

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)

त्रैमासिक समीक्षा संख्या. 115

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जल विद्युत् परियोजना प्रबोधन प्रभाग

नई दिल्ली

जनवरी-2024

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Executive Summary

ALL INDIA POWER SECTOR INSTALLED CAPACITY (AS ON 31.12.2023)

Installed Capacity (IC)	MW	Percentage of total IC
Thermal (Coal, Lignite, Gas & Diesel)	240022.92	(56.04%)
Renewable		
a) Large hydro (above 25MW)	46910.17	(10.95%)
b) Other Renewables (solar, wind, biomass small hydro etc.)	133886.18	(31.25%)
Nuclear	7480	(1.74%)
TOTAL (IC)	428299.27	

Sector wise Hydro Capacity under Execution: A hydro capacity (from hydro projects >25 MW) of **17973.5 MW** is under execution. Sector wise summary is given as under: -

Sector	Under Active construction		Presently stalled		Under Execution (MW)	
	Nos	MW	Nos	MW	Nos	MW
Central	16	12056	1	171	17	12227.00
State	13	3091.5	2	128	15	3219.5
Private	3	1590	6	937	9	2527
Total:	32	16737.5	9	1236	41	17973.5

Monitorable Targets for Hydro Capacity Addition for the year 2023-24:

Monitorable Targets for hydro capacity addition for the year 2023-24 is **2880 MW** (2060 MW in the Central Sector, 100 MW in State Sector and 720 MW in Private Sector). Details are as under:

Sl. No	Name of Project	State/ Implem. Agency	Unit No.	Capacity (MW)	Date of Commissioning during start of year(As per developer)	Most likely scenario (as assessed by CEA)at the start of year 2023-24	Latest commissioning schedule
	Central Sector						
1	Naitwar Mori 2x30=60 MW	Uttarakhand /SJVNL	U-1 U-2	30 30	May'23 May' 23	June'23 July'23	Commissioned on 24.11.2023 Commissioned on 04.12.2023
2	Subansiri Lower 8x250=2000 MW	Arunachal Pradesh/NHPC	U-1 U-2 U-3 U-4	250 250 250 250	June'23 July'23 Aug'23 Dec'23	Aug'23 Sept'23 Jan'24 Mar'24	Slipping to 2025-26 Slipping to 2025-26 Slipping to 2025-26 Slipping to 2025-26
3	Parbati St. II 4X200=800 MW	Himachal Pradesh/NHPC	U-1 U-2 U-3 U-4	200 200 200 200	Mar'24 Mar'24 Mar'24 Mar'24	Not likely during 2023-24	Not likely during 2023-24
4	Tehri PSS 4x250= 1000 MW	Uttarakhand/THDC	U-1 U-2 U-3 U-4	250 250 250 250	Aug'23 Sept'23 Nov.'23 Dec.'23	Oct'23 Nov'23 Jan'24 Feb'24	Slipping to 2024-25 Slipping to 2024-25 Slipping to 2024-25 Slipping to 2024-25
		Sub- total (Central):		2860	2860	2060	60
	State Sector						
5	Pallivasal 2x30= 60 MW	Kerala/ KSEB Ltd.	U-1 U-2	30 30	June'23 June'23	Dec'23 Dec'23	Mar'24 Mar'24
6	Thottiyar 1x30 + 1x10= 40 MW	Kerala/ KSEB Ltd.	U-1 U-2	30 10	Jul'23 Nov'23	Dec'23 Mar'24	Mar'24 Mar'24
		Sub- total (State):		100	100	100	100
	Private Sector						
7	Tidong-I 3x50=150 MW	Himachal Pradesh/ M/s Statkraft India Pvt. Ltd.	U-1 U-2 U-3	50 50 50	June'24 June'24 June'24	Not likely during 2023-24	Not likely during 2023-24
8	Pinnapuram 4X240+2X120=1200 MW	M/s Greenko Energies Pvt. Ltd.	U-1 U-2 U-3 U-4 U-5 U-6	240 240 240 240 120 120	Jan'24 Jan'24 Feb'24 Feb'24 Mar'24 Mar'24	Jan'24 Feb'24 Mar'24 Not likely during 2023-24 Not likely during 2023-24 Not likely during 2023-24	Slipping to 2024-25 Slipping to 2024-25 Slipping to 2024-25 Not likely during 2023-24 Not likely during 2023-24 Not likely during 2023-24
		Sub- total (Private):		1350	1350	720	-
	Total (CS+SS+PS)			4310	4310	2880	160

