipped	- Slipped due to flooding of Power House on 30.07.2014 during synchronization process for Unit # 1 to Unit# 3.
5	Nagarjuna Sagar APGENCO, A.P. 2x25= 50 MW	Unit # 1 Unit # 2	25 25	0	Sep-14 Dec-14	Slipped	- Commissioning delayed due to non-availability of water.
	Sub- total (B):		210	0			
C. I	Private Sector						
6	Jorethang Loop DANS Pvt. Ltd., Sikkim 2x48= 96 MW	Unit # 1 Unit # 2	48 48	0	Feb-15 Mar-15	Slipped	- Slipped due to non-completion of HRT.
7	Teesta-III Teesta Urja, Sikkim 6x200= 1200 MW	Unit # 6	200	0	Mar-15	Slipped	- Slipped due to Financial crunch with the Developer.
	Sub- total (C):		296	0			
	Total (A+B+C)		842	736			

Out side RFD achievements:

Unit $\#1\ \&\ \#\ 2\ (400\ MW)$ of Kol Dam HEP commissioned during March, 2015.

Chapter- 1.1b

Hydro Capacity Addition during the Year 2015-16

Sl. No.	Particular	Particular Unit Capacity (MW) Commissioning Nos.		sioning	Remarks/				
2100		1,000	Target	Actual	As Programmed	Actual (A)/ Anticipated	Critical Issue		
A.	Central Sector								
1	Koldam NTPC, HP 4x200= 800 MW	Unit # 3 Unit # 4	200 200	200 200	4/15 5/15	10.04.2015(A) 12.06.2015(A)	Commissioned		
2	Teesta Low Dam- IV NHPC, W.B 4x40 = 160 MW	Unit # 1 Unit # 2	40 40	40 40	2/16 3/16	14.02.2016 16.03.2016	Commissioned		
3	Pare NEEPCO, Ar. Pradesh 2x55=110 MW	Unit # 1 Unit # 2	55 55		8/12 8/12	Slipped Slipped	Slipped due to inundation of dam area with flood water after overtopping of Coffer Dam in June'15 and many times thereafter. Slow progress of works in Dam concreting.		
	Sub- total (A):		590	480			Achieved:-480 MW		
В.	State Sector								
4	Baglihar - II JKPDC, J&K 3x150= 450 MW	Unit # 1 Unit # 2 Unit # 3	150 150 150	150 150 150	9/15 9/15 2016-17	05.09.2015(A) 29.09.2015(A) 26.10.2015(A)	Commissioned		
5	Kashang – I HPPCL, H.P. 1x65=65 MW	Unit # 1	65		3/16	Slipped	Slow progress of E&M works.		
6	Lower Jurala TSGENCO, Telangana 6x40= 240 MW	Unit # 1 Unit # 2 Unit # 3 Unit # 4	40 40 40 40	40 40 40 40	7/15 8/15 9/15 10/15	14.10.2015(A) 30.09.2015(A) 04.01.2016(A) 05.03.2016(A)	Commissioned		
7	Nagarjuna Sagar TR APGENCO, AP 2x25=50 MW	Unit # 1 Unit # 2	25 25		7/15 7/15	Slipped Slipped	Unit 1 & 2 could not be commissioned due to non-availability of rated discharge.		
	Sub- total (B):		575	610			Achieved:-610 MW		
C.	Private Sector								
8	Sorang HSPCL, H.P. 2x50 = 100 MW	Unit # 1 Unit # 2	50 50		11/11 12/11	Slipped Slipped	Unit # 1 synchronized, but could not be commissioned due to non-availability of rated discharge. Penstock ruptured on 18.11.2015.		
9	Srinagar AHPCL, Uttarakhand 4x82.5=330	Unit # 1 Unit # 2 Unit # 3 Unit # 4	82.5 82.5 82.5 82.5	82.5 82.5 82.5 82.5	4/15 4/15 5/15 6/15	10.04.2015(A) 08.06.2015(A) 20.04.2015(A) 03.06.2015(A)	Commissioned		
10	Jorethang Loop DANS Pvt. Ltd., Sikkim 2x48= 96 MW	Unit # 1 Unit # 2	48 48	48 48	9/15 10/15	22.09.2015(A) 23.09.2015(A)	Commissioned		
	Sub- total (C):		526	426			Achieved:-426 MW		
	Total (A+B+C)		1691	1516			Achieved:-1516 MW		
		Note: 15	Note: 1516 MW out of 1691 MW is Commissioned during 2015-16.						

Out side RFD achievements:

Unit #3 (150 MW) of Baglihar-II HEP commissioned ahead of Programme during Oct-2015.

Chapter- 1.1c

Hydro Capacity Addition during the Year 2016-17

1 IN 4	Particular Central Sector			1	Unit Nos. Capacity (MW) Commissioning		Remarks/ Critical	
1 IN 4	Central Sector		Target	Actual	As Programmed	Actual(A)/ Anticipated	Issue	
2 F								
N	Feesta Low Dam IV NHPC, West Bengal 4x40 = 160 MW	Unit # 3 Unit # 4	40 40	40 40	Jun.16 Sep.16	03.07.2016(A) 11.08.2016(A)	Commissioned	
	Pare NEEPCO, Ar. Pradesh 2x55=110 MW	Unit # 1 Unit # 2	55 55		Aug.12 Aug.12	Slipped Slipped	Slow progress in Dam concreting and erection of spillway gates.	
N	Kameng NEEPCO, Ar. Pradesh 4x150= 600 MW	PCO, Ar. Pradesh Unit # 2 150 - Dec.'09 Slippe 0= 600 MW		Slipped Slipped	Slow progress in Dam & HM works.			
S	Sub- total (C.S.):		490	80				
B. S	State Sector			•				
F	Sainj HPPCL, H.P 2x50= 100 MW.	Unit # 1 Unit # 2	50 50		Dec.16 Jan.17	Slipped Slipped	Slow progress of concreting barrage, pressure shaft & power house.	
H	Kashang – I HPPCL, H.P. Lx65=65 MW	Unit # 1	65	65	May 16	10.10.2016(A)	Commissioned	
T	Lower Jurala ISGENCO, Telangana 6x40= 240 MW	Unit # 5 Unit # 6	40 40	40 40	Sept.16 Nov.16	20.08.2016(A) 29.09.2016(A)	Commissioned	
T	Pulichintala FSGENCO,Telangana 4x30=120 MW	Unit # 1 Unit # 2	30 30	30	Aug.16 Dec16	25.09.2016(A) Slipped	Commissioned Due to non-availability of water in the Dam.	
N	New Umtru MePGCL,Meghalaya 2x20=40 MW	Unit # 1 Unit # 2	20 20		Nov.16 Dec.16	Slipped Slipped	Slow progress of works.	
T	Feesta-III Feesta Urja Ltd. Sikkim 6x200= 1200 MW	Unit #1 Unit # 2 Unit # 3	200 200 200	200 200 200	Dec.16 Jan.17 Feb.17	15.01.2017(A) 27.01.2017(A) 14.01.2017(A)	Commissioned	
A	Nagarjuna Sagar TR APGENCO, Telangana 2x25= 50 MW	Unit #1 Unit #2	25 25	25 25	Aug.16 Aug.16	05.01.2017(A) 28.01.2017(A)	Commissioned	
S	Sub- total (B):		995	825				
C. F	Private Sector							
L	Chanju-I [A Energy ; H.P. 3x12= 36 MW	Unit # 1 Unit # 2 Unit # 3	12 12 12	12 12	July 16 Sept.16 Dec.16	17.02.2017(A) 01.02.2017(A) Slipped	Commissioned Commissioned Slow progress of E&M works.	
S P	Dikchu Sneha Kinetic Power Projects (P).Ltd., Sikkim 2x48= 96 MW	Unit # 1 Unit # 2	48 48		July.16 Sept.16	Slipped Slipped	Slow progress of HM & EM works.	
S	Fashiding Shiga Energy Pvt. Ltd. Sikkim 2x48.5= 97 MW	Unit # 1 Unit # 2	48.5 48.5	-	Jan.17 Feb.17	Slipped Slipped	Non completion of power evacuation system.	
S	Sub- total (P.S.):		229	24				
7	Total C.S.+S.S.+P.S.)		1714	929				

Chapter- 1.1c

		Out Side Programme												
1	Kashang-II HPPCL , HI 1x65+1x65=	P	Unit # 1 Unit # 2	65 65	65 65	NA NA	02.01.2017(A) 22.08.2016(A)	Commissioned						
2.	Teesta-III Teesta Urja Ltd. Sikkim 6x200=1200 MW.		Unit #4 Unit # 5 Unit # 6	200 200 200	200 200 200	Outside Programme	16.02.2017(A) 24.01.2017(A) 28.01.2017(A)	Commissioned						
		Total Outsi	de Programme :		730									
		Grand Tota	1 (31.03.2017)		1659									

Chapter- 1.1d Hydro Capacity Addition during the Year 2017-18

Sl. No.	Particular	Unit Nos.	Capaci	ty (MW)	Commi	ssioning	Remarks / Critical Issues
			Actual	Target	As Programmed	Actual (A)/ Anticipated	
A.	Central Sector						
1	Tuirial NEEPCO, Mizoram 2x30 = 60 MW	Unit # 1 Unit # 2	30 30	30 30	Jun '17 Sep '17	25.08.2017(A) 28.11.2017(A)	Commissioned
2	Kishanganga NHPC, J&K 3x110 = 330 MW	Unit #1 Unit # 2 Unit # 3	110 110 110	110 110 110	Jan '18 Feb '18 Mar '18	13.03.2018(A) 21.03.2018(A) 30.03.2018(A)	Commissioned
3	Pare NEEPCO, Arunachal Pradesh 2x55=110 MW	Unit # 1 Unit # 2	55 55	55 55	May'18 May'18	Slipped Slipped	Seepage from diversion tunnel during impounding of reservoir.
4	Kameng NEEPCO, Arunachal Pradesh 4x150=600 MW	Unit # 1 Unit # 2	150 150	-	Mar. '18 Mar. '18	Slipped Slipped	Leaking observed in Penstock during water filling
	Sub- total (A):		800	390	Total Commission	oned in Central Se	ctor : 390 MW
B.	State Sector						
1	Sainj HPPCL, H.P. 2x50= 100 MW	Unit # 1 Unit # 2	50 50	50 50	May.17 Jun.17	04.09.2017(A) 04.09.2017(A)	Commissioned
2	Uhl - III BVPCL, H.P. 3x33.33=100 MW	Unit #1 Unit # 2 Unit # 3	33.33 33.33 33.33	-	Jan.'18 Feb.'18 Mar.'18	Slipped Slipped Slipped	Delay in completion of HRT lining due to heavy ingress of water in HRT.
3	Pulichintala TSGENCO,Telangana 4x30=120 MW	Unit # 2 Unit # 3	30 30	30 30	Aug.17 Oct.17	26.10.2017(A) 01.11.2017(A)	Commissioned
4	New Umtru MePGCL, Meghalaya 2x20=40 MW	Unit # 1 Unit # 2	20 20	20 20	Apr.17 Jul.17	22.04.2017 (A) 30.06.2017 (A)	Commissioned
	Sub- total (B):		300	200	Total Cor	mmissioned in Stat	e Sector :200 MW
C.	Private Sector						
1	Chanju-I IA Energy, H.P. 3x12 = 36 MW	Unit # 3	12	12	May.17	26.07.2017 (A)	Commissioned
2	Dikchu Sneha Kinetic Power Projects Pvt. Ltd., Sikkim,2x48MW= 96	Unit # 1 Unit # 2	48 48	48 48	Apr.17 May.17	11.04.2017 (A) 12.04.2017 (A)	Commissioned
3	Tashiding Shiga Energy Pvt. Ltd. Sikkim 2x48.5= 97 MW	Unit # 1 Unit # 2	48.5 48.5	48.5 48.5	Jul.17 Aug.17	06.11.2017 (A) 06.11.2017(A)	Commissioned
	Sub- total (C):		205	205	Total Com	missioned in Priva	te Sector : 205 MW
	Total (A+B+C)		1305	795	Total Com	nmissioned during	2017-18 : 795 MW.

Chapter- 1.1e Hydro Capacity Addition during the Year 2018-19

Sl. No.	Particular	Unit Nos.	Capacit	y (MW)	Commis	sioning	Remarks / Critical Issues	
			Target	Actual	As Programmed	Actual (A)/ Anticipated		
A.	Central Sector							
1	Pare NEEPCO, Arunachal Pradesh 2x55=110 MW	Unit # 1 Unit # 2	55 55	55 55	May'18 May'18	28.05.2018 21.05.2018	Commissioned	
2	Kameng NEEPCO, Arunachal Pradesh 4x150=600 MW	Unit # 1 Unit # 2 Unit # 3 Unit # 4	150 150 150 150		March'19 March'19 March'19 March'19	Slipped to 2019-20	Non-completion of Rectification works of leakage observed in penstock1&2 during water filling	
	Sub- total (A):		710	110	Total Commission	ed in Central Sect	tor :110 MW	
В.	State Sector							
3	Uhl - III BVPCL, H.P. 3x33.33=100 MW	Unit #1 Unit # 2 Unit # 3	33.33 33.33 33.33		Aug. 18 Aug. 18 Sep. 18	Slipped to 2019-20	During HST, some leakage in Penstock is observed which is being rectified.	
4	Pulichintala TSGENCO, Telangana 4x30=120 MW	Unit # 4	30	30	Sep.18	08.09.2018(A)	Commissioned	
	Sub- total (B):		130		30			
	Total (A+B)		840		140	Total Comm. 140 MW		

Chapter-1.1f

Hydro Capacity Addition during the Year 2019-20

Sl.	Particular	Unit Nos.	Capacity	(MW)	Commi	issioning	Remarks /	
No.			Target	Actual	As Programmed	Actual (A)/ Anticipated	Critical Issues	
A.	Central Sector							
1	Kameng NEEPCO, Arunachal Pradesh 4x150=600 MW	Unit # 1 Unit # 2 Unit # 3 Unit # 4	150 150 150 150	150 150	Aug'19 Aug'19 Aug'19 Aug'19	Feb,20 Feb,20 Slipped Slipped Slipping to (March-21)	-Seepage of water during welding affecting progress of works and causing delaysDifficult approach and working conditionVentilation constrains Works effected due to heavy rains this monsoon.	
	Sub- total (A):		600	300				
B.	State Sector							
2.	Uhl - III BVPCL, H.P. 3x33.33=100			Nov,19	Slipping to (Dec,22)	-Difficult approach -Delay in welding of liner in bend Rupture in Penstock in May,2020		
3	Sawra Kuddu HPPCL, H.P. 3x37=111 MW	Unit #1 Unit # 2 Unit # 3	37 37 37		Sep,19 Oct,19 Nov,19	Slipping to (March,21)	 Delay in completion of HRT works & associated transmission line. During filling of water conductor system in May,20, leakage is observed in adit to HRT 	
	Sub- total (B):		211					
C.	Private Sector							
4.	Bajoli Holi GMR,H.P. 3x60=180 MW	Unit #1 Unit # 2 Unit # 3	60 60 60		Jan.,20 Feb.,20 Mar.,20	Slipping to (Dec,21)	-Works affected due to heavy rainfall in August,19 and inclement weather from early Dec,19. to end of Jan,20 -Poor financial health of civil contractor.	
5.	Singoli Bhatwari L&T, Uttarakhand 2x33=99 MW	Unit #1 Unit # 2 Unit # 3	33 33 33		Mar.,20 Mar.,20 Mar.,20	Slipping to (Dec,20)	-Commissioned	
6.	Sorang HSPCL Uttarakhand 2x50=100 MW	Unit #1 Unit # 2	50 50		Nov,19 Dec.,19	Slipping to Dec,21	- Poor planning of re- erection of penstock works - Weather constraints.	
	Sub- total (C):		379					
	Total (A+B+C)		1190	300				

Hydro Capacity Addition during the Year 2020-21

Chapter-1.1(g)

Sl. No.	Particular	Unit Nos.	Capacity	(MW)	Comm	issioning	Remarks / Critical Issues	
			Target	Actual	As Programmed	Actual (A)/ Anticipated		
A.	Central Sector							
1	Kameng NEEPCO, Arunachal Pradesh 4x150=600 MW	Unit # 3 Unit # 4	150 150	300	March,21 March,21	21.01.2021 11.02.2021	Commissioned Commissioned	
	Sub- total (A):		300	300				
B.	State Sector							
2	Sawra Kuddu HPPCL, H.P. 3x37=111 MW	Unit #1 Unit # 2 Unit # 3	37 37 37	111	(March,21) (March,21) (March,21)	12.11.2020 05.12.2020 16.12.2020	Commissioned Commissioned Commissioned	
	Sub- total (B):		111	111				
C.	Private Sector							
3.	Singoli Bhatwari L&T, Uttarakhand 2x33=99 MW	Unit #1 Unit # 2 Unit # 3	33 33 33	99	March.,20 March.,20 March.,20	19.11.2020 18.12.2020 25.12.2020	Commissioned Commissioned Commissioned	
4.	Rongnichu 2x48= 96 MW* Madhya Bharat Power Corpn., Sikkim	Unit #1 Unit # 2	48 48		March,21 March,21		oned in FY 2021-22 with hanced capacity	
	Sub- total (C):		195					
	Total (A+B+C)		606	510				

Note: 510 MW capacity addition has been achieved in FY 2020-21 out of programmed capacity of total 606 MW $\,$

Hydro Capacity Addition during the Year 2021-22

Chapter -1.1(h)

Sl. No.	Particular	Unit Nos.		apacity MW)	Capacity	Addition	Remarks/Critical Issues
Α.	State Sector		Target	Actual	As Programmed	Actual/ Anticipated	
1	Pallivasal KSEB, Kerala 2x30=60 MW	Unit #1 Unit # 2	30 30		December'21 December'21	2022-23 2022-23	Slipped to 2022-23
2	Thottiyar KSEB, Kerala 1x30+1x10=40M W	Unit #1 Unit # 2	10 30		December'21 December'21	2022-23 2022-23	Slipped to 2022-23
	Sub- total (A):		100 MW				
В.	Private Sector						
3	Sorang HSPCL, H.P. 2x50=100 MW	Unit #1 Unit # 2	50 50	100	June'21 June'21	23.09.2021 21.09.2021	Commissioned Commissioned
4	Bajoli Holi GMRBHHPPL, H.P. 3x60=180 MW	Unit #1 Unit # 2 Unit # 3	60 60 60	60 60 60	June'21 June'21 June'21	25.03.2022 27.03.2022 28.03.2022	Commissioned Commissioned Commissioned
5	Rongnichu MBPCL, Sikkim 2x56.5=113 MW	Unit #1 Unit # 2	56.5 56.5	113	May'21 May'21	25.06.2021 30.06.2021	Commissioned Commissioned
	Sub- total (B):		393 MW	393 MW			
	Total (A+B)		493 MW				

Hydro Capacity Addition during the Year 2022-23

Chapter -1.1(i)

Sl. No.	Particular	Unit Nos.	Capa (MV		Capacity	Addition	Remarks/Critical Issues
			Target	Actual	As Programmed	Actual(A)/ Anticipated	
A	Central Sector						
1	Naitwar mori 2X30=60MW	Unit #1 Unit # 2	30 30		Dec'22 Jan'23	Mar'23 Mar'23	-
2	Subansiri Lower 8x250= 2000 MW	Unit #1 Unit #2	250 250		Jan'23 Feb'23	Slipped to 2023-24	Extended Monsoon & damage to protection wall of power house / collapse of DT-2
3	Tehri PSS 4x250= 1000 MW	Unit #1	250		Mar'23	Slipped to 2023-24	Geological constraints
	Sub total (A)		810 MW				
В	State Sector						
1	Pallivasal KSEB, Kerala 2x30=60 MW	Unit #1 Unit #2	30 30		Mar'23 Mar'23	Slipped to 2023-24	-Extended Monsoon -Slow progress of works
2	Thottiyar KSEB, Kerala 1x30+1x10=40M W	Unit #1 Unit #2	10 30		Feb'23 Mar'23	Slipped to 2023-24	-Extended Monsoon -Slow progress of works
3	Vyasi 2x60=120 MW	Unit #1 Unit # 2	60 60	60 60	Apr'22 May'22	May'22 (A) April'22(A)	U#1 Commissioned on 24.05.2022 U# 2 Commissioned on 22.04.2022
	Sub- total (B):		220 MW	120 MW			
C.	Private Sector						
1	Tidong-I 2x50= 100 MW	Unit #1	50		Mar'23	Slipped to 2023-24	-Delay in clearance of transmission line -Pressure shaft misalignment issues
	Sub- total (C):		50MW				
	Total (A+B+C)		1080MW	120MW			

Chapter – 1.1 (j)

Hydro Capacity Addition during the Year 2023-24

Sl. No.	Name of Project	State/ Implem	Unit No.			Сара	acity Addition	Reason for slippage
		Agency		Target	Actual	As Program med	Actual(A)/ Anticipated	
	Central Sector							
1	Naitwar Mori 2x30=60 MW	Uttarakhand /SJVNL	U-1 U-2	30 30	30 30	June'23 July'23	24.11.2023 04.12.2023	
2	Subansiri Lower 8x250=2000 MW	Arunachal Pradesh/NHP C	U-1 U-2	250 250		Aug'23 Sept'23	Slipped to 2026-27 Slipped to 2026-27	 Diversion tunnel-1 collapsed. Slope stability of left bank. Erection of balance 6 nos. of radial gates, DT plugging
		Sub- total (Central):		560		560	60	
	State Sector							
3	Pallivasal 2x30= 60 MW	Kerala/ KSEB Ltd.	U-1 U-2	30 30		Dec'23 Dec'23	Slipped to 2024-25 Slipped to 2024-25	Slow progress of works Slow progress of works
4	Thottiyar 1x30 + 1x10= 40 MW	Kerala/ KSEB Ltd.	U-1 U-2	30 10		Dec'23 Mar'24	Slipped to 2024-25 Slipped to 2024-25	Slow progress of works Slow progress of works
		Sub- total (State):		100		100	0	
	Total (CS+SS+PS)				60	660	60	

Chapter 1.2(a) Summary of Hydro Addition expected during 2024-25 to 2031-32 Part A – Conventional hydro

	Tentative Year-wise Hydro Capacity Addition for the period 2024-25 till 2031-32															
													Stall	ed	То	tal
Cantan	2024-25 2025-26 2026-27 2027-28 2028-29 2031-32															
Sector	MW	Nos.	MW	Nos.	MW	Nos.	MW	Nos.	MW	Nos.	MW	Nos.	MW	Nos.	MW	Nos.
Central Sector	1550	2#	620	2#	3734	6#	1250	3	1022	3	2880	1	171	1	11227	18#
State Sector	200	3	556	3	490	2	1045.5	3	300	1	0	0	48	1	2639.5	13
Private Sector	0	0	390	2	0	0	0	0	0	0	0	0	937	6	1327	8
Total	1750	5#	1566	7#	4224	8#	2295.5	6	1322	4	2880	1	1236	8	15193.5	39#

Note:-#3 units of Subansiri Lower HEP(750 MW) likely during 2024-25, 2 units (500 MW) during 2025-26 and 3 units (750 MW) during 2026-27.