Total capacity likely to be achieved by 31.03.2024 – 160 MW

CHAPTER- 1

Milestones achieved during the Quarter October ~ December, 2023

- Naitwar Mori Hydro-electric Project (60MW) commissioned during Dec'23

CHAPTER - 2

Plan wise Hydro capacity Target Vs Achievement since 4th Plan

Plan / Year	Target (MW) (Original)	Capacity Addition (MW)	% Achieved
4th Plan (1969-74)	3518.00	1058.39	30.08
5th Plan (1974-79)	4654.00	3867.77	83.11
Annual Plan (1979-80)	548.00	550.9	100.53
6th Plan (1980-85)	4768.00	3076.05	64.51
7th Plan (1985-90)	5541.25	3828.41	69.09
Annual Plan (1990-91)	1006.50	445.5	44.26
Annual Plan (1991-92)	754.30	436	57.8
8th Plan (1992-97)	9282.15	2427.65	26.15
9th Plan (1997-02)	9817.70	4538.25	46.23
10th Plan (2002-07)	14393.20	7886	54.79
11th Plan (2007-12)	15627.00	5544	35.48
12 th Plan (2012-17)	10897.00	5479	50.28
2017-18	1305.00	795	60.92
2018-19	840.00	140	16.67
2019-20	1190.00	300	25.21
2020-21	606.00	510	84.16
2021-22	493.00	393	79.72
2022-23	1080	120	11.11
2023-24	2880.00		

CHAPTER - 2.1

Year/Plan wise Hydro Capacity Addition in the Country

S.No.	Year	Target (Original)	Capacity Addition (MW)	% Achieved	Remarks
1st Five Year Plan (1.1.51 to 31.12.55)					
1	1951		15.89		
2	1952		140.00		
3	1953		16.00		
4	1954		62.17		
5	1955		<u>146.13</u>		
	Total :		<u>380.19</u>		
2nd Five Year Plan (1.1.56 to 31.03.61)					
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>		
3rd Five Year Plan (1.4.61 to 31.03.66)					
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>		
Annual Plans (1966-67, 67-68, 68-69)					
16	1966-67		633.48		
17	1967-68		729.70		
18	1968-69		419.99		
4th Five Year Plan (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 Plan (1.4.74 to 31.03.79)					
24	1974-75		563.94		
25	1975-76		934.36		
26	1976-77		561.30		
27	1977-78		995.32		
28	1978-79		<u>812.85</u>		
	Total :	4654	<u>3867.77</u>	81.11	
Annual Plan (1979-80)					
29	1979-80	548	550.90	100.18	
6th Five Year Plan (1.4.80 to 31.03.85)					
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	

S.No.	Year	Target (Original)	Capacity Addition (MW)	% Achieved	Remarks
7th Five Year Plan (1.4.85 to 31.03.90)					
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>		
	Total :	5541.25	<u>3828.41</u>	69.09	
Annual Plans (1990-91, 91-92)					
40	1990-91	1006.5	445.50	44.26	
41	1991-92	754.3	436.00	57.8	
8th Five Year Plan (1.4.92 to 31.03.97)					
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 Plan (1.4.97 to 31.03.2002)					
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 Plan (1.4.02 to 31.03.07)					
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 Highest
	Total :	14393	<u>7886.00</u>	54.79	
11th Five Year Plan (1.4.07 to 31.03.12)					
57	2007-08	2423	2423		2nd Highest.
58	2008-09	1097	969		
59	2009-10	1805	39		
60	2010-11	1741	690		
61	2011-12	8561	1423		
	Total :	15627	<u>5544.00</u>	35.48	
12th Five Year Plan (1.4.12 to 31.03.17)					
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	<u>5479</u>	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	2880 ★			

★ Targets set at the beginning of the year.