Part B – Pumped Storage

	Tentative Year-wise Hydro Capacity Addition for the period 2024-25 till 2031-32															
													Stalled		Total	
	2024-25 2025-26 2026-27 2027-28 2028-29 2031-32															
Sector	MW	Nos.	MW	Nos.	MW	Nos.	MW	Nos	MW	N os.	MW	Nos.	MW	Nos.	MW	Nos.
Central Sector	1000	1	0	0	0	0	0	0	0	0	0	0	0	0	1000	1
State Sector	0	0	500	1	0	0	0	0	1350	1	0	0	80	1	1930	3
Private Sector	1200	1	0	0	0	0	0	0	0	0	0	0	0	0	1200	1
Total	2200	2	500	1	0	0	0	0	1350	1	0	0	80	1	4130	5

Chapter 1.2(b) Hydro Capacity addition program for 2024-2025

Sl. No.	Name of Project	State/ Implem. Agency	Unit No.	_	acity W)	Capacity Addition
				Target	Actual	As Programmed/ Anticipated
	Central Sector					
1	Parbati-II /NHPC (4*200=800 MW)	Himachal Pradesh/NHPC	U-1 U-2 U-3 U-4	200 200 200 200 200	0	Dec'24 Dec'24 Dec'24 Dec'24
2	Tehri PSS/THDC (4*250=1000 MW)	Uttarakhand/THDC	U-1 U-2 U-3 U-4	250 250 250 250 250	0	Sept'24 Oct'24 Nov'24 Dec'24
3	Subansiri Lower / NHPC (8x250=2000 MW	Arunachal Pradesh/Assam/ NHPC	U-1 U-2 U-3	250 250 250	0	Mar'25 Mar'25 Mar'25
		Sub- total (Central):		2550	0	
	State Sector					
4	Pallivasal (2x30= 60 MW)	Kerala/ KSEB Ltd.	U-1 U-2	30 30	0	Sept'24 Sept'24
5	Thottiyar (1x30 + 1x10 = 40 MW)	Kerala/ KSEB Ltd.	U-1 U-2	10 30	0	Sept'24 Sept'24
6	Uhl-III (3*33.3=100 MW)	Himachal Pradesh/BVPCL	U-1 U-2 U-3	33.3 33.3 33.3	0	Oct'24 Nov'24 Dec'24
		Sub- total (State):		200	0	
	Private Sector					
7	Pinnapuram 4X240+2X120 =1200 MW	Andhrapradesh/M/s Greenko Energies Pvt. Ltd.	U-1 U-2 U-3 U-4 U-5 U-6	240 240 240 240 120 120	0	Dec'24 Dec'24 Jan'25 Feb'25 Feb'25 Mar'25
		Sub-total (Private):		1200	0	_
	Total ((CS+SS+PS)		3950	0	

Chapter 1.2(c) Hydro Capacity addition program for 2025-2026

F Y. 2	2025-26					
S.No	Project Name/ Impl. Agency	Sector	State Unit N		Capacity (MW)	Anticipated Trial Run Date
A	Hydro					
1	Rangit-IV/NHPC	Central	Sikkim	U-1 to 3	120	May'2025
2	SUBANSIRI LOWER /NHPC Central		Arunachal Pradesh	U-4 to 5	500	Dec'2025
3	Shahpurkandi /PSPCL	State	Punjab	U-1 to 7	206	Jan'2026
4	Lower Sileru Extension /APGENCO) Sta		sion Andhra U-1 to 2		230	Mar'2026
5	Lower Kopili /APGCL	State	Assam	U-1 to 5	120	Oct'2025
6	Kutehr/JSW	Private	Himachal Pradesh	U-1 to 3	240	Apr'2025
7	Tidong-I /M/s Statkraft India Pvt. Ltd.	Private	Himachal Pradesh	U-1 to 3	150	Oct'2025
	Sub-Tota	l (Hydro))		1566	
В	PSP					
1	Kundah Pumped Storage (Phase-I, Phase-II & Phase-III) /TANGEDCO	State	Tamil Nadu	U-1 to 4	500	Dec'2025
	Sub-Tot	al (PSP)	1		500	
		Total	2066			

Chapter 1.2(d) Hydro Capacity addition program for 2026-2027

F Y. 2	2026-27					
S.No	Project Name/ Impl. Agency	Sector	State	Unit No.	Capacity (MW)	Anticipated Trial Run Date
A	Hydro					
1	Kiru /CVPPL	Central	Jammu & Kashmir	U-1 to 4	624	Sep'2026
2	SUBANSIRI LOWER /NHPC	Central	Arunachal Pradesh	U-6 to 8	750	May'2026
3	Ratle / NHPC	Central	Jammu & Kashmir	U-1 to U-5	850	Dec'2026
4	Pakal Dul /CVPPL	Central	Jammu & Kashmir	U-1 to U-4	1000	Sept'2026
5	Vishnugad Pipalkoti /THDC	Central	Uttarakhand	U-1 to U-4	444	Dec'2026
6	Dhaulasidh /SJVN	Central	Himachal Pradesh	U-1 to 2	66	May'2026
7	Shongtong Karcham/HPPCL	State	Himachal Pradesh	U-1 to U-3	450	Feb'2027
8	Mankulam/ KSEB Ltd. State		Kerala	U-1 to U-2	40	May'2026
		Su	b-Total (FY 2	2026-27)	4224	

Chapter 1.2(e)
Hydro Capacity addition program for 2027-2028

F Y. 2	2027-28						
S.No	Project Name/ Impl. Agency	Sector	State	Unit No.	Capacity (MW)	Anticipated Trial Run Date	
A	Hydro						
1	Teesta- VI /NHPC	Central	Sikkim	U-1 to U-4	500	Dec'2027	
2	Kwar/CVPPL	Central	Jammu & Kashmir	U-1 to U-4	540	Dec'2027	
3	Luhri-I/SJVN	Central	Himachal Pradesh	U-1 to 4	210	Jun'2027	
4	Polavaram / Polavaram Project Authority	State	Andhra Pradesh	U-1 to 12	960	Sept'2027	
5	Parnai/JKSPDC	State	Jammu & Kashmir	U-1 to 3	37.5	Jul'2027	
6	Chanju-III /HPPCL	State	Himachal Pradesh	U-1 to U-3	48	Jul'2027	
		Su	b-Total (FY 2	2027-28)	2295.5		

Chapter 1.2(f) Hydro Capacity addition program for 2028-2029

F Y. 2	2028-29					
S.No	Project Name/ Impl. Agency	Sector	State	Unit No.	Capacity (MW)	Anticipated Trial Run Date
A	Hydro					
1	Sunni Dam /SJVNL Cer		Himachal Pradesh	U-1 to U-6	382	Apr'2028
2	Tapovan Vishnugad /NTPC	Central	Uttarakhand	U-1 to 4	520	Mar'2029
3	Rammam - III / NTPC Ltd.	Central	West Bengal	U-1 to U-3	120	Mar'2029
4	Lakhwar Multipurpose Project /UJVNL	State	Uttarakhand	U-1 to U-3	300	Oct'2028
	Sub-Total	(Hydro)			1322	
В	PSP					
	Upper		Andhra	U-1 to	1250	
1	Sileru/APGENCO	State	Pradesh	U-9	1350	Feb'2029
	Sub-Tota	l(PSP)			1350	
	Sub-Tota	al (Hydro	+PSP) (FY 2	028-29)	2672	

Chapter 1.2(g) Hydro Capacity addition program for 2031-2032

FY. 2	2031-32					
S.No	Project Name/ Impl. Agency	Sector	State	Unit No.	Capacity (MW)	Anticipated Trial Run Date
A	Hydro					
1	Dibang/NHPC		Arunachal	U-1 to		
1	Dibang/NHFC	Central	Pradesh	U-12	2880	(Feb'32)
		2880				

Chapter 1.3(a)

List of under construction Hydro Electric Projects (above 25 MW)

A	Hydro							
SI. No	Name of the Project (Executing Agency)	Project Executing State / UT		I.C. (No. X MW.)	Cap. Under Execution (MW)	River/Basin	Date of finish/ commissi oning	% Physical Progress
	Central Sector							
1	Subansiri Lower (NHPC)	Arunachal Pradesh/Assam	Lower Subansiri, Ar. Pradesh / Dhemaji, Assam	8x250	2000.00	Subansiri/ Brahmaputra	2026-27 (May'26)	93.20
2	Parbati St. II (NHPC)	Himachal Pradesh	Kullu	4x200	800.00	Parbati/Beas/In dus	2024-25 (Dec'24)	97.00
3	Dibang Multipurpose Project (NHPC)	Arunachal Pradesh	Lower Dibang Valley	12x240	2880.00	Dibang/Brahma putra	2031-32 (Feb'32)	10.00
4	Teesta St. VI NHPC	Sikkim	South Sikkim	4x125	500.00	Teesta/Brahma putra	2027-28 (Dec '27)	61.00
5	Rangit-IV (NHPC)	Sikkim	West Sikkim	3x40	120.00	Rangit/ Teesta/ Brahmaputra	2025-26 (May'25)	72.00
6	Ratle (RHEPPL / NHPC)	UT of Jammu & Kashmir	Kishtwar	4x205 + 1x30	850.00	Chenab/Indus	2026-27 (Dec'26)	12.00
7	Pakal Dul (CVPPL)	UT of Jammu & Kashmir	Kishtwar	4x250	1000.00	Marusadar/ Chenab / Indus	2026-27 (Sept'26)	50.00
8	Kiru (CVPPL)	UT of Jammu & Kashmir	Kishtwar	4x156	624.00	Chenab/ Indus	2026-27 (Sept'26)	32.00
9	Kwar (CVPPPL)	UT of Jammu & Kashmir	Kishtwar	4x135	540.00	Chenab/Indus	2027-28 (Dec '27)	13.00
10	Luhri-I (SJVN)	Himachal Pradesh	Kullu/Shimla	2x80+2 x25	210.00	Satluj/Indus	2025-26 (Jan'26)	50.00
11	Dhaulasidh (SJVN)	Himachal Pradesh	Hamirpur/ Kangra	2x33	66.00	Beas/Indus	2025-26 (Nov'25)	56.00
12	Sunni Dam (SJVN)	Himachal Pradesh	Shimla/Mand i	4x73+1 x73+1x 17	382.00	Satluj/Indus	2028-29 (Apr'28)	22.00
13	Vishnugad Pipalkoti (THDC)	Uttarakhand	Chamoli	4x111	444.00	Alaknanada/Ga nga	2026-27 (Jun'26)	67.00

14	Tapovan Vishnugad (NTPC)	Uttarakhand	Chamoli	4x130	520.00	Dhauliganga / Alaknanada & /Ganga	2028-29 (Mar'29)	75.00
15	Rammam-III (NTPC)	West Bengal	Darjeeling	3x40	120.00	Rammam/ Rangit/Teesta Brahmaputra	2028-29 (Mar'29)	40.00
	Sub-Total:	Central Sector (Hy	ydro)		11056.00			
	State Sector							
16	Polavaram (APGENCO/ Irrigation Dept., A.P.)	Andhra Pradesh	East & West Godavari	12x80	960.00	Godavari/ EFR	2025-26 (Mar'26)	23.00
17	Lower Sileru Extension (APGENCO)	Andhra Pradesh	Alluri Sitharamaraj u	2x115	230.00	Sileru/ Godavari	2025-26 (Mar'26)	Initial stage of constructio n
18	Shongtong Karcham (HPPCL)	Himachal Pradesh	Kinnaur	3x150	450.00	Satluj/ Indus	2026-27 (Nov'26)	50.00
19	Chanju-III (HPPCL)	Himachal Pradesh	Chamba	3x16	48.00	Chanju Nallah	2027-28 (Jul'27)	Initial stage of constructio n
20	Pallivasal (KSEB)	Kerala	Idukki	2x30	60.00	Mudirapuzha/ Periyar/ Baypore Periyar/ WFR	2024-25 (Sep'24)	97.00
21	Thottiyar (KSEB)	Kerala	Idukki	1x30+1 x10	40.00	Thottiyar/ Periyar/ / Baypore Periyar/ WFR	2024-25 (Sep'24)	97.00
22	Mankulam (KSEB)	Kerala	Idukki	2x20	40.00	Melachery	2026-27 (May'26)	9.00
23	Lower Kopli (APGCL)	Assam	Dima Hasao & Karbi Anglong	2x55+2 x2.5+1 x5	120.00	Kopili/Brahma putra	2025-26 (Jul'25)	67.00
24	Uhl-III (BVPCL)	Himachal Pradesh	Mandi	3x33.33	100.00	Uhl/Beas/ Indus	2024-25 (Dec'24)	95.00
25	Parnai (JKSPDC)	UT of Jammu & Kashmir	Poonch	3x12.5	37.50	Jhelum/ Indus	2025-26 (Dec'25)	58.00
26	Shahpurkandi (PSPCL/ Irrigation Deptt., Pb.)	Punjab	Pathankot	3x33+3 x33+1x 8	206.00	Ravi/ Indus	2025-26 (Oct'25)	67.00
27	Lakhwar Multipurpose Project (UJVNL)	Uttarakhand	Dehradun & Tehri Garhwal	3x100	300.00	Yamuna	2028-29 (Oct'28)	8.00
	Sub-7	Total: State Sector	1		1241.50			
	Private							
28	Sector Tidong-I (Statkraft IPL)	Himachal Pradesh	Kinnaur	3x50	150.00	Tidong/Satluj/I ndus	2025-26 (Jun'25)	94.00
29	Kutehr (JSW Energy Ltd)	Himachal Pradesh	Chamba	3x80	240.00	Ravi/ Indus	2025-26 (Nov'25)	76.00

	Sub-To	otal: Private Sector	•		390.00			
		Total (Hyd	ro)	·	14037.50			
В	PSP					1	1	
	Central Sector							
30	Tehri PSS (THDC)	Uttarakhand	Tehri Garhwal	4x250	1000.00	Bhilangna/ Bhagirathi/ Ganga	2024-25 (Oct'24)	96.80
	Sub-Total: Central Sector (PSP)				1000.00			
	State Sector							
31	Upper Sileru (APGENCO)	Andhra Pradesh	Alluri Sitharamaraj u	9x150	1350.00	Sileru/ Godavari	2028-29 (Feb'29)	Initial stage of constructio
32	Kundah PSP Phase- I,II&III) (TANGENDC O)	Tamil Nadu	Nilgiris	4x125	500.00	Kundah/ Bhavani/ Cauvery/EFR	2025-26 (Jul'25)	76.00
		otal: State Sector	(PSP)		1850.00			
	Private Sector							
33	Pinnapuram (Greenko AP01 IREP Private Limited)	Andhra Pradesh	Kurnool	4x240+ 2x120	1200.00	Pennar Basin	2024-25 (Dec'24)	80.00
		otal: Private Sector	(PSP)		1200.00			
		Total (PSI	?)	ı	4050.00			
		Total (Hydro -	+PSP)		18087.50			

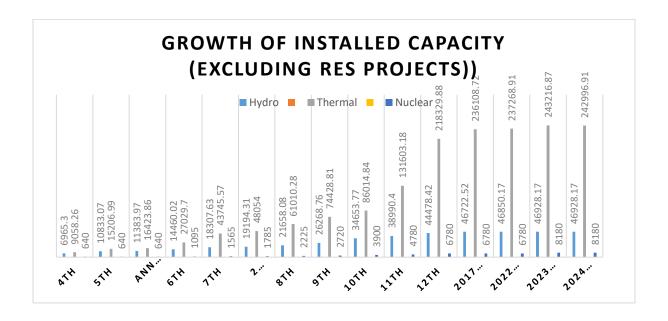
Chapter 1.3(b)

Sl.	Name of			I.C.	Сар.				
No.	(Executing Agency)	Sector	State /District	(No. X MW.)	Under Exe- cution (MW)	River/Basin	Туре	% Physical progress	Present Status
A	Projects held up due to sub- judice matters								
1	Lata Tapovan (NTPC)	Central	Uttarakhan d/Chamoli	3x57	171	Dhauliganga /Alaknanada & Ganga	RoR	3.8%	Matter is sub-judice. Infrastructure works almost completed. Hon'ble SC stayed construction of 24 HE projects in Uttarakhand including Lata Tapovan. Project is likely to be commissioned 4 years after restart of works. Work stalled since May, 2014.
2	Maheshwar (SMHPCL)	Private	Madhya Pradesh /Khargone & Khandwa	10x40	400	Narmada/CIR S	RoR	85%	Matter is sub-judice. Works suspended since Nov-11 due to cash flow problem with developer. M.P. Power Management Company Ltd. has terminated the Power Purchase Agreement with SMHPCL on 18.04.2020. The application of PFC has been admitted in NCLT on 27.09.2022 under IBC. CIRP has been put on hold by NCLT vide order dated 17.03.2023 in an application filed by Entegra Ltd. PFC has filed an Appeal before the NCLAT against the NCLT Order dated 17.03.2023 for recommencement of CIRP.Project is likely to be commissioned 2 years after restart of works.
3	Bhasmey (Gati Infrastructure) Pvt. Ltd.	Private	Sikkim /East Sikkim	2x25.5	51	Rangpo/ Teesta/ Brahmaputra	RoR	30%	Matter is sub-judice. The Court appointed Resolution Professional for Bhasmey HEP stated that works stalled since Sept., 2016. CIRP has been initiated against Gati infra and NCLT has appointed Resolution Professional .The Resolution Professional has received 4 Resolution Plan in the matter of Gati Infrastructure Bhasmey

			Sub to	tal	622				Power Private Limited and are pending for approval from the Committee of Creditors. Project is likely to be commissioned 4 years after restart of works.
В	Projects held up due to funds constraints								
1	Tangnu Romai Power Generation Power Ltd.	Private	Himachal Pradesh /Shimla	2x22	44	Pabbar/Tons/ Yamuna/ Ganga	RoR	20%	Works on hold since Aug 2016. Funds constraints with the developer. Project is likely to be commissioned 4 years after restart of works.
2	Rangit-II (Sikkim Hydro) Power Ventures Ltd.	Private	Sikkim /West Sikkim	2x33	66	Greater Rangit/ Teesta/ Brahmaputra	RoR	20%	Works stalled since Dec., 2017. Funds constraints with the developer. Project is likely to be commissioned 3 years after restart of works
			Sub to	tal	110				
С	Project held up due to accessibility to project site								
1	Panan (Himagiri) Hydro Energy Private Ltd.	Private	Sikkim /North Sikkim	4x75	300	Rangyongchu/ Teesta/ Brahmaputra	RoR	Nil	Accessibility to Project site. The permanent bridge over Mantam Lake for accessibility to Dam site is being constructed by Roads and Bridges Department Govt. of Sikkim which is likely to be completed by 2026. The Financial Institutes are awaiting for completion of bridge, thereafter the process of financing the project can startProject is likely to be commissioned 5 years after restart of works.

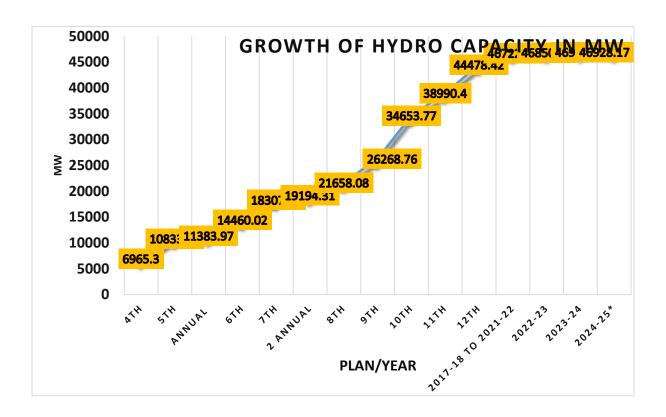
			Sub to	tal	300				
D	Projects held up due to other issue								
1	Lower Kalnai (JKSPDC)	State	U.T of Jammu & Kashmir /Kishtwar	2x24	48	Chenab/ Indus	RoR	10%	Works on all fronts at Dam and Power House site are stalled since the contract has been terminated by JK Govt. order no. 115-PDD of 2019 dated 08.06.2019. The Balance Work stands tendered out by JKSPDC in EPC mode vide E-NIT on 24.03.2022. Technical evaluation of the bids is completed and financial bids are slated to be opened .Project is likely to be commissioned 4 years after restart of works.
2	Koyna Left Bank (WRD,MAH)	State	Maharashtr a /Satara	2x40	80	Koyna/ Krishna/EFR	PSS	5%	Project stalled since July, 2015. The current expenditure on the project has already reached to almost original administrative approved cost level. The proposal for execution with various options (By WRD/Through BOT/By MSPGCL in collaboration with WRD) is under process. Project is likely to be commissioned 4 years after restart of works
3	Phata Byung (MJUPL(Statkra ft))	Private	Uttrakhand /Rudrapray ag	2x38	76	Mandakini/Al aknanda Ganga	RoR	74.0%	Works stalled since July, 2017 due to Financial crunch. The project stands alloted to M/s Statkraft IH through NCLT on 23.03.2023. The revival of Environmental clearance is under process. Project is likely to be commissioned 2 years after restart of works.
			Sub total		204				
	m :				44				
	Total:				1236				

Chapter 2
Growth of Installed Capacity



^{*}data for 2024-25 is till 30.06.2024

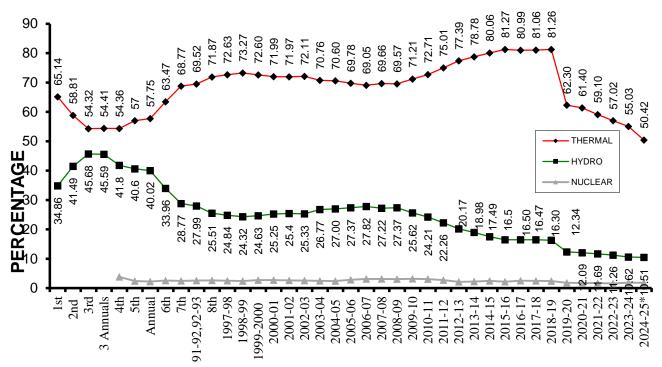
Chapter 2.1
Growth of Hydro Capacity



*data for 2024-25 is till 30.06.2024

Chapter 3

TREND OF CAPACITY ADDITION AS % OF TOTAL (Hydro Thermal mix)



Note: Till 2018-19 the percentage of Hydro and Thermal had been calculated based on total installed capacity excluding RES and since 2019 the percentage Hydro /Thermal has been calculated on total installed capacity including RES

^{*}data for 2024-25 is till 30.06.2024

Chapter 4.1

Sanctioned Under-construction Hydro Electric Projects

(Excluding projects under Ministry of New & Renewable Energy)

Part A – Conventional Hydro

Sl.	Name of Scheme State I.C.		I.C.	Benefits	Date of
No.			(No. x MW)	(MW)	Approval
	<u>Central Sector</u>				
1	Pakal Dul (CVPPL)	J&K	4x250	1000.00	28.10.14
2	Parbati St. II (NHPC)	H.P.	4x200	800.00	11.09.02
3	Tapovan Vishnugad (NTPC)	Uttarakhand	4x130	520.00	11/2006
4	Subansiri Lower (NHPC)	Ar. Pr./Assam	8x250	2000.00	09.09.03
6	Vishnugad Pipalkoti (THDC)	Uttarakhand	4x111	444.00	21.08.08
5	Ramam-III (NTPC)	West Bengal	3x40	120.00	10.09.14
7	Teesta St. VI (NHPC)	Sikkim	4x125	500.00	08.03.19
8	Ratle (Ratle Hydro) (NHPC)	J&K	4x205+1x30	850.00	11.02.21
9	Kiru (CVPPL)	J&K	4x156	624.00	08.03.19
10	Rangit-IV (NHPC)	Sikkim	3x40	120.00	30.03.21
11	Luhri -I (SJVN)	H.P.	2x80+2x25	210.00	20.11.20
12	Dhaulasidh (SJVN)	H.P.	2x33	66.00	01.10.20
13	Kwar (CVPPPL)	J&K	4x135	540.00	11.05.22
14	Dibang Multipurpose Project (NHPC)	Arunachal		2880.00	
		Pradesh	12x240		
15	Sunni Dam (SJVN)	HP	4x73+1x73+1x17	382.00	04.01.2023
	Sub- total (Ce		11056.00		
	State Sector	-			
16	Parnai (JKSPDC)	J&K	3x12.5	37.50	25.10.13
17	Uhl-III (BVPCL)	H.P.	3x33.33	100.00	26.09.03
18	Shongtom Karcham (HPPCL)	H.P.	3x150	450.00	16.08.12
19	Shahpurkandi (PSPCL)	Punjab	3x33+3x33+1x8	206.00	04.05.11
20	Indrasagar Polavaram (PPA)	Andhra Pradesh	12x80	960.00	25.02.09
21	Pallivasal (KSEB)	Kerala	2x30	60.00	31.01.07
22	Thottiyar (KSEB)	Kerala	1x30+1x10	40.00	05.06.08
23	Lower Kopli (APGCL)	Assam	2x55+2x2.5+1x5	120.00	Nov.2020
24	Chanju-III (HPPCL)	Himachal Pradesh	3x16	48.00	
25	Mankulam (KSEB)	Kerala	2x20	40.00	03.03.2022
26	Lower sileru Extension (APGENCO)	Andhra Pradesh	2x115	230.00	24.08.2020
27	Lakhwar Multipurpose Project (UJVNL)	Uttarakhand	3x100	300.00	23.12.2021
		tate Sector) :		2591.50	
	Private Sector	-			
28	Tidong-I (Statkraft India Pvt. Ltd.)	H.P.	3x50	150.00	23.07.07
29	Kutehr (JSW Energy (Kutehr)Ltd.	H.P.	3x80	240.00	31.03.10
		ivate Sector) :	<u> </u>	390.00	
	Total - Under execution (5.2024)	14037.50	
		,			

Part B - PSP

Sl.	Nowe of Cohomo	State	I.C.	Benefits	Date of
No.	Name of Scheme	State	(No. x MW)	(MW)	Approval
	Central Sector		(,		TT
1	Tehri PSS (THDC)	Uttarakhand	4x250	1000.00	18.07.06
	Sub- total (C	Central Sector):		1000.00	
	State Sector	-			
2	Kundah Pumped Storage-I (TANGENDCO)	Tamil Nadu	4x125	500.00	03.12.08
3	Upper sileru (APGENCO)	Andhra Pradesh	9x150	1350.00	
	Sub- total (State Sector):				
	Private Sector	-			
4	Pinnapuram (Greenko AP01 IREP Private Ltd)	A.P.	4x240+2x120	1200.00	20.04.22
	Sub- total (I	1200.00			
	Total - Under execution PSP (as on 31.06.2024)				

Chapter 4.2
Sanctioned Hydro Electric Projects for Construction which are held up
(Excluding projects under Ministry of New & Renewable Energy)

Sl.	Name of Scheme	State	I.C.	Benefits	Date of
No.			(No. x MW)	(MW)	Approval
	<u>Central Sector</u>				
1	Lata Tapovan (NTPC)	Uttarakhand	3x57	171.00	17.07.12
	Sub- total (Central Sec	tor) :		171.00	
	State Sector	_			
2	Lower Kalnai (JKSPDC)	J&K	2x24	48.00	16.08.13
3	Koyna Left Bank (WRDMah)	Maharashtra	2x40	80.00	20.02.04
	Sub- total (State Secto	128.00			
	Private Sector	_			
4	Tangnu Romai- I (Tangnu Romai Power Generation)	H.P.	2x22	44.00	30.11.07
5	Phata Byung (LANCO)	Uttarakhand	2x38	76.00	30.11.07
6	Maheshwar (SMHPCL) #	M.P.	10x40	400.00	29.09.06
7	Bhasmey (GATI Infrstructure)	Sikkim	2x25.5	51.00	Dec-08
8	Rangit-II (Sikkim Hydro Power)	Sikkim	2x33	66.00	10.02.10
9	Panan (Himagiri Hydro Energy) Sikkim 4x75				07.03.11
	Sub- total (Private Sec	937.00			
	Total - Capacity (as on 31.	1236.00			

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

Chapter 5 Status of Under Construction Hydro Electric Projects (above 25 MW) in the Country Part A.1 – Under Execution Hydroelectric Projects

	Name of Project	State	Broad Present Status / Critical Area	Remarks/
Sl.	Executing Agency	Comm. Sch.	Broad Fresent Status / Critical Area	Critical issues
No.	Date of CEA clearance /	(original/		Critical issues
110.	Approval	Now Ant.		
	Capacity (MW)	1101/11111		
	Broad Features			
	Cost (original/latest)			
	In Rs. Crores.			
Α	Central Sector			
	Parbati-II	H.P.	CIVIL WORKS	-Slow progress of HRT
1	NHPC			excavation due to geological
	11.09.2002	2009-10	Dam & Intake Structure (83.7m high and 3.7m	constraints.
	4x200 = 800 MW	2024-25	D-shaped intake structure) - Completed.	-Heavy rainfall during the
	Broad Features :	(Dec'24)		monsoon of 2023 which had
	Dam – 85m High, 109. m		Head Race Tunnel – Out of Total HRT of	cut off the approach to
	long at top, concrete		31557m, excavation of 31516.28m and concrete	working fronts in HRT.
	gravity type		lining of 30161m have been completed.	
	HRT- 6m x 31.23km		Power House (23.5m x 39.7m x 123m size):	
	P.House- Surface		Completed.	
	23.5mx 39.7mx 123m.			
	Turbine- Pelton		Nallah Works -Completed	
	Swyd 13.8/400 kV			
	Cost:			
	Original:3919.59		ELECTROMECHANICAL WORKS:	
	Latest: 9897.59			
	(04/20 PL)		All units synchronized with grid	
	Contractors		THE POLICE OF THE PROPERTY OF THE POLICE OF	
	Civil: Gammon /		HYDROMECHANICAL WORKS:	
	Valecha		All the major HM works completed.	
	HM: Om Metals			
	E&M:BHEL			
2	TapovanVishnugad	<u>Uttarakhand</u>	CIVIL WORKS	-Due to Land Subsidence
	NTPC		Barrage: Excavation Completed and Concreting	issue in Joshimath,
	11.08.2004/Nov, 2006	2012-13	almost completed.	Construction work of
	4x130 = 520 MW	2028-29	HRT& Adits: Muck removal works have been	Tapovan HPP along with
	Broad Features :	(Mar'29)	completed through all the faces of HRT till	construction work in
	Barrage–5 bays of 12m		Nov,2022. Lastly, Face#2 of HRT cleared in	Joshimath and Helang-
	HRT- 5.4m x 11.97km		Nov,2022	Marwari Bye-pass Road was
	P.House- underground		Desilting Chamber: Concreting under progress.	stopped by Chamoli District
	Turbine- V.Pelton Cost: Original: 2978.48		Gate erection completed. TRT, Pressure shaft, Surge shaft completed.	Administration due to land subsidence in Joshimath
	Latest: 7700 (4 th		1 K1, Fressure shart, Surge shart completed.	Town.
	qtr 22)		E&M works: More than 80% Supply is	TOWII.
	Agencies:		completed. 2 units are boxed-up and the erection of	
	• Barrage		3rd unit is 80% complete. The erection agency of	
	Package: M/s		M/s BHEL has been demobilized.	
	RPPL			
	HRT Package:		Hydro-Mechanical works: a. Damage assessment	
	M/s HCC		is completed, repair methodology and required	
	• Powerhouse		supplies has been chalked out. b. Rate finalization	
	and Penstock		for restoration works &BOI's are under process c.	
	Package: Ms		Supplies for Radial Gate & other components and	
	Patel		start of balance works is being taken-up with	
	Engineering Lt		agency in parallel to rate finalization.	
	d.			
	HM Package:			
	Om Metals			

	 E&M Package: BHEL Switchyard Package: M/s GE T&D India Ltd. GT Package: ABB Ltd. 			
3	Vishnugad Pipakoti THDC 21.08. 2008 4x111= 444 MW Broad Features: Dam – 65m High, 89.3m long, concrete gravity HRT- 13.4 Km, 8.8m dia Horse shoe shape P. House-Underground 127mx 20.3mx 50m Turbine- Francis SWYD- 13.8/420 kV Cost:Original: 2491.58	Uttara khand 2013-14 2026-27 (Dec'26)	Civil & HM Works: River Diversion has been completed. Construction of U/S Coffer Dam has been completed. Dam excavation: Around 89% completed. Concreting is in progress. De-silting Chambers: 100% excavation is completed and the lining work is in progress HRT by DBM (Total 1.5 kms): 100% excavation completed. Kerb concreting and overt lining completed in the length of 791 m and 708 m respectively. HRT by TBM (12 kms): 1757 m HRT has been constructed. Machine Hall: EoT erection work completed. Unit-1 pit excavation has been completed. Transformer Hall: Excavation has been completed. TRT: Around 71% heading excavation has been completed. Electro-Mechanical Works: 48% supply of equipment/ material has been completed.	-Financial crunch with the civil contractor -Intermittent stoppage of works after the Joshimath subsidence issue Jan'23
4	Subansiri Lower NHPC 09.09.2003 8x250= 2000 MW (1000 MW in 12 th Plan) Broad Features: Dam –116m High, concrete gravity HRT- 8 x 9.5m x 1145m Power House- Surface Turbine- Francis SWYD- 16/400 kV Cost: Original: 6285.33 Latest:19992.43 (04/17 PL) Contractors Civil: BGS-SGS-Soma JV HM: Texmaco E&M: Alstom	Arunachal Pradesh Assam 2009-11 2026-27 (May'26)	➤ Dam (116m high and 284m long):- Cumulative concreting of 99.87 percent achieved. ➤ Power House (285m x 61m x 64m size):- cumulative qty. achieved 89.72 percent. ➤ HRT- 100 % completed ➤ Pressure shaft-96.31% completed ➤ E&M Works- 81.8 % completed. ➤ HM Works: 88.27 % completed	Radial Gates erection and Diversion Tunnel plugging are critical activities.
5	Teesta-VI NHPC 08.3.2019 4x125= 500 MW Broad Features: Barrage: 26.5m high HRT- 2nos,27.52km long	Sikkim 2012-13 2027-28 (Dec'27)	Civil Works: Barrage works - 76.96 %, SFT works -20.54%, De-silting basin - 84.33%, Intake area – 3.01%, HRT works -38.14%, Surge Shaft/ Surge Gallery -83.05%, Pressure shaft - 81.53%, Power house works - 90.69%, and TRT Works - 93.16% has been completed.	Poor geology in HRT.

	Pressure shaft: 4nos. 5.4m dia. 151m to 198m length, TRT: 4nos 247m each length, 7.5x7.0m D-shapped. PH- Under ground Turbine- Francis Cost: Original: 3283.08 Latest: 5748.04 (07/2018 PL) Contractors Civil: JAL & Gammon E&M: Alstom		HM Works: Supply and erection works – 56.22% completed. E&M Works: 58.76% completed.	
6	Rammam-III NTPC Hydro Ltd. 10.09.14 3x40 = 120 MW Broad Features: Run of the River Scheme Cost: Original: 1381.84 Latest: 1592.34 Contractors Barrage and Part HRT Package: M/s Simplex Infrastructures Ltd & M/s Apex-Encon Project Pvt Ltd (JV))- Power-House and Part HRT Package: M/s SEW Infra Ltd. EM Package: M/S BHEL-	West Bengal 2019-20 2028-29 (Mar'29)	Civil & HM works of Barrage Complex including Part HRT Package - 33.59% completed Civil & HM works of Power House including Part HRT Package - 52.42% completed Electro-Mechanical Package- 48 % completed	Heavy flood hit the Barrage area on 18.06.2023 and upstream of Barrage and equipment including access road were washed away/damaged Work progress affected supply of construction materials has been hampered due to damage in some patches of NH 10 since 04.10.2023 due to flash flood of Sikkim (Road re-opened for Heavy vehicle movement from 24.12.2023. *Barrage Area: Contract for Barrage and part HRT Pkg awarded to M/s Simplex Apex Encon JV has been terminated on 09.02.2024. Balance work of the package has been awarded to M/s RVNL on 06.06.2024.
7	Pakal Dul CVPPL 03.10.2006 4x250 = 1000 MW Broad Features: Dam – 167m High, Width-305m), CFRD, HRT- 2 nos. 7.2m dia 1000m long S.Shaft-16m dia 200m Height P.House- Underground (157mx20.20mx49m) TRT- 5.5m dia, 125m long. Cost: Original:8112.12	J&K <u>2020-21</u> 2026-27 (Sept'26)	Diversion Tunnel (1 no, diameter 11 m, length 851 m).): Works of Diversion Tunnel completed. River Diversion was achieved on 01.11.2021. 1. Civil Works are 35% completed 2. HM Works are 49% completed 3. E&M Works are 68% completed	 HRT & Dam works are critical. Launching of TBM - 2-Inordinate delay due to the delay in arranging required Crane for erection of TBM-2 by M/s L&T Surge Shaft 1- Delay anticipated in excavation due to treatment of hill slopes overlooking SS top due to Geological

	Latest: 8112.12 <u>Contractors</u> Civil: Afcons – JAL – JV L&T,JAL HM: PES E&M: Voith Hydro Ltd			conditions/ Topography.
8	Kiru CVPPL 13.06.2016 4x156=624 MW Broad Features: Dam – 135m High, Width-193m), Concrete gravity, Penstock 4nos., 5.5m dia. P.House- Underground (182mx23.6mx51.2m) TRT- 4 nos., 7.0m dia, 165 to 190m long. Cost: Original:4287.59 Latest: 4287.59 Contractors Civil: Patel Engg. HM: PES Engineers E&M: Andritz Hydro	J&K 2023-24 2026-27 (Sep'26)	 Civil Works are 35.8% completed Construction of Coffer Dam, PH Cavern, TH Cavern, Adit to Pressure Shaft top & bottom is in progress Excavation of Power House & Pressure shaft has been completed DT works completed and River Diversion achieved on 31.12.2021 Excavation of all TRTs is done HM Works are 22% completed Detailed Design Engineering/manufacturing & supply of HM components is in progress. E&M Works are 51% completed Detailed Design Engineering/manufacturing and supply of E&M equipment is in progress. 	 The project is in the initial stage of construction. There is a delay in the supply of steel plates
9	Ratle Ratle Hydro Electric Project Pvt. Ltd. / NHPC 19.12.2012 4x205+1x30= 850 MW Broad Features: Dam Height-133m Length-194.8m Spillway-Radia Gate-(5) Size-10.75x1420 m Diversion Tunnel:2 Nos., Circular (Right back) Pressure Tunnel:11m dia each. Pressure Shaft: 6.6 m each steel lined. P.House-Underground Turbine- Francis Average Gross Head- 100.39m Addl. Unit(30MW) Housed in Main P.H. Cavity) Rated Head-98.9m Cost: Original: Rs 5281.94 Crore Latest Rs. 5281.94 Crore Contractors Civil & HM: GVK E&M: Alstom	J&K 2017-18 2026-27 (Dec'26)	• Improvement / Construction of Roads: - Completed. River Chenab was diverted through DT-2 on 27.01.2024 Excavation of Power House, Dam abutment, and TRT are in progress as the project is in the initial phase of construction.	

10	Rangit-IV Jal Power corp. Ltd. 06.07.2007 3x40= 120 MW Broad Features: Dam: Concrte 44m high .HRT: D- 6.4m L- 6.5km Power House: Surface Turbine: Francis Cost: Original:726.17 Latest: 938.29 (10/19 PL) Contractors Civil: Ritwik (27.08.2021) HM: PES (28.06.2021) E&M: Andritz (08.07.2021)	Sikkim 2011-12 2025-26 (May'25)	1. Civil Works: Dam & Intake works – 90.76%, HRT – 62.19%, De-silting chamber –97.98%, Pressure shaft – 86.63%, Power House & TRC – 74.30%, Surge shaft – 96.20% has been completed. 2. HM Works: Supply and erection work – 59.47% completed. 3. E&M Works: 70.15% completed.	-Poor rock and adverse geology in HRTMethane in HRT
11	Luhri Stage-1 SJVN Ltd. 01.05.2018 2x80+2x25=210 MW Broad Features: Dam: 86 m high HRT: 9m dia 38 km length Power House:Underground Turbine: Francis Cost: Original - 1810.56(05/2020) Contractor: Civil: Luhri Hydro Power Consortium dt. 24.11.2020 E&M works: Voith Hydro dt. 16.7.2021 Transmission line from Switchyard to Polling station: M/s Kalpatru Power dt. 6.7.2022	Himachal Pradesh 2025-26 2027-28 (Jun'26)	 Civil and HM works Dam excavation: In progress and cumulative 7,63,093 cum (91%) out of 8,37,912 cum Completed. Dam concreating:,5,973 cum (1.4%) out of 4,33,790 cum completed. Power house Excavation: 4,91,175 cum (98%) out of 4,99,615 cum completed and Concreting of Columns and Beams is completed. Tail Race Channel: - 5,93,058 cum (93%) out of 6,40,220 cum completed. E&M Works: Design/drawings of draft tube, EOT crane, spiral case, pit liner assembly, turbine shaft seal assembly, runner assembly, and generator foundation and generator stator frame & core assembly have been approved. Draft tube liners for three units out of four received at site. DT liner for 4th unit is under transportation. Manufacturing of EOT crane completed and load test conducted on 15.05.2024 	-Work hampered in monsoon due to overtopping of coffer dam and accumulation of silt
12	Dhaulasidh Hydro Electric Project (SJVN Ltd) (2x33 MW = 66 MW) Cost: Original: Rs. 687.97 Cr Civil & HM works: M/s Rithwik Projects Pvt. Ltd. dt. 6.5.2021 EM works: M/s Voith Hydro dt. 19.1.2022	Himachal Pradesh 2025-26 2026-27 (May '26)	1. Civil and HM works River Diversion achieved on 15.02.2022 Dam concreating:, 109,741 cum out of 3,11,450 cum completed Power house Excavation: up to unit pit is completed Power house Concreting: 10,856 cum out of 32,225 cum completed Excavation of Tail race tunnel is completed Erection of Draft tube liners for both units completed on 13.05.2024 and 2nd Stage concrete completed. Fabrication of spiral case & stay ring for unit-1 completed and for unit-2 in progress.	Works hampered in monsoon due to flash flood.

13	Kwar Hydro Electric Project, CVPPPL (4x135 MW = 540 MW) Cost: Original: Rs. 4526.12 Cr Civil works: M/s Patel Engg. Limited dtd. 11.05.2022	UT of J&K 2027-28 (Dec'27)	1. Civil works: 10.2% completed DT portal development, DT Excavation & Benching and CVT Excavation have been completed and River Diversion has been achieved on 15.01.2024. Excavation of MAT, PH Crown Excavation, Surge Gallery, GIS Cavern excavation, stripping of Dam Abutments, TC approach tunnel and Construction of Cofferdam are in progress. 2. HM works The issued NIT No: CVPP/C&P/Kwar/HM-PKG/2022 dated 11.08.2022 (of 2nd instance) has been cancelled on 15.06.2023 and re- tendering is in process. The financial bids opened on 08.05.2024 and the eRA (e Reverse Auction) concluded on 14.05.2024. Currently, the price bids are under evaluation by seeking justification of rate by L1 bidder.	
			3. EM works The Board of CVPPL in its 80th Meeting has resolved for cancellation of current tendering process of E&M Works Package of Kwar HE Project and has directed for re-tendering. Re-tendering process is in progress. e-NIT of E&M package has been floated on 24.05.2024. The date of start of submission of online Techno commercial bids is 27.06.2024 with the last date of submission on 15.07.2024	
14	Sunni Dam SJVN 4x73+1x73+1x17=382 MW Cost: Original: Rs. 2614.51 crs (05/21) Civil & HM works: M/s Rithwik Projects Pvt. Ltd. dt. 14.1.2023 EM works: Yet to be awarded	Himachal Pradesh 2027-28 2028-29 (Apr'28)	Diversion Tunnel work is completed River diverted on 13.01.2024 Dam work: Left Abutment Stripping for dam left abutments above EL 660 m: In progress and cumulative 40,400 cum out of 1,21,130 cum completed Right abutments Stripping upto EL 660 m: Started on 26.04.2024 and cumulative 2,650 cum (4%) out of 69,248 cum completed Power house: Main Access Tunnel Excavation 183 m out of 605 m completed	
15	Dibang HEP, NHPC (12x240=2880MW) Cost: Rs. 31876.39 Cr Infrastructure Works: M/s L&T dated 27.02.2023	Arunachal Pradesh 2031-32 (Feb'32)	The project is in initial stage of construction, therefore various pre – construction activities involved like mobilization of man and machinery, site cleaning, development of access roads and infrastructural facilities etc.	