Chapter- 2.1a

Hydro Capacity Addition during the Year 2014-15

Sl. No.	Particular	Unit Nos.	Capacity (MW)		Commissioning		Remarks/Critical Issue
			Target	Actual	As Programmed	Actual (A)/ Anticipated	
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. 6x68.67 = 412 MW	Unit # 3 Unit # 4 Unit # 6	68.67 68.67 68.67	68.67 68.67 68.67	Jun 14 May 14 Apr 14	31.07.2014(A) 12.06.2014(A) 04.12.2014(A)	Commissioned
Out side the Programme							
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. State Sector							
4	Lower Jurala TSGENCO, Telangana 6x40= 240 MW	Unit # 1 Unit # 2 Unit # 3 Unit # 4	40 40 40 40	0 0 0 0	Jul.-14 Jul.-14 Oct.-14 Mar.-15	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 0	Sep-14 Dec-14	Slipped	- Commissioning delayed due to non-availability of water.
Sub- total (B):			210	0			
C. Private Sector							
6	Jorethang Loop DANS Pvt. Ltd., Sikkim 2x48= 96 MW	Unit # 1 Unit # 2	48 48	0 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- 2.1b

Hydro Capacity Addition during the Year 2015-16

Sl. No.	Particular	Unit Nos.	Capacity (MW)		Commissioning		Remarks/Critical Issue
			Target	Actual	As Programmed	Actual (A)/ Anticipated	
A. Central Sector							
1	Koldam NTPC, HP 4x200= 800 MW	Unit # 3	200	200	4/15	10.04.2015(A)	Commissioned
		Unit # 4	200	200	5/15	12.06.2015(A)	
2	Teesta Low Dam-IV NHPC, W.B 4x40 = 160 MW	Unit # 1	40	40	2/16	14.02.2016	Commissioned
		Unit # 2	40	40	3/16	16.03.2016	
3	Pare NEEPCO, Ar. Pradesh 2x55=110 MW	Unit # 1	55		8/12	Slipped	Slipped due to inundation of dam area with flood water after overtopping of Coffey Dam in June'15 and many times thereafter. Slow progress of works in Dam concreting.
		Unit # 2	55		8/12	Slipped	
	Sub- total (A):		590	480			Achieved:-480 MW
B. State Sector							
4	Baglihar - II JKPDC, J&K 3x150= 450 MW	Unit # 1	150	150	9/15	05.09.2015(A)	Commissioned
		Unit # 2	150	150	9/15	29.09.2015(A)	
		Unit # 3	150	150	2016-17	26.10.2015(A)	
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	40	40	7/15	14.10.2015(A)	Commissioned
		Unit # 2	40	40	8/15	30.09.2015(A)	
		Unit # 3	40	40	9/15	04.01.2016(A)	
		Unit # 4	40	40	10/15	05.03.2016(A)	
7	Nagarjuna Sagar TR APGENCO, AP 2x25=50 MW	Unit # 1	25		7/15	Slipped	Unit 1 & 2 could not be commissioned due to non-availability of rated discharge.
		Unit # 2	25		7/15	Slipped	
	Sub- total (B):		575	610			Achieved:-610 MW
C. Private Sector							
8	Sorang HSPCL, H.P. 2x50 = 100 MW	Unit # 1	50		11/11	Slipped	Unit # 1 synchronized , but could not be commissioned due to non-availability of rated discharge. Penstock ruptured on 18.11.2015.
		Unit # 2	50		12/11	Slipped	
9	Srinagar AHPCL, Uttarakhand 4x82.5=330	Unit # 1	82.5	82.5	4/15	10.04.2015(A)	Commissioned
		Unit # 2	82.5	82.5	4/15	08.06.2015(A)	
		Unit # 3	82.5	82.5	5/15	20.04.2015(A)	
		Unit # 4	82.5	82.5	6/15	03.06.2015(A)	
10	Jorethang Loop DANS Pvt. Ltd., Sikkim 2x48= 96 MW	Unit # 1	48	48	9/15	22.09.2015(A)	Commissioned
		Unit # 2	48	48	10/15	23.09.2015(A)	
	Sub- total (C):		526	426			Achieved:-426 MW
	Total (A+B+C)		1691	1516			Achieved:-1516 MW
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- 2.1c