В	State Sector			-
16	Parnai JKSPDC 21.10.2013 3x12.5= 37.5 MW Broad Features: Barrage: 107m Long, 11.7m High HRT: D Shape, 9236m long, 3.2m dia Surge Shaft: 3.2m Dia Power House- Surface- 60x12x28 Cost: Original: 640.86 Latest 640.86 Contractors Civil: Patel & Alstom E&M: Andritz	UT of J&K 2017-18 2027-28 (July,27)	The implementation of the project has been undertaken by awarding the EPC contract in favour of M/s. Patel Engg. Ltd. in 2013. Barrage (107m long, 11.7m high and 7m wide concrete structure):- Barrage concrete works completed 36296cum out of 39446cum. Excavation work 47740cum out of 48698cum is completed. HRT (D-shaped, 3.2m diameter, 9.156km long):- 7089.8 RM out of 9236 m excavation completed. 774 m out of 9236 m lining completed. Pressure shaft (1 no., 2m dia, 1733m long):- Excavation 20791.50 cum out of total 34560 cum completed. 2636.25 cum out of 7497 cum concreting has been completed. Power House (Surface 60x12x28m):- Excavation 63351 cum out of total 65000 cum completed. Overall physical progress:59.16% Financial Progress: 67.47%	- Slow progress of works - Contractual Issues.
17	Shahpurkandi Irrigation Deptt. &PSPCL 04.05.2011 3x33+3x33+1x8=206 MW Cost: Original: 1835.50 Latest 2368.55 (Power Component) Contractors Civil & HM for Main Dam with two Head Regulators: Soma – BUREYA JV Power Houses: M/s OMIL JV E&M: BHEL	Punjab 2015-16 2025-26 (Jan'26)	Main Dam: Overall 99.40% work of Main Dam portion has been completed. Hydel Channel: Overall work has been completed. Power House: Excavation completed. Concreting started and 61.31% completed. Physical progress: 67% E&M: The E&M contract with BHEL has been revised and manufacturing /procurement of equipment for the projects is under progress by BHEL.(Effective date of 01.11.2018). The E&M works of Power Houses is proposed to be completed by October 2025. Overall physical progress: 74.50% Financial Progress: 54.05%	Delay in E&M works is critical for schedule commissioning.
18	Uhl-III Beas Valley Power Corporation Ltd. (HPSEB) 19.09.02 / (TEC -2x50 MW) 3x33.3 =100 MW (Revised vide HPSEB letter dt. 19.01.07. Broad Features: HRT-4.15m x 8.47 km S.Shaft- 13m x 68.8m Penstock- 3.4m x 1851.946 m (main) P.House- Surface Turbine- V. Francis	H.P. 2006-07 2024-25 (Dec'24)	All civil works completed. E&M works: Dry test of all units completed. Restoration works of pen stock &E&M equipment are under process. Fabrication of Steel Ferrules and erection is under process. Dismantling/marking of foundation has been started from 16.02.2024 Overall Physical Progress: 95%	

	Cost: Original: 431.56 Latest:1281.52			
	Contractors Civil: Continental / Abir HM: PES E&M: BHEL			
19	Shongtong Karcham H.P. Power Corpn. Ltd. Clearance: 16.08.2012 3x150= 450 MW Broad Features: Intake Tunnel: 4 Nos. Horse shoe 6.4m dia 192 to 280m length HRT- Circular, 10.5m dia, 8096m long. Power House- Under ground Turbine- VF. Switchyard: 400 Kv. Cost: Original: 2807.83 Latest: 2807.83 Contractors Civil & HM: Patel E&M: Andritz	H.P. 2016-17 2026-27 (Feb'27)	 Barrage Work:- 49.72% excavation completed. Concreting 4.48 % completed. Power Intake:- 30.41 % Excavation completed. Desilting chamber (4 nos. each of 260 m length x 17m width x 22.80 m depth):- Excavation of Desilting chambers 74.26% completed. Silt Flushing Tunnel (SFT):-Excavation of SFT 55.38% completed. HRT (10.5m diameter, 7.7125 km long):- Heading excavation 98.33% completed. Benching excavation 79.16% completed. Surge Shaft (30.6m diameter 98.5m height):-Excavation-90.81% completed Pressure Shaft (3nos. 5.0m diameter, Length I&III = 230m, II = 220m):- Excavation of PAC 100% completed. Power House (131.15m (L) x 23m (W) x 44.29m (H)):-100% excavation of Transformer hall completed. 2nd EOT Crane in machine hall installed. Installation of draft tube in Unit-I completed. TRT(including adit, Main TRT, Unit TRTs & manifold): Excavation 73.19% completed. E&M Works:-Supply 63.9% completed. Erection yet to start. Overall E&M works 58.45% completed. Draft Tube:-72.90% excavation completed Physical progress: 50.91% in March'24. Financial Progress: 59.70 % 	Dam is critical due to change in design and approval of same.
20	Polavaram APGENCO / Irrigation Deptt., A.P. 21.07.2010/ 25.02.2009 12x80= 960 MW Broad Features: ECRF Dam- L-2454 m, H-57.9m, Spillway- L-1128m, Spill gate -48 Nos. Approach channel-175m. Intake tunnel: Ø 9m, L- 130m (12 Nos) Power House- Surface type, Turbine- Vertical Kaplan Tail Race Channel- 1130m. Cost: Original: 4956.39 Latest:5338.95 (Power Component)	Andhra Pradesh 2017-18 2027-28 (Sep'27)	Pressure Tunnels (1 to 12): Erection: Completed – 208 Nos., Balance- nil. Concreting: Completed – 250 Nos., Balance - 38 Nos. Power House area – Concreting work: Completed:157091 Cum, Balance: 86619 Cum. Civil work 20.64%, HM work 1.42% E&M work 1.66% Infrastructure Works: 0% Overall Physical progress: 23.72% Overall financial progress: 29.63%	

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	Contractors Civil:Navyug contract terminated and awarded to M/s Megha Engineering and Infrastructure Ltd. (MEIL) (EPC contractor) E&M: BHEL			
21	Lower Sileru extension APGENCO 2x115 = 230 MW 24.08.2020 Contractors M/s SSEL-PES Consortium Cost: Original: 571 (2020-21) Latest: 571 (2020-21)	Andhra Pradesh 2025-26 (Mar'26)	Project is in initial stage of construction. Overall Physical Progress:21.6% Overall Financial Progress: 22.52%	
22	Pallivasal KSEB 2x30= 60 MW 31.01.2007 Broad Features: HRT: 3.50m X 3396m Surge Shaft: 7.0m X 49m Pressure Shaft: 2.50m X 1019.20m Penstock: 2.nos., 1161.20m each. Power House: Surface Turbine: Pelton S. Yard: 220kV – Single bus Cost: Original: 222.00 Latest: 550.00 Contractors Single Package (Except Intake & balance Tunneling works) ESSAR – DEC – CPPL JV -M/s Bumi-Zillion JV (for Intake works & balance Tunneling works) -M/s Anchor structure- PSE-SSIPCJV, M/s. Shri Sarvasana Industries Pvt. Ltd.	Kerala 2010-11 2024-25 (Sep'24)	Civil Works: 99. 50% completed. HM Works: 98.80% completed. E&M Works: 93% completed. Intake structure: Intake structure completed HRT: completed. Invert conc: 3347m/3347m completed. Surge Tank/Forebay: Excavation completed. Conc.843/843 cum. Pressure Shaft: Excavation - Completed. Surface penstock: completed. Fabrication of ferrule completed, Erection completed. Power House: Building completed. Tail race Channel (2 Nos.): Excavation & lining completed. The overall progress achieved: - 98.21%.	
23	Thottiyar KSEB 1x30 + 1x10= 40 MW 05.06.2008 Broad Features: Weir: 222m Long 11 blocks 7.5m height Tunnel: Circular 2.6m dia 199m long. Power House: Surface	<u>Kerala</u> 2012-13 2024-25 (Sep'24)	-Civil & HM works re-awarded to M/s PRIL-Sri Sarvana Industries Pvt. Ltd. on 05.01.2018. KSEB decided to execute E&M works departmentally & tendering was awarded to M/s Fitwell. Civil Works: Weir: Excavation – completed, Concreting – completed.	

24	Turbine: Vertical Pelton Cost: Original: 136.79 Latest: 280 Contractors Civil & HM: PRIL- Sri Sarvana Industries		Approach Channel & Intake: Excavation works 100% completed. Tunnel – 100% works completed. Penstock, Anchors, Rocker support: Excavation – 87.24% completed, concreting completed, Fabrication and erection of penstock 100% completed. Power house:- Overall 99% works completed. Bridge – The Bridge is ready for vehicle traffic. Surface finishing works of approach road to bridge is to be done. E&M works- 95% works completed. Physical Progress:-95.745%	
24	Mankulam KSEB 2 X 20 = 40 MW 03.03.2022 Broad features: Dam: Concrete, straight gravity HRT:3.6mX2473m Surge shaft: Dia- 8m, top level of surge - 719.11m Pressure shaft: 1 no. Dia- 3m, Area - 7.07m2, Length - 398m Penstock: 2 Nos. 30m x2.3m Turbine: Pelton Max. gross head: 323.43m Cost: 600Cr. (2016) Contractors CIVIL & HM: M/s. PES Engineers Private Limited - M/s KSR Infracon Private Limited, Joint Venture (PES-KSR JV	<u>Xerala</u> <u>2026-27</u> (May'26)	Civil Works: 9.86%completed. HM Works: Not yet started. E&M Works: Not yet tendered. Intake structure: Leading channel of Water conductor system excavated. HRT: Excavation -2056/2473 m completed., Surge Tank/Forebay: Erection of Gantry crane progressing. Pressure Shaft:30% progress. Power House: Excavation progressing Bridge and road: Bridge completed and opened for traffic. Dam: 21.58% works completed. Overall Physical progress:9.86%	
25	Lower Kopli APGCL 2x55+2x2.5+1x5= 120 MW Broad Features: Dam: Conc. Gravity HRT- Circular, 7m dia, 3.64Km long. Power House- Surface Turbine- VF. Switchyard: 220 Kv. Cost: Original:1115.91 Latest:1795 Contractors Civil: L&T	Assam 2023-24 2024-25 (Oct'25)	Dam excavation: 100% Dam concrete: 56.4% Intake StructurConcrete: 57% HRT: Concrete: 75% Overall Physical progress – 70.70%	
26	Chanju-III H.P. Power Corpn. Ltd. Clearance: 14.07.2015 3x16= 48 MW	<u>H.P.</u> 2027-28 2027-28	Initial stage of contruction Civil Works – 3.8% completed. Overall Physical Progress:-11.34%	

	Broad Features: HRT- D shape, 5090m long. Power House- Under ground Turbine- Vertical shaft Pelton Cost: Original: 418.57 Latest: 418.57 Contractors Civil & HM: MFB- ACNC (JV) E&M:	(Jul'27)		
27	Lakhwar Multipurpose Project (UJVNL) Clearance: 23.12.2021 3x100= 300 MW Cost: Original: 5747.17. Latest: 5747.17	Uttara khand 2028-29 2028-29 (Oct'28)	Letter of Acceptance (LOA) has been issued to M/s L&T Limited for the work of "Balance civil works for Construction of 204m high concrete gravity dam, Intake, (3X100 MW) capacity underground Power House and appurtenant works on river Yamuna of Lakhwar Multipurpose Project in District-Dehradun/Tehri Garhwal (Uttarakhand)" on 01.02.2023. Overall Physical Progress:-9.20%	
С	Private Sector			
28	Tidong-I M/s Statkraft India Pvt. Ltd. 3x50 = 150 MW 28.07.2006 Broad Features: HRT-D-3.5m L-8461 m P.H. Surface Turbine -Vertical Pelton Cost: Original 543.15 Latest 1850 Contractors Civil &HM: SCL Infratech / Himalaya E&M: Alstom	H.P. 2021-22(New Developer) 2024-25 (Oct'25)	M/s Statkraft India Pvt Ltd has acquired the 100% equity of the project on 04.09.2018 River Diversion Works: Excavation completed and 32144/37159 cum concreting completed. Head Works: Head works for the project are nearing 99.34% completed. HRT (8409m): HRT Excavation completed. 8409/8409 m lining completed. Surge Shaft: Surge shaft Excavation completed & Lining (24 m) out of 89m 34% completed. Pressure Shaft: Pressure Shaft excavation completed (1.4 km). 471.77m out of 1388m lining has been completed. Powerhouse (Surface) & Tail-race Channel (4 m wide open channel, 50 m long): Power House external building construction completed. Overall, 99.3% Power House civil works has been completed. E&M Works: 100 MW, 100% works completed. 50 MW, 80% completed. T Line – 71.2% completed. Overall physical progress achieved is 94.76%.	- Pressure shaft &Transmission Line critical.

29	Kutehr	<u>H.P.</u>	Civil works, HM works and E&M works	-
	M/s JSW Energy (Kutehr)		awarded on 20.10.2019, 19.09.2019 and	
	Ltd.	<u>2024-25</u>	13.02.2020 respectively. River diversion was	
	3x80 = 240 MW	2025-26	achieved on 25.01.2020.	
	31.08.2010	(Apr'25)	Barrage (27m high): Concreting of Upstream	
	Broad Features:		keys & Apron floor(85m) completed.	
			Concrete of Left Half of barrage: 73704.60	
	Cost: <u>Original</u> : <u>1798.13</u>		cum completed out of 75000 cum.	
	Latest : 2879		HRT: Six out of Six Construction Adits to	
	<u>Contractors</u>		HRT completed,14566.35 m out of 14566.35 m	
	Civil &HM: M/s		of Head Race Tunnel 03 daylighted on	
	Angelique – PCC		27.10.2023 completed.	
	consortium, M/s MF		Civil Works: 37.8%	
	BumiGeotech Pvt. Ltd. &		E&M Works:12.7%	
	M/s. PES Engineers Pvt.		HM works: 10.8%,	
	Ltd.		Infrastructure Works: 14.6%	
	E&M : M/s Andritz Hydro		Miscellaneous:4.2%	
	Pvt Ltd.			
			Overall Physical Progress- 80.10%	

Part A.2 – Under Execution Pumped Storage Projects

	Name of Project	State	Broad Present Status / Critical Area	Remarks/
Sl.	Executing Agency	Comm. Sch.		Critical issues
No.	Date of CEA clearance /	(original/		
	Approval	Now Ant.		
	Capacity (MW)			
	Broad Features			
	Cost (original/latest)			
	In Rs. Crores.			
A	Central Sector			
	THDC, 18.7.06 Nov-11 (Revised CCEA) 4x250=1000 MW Broad Features: Surge Shaft: U/s – 2 nos. D/s – 2 nos Power House: U/G TRT: 2, Dia 9m and Lenghth 1070m & 1160m Turbine: VF reversible pump turbine Cost: Original: 1657.60 Latest:6439.60 (Oct-22PL)	2010-11 2024-25 (Dec'24)	advanced stage after successful boxing-up. Unit readiness for synchronization is likely by July'24. Unit-2: Boxing up successfully completed on 26.12.2023. Unit readiness for synchronization is likely by Aug'24. Unit-3: Rotor lowering successfully completed on 08.03.2024. Unit readiness for synchronization is likely by Sept'24. Unit-4: Runner and stator have been lowered. Rotor assembly is in progress in service bay. Unit readiness for synchronization is likely by Oct'24. Civil & Hydro-mechanical Works: Upstream Surge Shaft- 1 & 2 USSS-01 Lining has been completed. Lining in USSS-02 is likely to be completed by Jul'24.	-
	Contractors Turnkey: Alstom, France/ HCC		Tail Race Tunnels- 1 & 2 (2406 m): Concrete lining and Grouting have been completed Dismantling the flood protection wall and accomplish river joining works: Dismantling of flood protection wall and river joining works completed.	
A	State Sector			
2	Upper Sileru APGENCO 9x150 = 1350 MW 20.12.2022 Cost:	Andhra Pradesh 2028-29 (Feb'29)	Project is in initial stage of construction	

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Cost: Original: 6465.22 Latest: 6465.22 Contractors E&M: M/s Andritz Civil: M/s Megha	 segment, stay ring of unit 1 to 4 completed. Stator & Rotor service way from unit 1&2 in progress. Generator Components: 90% delivered to site Turbine components: 40% delivered to site, majority of balance material being assembled directly at Andritz workshop, 1 unit is ready for dispatch All Draft Tubes delivered to site Stay ring for all Units delivered to site. Turbine Shafts: 5 Units delivered to site. Spiral case segments: All Units delivered to 	
	• Spiral case segments: All Units delivered to site.	

Part B – Held up

	Name of Project	State	Broad Present Status / Critical Area
Sl.	Executing Agency	Comm.	
No.	Date of CEA clearance /	<u>Sch.</u>	
	Approval	(original/	
	Capacity (MW)	Now Ant.	
	Broad Features		
	Cost (original/latest)		
	In Rs. Crores.		
Α	Central Sector		
1	Lata Tapovan,		Construction work stopped vide Hon'ble Supreme
	NTPC	<u>Uttara</u>	Court order dated 7.5.14.
	Aug-2012	<u>khand</u>	
	3x57= 171 MW	<u>2017-18</u>	•Since then, various hearings had been held but the
	Broad Features:	2028-29	matter is yet to be concluded. Last hearing was held on
	Barrage-14 bays of 11m each	(Subject to	22.08.2022, wherein Hon'ble Supreme Court issued the
	HRT- 7.51 Km, 4.7m dia	re-start of	order for listing the matter on 11.10.2022. Matter is likely
	P.House- underground	works)	to be listed on 17.01.2024.
	Turbine- V.Francis		• Meanwhile, M/s L&T have raised claims of nearly Rs
	Cost: <u>Original</u> : <u>1527.00</u>		336 Cr for disruption to Civil & HM Package awarded to
	Latest: 1801.07		them. The dispute pertaining to the claim was under
	Contractors		arbitration. Award for the same has been passed by Ld.
	Civil & HM : L&T		Arbitral Tribunal on 20.05.2022. The award has been
	<u>E&M : BHEL</u>		challenged by both parties in the Hon'ble High Court of
			Delhi. Next hearing listed on 12.03.2024.
			• The contract of EM package, which was awarded to
			BHEL has been fore-closed on 28.07.2021.
			Matter is sub-judice. Infrastructure works almost
			completed. Hon'ble SC stayed construction of 24 HE
			projects in Uttarakhand including Lata Tapovan.
			Project is likely to be commissioned 4 years after restart
			of works. Work stalled since May, 2014.
В	State Sector		
2	Lower Kalnai	UT of J&K	- Works on all fronts at Dam and Power House site
	JKSPDC	2017-18	are stalled since the contract has been terminated
1	16.08.2013	(Commissi	by JK Govt. order no. 115-PDD of 2019 dated
1	2x24= 48 MW	oning	08.06.2019. The Balance Work stands tendered out
1	Broad Features:	Subject to	by JKSPDC in EPC mode vide E-NIT on
1	Dam: 110m Span, 49m High	re-start of	24.03.2022. Technical evaluation of the bids is
	HRT: D Shape, 3960m long, 4m	works)	completed and financial bids are slated to be
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	Surge Shaft: 14m Dia Power House- 55x23.45x32.4 Cost: Original: 576.87 Latest 576.87 Contractors Civil: Coastal E&M: GE		opened .Project is likely to be commissioned 4 years after restart of works.
3	Koyna Left Bank PSS WRD, Mah. 20.02.2004 2x40 = 80 MW Broad Features: Water from the existing ShivajiSagar Lake (Koyna reservoir) is to be utilized for generation. Intake Tunnel: Dia – 7.20 M Length – 235.5 M (including Lake tap) HRT: Dia – 7.20 M Length – 80 M Penstock – 2 nos ,Dia – 2.9M Length – 10 M each P.House – Underground Turbine – Reversible Cost: Original: 245.02 Latest:1403.77 Contractors Civil &HM: BT Patil – Malaxmi JV / Patel E&M: LitostrojSlovania&Koncar, Croatia	Maharashtr a 2014-15 2027-28 (Subject to re-start of works)	Project stalled since July, 2015. The current expenditure on the project has already reached to almost original administrative approved cost level. The proposal for execution with various options (By WRD/ Through BOT/By MSPGCL in collaboration with WRD) is under process. Project is likely to be commissioned 4 years after restart of works.
С	Private Sector		
4	Tangnu Romai-I M/s Tangnu Romai Power generation 2x22= 44 MW 30.11.2007 (TEC by HPSEB) Broad Features: Barrage at EL ± 2555 m HRT-3.1m dia& 7.220 km length Surge Shaft- 5m dia, Top Level 2570 m & Bottom Level 2520 m Penstock- 2 m dia& 609.3 m length P.House- Surface Turbine – Vertical Francis Cost: Original:255.00 Latest:641.89 Contractors Civil & HM : Sai Urja E&M : Andritz	H.P. 2014-15 (Subject to re-start of works)	Works on hold since Aug 2016. Funds constraints with the developer. Project is likely to be commissioned 4 years after restart of works.
5	Phata Byung M/s Statkraft India pvt ltd 23.03.2023 2x38 MW = 76 MW Broad Features: Dam - 26m high HRT- 3.2 m dia&	Uttara khand 2012-13 (Subject to re-start of works)	- Works severely affected due to flash floods in June, 2013 Works stalled since July, 2017 due to Financial crunch with the contractor / developer. The company is undergoing a corporate insolvency resolution process initiated under IBC for resolution and revival of the project since June 2020. Under this process, the

	9.38 km length Turbine – Frances Cost: Original: 520.00 Latest: 1132 Contractors Civil: Lanco HM: Cimmco E&M: Alstom		resolution professional appointed by the NCLT initiated the process for inviting prospective investors for the project. On 25.02.2022, the CoC approved the Final Statkraft IH Holding AS Resolution Plan by a majority of 100%. The Resolution Professional has filed for approval of the resolution Plan Application before the Hon'ble NCLT. The Allahabad bench of the National Company Law Tribunal approved the resolution. According to the resolution plan, Statkraft will pay a total of ₹180 crore including ₹149.61 crore to secured financial creditors within 90 days of approval of the resolution plan and ₹27.8 crore towards meeting the payment for costs of the corporate insolvency resolution proceedings. Works stalled since July, 2017 due to Financial crunch.The project stands alloted to M/s Statkraft IH through NCLT on 23.03.2023. The revival of Environmental clearance is under process. Project is likely to be commissioned 2 years after restart of works.
6	Maheshwar, SMHPCL 30 12 96/29.9.2006 (FC) 10x40= 400 MW Broad Features: Dam-35m High, concrete gravity P.Shaft-10x7.82m x 52m P.House - Surface Turbine- Kaplan Cost: Original: 1569.27 Latest: 8121.00 Contractors Civil & HM : Sew E&M : BHEL	M. P. 2001-02 (Subject to re-start of works)	Matter is sub-judice. Works suspended since Nov-11 due to cash flow problem with developer. M.P. Power Management Company Ltd. has terminated the Power Purchase Agreement with SMHPCL on 18.04.2020. The application of PFC has been admitted in NCLT on 27.09.2022 under IBC. CIRP has been put on hold by NCLT vide order dated 17.03.2023 in an application filed by Entegra Ltd. PFC has filed an Appeal before the NCLAT against the NCLT Order dated 17.03.2023 for recommencement of CIRP.Project is likely to be commissioned 2 years after restart of works
7	Bhasmey Gati Infrastructure 2x25.5= 51 MW Broad Features: Dam-33.2m High, Symmetrical gravity HRT-5.3m dia&5.132 km length, Circular. Surge Shaft- 89.8m Hight& 14m dia. P.House-Outdoor Turbine-VF TRT-2 Nos, L-50m Swityard-132/11 KV Cost: Original: 408.50 Latest: 746.01 Contractors Civil: Simplex E&M: Voith	Sikkim 2012-13 (Subject to re-start of works)	- Matter is sub-judice. The Court appointed Resolution Professional for Bhasmey HEP stated that works stalled since Sept., 2016. CIRP has been initiated against Gati infra and NCLT has appointed Resolution Professional .The Resolution Professional has received 4 Resolution Plan in the matter of Gati Infrastructure Bhasmey Power Private Limited and are pending for approval from the Committee of Creditors. Project is likely to be commissioned 4 years after restart of works.
8	Rangit-II Sikkim Hydro Power Limited 10.02.2010 2x33= 66 MW	Sikkim 2015-16 (Subject	Works stalled since Dec., 2017. Funds constraints with the developer. Project is likely to be commissioned 3 years after restart of works

		•	
	Broad Features: Dam-47m High, Concrete Gravity HRT-3.9m dia&4.745 km length, Surge Shaft- 65.5m High & 10m dia. Underground Pressure Shaft: 1.7 m dia& 2.5 km length. P.House-Outdoor Turbine- Pelton Vertical Swityard- GIS, 132/11KV Cost: Original: 496.44 Latest: 496.44 Contractors Civil &HM: Coastal E&M: Gammon	to re-start of works)	
9	Panan Himagiri Hydro Energy Pvt. Ltd. 07.03.2011 4x75= 300 MW Broad Features: Dam-115m from deepest foundation level Desilting Chambers: Underground, 2 Size (14Lx22Wx2.5H) HRT- modified horse shoe, 6 m dia& 9549m length, Surge Shaft- 102 m High & 15m dia. Pressure Shaft: 2/4, 3.4/2.4m dia, 707.4 m- Long P.House-Surface Turbine-Vertical Francis Cost: Original: 1833.05 Latest: 2675.00 Contractors Civil: Essar	Sikkim 2018-19 (Subject to re- start of works)	Accessibility to Project site. The permanent bridge over Mantam Lake for accessibility to Dam site is being constructed by Roads and Bridges Department Govt. of Sikkim which is likely to be completed by 2026. The Financial Institutes are awaiting for completion of bridge, thereafter the process of financing the project can start. Project is likely to be commissioned 5 years after restart of works.

Chapter-6.1
Financial Status of Under Construction H.E.Ps

Sl.	Name of project/ State	G .	Benefits	Cost	Ant .Cost.	Cost	Actual Expend. During FY2022-	Total Expend. (till Mar'202	Actual Expend. During FY2023-	Total Expenditur e upto (Mar'24)	Actual Expend. During FY2024-	Total Expenditure upto (Jun'24)																				
No.		(MW)	(MW)			Overrun																					23 (till Mar'2023)	3)	24 (till Mar'24)	, ,	25 (till Jun'24)	
				(PL)	(PL)																											
	Under Execution	1	_	<u>_</u>	_	-																										
	Central Sector																															
1	Pakal Dul (CVPPL)	4x250	1000	8112.12	8112.12	_	698.42	2922.28	1155.52	4077.8	404.15	4481.95																				
	J&K			(03/2013)	(03/2013)																											
2	Parbati - II(NHPC)	4x200	800	3919.59	11134.54	7214.95	833.94	10430.45	696.22	11126.67	492.62	11619.29																				
	H.P.			(12/2001)	(07/2022)																											
3	Tapovan Vishnugad (NTPC)	4x130	520	2978.48	7700.00	4721.52	512.13	5804.56	493.82	6298.38	30.34	6328.72																				
	Uttarakhand			(03/2004)	(4th Qtr/2022)																											
4	Vishnugad Pipalkoti (THDC)	4x111	444	2491.58	3860.35	1368.77	534.70	2989.05	520.14	3509.19	317.55	3826.74																				
	Uttarakhand			(03/2008)	(02/2019)																											

5	Ramam-III (NTPC)	3x40	120	1381.84	1381.84	0	96.06	871.04	171.20	1042.24	0.00	1042.24
	West Bengal			09/2014	09/2014							
6	Subansiri Lower (NHPC)	8x250	2000	6285.33	19992.43	13707.1	2603.69	18110.09	2723.79	20833.88	629.22	21463.1
	Ar. Pradesh/Assa m			(12/2002)	(01/2020)							
7	Teesta St. VI (NHPC)	4x125	500	5748.04	5748.04	_	877.84	2318.34	1125.93	3444.27	136.45	3580.72
	Sikkim			(07/2018)	(07/2018)							
8	Ratle (NHPC)	4x205 + 1x30	850	5281.94	5281.94	0	152.38	162.74	485.26	648	72.54	720.54
	J&K			(11/2018)	(11/2018)							
9	Kiru (CVPPL)	4x156	624	4287.59	4287.59		292.40	1000.00	637.18	1637.18	-33.24	1603.94
	J&K			(07/2018)	(07/2018)							
10	Luhri-I	2x80+2x 25	210	1810.56	1810.56		448.60	1093.79	336.15	1429.94	52.08	1482.02
	H.P.			(05/2020)	(05/2020)							
11	Rangit-IV (NHPC)	3x40	120	726.16	938.29	212.13	347.17	556.60	450.33	1006.93	128.07	1135
	Sikkim			(2011-12)	(10/2019)							
12	Dhaulasidh (SJVN)	2x33	66	688	688		152.63	379.52	212.14	591.66	60.27	651.93
	Himachal Pradesh			(05/2020)	(05/2020)							
13	Kwar (CVPPPL)	4x135	540	4526.12	4526.12		245.38	381.55	210.86	592.41	67.63	660.04
				(09/2020)	(09/2020)							
14	Dibang (NHPC)	12x240	2880	31876.39	31876.39		91.16	2091.30	215.99	2307.29	138.71	2446
				(05/2021)	(05/2021)							

	Sunni Dam	4x73										
15	(SJVN)	+1x72+1 x17	382	2614.51	2614.51	Nil	178.62	444.61	231.65	676.26	18.81	695.07
13		A17		(03/2021)	(03/2021)			444.01	231.03	070.20	10.01	033.07
A	Sub Total: Central Sector		11056.00	82728.22	109952.72		8999.90	49555.92	9666.18	59222.1	2515.20	61737.3
	State Sector											
16	Parnai	3x12.5	37.50	640.86	640.86	_	62.82	350.07	53.06	403.13	0.00	403.13
	J&K			(NA)	(NA)							
17	Uhl-III	3x33.33	100	431.56	2400	1968.44	336.35	2487.26	274.74	2762	0.00	2762
	H.P.			(09/2002)								
18	Shontong Karcham	3x150	450	2807.83	2807.83	-	189.63	1892.14	193.34	2085.48	0.00	2085.48
	H.P.			(07/2011)	(07/2011)							
19	Shahpurkandi #	3x33+3x 33+1x8	206	1835.50	2368.55	533.05	427.28	2226.40	373.06	2599.46	0.00	2599.46
	Punjab			(4/2008)	(2/2018)							
20	Polavaram HEP (PPA)	12x80	960	3013.68	5338.95	2325.27	230.11	884.89	451.12	1336.01	0.00	1336.01
	Andhra Pradesh			(2010-11)	(2016-17)							
21	Pallivasal (KSEB)	2x30	60	222	550	328	63.66	500.42	46.84	547.26	0.00	547.26
	Kerala			(1999)	(2018)							
22	Thottiyar (KSEB)	1x30 +	40	136.79	280	143.21	30.86	165.82	14.82	180.639	0.00	180.639
	Kerala	1x10		(2007)	(2018)							
23	Lower Kopili	2x55+2x2. 5+1x5	120	1116	1795		2.00	808.93	476.05	1284.98	0.00	1284.98
	Assam				(2021)							
24	Mankulam	2x20	40	600	600		104.38	104.38	25.08	129.46	0.00	129.46
	Kerala(KSEB)			(2016)	(2016)							

25	Chanju-III (HPPCL)	3x16	48.00	418.57	418.57			45.41	34.01	79.42	0.00	79.42
	H.P.											
26	Lakhwar Multipurpose Project (UJVNL)	3x100	300.00	5747.17	5747.17			438.46	110.63	549.09	0.00	549.09
	Uttarakhand											
27	Lower Sileru Extension	2x115	230.00	571	571				101.25	101.25	0.00	101.25
	Andhra Pradesh			(20-21)	(20-21)							
В	Sub-total: State Sector		2591.50	17540.96	23517.93		2374.40	11308.32	2463.81	13772.133	0.00	13772.133
	Private Sector											
28	Tidong-I	3x50	150	543.15	1850.00	_	257.00	1431.50	474.16	1905.66	0.00	1905.66
	H.P.			(06/2018)	(06/2018)							
29	Kutehr (JSW Energy (Kutehr)Ltd.	3x80	240.00	1798.13	1798.13		427.22	1579.49	525.28	2104.77	0.00	2104.77
	H.P.			(09/2011)	(09/2011)							
С	Sub-total: Private Sector		390.00	8806.50	3648.13		4341.56	8400.68	2684.15	11084.83	0.00	11084.83
	Total : (Hydro)		14,037.50	1,09,075.68	1,37,118.78	32522.44	15,715.86	69264.92	14814.14	84079.063	2515.20	86594.263
	PSP											
1	Tehri PSP (THDC),	4x250	1000	1657.60	6439.60	4782	792.97	5290.75	996.30	6287.05	275.84	6562.89
	Uttarakhand			(12/2005)	(10/2022)							
2	Pinnapuram (Greenko)	4x240+2 x120	1200.00	6465.22	6465.22		3657.34	5289.26	3606.00	8895.26	0.00	8895.26
				2021	2021							

	Kundah											
3	Pumped	4x125	500.00	1216.59	3401	2184.41	927.31					
	Storage-I							1404.14	930.24	2334.38	0.00	2334.38
	Tamil Nadu /											
	(TANGENDC			(2007-08)	(2014)							
	O)											
4	Upper Sileru	9*150	1350.00	12264.36	11148.51							
	Andhra				9/2022							
	Pradesh			'9/2022	9/2022							
	Sub-total:											
	PSP		4050	21603.77	27454.33	6966.41	5377.62	11984.15	5532.54	17516.69	275.84	17792.53
	Total : (Hydro	o + PSP)	18,087.50	130679.45	164573.11	39488.85	164573.11	81249.07	20346.68	101595.75	2791.04	104386.79

Chapter-6.2

Financial Status of H.E.Ps-Held up

SI.	Name of project/ State	Capacity	Benefits	Cost	Ant .Cost.	Cost	Actual Expend. During FY2022-23	Total Expend. (till Mar'2023)	Actual Expend. During FY2023-24	Total Expenditure upto (Mar'24)
No.		(MW)	(MW)			Overrun	(till Mar'2023)		(till Mar'24)	
				(PL)	(PL)					
	Under Execution	_	<u> </u>	_	<u>-</u>	-				
	<u>Central Sector</u>									
1	Lata Tapovan(NTPC)	3x57	171	1527.00	1527.00	0		149.93	0.00	149.93
	Uttarakhand			(07/2012)	(07/2012)					
A	Sub Total: Central Sector		12287.00	1527.00	1527.00		8999.90	149.93	0.00	149.93
	State Sector									
2	Lower Kalnai	2x24	48	576.87	576.87	_	0		0.00	
	J&K			(NA)	(NA)					
3	Koyna Left bank PSS	2x40	80	245.02	379.78	134.76	0.00		0.00	
	Maharashtra			(1999)	(2014)					
В	Sub-total: State Sector		128.00	821.89	956.65		2374.40	11308.32	2463.81	13772.133
	Private Sector									
4	Tangnu Romai- I	2x22	44	255.00	641.89	386.89			0.00	
	H.P.			(1/2007)	(2018)					
5	Phata Byung	2x38	76	520.00	1132.00	612			0.00	
	Uttarakhand			(2013-14)	(9/2016)					

6	Maheshwar	10x40	400	1569.27	6793.00	5223.73			0.00	
	M.P.			(1996-97)	(2016-17)					
7	Bhasmey	2x25.5	51	408.50	746.01	337.51			0.00	
	Sikkim			(2012-13)	(03/2018)					
8	Rangit- II	2x33	66	496.44	496.44	_			0.00	
	Sikkim			(2011-12)	(2011-12)					
9	Panan	4x75	300	1833.05	2671.00	837.95	100.38	100.43	-100.43	
	Sikkim			(2009)	(2018)					
С	Sub-total: Private Sector		937.00	5082.26	12480.34		100.38	8400.68	2684.15	11084.83
	Total : (Under Execution):		13,352.00	7,431.15	14,963.99	7532.84	11,474.68	19858.93	5147.96	25006.893

Chapter 7.1
Status of Environmental and Forest Clearance of Under Construction Hydro Electric Projects

						Date of	Date of	
Sl.	Name of	State	I.C.	Benefits	Date of	Env.	Forest	Date of
No.	Project	State	(No.xMW)	(MW)	C Clearance	clearance	Clearance	I. Approval
1100	110,000		(11001111111111111111111111111111111111	(2.2 , ,)		0.00.1	0104141100	zvizppio vuz
I	Central Sector							
1	Pakal Dul				03.10.06	12.07.12	15.12.15	28.10.14
1	(CVPPL)	J&K	4x250	1000	03.10.00	12.07.12	13.12.13	20.10.14
2	Parbati-II (NHPC)	H.P.	2x400	800.00	03.01.01	04.06.01	04.09.2001	11.09.02
	Tehri PSS				10.10.88	19.07.90	04.06.87	18.07.06
3	(THDC)	Utt.	4x250	1000.00				
	Tapovan				11.08.04	08.02.05	22.04.06	28.11.2006
	Vishnugad			520.00				
4	(NTPC)	Utt.	4x130		00/2005	22.00.05	20.07.12	21.00.00
5	Vishnugad	Utt.	4x111	444.00	09/2006	22.08.07	28.05.13	21.08.08
3	Pipalkoti (THDC) Ramam-III	W.B.	3x40	120.00	12.09.06	17.08.07	18.10.08	10.09.14
6	(NTPC)	W.D.	3840	120.00	12.09.00	17.08.07	18.10.08	10.09.14
	Subansiri Lower	Ar.						
7	(NHPC)	Pr./Asm.	8x250	2000.00	13.01.03	16.07.03	24.06.2004	09.09.03
8	Teesta St. VI	Sikkim	4x125	500.00	27.12.2006	21.09.06	23.05.2008	08.03.2019
9	Ratle (NHPC)	J&K	4x205+1x30	850.00	19.12.2012	12.12.12	15.10.14	11.02.2021
10	Kiru (CVPPL)	J&K	4x156	624.00	13.06.2016	24.06.16	19.05.16	08.03.19
11	Rangit-IV	Sikkim	3x40	120.00	06.07.2007	16.05.07	26.12.07	30.03.2021
12	Luhri -I (SJVN)	H.P.	2x80+2x25	210.00	01.05.2018	17.03.2020	28.03.2019	20.11.2020
	Dhaulasidh			66.00				01 10 2020
13	(SJVN)	H.P.	2x33		25.06.2011	21.02.2013	11.08.2020	01.10.2020
	Dibang	Arunach		2880.00	18.09.2017	19.05.2015	12.03.2020	27.02.2023
	Multipurpose	al						
14	Project (NHPC)	Pradesh	12x240	202.00				
	Sunni Dam		4x73+1x73+1	382.00				04.01.2023
15	(SJVN)	HP	x17		11.02.2021	04.02.2022	23.08.2022	
16	Kwar (CVPPPL)	J&K	4x135	540.00	23.02.2017	10.04.2017	08.08.2014	11.05.2022
	Sub-total	(Central Se	ector):	12056.00				
II	State Sector							
17	Parnai (JKSPDC)	J&K	3x12.5	37.50	11.12.1992	24.12.2010	17.05.2013	25.10.2013
18	Uhl-III	H.P.	3x33.33	100.00	19.09.02	15.11.02	20.12.02	26.09.03
	Shongtong	H.P.	3x150	450.00	16.8.12	19.05.11	22.03.11	-
19	Karcham							
	Shahpurkandi	Punjab	3x33+3x33+1	206.00	08/2009	18.11.81	Not Reqd.	04.05.11
20		3	x8					
21	Indrasagar	Andhra	12x80	960.00	21.07.2010	20.07.10	21.07.10	25.02.00
21	Polavaram (PPA)	Pr.				28.07.10	21.07.10	25.02.09
22	Pallivasal Extn.	Kerala	2x30	60.00	31.01.07	Not Reqd.	11.07.07	31.01.07
23	Thottiyar	Kerala	1x30 + 1x10	40.00	05.06.08	Not Reqd.	11.07.07	05.06.08
	Kundah Pumped	Tamil	4x125	500.00	15.02.18	08.05.07	27.11.08	03.12.08
	Storage-I	Nadu						
24	(TANGENDCO)	A	0.55.0.05.1	100.00	24.07.16	04.00.2010	04.12.2020	01.00.2020
25	Lower Kopli	Assam	2x55+2x2.5+1	120.00	24.05.16	04.09.2019	04.12.2020	01.09.2020
23	(APGCL) Chanju-III		x5			29.09.2017	11.10.2019	
26	(HPPCL)	H.P.	3x16	48	14.07.2015	29.09.201/	11.10.2019	
	Mankulam	Kerala	2 x 20	40.00	03.03.2022	Not	11.07.2007	03.03.2022
27	(KSEB)					required		
27	(KSEB)					required		

	Lakhwar	Uttarakh	3x100	300.00	14.12.2012	02.02.2021	31.01.2014	23.12.2021
	Multipurpose	and						
28	Project (UJVNL)							
	Lower Sileru	Andhra	2x115	230.00	Not	24.04.2023	04.08.2022	24.08.2020
	Extension	Pradesh			required			
29								
	Upper Sileru	Andhra	9x150	1350.00	13.06.2023	Pending	Pending	
20	(APGENCO)	Pradesh						
30								
	Sub-tota	al (State Sec	tor):	4441.50				
III	Private Sector							
31	Private Sector Tidong-I	H.P.	3X50	150.00	-	18.06.08	18.06.08	23.07.07
		H.P. H.P.	3X50 3x80	150.00 240.00	-	18.06.08 05.07.11	18.06.08 19.02.13	23.07.07 31.03.10
31	Tidong-I				20.04.22			
31	Tidong-I Kutehr		3x80	240.00	20.04.22	05.07.11	19.02.13	
31	Tidong-I Kutehr Pinnapuram	H.P.	3x80	240.00	20.04.22	05.07.11 14-07-	19.02.13 23-04-	
31	Tidong-I Kutehr Pinnapuram (Greenko AP01	H.P.	3x80	240.00	20.04.22	05.07.11 14-07-	19.02.13 23-04- 2020	
31	Tidong-I Kutehr Pinnapuram (Greenko AP01 IREP Private Ltd)	H.P.	3x80 4x240+2x120	240.00	20.04.22	05.07.11 14-07-	19.02.13 23-04- 2020	

Chapter 7.2

				Chapte	1 / .4			
	Statu	ıs of Environn	nental and Fo	rest Cleara	nce of Hydro	Electric Pro	jects-Held up	
Sl. No.	Name of Project	State	I.C. (No.xMW)	Benefits (MW)	Date of TEC Clearance	Date of Env. Clearance	Date of Forest clearance	Date of I. Approval
I	Central Sector							
1	Lata Tapovan (NTPC)	Utt.	3x57	171.00	08.02.06	21.02.07	30.04.07	01.08.12
	Sub-tot	tal (Central Se	ctor):	171.00				
II	State Sector							
2	Lower Kalnai (JKSPDC)	J&K	2x24	48.00	16.08.2013	22.08.2014		16.08.2013
3	Koyna Left Bank PSS	Mah.	2x40	80.00	-	16.05.07	Not Reqd.	20.02.04
	Sub-te	otal (State Sec	tor):	128.00				
III	Private Sector							
4	Tangnu Romai- I	H.P.	2x22	44.00	-	01.05.09	19.01.10	30.11.07
5	Phata Byung	Uttarakhand	2x38	76.00	-	01.05.09	-	30.11.07
6	Maheshwar	M.P.	10x40	400.00	-	07.01.94	Not Reqd.	29.09.06
7	Bhasmey	Sikkim	2x25.5	51.00	-	15.05.07	13.09.10	-
8	Rangit- II	Sikkim	2x33	66.00	-	16.04.10	22.10.10	10.2.10
9	Panan	Sikkim	4x75	300.00	ı	02.01.07	21.09.10	07.03.11
	Sub-to	tal (Private Se	ctor):	937.00				
	T	1236.00						

Chapter 8.1(a)

Status of Civil Package Award (First Package) of Under Construction Hydro Electric Projects