Hydro Capacity Addition during the Year 2016-17

Sl. No.	Particular	Unit Nos.	Capacity (MW)		Commissioning		Remarks/ Critical Issue
			Target	Actual	As Programmed	Actual(A)/ Anticipated	
A.	Central Sector						
1	Teesta 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
2	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.
3	Kameng NEEPCO, Ar. Pradesh 4x150= 600 MW	Unit # 1 Unit # 2	150 150	- -	Dec.'09 Dec.'09	Slipped Slipped	Slow progress in Dam & HM works.
	Sub- total (C.S.):		490	80			
B.	State Sector						
1	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.
2	Kashang – I HPPCL, H.P. 1x65=65 MW	Unit # 1	65	65	May 16	10.10.2016(A)	Commissioned
3	Lower Jurala TSGENCO, 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
4	Pulichintala TSGENCO, 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.
5	New Umtru MePGCL, Meghalaya 2x20=40 MW	Unit # 1 Unit # 2	20 20	- -	Nov.16 Dec.16	Slipped Slipped	Slow progress of works.
6	Teesta-III Teesta 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
7	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
	Sub- total (B):		995	825			
C.	Private Sector						
1	Chanju-I IA 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.
2	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.
3	Tashiding 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.
	Sub- total (P.S.):		229	24			

Chapter- 2.1c

	Total C.S.+S.S.+P.S.)		1714	929			
	Out Side Programme						
1	Kashang-II & III HPPCL , HP 1x65+1x65= 130MW	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 Outside Programme :			730			
	Grand Total (31.03.2017)			1659			

Chapter- 2.1d

Hydro Capacity Addition during the Year 2017-18

Sl. No.	Particular	Unit Nos.	Capacity (MW)		Commissioning		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 Commissioned in Central Sector : 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 Commissioned in State 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 Commissioned in Private Sector : 205 MW		
	Total (A+B+C)		1305	795	Total Commissioned during 2017-18 : 795 MW.		

Chapter- 2.1e

Hydro Capacity Addition during the Year 2018-19

Sl. No.	Particular	Unit Nos.	Capacity (MW)		Commissioning		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 Commissioned in Central Sector :110 MW		
B.	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-2.1f

Hydro Capacity Addition during the Year 2019-20

Sl. No.	Particular	Unit Nos.	Capacity (MW)		Commissioning		Remarks / Critical Issues
			Target	Actual	As Programmed	Actual (A)/ Anticipated	
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 delays. -Difficult approach and working condition. -Ventilation 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	Unit #1 Unit # 2 Unit # 3	33.33 33.33 33.33		Oct,19 Nov,19 Dec,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

Sl. No.	Particular	Unit Nos.	Capacity (MW)		Commissioning		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	*To be commissioned in FY 2021-22 with 17 MW enhanced 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

Chapter -2.1 h

Hydro Capacity Addition during the Year 2021-22

Sl. No.	Particular	Unit Nos.	Capacity (MW)		Capacity Addition		Remarks/Critical Issues
			Target	Actual	As Programmed	Actual/Anticipated	
A.	State Sector						
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=40MW	Unit #1 Unit # 2	10 30		December'21 December'21	2022-23 2022-23	Slipped to 2022-23
	Sub- total (A):		100 MW				
B.	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 GMRBHHPL, 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				

Chapter -2.1 i

Hydro Capacity Addition during the Year 2022-23

Sl. No.	Particular	Unit Nos.	Capacity (MW)		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				
B	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=40 MW	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-l 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 – 2.1 (j)

Hydro Capacity Addition Programme for 2023-24

Sl. No.	Name of Project	State/ Imple m. Agency	Unit No.	Capacity (MW)		Capacity Addition		Reason for slippage
				Target	Actual	As Programmed	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/NH PC	U-1 U-2 U-3 U-4	250 250 250 250		Aug'23 Sept'23 Jan'24 Mar'24	Slipping to 2025-26 Slipping to 2025-26 Slipping to 2025-26 Slipping to 2025-26	<ul style="list-style-type: none"> • Diversion tunnel-1 collapsed. • Slope stability of left bank. • Erection of balance 6 nos. of radial gates, DT plugging
3	Tehri PSS 4x250= 1000 MW	Uttarakhand/TH DC	U-1 U-2 U-3 U-4	250 250 250 250		Oct'23 Nov'23 Jan'24 Feb'24	Slipping to 2024-25 Slipping to 2024-25 Slipping to 2024-25 Slipping to 2024-25	<ul style="list-style-type: none"> • River joining works are critical • Permission from Up irrigation Dept from 1-30th Jun,2024 • Plug breaking of HRT
		Sub- total (Central):		2060		2060	60	
	State Sector							
4	Pallivasal 2x30= 60 MW	Kerala/ KSEB Ltd.	U-1 U-2	30 30		Dec'23 Dec'23	Mar'24 Mar'24	
5	Thottiyar 1x30 + 1x10= 40 MW	Kerala/ KSEB Ltd.	U-1 U-2	30 10		Dec'23 Mar'24	Mar'24 Mar'24	
		Sub- total (State):		100		100	100	
	Private Sector							
6	Pinnapuram 4X240+2X120=1200 MW	M/s Greenko Energies Pvt. Ltd.	U-1 U-2 U-3	240 240 240		Jan'24 Feb'24 Mar'24	Slipping to 2024-25 Slipping to 2024-25 Slipping to 2024-25	Slow progress of works
		Sub- total (Private):		720		720	-	
Total (CS+SS+PS)				2880	60	2880	160	

CH. 2.2(a)

SUMMARY

Tentative Year-wise Hydro Capacity Addition for the period 2023-24 till 2031-32

Sector															Stalled		Total	
	2023-24		2024-25		2025-26		2026-27		2027-28		2028-29		2031-32		MW	Nos.	MW	Nos.
	MW	Nos.	MW	Nos.	MW	Nos.	MW	Nos.	MW	Nos.	MW	Nos.	MW	Nos.				
Central Sector	0	0	1800	2	3020	5	3454	6	382	1	520	1	2880	1	171	1	12227	17
State Sector	100	2	540	3#	1613.5	5#	490	2	48	1	300	1	0	0	128	2	3219.5	15
Private Sector	0	0	1350	2	240	1	0	0	0	0	0	0	0	0	937	6	2527	9
Total	100	2	3690	7#	4576.5	11#	3944	8	430	2	820	2	2880	1	1236	9	17973.5	41

Note:-Presently 41 no. of hydroelectric project (above 25 MW) totaling to 17973.5 MW are under implementation (CS-17 nos.(12227 MW),SS-15 nos.(3219.5 MW),PS-9 nos. (2527 MW)). Out of these,32 no. HEPs totaling to 16737.5 MW are under active construction (CS – 16 nos. (12116 MW), SS – 13 nos. (3091.5 MW), PS – 3 nos. (1590 MW) and 9 no. HEPs totaling to 1236 MW are presently stalled.