Sl.	Name of Project	State	Capacity	Benefits	Date of CCEA/	Date of letter
No.			(MW)		Investment	of award
	Central Sector					
1	Pakal Dul(CVPPL)	J&K	4x250	1000.00	28.10.14	21.02.2018
2	Parbati-II (NHPC)	H.P.	4x200	800.00	11.09.02	11.09.2002
3	Tehri PSP	Uttarakhand	4x250	1000.00	18.07.06	23.06.2011
4	Tapovan Vishnugad (NTPC)	Uttarakhand	4x130	520.00	16.11.2006	28.11.2006
5	Vishnugad Pipalkoti (THDC)	Uttarakhand	4x111	444.00	21.08.08	17.01.2014
6	Ramam-III	W.B.	3x40	120.00	10.9.14	10.09.2014
7	Subansiri Lower (NHPC)	Ar.Pr./ Assam	8x250	2000.00	09.09.03	19.12.2003
8	Teesta St. VI	Sikkim	4x125	500.00	08.03.19	31.03.2020
9	Ratle (NHPC)	J&K	4x205+1x30	850.00	11.02.2021	18.01.2022
10	Kiru (CVPPL)	J&K	4x156	624.00	08.03.2019	24.02.2020
11	Rangit-IV	Sikkim	3x40	120.00	30.03.2021	27.08.2021
12	Luhri -I (SJVN)	H.P.	2x80+2x2	210.00	20.11.20	24.11.2020
13	Dhaulasidh (SJVN)	H.P.	2x33	66.00	01.10.2020	06.05.2021
14	Dibang (NHPC)	Arunachal Pradesh	12x240	2880.00	27.02.2023	27.02.2023
15	Sunni Dam (SJVN)	H.P.	4x73+1x73+1x17	382.00		
16	Kwar (CVPPPL)	J&K	4x135	540.00	11.05.2022	11.05.2022
	Sub-total (Central Sector):			12056.00		
	State Sector					
17	Parnai (JKSPDC)	J&K	3x12.5	37.50	21.10.2013	25.10.2013
18	Uhl-III	H.P.	3x33.33	100.00	19.09.02	02.04.2003
19	Shongton Karcham	H.P.	3x150	450.00	16.08.12	04.08.2012
20	Shahpurkandi	Punjab	3x33+3x33+1x8	206.00	04.05.11	11.02.2013
21	Indrasagar Polavaram (PPA)	Andhra Pr.	12x80	960.00	21.02.2012	20.12.2017
22	Pallivasal	Kerala	2x30	60.00	31.08.07	31.01.2007
23	Thottiyar	Kerala	1x30 + 1x10	40.00	05.06.08	22.12.2008
23	Kundah Pumped Storage-I	Tamil Nadu	4x125	500.00		15.02.2018
24	(TANGENDCO)	1 411111 1 (4444	20		03.12.08	10.02.2010
25	Lower Kopli (APGCL)	Assam	2x55+2x2.5+1x5	120.00	01.09.2020	21.08.2020
26	Chanju-III (HPPCL)	H.P.	3x16	48.00	14.07.2015	07.10.2022
27	Mankulam (KSEB)	Kerala	2 x 20	40.00	03.03.2022	03.03.2022
28	Lakhwar Multipurpose Project (UJVNL)	Uttarakhand	3x100	300.00	23.12.2021	01.02.2023
29	Lower Sileru Extension	Andhra Pradesh	2x115	230.00	24.08.2020	24.08.2020

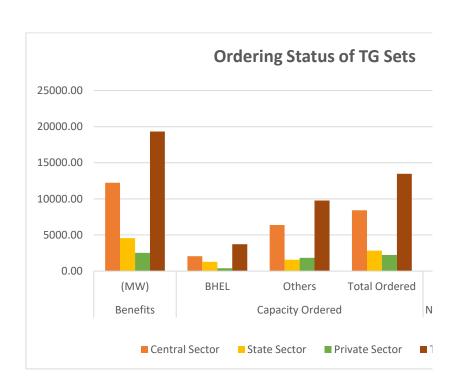
•	Upper Sileru (APGENCO)	Andhra	9x150	1350.00	13.06.2023	28.02.2024
30		Pradesh				
	Sub-total (State Sector):			4441.50		
	Private Sector					
31	Tidong-I	H.P.	3X150	150.00	23.07.07	07.11.2008
	Kutehr (JSW Energy	II D	3x80	240.00		20.10.2019
32	(Kutehr)Ltd.	H.P.			31.03.10	
	Pinnapuram (Greenko AP01	4 D	4x240+2x120	1200.00		:
33	IREP Private Ltd)	A.P.				21.05.2020
	Sub-total (Private Sector):			1590.00		
	Total - U	nder Execution:		18087.50		

Chapter 8.1(b)
Status of Civil Package Award (First Package) of Under Construction Hydro Electric Projects (held up)

Sl.	Name of Project	State	Capacity	Benefits	Date of CCEA/	Date of letter
No.			(MW)		Investment	of award
	Central Sector					
1	Lata Tapovan (NTPC)	Uttarakhand	3x57	171.00	08/2012	17.08.2012
	Sub-total (Central Sector):			171.00		
	State Sector					
2	Lower Kalnai (JKSPDC)	J&K	2x24	48.00	16.08.2013	12.09.2013
3	Koyna Left Bank PSS	Mah.	2x40	80.00	20.02.04	20.06.2007
	Sub-total (State Sector):			128.00		
	Private Sector					
4	Tangnu Romai- I	H.P.	2x22	44.00	2014-15	14.06.2010
5	Phata Byung	Uttarakhand	2x38	76.00	06.10.08	12.04.2008
6	Maheshwar	M.P.	10x40	400.00	30.12.96	20.02.1997
7	Bhasmey	Sikkim	2x25.5	51.00	Dec-08	12.04.2010
8	Rangit-II	Sikkim	2x33	66.00	10.02.10	24.10.2011
9	Panan	Sikkim	4x75	300.00	07.03.11	22.02.2014
	Sub-total (Private Sector):	•		937.00		
	Total - Under	Execution:		1236.00		

Chapter 8.2

	1				
Ordering Status of TG sets for U	nder Construction Hy	dro Elec	tric Proj	ects	
Summa	ry- Units Ordered				
Sector	Benefits	Ca	Not yet ordered		
	(MW)	BHEL	Others	Total Ordered	
Central Sector	12227.00	2055.00	6370.00	8425.00	3802.00
State Sector	4569.50	1266.00	1565.50	2831.50	1738.00
Private Sector	2527.00	400.00	1827.00	2227.00	300.00
Total: Under Execution	19323.5	3721.00	9762.50	13483.50	5840.00



Chapter 8.2

Ordering Status of TG sets of Under Construction Hydro Electric Projects

Sl. No.	Name of the Project/State	Capacity (No.x MW)	Benefits (MW)	Make/Supplier of TG set	Date of Order
A.	Central Sector				
	BHEL Units				
1	Parbati-II (NHPC),(H.P.	4x200	800.00	BHEL	24.12.02
2	Tapovan Vishnugad (NTPC), Utt.	4x130	520	BHEL	01/2008
3	Lata Tapovan, Uttarakhand	3x57	171	BHEL	12/2012
4	Vishnugad Pipalkoti (THDC)	4x111	444	BHEL	18.11.14
5	Ramam-III (NTPC)	3x40	120	BHEL	19.02.15
	Sub-total- BHEL		2055.00		
	Other Units				
6	Tehri PSP (THDC)	4x250	1000.00	Alstom, France	27.07.11
7	Subansiri Lower (NHPC), Ar. Pr.	8x250	2000.00	Alstom, France & India	11.02.05
8	Teesta St. VI, (Sikkim)	4x125	500.00	Alstom, India	04/2009
9	Pakal Dul(J&K)	4x250	1000.00	Voith Hydro Pvt. Ltd.	01/2019
10	Rangit-IV, (Sikkim)	3x40	120.00	Andritz Hydro, India	28.08.09
11	Kiru (CVPPL)	4x156	624.00	M/s Andritz Hydro Pvt. Ltd.	24.02.20
12	Luhri -I (SJVN)	2x80+2x25	210.00	Voith Hydro Pvt. Ltd.	16.07.21
13	Dhaulasidh (SJVN)	2x33	66.00	Voith Hydro Pvt. Ltd.	19.01.2022
14	Ratle (J&K)	4x205+1x30	850.00	M/s Megha Engineering & Infrastructures Limited	18.01.2022
	Sub-total- Others		6370.00		
	Sub-total (Central Sector):		8425.00		
В	State Sector				
	BHEL Units				
15	Uhl-III (H.P.) BVPCL	3x33.33	100.00	BHEL	15.02.07
16	Shahpurkandi, Punjab ; PSPCL	3x33+3x33+1x8	206.00	BHEL	28.02.14
17	Polavaram (PPA) Andhra Pr.	12x80	960.00	BHEL	30.03.21
	Sub-total- BHEL		1266.00		
	Chineese				
18	Pallivasal, Kerala ;KSEB	2x30	60.00	Dongfang Elec.Corp., China	31.01.07
19	Thottiyar, Kerala KSEB	1x30 + 1x10	40.00	Chongqing, China	22.12.08
	Sub-total- Chineese		100.00		
	OTHER UNITS				

	T			T	
20	Koyna Left Bank PSS, Maharashtra	2x40	80.00	IVRCL Ltd	16.12.10
21	Shontong Karcham, H.P.	3x150	450.00	Andritz Hydro, India	04.03.15
22	Parnai (JKSPDC) J&K	3x12.5	37.50	Andritz Hydro, India	-
23	Lower Kalnai (JKSPDC) J&K	2x24	48.00	GE Power India Pvt. Ltd.	-
24	Kundah Pumped Storage-I (Tamil Nadu)	4x125	500.00	Megha Engineering & Infrastructure Ltd.	28.11.2019
25	Lower Kopli (APGCL)	2x55+2x2.5+1x5	120.00	M/s ANDRITZ HYDRO Private Ltd	09.09.2021
26	Lower Sileru Extension	2x115	230.00	M/s Shirdi Sai Electricals & M/s PES Engineers Private Ltd	13.04.2022
	Sub-total- Others		1466		
	Sub-total (State Sector):		2831.50		
С	Private Sector				
	BHEL Units				
27	Maheshwar (M.P.)	4x100	400.00	BHEL	25.06.07
	Sub-total- BHEL		400		
	OTHER UNITS				
28	Tidong-I, (H.P.)	3X50	150.00	Alstom, India	28.02.11
29	Tangnu Romai- I, (H.P.)	2x22	44.00	Andritz Hydro, India	17.04.13
30	Phata Byung, (Uttarakhand)	76.00	76.00	Alstom, India	12.04.08
31	Bhasmey, (Sikkim)	2x25.5	51.00	Voith Hydro, India	14.04.10
32	Rangit-II, (Sikkim)	2x33	66.00	Gammon India Ltd.	24.03.12
33	Pinnapuram (Greenko)	4x240+2x120	1200.00	Andritz Hydro Pvt. Ltd., India	21.05.2020
34	Kutehr(HP)	3x80	240.00	Andritz Hydro Pvt. Ltd., India	13.02.20
	Sub-total- Others Sub-total (Private Sector): Under Execution Total (Units Ordered):		1827.00		
			2227.00		
			13483.50		
Units not yet ordered					
A	Central Sector				
35	Dibang Multipurpose Project (NHPC)	12x240	2880.00		
				·	

	T	T	I	
36	Sunni Dam (SJVN)	4x73+1x73+1x17	382.00	
37	Kwar (CVPPPL)	4x135	540.00	
	Sub-total (Central Sector):		3802.00	
В	State sector			
38	Chanju-III (HPPCL)	3x16	48.00	
39	Mankulam (KSEB)	2 x20	40.00	
40	Lakhwar Multipurpose Project (UJVNL)	3 x 100	300.00	
41	Upper Sileru PSP (APGENCO)	9x150	1350.00	
	Sub-total (State Sector):		1738.00	
С	Private Sector			
41	Panan, Sikkim	4x75	300.00	
	Sub-total (Private Sector):		300.00	
Total: (Units not yet ordered)			5840.00	
Total: Under execution			19323.50	

Chapter 8.3

Part - A
Status of the ordering of various packages for Under Construction Hydro Electric Projects

Sl. No.	Project name/ Exec. Agency CEA clearance/ Approval Capacity (MW)	State Region	Contract	Scope of works & brief details	Contracting Agency (Name & Location)	Contract value (Rs. Crs.)	Date of Contract (commenceme nt)/ Completion													
Under	Execution	T	1			I	1													
A Cen	tral Sector																			
1	Pakal Dul CVPPL 03.10.2006/ 28.10.2014	UT of J&K North Region	Civil works	Power House Package- Power House, Transformer Cavern, MIV cavern, Valve House, TRT, Pressure shaft, Surge Shaft and associated works.	M/s. Afcons-Jaiprakash Associates JV	1051.00	21.02.2018 20.12.2022													
	4x230 = 1000MW	FA230 -		Dam Pkg Diversion Tunnel works, Dam works, Spillways, and Part of HRT by DBM and associated works.	M/s Jaiprakash Associates	2853.00	21.06.2018 20.03.2023													
			E&M Works	Letter of Award Issued: Supply, Erection & commissioning of E&M components.	M/s. Voith Hydro Limited	703.63	02.01.2019 01.11.2023													
			H&M Works	Letter of Award Issued: Supply, Erection & commissioning of HM components.	M/s PES Engineers Pvt. Ltd	286.58	26.08.2019 25.06.2023													
			HRT-TBM	Letter of Award Issued- HRT by TBM	M/s L&T Ltd.	2575.63	03.07.2020 02-01-2025													
2	Parbati-II NHPC	Himach		Lot-1: Civil & HM works for Dam and Part HRT (0-3500m)	M/s Patel-SEW JV,	322.9	11.09.2002 13.08.2011 (revised)													
	12.10.1999/ 11.09.2002	Pradesh		Lot-2: Civil & HM works of HRT (3500-24733m)	M/s Himachal JV	419.89	11.09.2002 10.09.2007													
	4x200 = 800 MW	North		Contract terminated in March-12 and I	Fresh awarded as under.	<u> </u>	<u>I</u>													
		Region	Kegion	kegion	Kegion	Region	veâlon	kegion	Region		Lot-2A: Balance civil works of HRT by TBM	M/s Gammon-CMC JV, Mumbai	455.63	13.08.2013 27.01.2020 (revised)						
				Lot-2B: Balance civil works of HRT by DBM and associated HM works	M/s Valecha Engg. Ltd, Mumbai	176.30	21.11.2013 24.01.2018 (revised)													
			Civil works	*contract has been terminated on 22.12.2018																
				Lot 2C : Execution of 1500 m Head Race Tunnel by DBM	M/s Gammon Engineers Contractors Pvt Limited	211.64	02.06.2020 01.03.2023													
				Lot-3: Civil & HM works of Power House, Pressure Shaft, Surge Shaft & Part HRT (24733-31525)	M/s Gammon India Ltd.	603.69	13.09.2002 24.05.2016 (revised)													
				Lot-4: Jiwa Nallah Works	M/s BJ_Techno-HAS	56.47	11.09.2002 10.09.2007													
				Contract terminated and Fresh awarde	d as under:	-	•													

Sl. No.	Project name/ Exec. Agency CEA clearance/ Approval Capacity (MW)	State Region	Contract	Scope of works & brief details	Contracting Agency (Name & Location)	Contract value (Rs. Crs.)	Date of Contract (commenceme nt)/ Completion
				Lot-4A: Balance Civil & HM works of Jiwa Nallah and associated works *contract has been terminated on 25.05.2019	M/s Coastal Projects, Noida	78.34	22.06.2011 24.03.2015 (revised)
			E&M works	Generating Units, EOT Crane Main step up Transformers, Switch Yard and	M/s BHEL	354.44	24.12.2002 23.04.2007
				Electrical & Mechanical Auxiliaries	M/s BHEL	34.2	24.12.2002 23.04.2007
				Design, Manufacture, Supply, Erection , Testing & commg.	M/s BHEL	391.11	29.12.2006 02/2011
			H&M Works	Hydro-Mechanical Packages	M/s Patel-Sew JV	23.61	11.09.2002 13.08.2011 (revised)
3	Tehri PSS, THDC, 18.7.06 Nov-11 (Revised CCEA) 4x250=1000 MW	Uttara. khand NR	EPC/ Turnkey Contract	i. Planning, Design and Engg. ii. Civil works iii. Supply of EM & HM (off shore) iv. Supply of E&M and HM (on shore) E&M and HM services	Consortium of M/S Alstom Hydro France and Hindustan Construction Company with M/s Alstom Hydro, France as lead partner	Total in 1843.49 E&M equip:- Euro 62.92 million + 474.43 Cr.	23.06.2011 27.07.11 26.01.2016 (Commencem ent <u>Date</u>)
							U-1: 48 Mth. U-2: 50 Mth. U-3: 52 Mth. U-4: 54 mth. (from commenc.)
4	Tapovan Vishnugad NTPC	<u>Uttara.</u> khand		Construction of Barrage and De-silting chambers	M/s SSJV Projects Pvt. Ltd. and M/s ZVS, Russia	26915	01/2007 07/2012
	11.08.2004/	NR		Contract terminated in November-10 ar		ıly-12	
	Nov, 2006			Construction of Barrage and De-silting		457.57	07/2012
	4x130 = 520 MW		Civil works	chambers (Balance Works) Construction of HRT	Pvt. Ltd., Hyderabad. M/s L&T Ltd. and M/s Alpine Mayreder Bau GmbH	455.921	03/2015 11/2006 08/2012
			CIVII WOLKS	HRT contract terminated on 09.01.2014			
				Construction of HRT(Balance Works)	M/s HCC M/s Patel Engg. Pvt.	634.03 221.28 Cr.	03/2016 01/2019 05/2007
				Power House & Penstock package	Ltd.	+ Euro 37.58m	08/2012
			E&M works	Turbine generating units and associated auxiliaries	M/s BHEL	321.28 crs.	1/2008 12/12
			H&M works	Manufacturing, erection & Commissioning of various gates.	M/s Om Metal Infra project Ltd.	64.19 Cr. + €1.26m	10/07 09/12
			E&M Package		BHEL	2611.04	Dec, 12 June, 17

Sl. No.	Project name/ Exec. Agency CEA clearance/ Approval Capacity (MW)	State Region	Contract	Scope of works & brief details	Contracting Agency (Name & Location)	Contract value (Rs. Crs.)	Date of Contract (commenceme nt)/ Completion	
5	Vishnugad Pipalkoti, THDC	<u>Uttara</u>	Civil & HM works	EPC Contract	M/s HCC Ltd	1597.30	17.01.2014 16.07.2018	
	21.08.2008 4x111= 444 MW	khand <u>NR</u>	E&M Package	EPC Contract	BHEL	360.36	18.11.2014 17.11.2018	
6	Teesta-VI NHPC 08.03.2019/ 07/.2007(FC	<u>Sikkim</u> <u>NER</u>		Barrage, Desilting Basin, SFT, Intake part of HRT-I &HRT-II & other associated structure	M/s Jaiprakash Associate Limited	1710	31.03.2020	
) 4x125= 500MW		Civil works	Part of HRT-I &HRT-II , Surge Shaft, Power House ,TRT & other associated structure	M/s Patel Engineering Limited	1251	22.09.2021	
			H&M works		M/s PES Engineers Private Limited	INR 100.76 & EURO 17.5 lakhs	27.10.2021	
					E&M Package, EM-I	M/s GE Power India Ltd.	107.49	14.12.2020
				E&M Package, EM-II	M/s BHEL	150.10	04.09.2020	
				E&M Package, EM-III	M/s Technico India Pvt Ltd	3.98	22.09.2020	
			E&M works	E&M Package, EM-IV	M/s Jakson Ltd	3.07	1.10.2021	
				E&M Package, EM-V	M/s SHES Air and Automation	5.63	06.08.2021	
				E&M Package, EM-VI	M/s Avaids Technovators Pvt. Ltd.,	3.89	16.04.21	
				E&M Package, EM-VII	M/s PGCIL	55.57	21.12.2021	
				E&M Package, EM-VIII	M/s B. C. Technomation	6.23	28.08.2021	
7	Subansiri Lower NHPC 07.06.2001/0	Ar.Pr/ Assam NER		Dam/Barrage	M/s BGS – SGS - Soma JV, Hyderabad	1098.32	19.12.2003 12/2009	
	9.09.03 8x250= 2000 MW		Civil works	Power House & Tail Race civil works	M/s L & T LTD, Chennai	921.59	19.12.2003 12/2009 (Contract Foreclosed on 28.04.2015)	

Sl. No.	Project name/ Exec. Agency CEA clearance/ Approval Capacity (MW)	State Region	Contract	Scope of works & brief details	Contracting Agency (Name & Location)	Contract value (Rs. Crs.)	Date of Contract (commenceme nt)/ Completion
	(1111)			Surge Tunnel Works	M/s L & T LTD, Chennai	422.50	14.05.2009 11/2012 (Contract Foreclosed on 28.04.2015)
				Balance civil work of Powerhouse complex from HRT to Tail Race Channel	M/s Patel Engineering Ltd, Mumbai	1564.41	01.09.2021 12/2023
				Supply of CIF/CIP: Supply of all off shore equipments and material including general and specified spares.	Consortium of M/s Alstom Power Hydraulique, France And M/s Alstom Project India Ltd.	Euro 76.80 million + US\$ 6,779,760.	11.02.2005 08/2010
			E&M works	Ex-works supply of all equipment and material including general and specified spares of Indian origin.	Consortium of M/s Alstom Power Hydraulique, France and M/s Alstom Project India Ltd.	€ 23.21 million + US\$ 14,56 million + 727.97 crs	11.02.2005 08/2010
				Local transportation including port clearance and port charges and inland insurance and installation services.	M/s Alstom Project India Ltd.	1,23,74,37,48 6. 00	11.02.2005 08/2010
			H&M works	Supply, erection & commng. of gates	M/s Texmaco Ltd.	283.48 Cr. + Euro 2.22 M	19.06.2006 04/2010
8	Rammam- III NTPC Ltd. 3x40= 120 MW	<u>W.B.</u> <u>E.R.</u>	Civil works	Approach road to right bank of barrage to access various project component, Barrage construction, Under ground de- silting chamber with SFT and 5.1 km HRT	M/s. Simplex-Apex-JV (The contract has been terminated on 09.02.2024)	360.83	10.09.14 09/2019
			& HM works	Access from bridge on Rammam river to various proj. components, 3.1 km HRT, Surface Power House, 740 m TRC and 132 KV Switchyard.	M/s. SEW Infrastructure Ltd.	265.39	12.12.14 12/2019
			E&M works	Design, Engineering, Manufacturing, Supply, Insurance, Erection, Testing & Commissioning works for EM works EPC contract package.	M/s. BHEL	224.67	19.02.2015 11/2018
9	Ratle GVK Ratle HEP Pvt. Ltd. (GRHEPPL) 19-12-2012 4x205+1x30 = 850 MW	J&K NR		ution of 850MW Ratle Hydroelectric pro Limited on 18.01.2022 on EPC basis for 52			
10	Kiru CVPPL 13.06.2016 4x156=624 MW	J&K NR	Civil Works	Civil and HM works of DT, concrete gravity Dam, Intake, Pressure shaft, TRT and underground Power House.	M/s. Patel Engineering Ltd.	2240.27	<u>24.02.2020</u> <u>23.04.2024</u>

Sl. No.	Project name/ Exec. Agency CEA clearance/ Approval Capacity (MW)	State Region	Contract	Scope of works & brief details	Contracting Agency (Name & Location)	Contract value (Rs. Crs.)	Date of Contract (commenceme nt)/ Completion
			HM Works	Providing all service, Model testing, transportation, testing, Commissioning of Radial Gates, Vertical Gate, Gantry Cranes, Stoplogs, Steel liner for Pressure Shaft and Trash racks.	M/s PES Engineers Pvt. Ltd.	202.10	<u>24.02.2020</u> <u>23.01.2024</u>
			E & M works	Design, Manufacture, Supply Erection, Testing & commissioning of TG, 400 KV GIS, 400 KV outdoor pothead yard equipment, Associated Accessories and Auxiliaries,	M/s Andritz Hydro Pvt. Ltd.	552.52	24.02.2020 23.07.2024
11.	Rangit-IV Jal Power Corp. Ltd. 06.07.2007/2 3.10.2007(F C) 3x40 MW= 120	<u>Sikkim</u> <u>NER</u>	Civil works	Construction of Balance Civil works package: Diversion Channel, Coffer Dams, Dam, Spillway & Stilling Basin, Intake structure, Desilting Chambers, SFT, HRT, Surge Shaft, Pressure Shaft, Surface power house, TRC & other associated structures etc.	M/s Rithwik-HIPL Joint Venture	452.11	27.08.2021
			H&M works	Hydro-mechanical Works package of Rangit Stage-IV HE Project,	M/s PES Engineers Private Limited	100.40	28.06.2021
			E&M works	Electromechanical Works Package EM-2 for Design, Supply, Erection, Testing 7 Commissioning of Balance of Plant (BOP) items	M/s Andritz HydroPrivate Limited	80.12	08.07.2021
12.	Luhri Stage- 1 SJVN Ltd. 01.05.2018 2x80+2x25=	Himach al Pradesh	Civil and HM works	Design & engineering services, Civil and HM works of project.	M/s Luhri Hydro Power Consortium (A consortium of Patel Engineering and HES Infra Pvt. Ltd.)	976.50	24.11.2020/ 23.11.2025
	210 MW		E&M works	Design, engineering, manufacture, transportation, erection and commissioning of all EM components of project.	M/s. Voith Hydro Pvt. Ltd.	420.28	16.07.2021/ 16.05.2025
13	Dhaulasidh Hydro Electric Project SJVN Ltd	Himach al Pradesh NR	Civil and HM works	Design & engineering services, Civil and HM works of project.	M/s Rithwik Projects Pvt Ltd	526.92	06.05.2021/ 05.05.2025
	(2x33 MW = 66MW)		E&M works	Design, engineering, manufacture, transportation, erection and commissioning of all EM components of project.	Voith Hydro Pvt. Ltd.	136.64	19.01.2022/ 18.01.2025
14	Kwar (CVPPPL)	J&K	Civil and HM works	Civil Works of DT, Dam, Intake Pressure, Shafts, Power House, TRT.	M/s Patel Engineering Limited	2461	11.05.2022/ 10.05.2026
			works				

Sl. No.	Project name/ Exec. Agency CEA clearance/ Approval Capacity (MW)	State Region	Contract	Scope of works & brief details	Contracting Agency (Name & Location)	Contract value (Rs. Crs.)	Date of Contract (commenceme nt)/ Completion
15	Dibang Multipurpo se Project (NHPC)	<u>Arunac</u> <u>hal</u> <u>Pradesh</u>	Infrastructur e works/ Civil Works	Construction of Access Roads to Project Dam Site, Left Bank Road Network, Dibang Bridges, Dam Site Right Bank Road Network and Temporary Haulage Road to Pathar Camp From ADC Morh Including All Civil and HM Works Of Diversion Tunnel'	M/s L&T	1622	27.02.2023 / 05.03.2026
16	Sunni Dam (SJVN) 4.1.2023 4x73+1x73+ 1x17=382 MW	Himach al Pradesh	Civil and HM works	Design & engineering services, Civil and HM works of project. Yet to be awarded	M/s Rithwik Projects Pvt Ltd		14.1.2023
	Gr. A. G. A						
17	Parnai JKSPDC 21.10.2013 3x12.5=	NR <u>J&K</u>	Civil works	EPC contract	M/s. Patel Engineering Ltd. & M/s. Alstom India.		25.10.2013
	37.5 MW		E&M works	T.G. Set	M/S.Andritz Hydro, India		
			E&M works	T.G. Set	M/s. GE Power India Pvt. Ltd.		
18	Uhl-III, BVPC Ltd. 19.09.02 / (TEC -2x50 MW) 3x33.3 =100	<u>H.P.</u> <u>NR</u>		Neri Intake works & power channel	M/s SSJVPP Ltd. 12 th floor S.N.Tower 25/2 M.G.Road, Banglore Fresh Package awarded on 25.10.08 to: Continental Corp Project Ltd.	8.68	18.04.05 15.8.07 Re-awarded on 25.10.08
			Civil works	Head Race Tunnel (HRT)	M/s SSJVPP Ltd. 12 th floor S.N.Tower 25/2 M.G.Road, Banglore 560001 Package reawarded to: Continental Corp	69.58	<u>02.04.03</u> 30.04.07
			HM Works		Project Ltd Re- awarded to M/s Abir Infrastructure Pvt. Ltd., Gurgaon.		15.10.2010
				Rana Intake Works & Power channel	M/sTRG Industries Pvt Ltd E- 461 Greater Kailash –II New Delhi	17.53	26.07.05 26.10.07
				Penstock fabrication, erection	M/s PES.Engineers Pvt. Ltd. Hyderabad-500016	57.26	27.05.05 27.11.07
				Power House	M/s Pilot Engg., Ludhiana	9.87	19.6.2007 12/2009
			E&M works	Generating Equipment & Associated Aux, Transformers	M/s BHEL	117.36	15.02. 07 15.04.10
19	Shongtong Karcham H.P. Power Corpn. Ltd. Clearance: 16.08.2012/ 3x150= 450 MW	H.P. 2017- 18 2017- 18	Civil And H&M works	EPC Contract Package for Civil & HM works	M/s Patel Engineering Ltd.	103.24	04.08.2012 03.08.2017

Sl. No.	Project name/ Exec. Agency CEA clearance/ Approval Capacity (MW)	State Region	Contract	Scope of works & brief details	Contracting Agency (Name & Location)	Contract value (Rs. Crs.)	Date of Contract (commenceme nt)/ Completion
20	Shahpurkand i, Irrigation	<u>Punjab</u> <u>NR</u>	Civil works	Main Dam alongwith Two head regulators	SOMA-BUREYA Joint Venture	687.51	11.02.2013 Oct- 2016
	Deptt/PSPC L		& HM works	Hydel Channel	M/s Gurinder Singh Contractor	90.11	26.02.2013 Oct- 2015
	04.05.2011 3x33+3x33+ 1x8= 206		E&M works	EPC Contract	BHEL		28.02.14
	MW		E&M works	Design, manufacture, testing & commissioning of TG unit and auxiliaries	M/s IVRCL Ltd. Pune Turbine- Litostroj Slovania Generator- Koncar, Croatia	Euro 4.03 Crs + 177.99 Crs	16.12.2010 15.12.2014
21	Polavaram (PPA) 21.07.10/	Andhra Pradesh		Investigation and L.P schedules etc., (Balance) &	M/s. Trans stroy- JSCECUES (JV), Hyderabad	4054.00	02.03.2013 01.03.2018
	25.02.09 12x80 = 960MW	<u>S.R.</u>	Civil works & HM works & E&M works	EPC contract on TURNKEY basis.	M/s. Navayuga Engineering Company Contract terminated on 14.08.2019 & re-awarded to M/s Megha Engineering and Infrastructure Limited on 01.11.2019	3220.28 Crs	<u>20.12.2017</u> <u>01.11.2019</u>
22	Pallivasal KSEB/ Not Req./31.1.20 07 2x30=60	<u>Kerala</u> <u>SR</u>	Civil, H&M works and E&M works	The work was awarded to M/s ES consortium as a single package and an a was executed on 31.01.2007. The contra is 48 months i.e. 01.3.2011. E&M: Dongfang Electric Corporation,	agreement in this regard actual date of completion	242.96 Crs + US\$57 million	31.01.2007 01.03.2011
23	Thottiyar KSEB	<u>Kerala</u> <u>SR</u>	Civil works	Dam, Water Conductor System, power House	M/s Coastal Projects Private Ltd-	44.23	22.12.2008 19.05.2012
	1x30 + 1x10= 40		H&M works	Gates, erection, commissioning	Chongqing Joint Venture, Hyderabad	24.09	<u>22.12.2008</u> 19.05.2012
	MW		E&M works	Planning, Engineering, Manufacture, Supply, Erection, testing & commissioning	E&M: Chongqing, China	75.68	<u>22.12.2008</u> 19.05.2012
24	Kundah Pumped Storage Phase -4 x125=125	Tamil Nadu	Civil &	Package-I: Power House HM works on the Downstream side of P/House (Phase-I).	M/s. Patel Engg., Mumbai - Package-I	346.48	15.02.18 15.02.22
	X125=125 MW		HM Works	Package-II: Head Race Tunnel, Head Surge Shaft, Pressure Shafts, HM works on the Upstream side of P/House (Phase-I).	Consortium	321.34	15.02.18 15.11.21

Sl. No.	Project name/ Exec. Agency CEA clearance/ Approval Capacity (MW)	State Region	Contract	Scope of works & brief details	Contracting Agency (Name & Location)	Contract value (Rs. Crs.)	Date of Contract (commenceme nt)/ Completion
	Phase-I, II &III		E & M Works	Phase-II. Package-III: 1x125 MW Phase-III: 2x125 MW. Phase-III: 1x125 MW. (Complete design, Engineering, Procurement, Manufacturing assembly,Inspection,Testing,Transporting,Supply of complete reversible pump turbine, Generating M/c, Gen. Tx. and common accessories.including C&P system etc.,as specified at site erection, testing and commissioning of unit)		604.62 (Phase-I, Package- III) 756.54 (Phase-II) 401.85 (Phase-III)	28.11.2019 28.05.2023 28.11.2019 28.05.2023 28.11.2019 28.05.2023
25	Lower Kopli APGCL 2x55+2x2.5 +1x5= 120 MW	<u>Assam</u> NER	Civil & HM Works	Civil, Road & HM works awarded on 21.08.2020.	M/s L&T	1163.04	June 2024
			EM Works	E&M work awarded on 09.09.2021.	M/s Andritz Hydro Pvt. Ltd.	306.72	June 2024
26	Chanju-III (HPPCL)	H.P. NR	Civil Works	Civil works {Package-I and Package –II} awarded on 07.10.2022	(M/s. MFB-ACNC (JV)	350.52	07.10.2022
27	Mankulam (KSEB)	<u>Kerala</u> SR	Civil & HM works	Construction of Dams, Power Tunnel, Surge Shaft, Valve house, Pressure Shaft, Power House, Switch Yard, Access Roads, Bridge and Hydro Mechanical Works.	M/s. PES Engineers Private Limited - M/s KSR Infracon Private Limited, Joint Venture (PES-KSR JV) ,1st Floor,Pancom Chambers,6-3-1096 /IIA, Somajiguda, Raj Bhavan Road, Hyderabad- 500082, Telanoana	250.22	21.05.2022/ 14.05.2026
28	Lakhwar Multipurpos e Project (UJVNL)	<u>Uttarak</u> <u>hand</u> <u>NR</u>	Civil Works	Civil works awarded on 01.02.2023	M/s L&T	3241.08	01.02.2023

SI. No.	Project name/ Exec. Agency CEA clearance/ Approval Capacity (MW)	State Region	Contract	Scope of works & brief details	Contracting Agency (Name & Location)	Contract value (Rs. Crs.)	Date of Contract (commenceme nt)/ Completion
29	Lower Sileru Extension (APGENCO	Andhra Pradesh	Civil & HM Works	Civil works awarded on 13.04.2022	M/s Shirdi Sai Electricals Ltd. & M/s. PES Engineers Pvt. Ltd.	131.61	13.04.2024
			E&M Works	E&M works awarded on 13.04.2022	M/s Shirdi Sai Electricals Ltd. & M/s. PES Engineers Pvt. Ltd.	283.77	13.04.2024
30	Upper Sileru (APGENCO)	Andhra Pradesh	Civil Works	Civil works awarded on 28.02.2024	M/s Megha Engineering & Infrastructures Ltd./Hyderabad		
С	Private Sector	r					
31	Tidong-I M/s NSL Tidong Power Gen.	HP NR		Construction of River diversion, barrage, intake, Desilting basins, storage reservoir & HRT (RD 0 m -905 m)	M/s SCL Infratech Ltd. Hyderabad	127.996	7.11.2008 06.11.2011
	Ltd. $2x50 = 100$		Civil works	Construction of HRT (RD 905 m-RD 5537 m)	M/s SCL Infratech Ltd. Hyderabad	83.327	7.11.2008 09/2014
	MW	4 W		Construction of HRT (RD 5537 m -RD 8537 m)	M/s Himalaya Construction (P) Ltd.	31	07.07.2011 06.07.2015
				Construction of Surge Shaft, Pressure Shaft, Power House and Tail Race Channel	M/s Himalaya Construction (P) Ltd.	40	07.07.2012 06.06.2015
			E&M works	Supply, Installation, testing & commissioning of TG sets	M/s Alstom Projects, India	84	<u>28.02.2011</u> 27.05.2013
			E&M works	Supply, installation, T&C of TG set, Switchyard equipment & associated auxiliaries	M/s Andritz Hydro, India	56	17.04.2013 16.07.2015
			H&M works	Design, Engineering, Manufacture, Farication & Erectio,n of all hydro- mechamical equipment	M/s CIMMCO	34	12.04.2008 08/2012
			E&M works	Manufacturing., Supply, erection & commng. of TG units	M/s Alstom Project, India	84	12.04.2008 08.2012
			E&M works	Manuf., Supply, erection & commng. of TG units	M/s BHEL	470.5 Crs. + USD \$ 11.74 M 18.05.200	<u>25.06.2007</u> 10/2009
			H&M works	N.A.			
			E&M works	Manufacturing., Supply, erection & commng. of TG units	M/s Voith Hydro, India	93	14.04.2010 10/2012
			E&M works		M/s. Gammon India Ltd.		<u>24.03.2012</u>

Sl. No.	Project name/ Exec. Agency CEA clearance/ Approval Capacity (MW)	State Region	Contract	Scope of works & brief details	Contracting Agency (Name & Location)	Contract value (Rs. Crs.)	Date of Contract (commenceme nt)/ Completion
			E&M works	Manufacturing., Supply, erection & commng. of TG units	Under Award		
32	Kutehr M/s JSW Energy (Kutehr) Ltd. 3x80 = 240 MW 31.08.2010	HP NR	Civil works	Lot-1 Civil works for River diversion, Barrage,Power intake & Part of HRT. Lot-2 Civil works for balance HRT, Surge Shaft, Pr. Shaft, Steel liner, under ground power house, TRT, and Pothead yard. Lot-3 Complete HM works Lot-1D Design, fabrication ,supply and erection of steel liner and pen stock.	-M/s Angelique-PCC Constorium. -M/s MF Bumi Geotech private ltd. -M/s P.E.S. Engineers Pvt LtdM/s Greyhound Engineers India Private Ltd.	567.00 507.40 60.00 18.00	20.10.2019 19.06.2023 25.11.2019 24.05.2023 06.01.2020 05.05.2023 21.07.2020 20.07.2023
			E&M works	Electro Mechanical works.	M/s Andritz Hydro Pvt. Ltd.	220	29.07.2020 28.07.2023
			Design Colony	Project Design and Engineering	M/s AF Consult India Private Ltd, Tower 1, Steller IT Park, Sector 62, NOIDA- 201 301 M/s Swastik Prefab	11.5	11.04.2019 10.05.2024 06.02.2020
				Construction of Jura Colony	Private Limited, Sector - 16, NOIDA-201 031		30.11.2022
33	Pinnapura m (Greenko AP01 IREP	A.P.	Civil works & HM	Package -I Civil and Hydro Mechanical works Package -II Balance of Plant (BOP) works	M/s Megha Engineering		30.09.2020
	Private Ltd)		E&M works	Package -III Electro-mechanical works	M/s Andritz Hydro Pvt. Ltd.		21.05.2020

Part - B
Status of the ordering of various packages for construction-held-up Hydro Electric Projects

Sl. No.	Project name/ Exec. Agency CEA clearance/ Approval Capacity (MW)	State Region	Contract	Scope of works & brief details	Contracting Agency (Name & Location)	Contract value (Rs. Crs.)	Date of Contract (commencem ent)/ Completion
Α.	Central Sector						
1	Lata Tapovan, NTPC Aug-2012 3x57= 171 MW	<u>Uttara</u> <u>khand</u> <u>NR</u>	Civil & HM works	EPC Contract	M/s L&T	780.54	17.08.2012 16.08.2017
			E&M Package		BHEL	2611.04	Dec, 12 June, 17

Sl. No.	Project name/ Exec. Agency CEA clearance/ Approval Capacity (MW)	State Region	Contract	Scope of works & brief details	Contracting Agency (Name & Location)	Contract value (Rs. Crs.)	Date of Contract (commencem ent)/ Completion
			E&M works				
В	State Sector						
2	Lower Kalnai JKSPDC 16.08.2013 2x24= 48 MW	NR <u>J&K</u>	Civil works	EPC contract	M/s Coastal Projects Ltd.		12.09.2013
	3 Koyna Left		E&M works	T.G. Set	M/s. GE Power India Pvt. Ltd.		
3	Koyna Left Bank PSS WRD, Govt. of Mah. 20.02.2004 2x40 = 80 MW	<u>Maha.</u> <u>WR</u>	Civil and H&M works	Barrage, Intake tunnel, Twin lake tap, Ventilation tunnel, Power house, Intake structure ,HRT, Pressure shaft, tail surge shaft, pen	M/s B.T. Patil-Malaxmi (JV), Pune	131.91 Crs.	20.06.2007 30.06.2013 03.10.2007 30.06.2016
				stoke, TRT, Bus duct tunnel, Lower intake structure	M/s Patel Engg. Ltd. Mumbai	118.86 Crs.	
			E&M	Design, manufacture, testing & commissioning of TG unit and auxiliaries	M/s IVRCL Ltd. Pune Turbine- Litostroj Slovania	Euro 4.03 Crs +	16.12.2010 15.12.2014
			works		Generator- Koncar, Croatia	177.99 Crs	
			EM Works	E&M work awarded on 09.09.2021.	M/s Andritz Hydro Pvt. Ltd.	306.72	<u>June 2024</u>
С	Private Sector						
4	Tangnu Romai- I M/s Tangu Romai Power generation 2x22= 44 MW	HP NR	Civil works	Construction of Diversion Barrage, Intake, desilting, HRT, Surge Shaft, Penstok, Power House & Tail Race Channel	M/s Sai Urja Hydel Projects (P) Ltd., Shimla	164.7	14.06.2010 06/2014
	30.11.2007 HPSEB		E&M works	Supply, installation, T&C of TG set, Switchyard equipment & associated auxiliaries	M/s Andritz Hydro, India	56	17.04.2013 16.07.2015
5	Phata Byung M/s Lanco 06.10.2008	<u>Uttarakha</u> <u>nd</u> <u>NR</u>	Civil works	Dam, water conductor System, power House	Lanco Infratech Ltd.	206	12.04.2008 07/2012
	2x38 MW = 76 MW		H&M works	Design, Engineering, Manufacture, Farication & Erectio,n of all hydro- mechanical equipment	M/s CIMMCO	34	12.04.2008 08/2012
			E&M works	Manufacturing., Supply, erection & commng. of TG units	M/s Alstom Project, India	84	12.04.2008 08.2012
6	Maheshwar, SMHPCL 12 96/ 29.9.2006 (FC)	<u>M. P.</u> <u>WR</u>	Civil and HM works	All civil works like dam, Power Dam, HRC, Penstock PH etc.	M/s SEW Construction –Prasad and Company Ltd.	275.0 Crs. 22.02.97	22.02.1997 03/2005

Sl. No.	Project name/ Exec. Agency CEA clearance/ Approval Capacity (MW)	State Region	Contract	Scope of works & brief details	Contracting Agency (Name & Location)	Contract value (Rs. Crs.)	Date of Contract (commencem ent)/ Completion
	10x40= 400MW		E&M works	Manuf., Supply, erection & commng. of TG units	M/s BHEL	470.5 Crs. + USD \$ 11.74 M 18.05.2001	25.06.2007 10/ 2009
7	Bhasmey Gati Infrastructure 2x25.5 = 51 MW	<u>Sikkim</u> <u>NER</u>	Civil works	Dam, Tunnels , Power House, Surge Shaft, Pressure Shaft, Intake	M/s Simplex Infrastructure Ltd.	160	12.04.2010 11/2012
			H&M works	N.A.			
			E&M works	Manufacturing., Supply, erection & commng. of TG units	M/s Voith Hydro, India	93	14.04.2010 10/2012
8	Rangit-II Sikkim Hydro Power Limited 2x33= 66 MW	<u>Sikkim</u> <u>NER</u>	Civil &HM works	EPC Contract	M/s Coastal Project Limited	220.35	13.12.2011 23.10.2013
			E&M works		M/s. Gammon India Ltd.		24.03.2012
9	Panan Himagiri Hydro Energy Pvt. Ltd. 07.03.2011 4x75= 300 MW	<u>Sikkim</u> <u>NER</u>	Civil works	Coffer Dam, Diversion Tunnel, Dam, Desilting Basin, Power House, Surge Shaft, Pressure Shaft, Intake etc.	M/s Essar Projects (India) Ltd	392.40 (Excl. cost of cement, Steel, explosives)	22.02.2014 21.02.2018 (48 months)
			E&M works	Manufacturing., Supply, erection & commng. of TG units	Under Award		

CHAPTER - 9

<u>Part A –</u> <u>Status of financial closure of Under Execution Private Sector H. E. Projects</u>

Sl.	Name of	Implementing	Financial Closure Status	Remarks/
No.	Project, State,	Agency		Constraints
	Capacity, Date of TEC			
	Under Executio	n		
1.*	Teesta-VI,	M/s Lanco	Financial closure achieved in July, 07.	
	Sikkim	Energy Pvt. Ltd.		
	4x125 MW			
	27.12.2006			
2.*	Rangit-IV,	M/s Jal Power	Financial closure achieved on	
	Sikkim	corporation Ltd.	25.01.2010.	
	3x40 MW			
	06.07.2007			
3.	Tidong-I ,H.P.	M/s NSL Tidong.	Financial closure achieved on	
	150 MW		25.03.2010.	
	23.07.2007			
4*	Ratle, J&K 4x205+1x30= 850 MW	M/s GVK Ratle HEP Pvt. Ltd. (GRHEPPL)	Financial closure achieved.	
5.	Kutehr,H.P.	M/s JSW Energy	Financial closure achieved on	
	3x80=240 MW	(Kutehr) Ltd	14.01.2021	
6.	Pinnapuram,	Greenko AP01	Financial Closure for 1200 MW:	
3.	Andhra pradesh	IREP Private	06.04.2022	
	4x240 + 2x120	Limited)	Financial Closure for total capacity of	
	= 1200 MW		1680 MW: 13.12.2023	

^{*}Now these are CPUS's Projects

<u>Part B –</u> <u>Status of financial closure of Held up Private Sector H. E. Projects</u>

Sl. No.	Name of Implementing Project, State, Agency		Financial Closure Status	Remarks/ Constraints
	Capacity, Date	· ·		
	of TEC			
	Under Executio	n		
1	Maheshwar,	Shree Maheshwar	Financial closure achieved on 29.9.2006.	
	M.P., 10x40	Hydel Power		
	MW,	Corporation Ltd.		
	30.12.96	_		
2.	Tangu	Tangu Romai	Financial closure achieved on	
	Romai,H.P.	Power Gen. Pvt.	22.01.2010.	
	2x22 MW	Ltd.		
	30.11.2007			

Sl.	Name of	Implementing	Financial Closure Status	Remarks/
No.	Project, State, Agency			Constraints
	Capacity, Date			
	of TEC			
3.	Phata Byung	M/s Lanco	Financial closure achieved on	
	Uttarakhand		25.07.2009.	
	2x38 MW			
	06.10.2008			
4.	Bhasmey,	M/s Gati	Financial closure achieved on	
	Sikkim	Infrastructure	25.03.2010	
	2x25.5 = 51			
	MW			
	Dec, 2008			
5.	Rangit Stage- II	M/s Sikkim Hydro	Financial closure achieved on 15 th Jan,	
	Sikkim	Power Ventures	2014, 31 st March 2015 (Revised).	
	2x33 = 66 MW	Limited		
	10.02.2010			
6.	Panan, Sikkim	Himagiri Hydro	Financial closure with total debt of Rs.	
	4x75 = 300 MW	Energy Pvt. Ltd.	1516.42 is tied up with PFC ((808.76	
	07.03.2011		Crores), PTC (Rs. 120 Crores) & REC	
			(Rs 587.67 Crores).	