#Polavaram HEP is bifurcated for benefits during more than one year.

Ch. 2.2(b) – Hydro Capacity addition program for 2023-2024

S.No	Project Name/ Impl. Agency	Sector	State	Unit No.	Capacity (MW)	Anticipated Trial Run Date
F Y. 2023-24						
1	Pallivasal /KSEB	State	Kerala	U-1 to 2	60	Mar'2024
2	Thottiyar/KSEB	State	Kerala	U-1 to 2	40	Mar'2024
Sub-Total (FY 20 23-24)					100	

Ch. 2.2(c) – Hydro Capacity addition program for 2024-2025

F Y. 2024-25						
S.No	Project Name/ Impl. Agency	Sector	State	Unit No.	Capacity (MW)	Anticipated Trial Run Date
1	Parbati-II /NHPC	Central	Himachal Pradesh	U-1 to 4	800	Sept'2024
2	Tehri PSS/THDC	Central	Uttarakhand	U-1 to 4	1000	Oct'2024
3	Polavaram / Polavaram Project Authority	State	Andhra Pradesh	U-1 to 4	320	Mar'2025
4	Lower Kopili /APGCL	State	Assam	U-1 to 5	120	Mar'2025
5	Uhl-III / BVPCL	State	Himachal Pradesh	U-1 to 3	100	Dec'2024
6	Tidong-I /M/s Statkraft India Pvt. Ltd.	Private	Himachal Pradesh	U-1 to 3	150	Jun'2024
7	Pinapuram/Greenko	Private	Andhra Pradesh	U-1 to 6	1200	Dec'2024
Sub-Total (FY 2024-25)					3690	

Ch. 2.2(d) – Hydro Capacity addition program for 2025-2026

F Y. 2025-26						
S.No	Project Name/ Impl. Agency	Sector	State	Unit No.	Capacity (MW)	Anticipated Trial Run Date
1	Kiru /CVPPL	Central	Jammu & Kashmir	U-1 to 4	624	Mar'2026
2	SUBANSIRI LOWER /NHPC	Central	Arunachal Pradesh	U-1 to 8	2000	Oct'2025
3	Luhri-I /SJVN	Central	Himachal Pradesh	U-1 to 4	210	Jan'2026
4	Rangit-IV/NHPC	Central	Sikkim	U-1 to 3	120	May'2025
5	Dhulasidh /SJVN	Central	Himachal Pradesh	U-1 to 2	66	Nov'2025
6	Polavaram / Polavaram Project Authority	State	Andhra Pradesh	U-5 to 12	640	Mar'2026
7	Shahpurkandi /PSPCL	State	Punjab	U-1 to 7	206	Oct'2025
8	Lower Sileru Extension /APGENCO)	State	Andhra Pradesh	U-1 to 2	230	Mar'2026
9	Kundah Pumped Storage (Phase-I, Phase-II & Phase-III) /TANGEDCO	State	Tamil Nadu	U-1 to 4	500	Jul'2025
10	Parnai/JKSPDC	State	Jammu & Kashmir	U-1 to 3	37.5	Dec'2025
11	Kutehr/JSW	Private	Himachal Pradesh	U-1 to 3	240	Nov'2025
Sub-Total (FY 2025-26)					4873.5	