Chapter 10. DETAILS OF TIME/COST OVERRUN OF UNDER DEVELOPMENT HYDRO ELECTRIC PROJECTS (ABOVE 25 MW) – STATE-WISE

Part A – Active Under Construction Projects

Sl. No	Project Name/(I.C.)/ Executing Agency	Original Comm. Sched.	Latest/ Anticipated Comm. Sched.	Time over run (months)	Org. Cost (Rs. in Crores) (Price Level)	Latest/Ant. Cost (Rs. in Crores) (Price Level)	Cost over run (Rs. in Crores) (%)	Major reasons for time over run
1	2	6	7	8	9	10	11	12
	Andhra Pradesh							
1	Polavaram (12x80 = 960 MW) APGENCO / Irr. Deptt., A.P.	2017-18 (Mar'18)	2027-28 (Sep,27)	102	3013.68 (2010-11 PL) (Power Component)	5338.95 (2016-17 PL) (Power Component)	2325.27 (77.15)	Works stalled since 19.07.2019 till 30.03.2021 as APGENCO asked contractor Navayuga Engineering Company Ltd. (NECL) to stop all works and termination of contract issued on 14.08.2019. The writ petition filed by NECL was disposed by Hon'ble High Court against NECL on 14.12.2020. Final Contract concluded with new contractor M/s MEIL for execution of PHEP works on 30.03.2021
2	Pinnapuram (4x240+2x120 MW) M/s Greenko	2024-25 (Mar'25)	2024-25 (Mar'25)	Nil	6465.22 (Feb'2021 PL)	6465.22 (Feb'2021 PL)	Nil	Not applicable/ No time overrun
3	Lower Sileru Extension (2x115MW)(APGENCO)	2025-26 (Mar'26)	2025-26 (Mar'26)	NIL	571 (2020-21 PL)	571 (2020-21 PL)	NIL;	The project is in initial stage of construction.
4	Upper Sileru PSP (9x150MW)(APGENCO	2028-29 (Feb'29)	2028-29 (Feb'29)	NIL	12264.36	12264.36	NIL	The project is in initial stage of construction.
	Arunachal Pradesh							
5	Subansiri Lower (8x250 = 2000 MW) NHPC	2009-11 (Sep'10)	2026-27 (May'26)	188	6285.33 (12/02)	21247.54 (Completion Cost)	14962.21 (238)	 Delay in transfer of forest land. Disruption of works by locals in Ar. Pradesh side. Slope failure in Power House in Jan, 2008. All works except safety works were stalled from December, 2011 to October, 2019 due to agitation launched by activists in Assam against construction of Project. Work restarted w.e.f. 15.10.2019. DT-2 Inlet Area collapse and flooding of PH in September 2022.

6	Dibang Multipurpose Project (12x240 = 2880 MW) NHPC	2031-32 (Feb'32)	2031-32 (Feb'32)	NIL	31876.39 (05/21)	31876.39 (05/21)	NIL	The project is in initial stage of construction.
	Assam							
7	Lower Kopili (2x55+2x2.5+1x5 =120MW)	2024-25 (Jun'24)	2025-26 (Oct'25)	16	1115.91 (01/15)	1795 (2021)	679.09 (60.86)	The project is in initial stage of construction.
	Himachal Pradesh							
8	Parbati - II (4x200 = 800 MW) NHPC	2009-10 (Sept'09)	2024-25 (Dec,24)	183	3919.59 (12/01)	11063.49 (07/22)	7143.9 (182.26)	 Delay in revised forest clearance. TBM suffered extensive damage due to heavy ingress of water and slush in TBM face in Nov, 2006. Due to poor geology. Flash flood in 2004,2005,2010 and 2011. Contractual issues. Cash flow issues with civil contractors.
9	Uhl-III (3x33.33 = 100 MW) BVPCL	2006-07 (Mar'07)	2024-25 (Dec,24)	213	431.56 (09/02)	2948.94 (03/2023)	2517.38 (583.32)	 Delay in transfer of forest land. Delay in acquisition of private land Delay in award of works. Delay in transfer of quarry sites. Contract for construction of HRT rescinded twice i.e. during April, 2008 & July, 2010 due to slow progress and non-performance by the contractor. Poor geology in HRT. Leakage in Penstock in July,2018 and Rupture in May,2020
10	Shongtom Karcham (3x150 = 450 MW) HPPCL	2016-17 (Mar'17)	2026-27 (Feb,27)	119	2807.83 (07/11)	3708.51	900.68 (32.07)	 Disruption of works by local people. Barrage Silt Flushing Tunnel.

11	Tidong-I 2x50 =100 MW NSL Tidong (w.e.f. 04.09.2018 Statkraft India Pvt. Ltd. Has acquired the 100% equity in the project)	2021-22 (Oct'21) New Developer	2024-25 (Oct*25)	48	543.15 (01/2007)	1850.00 (06/2018)	1306.85 (240.6)	 Delay in NOC by Projects affected Panchayats. Suspension of works by Govt. for one year. Funds constraints with the developer Trans.line forest clearance, stuck with Supreme court . Delay in finalizing the power evacuation arrangement.
12	Kutehr 3x80=240 MW JSW Energy (Kutehr) Ltd	2024-25 (Nov'24)	2025-26 (Apr'25)	05	1798.13 (09/2011)	2879 (03/2019)	1080.87 (60.11)	➤ Slow mobilization due to Covid-19 Lockdown.
13	Luhri Hydro Electric Project Stage-I (2X 80+2X25 MW = 210 MW)	2025-26 (Jan'26)	2027-28 (Jan'27)	NIL	1810.56 (05/20)	1810.56 (05/20)	NIL	 Work started recently Rs. 1810.56 Crore which includes project cost of Rs. 1744.37 Crores (05/2020 PL) and Rs. 66.19 Crore for enabling infrastructure (to be availed as budgetary support from GoI)
14	Dhaulasidh (SJVN) 2x 33=66MW Hamirpur/ Kangra	2025-26 (Nov'25)	2026-27 (May'26)	06	687.97 (05/2020)	687.97 (05/2020)	NIL	Work started recently (Rs. 687.97 Crores which includes project cost of Rs. 666.32 Crores (05/2020 PL) and Rs. 21.65 Crores for enabling infrastructure (to be availed as budgetary support from GoI)
15	Sunni Dam (SJVN) 4x 73+1x73+1x17=382 MW	2027-28 (Mar'28)	2028-29 (Apr'28)	1	2614.51 (Mar'21)	2614.51 (Mar'21)	Nil	The project is in initial stage of construction.
16	Chanju-III (3x16 = 48 MW) HPPCL	2027-28 (Jul'27)	2027-28 (Jul'27)	Nil	418.57 (01/15)	789.49 (04/22)	370.92 (88.16)	The project is in initial stage of construction.
17	Pakal Dul (4x250= 1000 MW) CVPPL	2020-21 (Apr'20)	2026-27 (Sept'26)	77	8112.12 (03/13)	8112.12 (03/13)	#	 Contractual and Legal issues before award of works. (40 Months) Delay in award of works due to higher bids. Impact of COVID-19.
18	Parnai 3x12.5= 37.5 MW JKSPDC	2017-18 (Jan'18)	2027-28 (July,27)	114	640.86 (Completion cost)	640.86 (Completion cost)	#	 Delay in Land acquisition. Slow progress in HRT. Contractual issues

19	Kiru (4x156=624 MW) <u>CVPPL</u>	2023-24 (Aug,23)	2025-26 (Sep,26)	37	4287.59 (07/18)	4287.59 (07/18)	Nil	 Delay in award of works due to issue regarding sanction of Sub debt for the project between GoI and GoJK. Slow mobilization due to Covid-19 lockdown
20	Ratle (4x205+1x30) = 850 MW RHPPL / NHPC	2025-26 (Feb'26)	2026-27 (Dec'26)	10	5281.94 (11/18)	5281.94 (11/18)	Nil	Project was stalled since 11.07.2014due to various issues viz. R&R issues, Local issues, Law & order problem, etc. Earlier, it was under execution by private sector developer and some works have already been done. There was no progress from 11.07.2014 to 18.01.2022. JV of Govt. of UT of J&K and NHPC was formed and contract was awarded on turnkey basis on 18.01.2022.
21	Kwar (4x135=540 MW) CVPPL	2026-27 (Nov'2026)	2026-27 (Dec'2027)	13	4526.12 (Sep.'20)	4526.12 (Sep.'20)	Nil	The project is in initial stage of construction.
	Kerala							
22	Pallivasal 2x30 = 60 MW KSEB	2010-11 (Mar'11)	2024-25 (Sep,24)	162	222 (1999)	550.00 (2018)	328 (147.74)	 Delay in land acquisition. Poor geology strata in HRT. Works stopped by contractor since 28.1.15 to 11.04.2017 due to contractual issues. Contract terminated on 13.09.2018 and re-awarded in August, 2019.
23	Thottiyar (1x30+1x10)= 40MW KSEB	2012-13 (Apr'12)	2024-25 (Sep,24)	149	136.79 (2007)	280 (2018)	143.21 (104.69)	 Land acquisition issue. The works of weir and approach channel stopped from 2010 to 2012 by local people. The work stopped by Court from 12.12.2012 to April-2013. Financial crunch with contractor leading to foreclosure of contract in April,2017 and balance works re-awarded in January, 2018.
24	Mankulam (2x20)= 40MW KSEB	2026-27 (May 26)	2026-27 (May 26)	Nil	600 (08/22)	600 (08/22)	Nil	The project is in initial stage of construction.
	Punjab							
25	Shahpurkandi 3x33+3x33+1x8 =206 MW, Irrigation Deptt. &PSPCL	2015-16 (Mar,16)	2025-26 (Jan, 26)	118	1835.50 (04/08) (Power Component)	2368.55 (02/2018) (Power Component)	533.05 (29.04)	Works of Dam stopped since 29.08.2014 to sept. 2018 due to inter-state dispute between states of J&K & Punjab on sharing of waters of river Ravi and Tariff.

	Sikkim							
26	Teesta Stage VI (4x125 = 500 MW) LancoTeesta Hydro Power Ltd. (LTHPL) (Project taken over by NHPC w.e.f. 08.03.2019)	2023-24 (March'24)	2027-28 (Dec,27)	45	5748.04 (07/2018)	5748.04 (07/2018)	Nil	 Poor geology. Land acquisition. Contractual issues Funds constraints with developer (Private) and stalled from April, 2014 to October, 2019. M/s. LTHPL came under Corporate Insolvency Resolution Process. NHPC Ltd. emerged as H1 bidder. CCEA approval was accorded to NHPC on 08.03.2019. NCLT on 26.07.2019 approved resolution plan of NHPC for acquisition of LTHPL.
27	Rangit-IV HE Project (3X40 = 120 MW) NHPC	2023-24 (March'24)	2025-26 (May'25)	14	938.29 (10/19)	938.29 (10/19)	Nil	 Poor geology in HRT. Project was stalled since October, 2013 due to funds constraints with the developer. The project was under NCLT process since 9th April, 2019. The project has been awarded to NHPC. CCEA approval was accorded on 30.03.2021. The contract was awarded in 2021.
	Tamil Nadu							
28	Kundah PSP (Phase-I, Phase-II & Phase-III) (4x125=500 MW) TANGEDCO	2021-22 (Aug,21)	2025-26 (Dec,25)	52	1216.59 (2007-08)	3401 (2014)	2184.41 (179.55)	 Delay in award of civil works. Civil & HM works have been taken up from 05/2018 & EM works awarded in 11/2019
	Uttartakhand							
29	Tapovan Vishnughad (4x130 = 520 MW) NTPC	2012-13 (Mar'13)	2028-29 (Mar ² 9)	191	2978.48 (03/04)	5867.38 (2018)	2888.77 (96.99)	 Heavy water ingress due to bad geology in HRT and rock fall on TBM. TBM stuck up thrice. Flash flood in Aug'12 & June, 2013 damaging coffer dam. Termination of civil contracts for Barrage and HRT. Cash flow issues with civil contractors The unprecedented, devastating flash flood on 07.02.2021,due to glacial outburst, avalanching into Rishiganga River has hit the project Components. Barrage DC basin, Intake Part HRT and SFT was filled with Muck. Radial gates of barrage packages were washed away. Work on the project stopped since 05.01.2023 by the district administration due to subsidence in Joshimath area. Hon'ble High Court allowed for some essential works vide order dated 23.05.2023

30	Tehri PSS (4x250 = 1000 MW) THDC	2015-16 (Feb'16)	2024-25 (Dec'24)	106	1657.60 (12/05)	4825.60 (02/19)	3168 (191.11)	 Poor geology. Local agitation at Asena Quarry / muck disposal area. Revision of Lay out of machine hall due to poor geology. Funds constraints with contractor.
31	Vishnugad Pipalkoti (4x111 = 444 MW) THDC	2013-14 (Jun'13)	2026-27 (Dec ² 26)	162	2491.58 (03/08)	3860.35 (02/19)	1368.77 (54.93)	 CCEA approval in Aug-2008 but works could not be awarded due to Forest clearance/diversion of forest land. Forest land was acquired in January-14 and subsequently works awarded in January-2014. Disruption of works by local people. Cash flow problem with contractor.
32	Lakhwar Multipurpose project (3x100=300 MW) UJVNL	2028-29 (Oct. 28)	2028-29 (Oct. 28)	Nil	5747.17 (07/18)	5747.17 (07/18)	Nil	> The project is in initial stage of construction.
	West Bengal							
33	Rammam-III (3x40= 120 MW)	2019-20 (Sep'19)	2028-29 (Mar,29)	114	1381.84 (09/14)	1381.84 (09/14)	#	 Delay in getting permission for tree felling from Govt. of West Bengal for Access road from Adit-1 to Adit-2. Cash flow issues with civil contractors. Strike / bandh during Gorkhaland agitation in 2017.

Part B – Held-up Under Construction Projects

Sl. No	Project Name/(I.C.)/ Executing Agency	Original Comm. Sched.	Latest/ Anticipated Comm. Sched.	Time over run (months)	Org. Cost (Rs. in Crores) (Price Level)	Latest/Ant. Cost (Rs. in Crores) (Price Level)	Cost over run (Rs. in Crores) (%)	Major reasons for time over run
1	2	6	7	8	9	10	11	12
	Himachal Pradesh							
1	Tangnu Romai-I (2x22 = 44 MW) TRPGPL	2014-15 (Jun'14)	2027-28 (subject to re- start of works(4 years))	165	255.00 (01/07)	641.89 (2018)	386.89 (151.72)	Works on hold since Aug 2016. Funds constraints with the developer. Project is likely to be commissioned 4 years after restart of works.
	Govt. of UT of J&K							
2	Lower Kalnai 2x24= 48 MW JKSPDC	2017-18 (Sep'17)	2026-27 (subject to re- start of works (4 years))	114	576.87 (12/12) (Completion cost)	576.87 (12/12) (Completion cost)	#	➤ 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. The contract with M/s. Coastal Projects Ltd. has been terminated and retendering for selection of EPC contractor is under process.
	Modhya Dradash							
3	Madhya Pradesh Maheshwar (10x40 = 400 MW) SMHPCL	2001-02 (Mar'02)	2027-28 (subject to re- start of works(Two years)	312	1569.27 (96-97)	6793 (2016-17)	5223.73 (332.87)	Matter is sub-judice. Works suspended since Nov-11 due to cash flow problem with developer. M.P. Power Management Company Ltd. has terminated the Power Purchase Agreement with SMHPCL on 18.04.2020. The application of PFC has been admitted in NCLT on 27.09.2022 under IBC. CIRP has been put on hold by NCLT vide order dated 17.03.2023 in an application filed by Entegra Ltd. PFC has filed an Appeal before the NCLAT against the NCLT Order dated 17.03.2023 for recommencement of CIRP.Project is likely to be commissioned 2 years after restart of works
	Maharashtra							

Sl. No	Project Name/(I.C.)/ Executing Agency	Original Comm. Sched.	Latest/ Anticipated Comm. Sched.	Time over run (months)	Org. Cost (Rs. in Crores) (Price Level)	Latest/Ant. Cost (Rs. in Crores) (Price Level)	Cost over run (Rs. in Crores) (%)	Major reasons for time over run
1	2	6	7	8	9	10	11	12
1	Koyna Left Bank PSS 2x40 = 80 MW WRD, Maha	2014-15 (Oct'14)	2027-28 (subject to re- start of works (4 years)	161	245.02 (1999)	379.78 (2014)	134.76 (54.99)	Project stalled since July, 2015. The current expenditure on the project has already reached to almost original administrative approved cost level.
	Sikkim							
	Bhasmey (2x25.5 =51 MW) Gati Infrastructure	2012-13 (Jun'12)	2027-28 (subject to re- start of works(3 years))	189	408.50 (2012-13)	746.01 (03/18)	337.51 (82.62)	Matter is sub-judice. The Court appointed Resolution Professional for Bhasmey HEP stated that works stalled since Sept., 2016. CIRP has been initiated against Gati infra and NCLT has appointed Resolution Professional. The Resolution Professional has received 4 Resolution Plan in the matter of Gati Infrastructure Bhasmey Power Private Limited and are pending for approval from the Committee of Creditors. Project is likely to be commissioned 4 years after restart of works.
1	Rangit-II 2x33= 66 MW Sikkim Hydro Power Ltd.	2015-16 (Apr'15)	2027-28 (subject to restart of works(2-1/2 years))	155	496.44 (2011-12)	496.44 (2011-12)	#	➤ Works stalled since Dec., 2017. Funds constraints with the developer. Project is likely to be commissioned 3 years after restart of works
	Panan 4x75= 300 MW Himagiri Hydro Energy Pvt. Ltd.	2018-19	2028-29 (subject to restart of works(4-1/2 years)	120	1833.05 (2009)	2675.00 (2020)	841.95 (45.93)	Accessibility to Project site. The permanent bridge over Mantam Lake for accessibility to Dam site is being constructed by Roads and Bridges Department Govt. of Sikkim which is likely to be completed by 2026. The Financial Institutes are awaiting for completion of bridge, thereafter the process of financing the project can start. Project is likely to be commissioned 5 years after restart of works.
	Uttartakhand							

Sl. No	Project Name/(I.C.)/ Executing Agency	Original Comm. Sched.	Latest/ Anticipated Comm. Sched.	Time over run (months)	Org. Cost (Rs. in Crores) (Price Level)	Latest/Ant. Cost (Rs. in Crores) (Price Level)	Cost over run (Rs. in Crores) (%)	Major reasons for time over run
1	2	6	7	8	9	10	11	12
8	Lata Tapovan (3x57 = 171 MW) NTPC	2017-18 (Aug'17)	2028-29 (subject to re- start of works(4 years))	139	1527.00 (07/12)	1527.00 (07/12)	#	➤ Infrastructure works almost completed. As per Hon'ble Supreme Court vide its order dated 07.05.2014 stayed the construction of 24 Hydro projects in Uttarakhand including Lata Tapovan HEPP. According all construction activities stopped since 08.05.14. Main works to re-start after clearance from Hon'ble Supreme Court.
9	Phata Byung (2x38 = 76 MW), MJUPL	2012-13 (Jun'12)	2025-26 (subject to re-start of works(3 years))	165	520.00 (2013-14)	1132 (09/16)	612 (117.69)	➤ Works stalled since July, 2017 due to Financial crunch. The project stands alloted to M/s Statkraft IH through NCLT on 23.03.2023. The revival of Environmental clearance is under process. Project is likely to be commissioned 2 years after restart of works.

Note:- It is to mention that cost overrun has been calculated as the difference between the Latest Cost (provided by the developer to CEA along with the Price Level) and the Original Cost approved by the Central Government / State Government. In most of the cases the Latest cost at the current Price Level has not been provided by the developers.

Cost overrun could not be calculated due to non-availability of latest cost.