Ch. 2.2(e) – Hydro Capacity addition program for 2026-2027

F Y. 2026-27						
S.No	Project Name/ Impl. Agency	Sector	State	Unit No.	Capacity (MW)	Anticipated Trial Run Date
1	Kwar/CVPPL	Central	Jammu & Kashmir	U-1 to U-4	540	Nov'2026
2	Ratle / NHPC	Central	Jammu & Kashmir	U-1 to U-5	850	May'2026
3	Rammam - III / NTPC Ltd.	Central	West Bengal	U-1 to U-3	120	Sept'2026
4	Teesta- VI /NHPC	Central	Sikkim	U-1 to U-4	500	Aug'2026
5	Pakal Dul /CVPPL	Central	Jammu & Kashmir	U-1 to U-4	1000	Sept'2026
6	Vishnugad Pipalkoti /THDC	Central	Uttarakhand	U-1 to U-4	444	Jun'2026
7	Shongtong Karcham/HPPCL	State	Himachal Pradesh	U-1 to U-3	450	Nov'2026
8	Mankulam/ KSEB Ltd.	State	Kerala	U-1 to U-2	40	May'2026
Sub-Total (FY 2026-27)						3944

Ch. 2.2(f) – Hydro Capacity addition program for 2027-2028

F Y. 2027-28						
S.No	Project Name/ Impl. Agency	Sector	State	Unit No.	Capacity (MW)	Anticipated Trial Run Date
1	Sunni Dam /SJVNL	Central	Himachal Pradesh	U-1 to U-6	382	Mar'2028
2	Chanju-III /HPPCL	State	Himachal Pradesh	U-1 to U-3	48	Jul'2027
Sub-Total (FY 2027-28)					430	

Ch. 2.2(g) – Hydro Capacity addition program for 2028-2029

F Y. 2028-29						
S.No	Project Name/ Impl. Agency	Sector	State	Unit No.	Capacity (MW)	Anticipated Trial Run Date
1	Tapovan Vishnugad /NTPC	Central	Uttarakhand	U-1 to 4	520	Dec'2028
2	Lakhwar Multipurpose Project /UJVNL	State	Uttarakhand	U-1 to U-3	300	Oct'2028
Sub-Total (FY 2028-29)					820	

Ch. 2.2(h) – Hydro Capacity addition program for 2031-2032

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

Chapter 2.3(a)

List of Hydro Electric Projects (above 25 MW) -Active construction.								
Sl. No.	Name of the Project (Executing Agency)	State / UT	District	I.C. (No. X MW.)	Cap. Under Execution(MW)	River/Basin	Date of finish/ commissioning	% Physical Progress
Central Sector								
1	Subansiri Lower (NHPC)	Arunachal Pradesh/Assam	Lower Subansiri, Ar. Pradesh / Dhemaji, Assam	8x250	2000.00	Subansiri/ Brahmaputra	2025-26 (Oct'25)	92
2	Parbati St. II (NHPC)	Himachal Pradesh	Kullu	4x200	800.00	Parbati/Beas/Indus	2024-25 (Sept'24)	96
3	Luhri-I (SJVN)	Himachal Pradesh	Kullu/Shimla	2x80+2x25	210.00	Satluj/Indus	2025-26 (Jan'26)	52
4	Dhaulasidh (SJVN)	Himachal Pradesh	Hamirpur/ Kangra	2x33	66.00	Beas/Indus	2025-26 (Nov'25)	60
5	Pakal Dul (CVPPL)	UT of Jammu & Kashmir	Kishtwar	4x250	1000.00	Marusadar/ Chenab / Indus	2026-27 (Sept'26)	41
6	Kiru (CVPPL)	UT of Jammu & Kashmir	Kishtwar	4x156	624.00	Chenab/ Indus	2025-26 (Mar'26)	24
7	Teesta St. VI NHPC	Sikkim	South Sikkim	4x125	500.00	Teesta/Brahmaputra	2026-27 (Aug'26)	55
8	Vishnugad Pipalkoti (THDC)	Uttarakhand	Chamoli	4x111	444.00	Alakanada/Ganga	2026-27 (Jun'26)	65
9	Tapovan Vishnugad (NTPC)	Uttarakhand	Chamoli	4x130	520.00	Dhauliganga / Alakanada & /Ganga	2028-29 (Dec'28)	75
10	Tehri PSS (THDC)	Uttarakhand	Tehri Garhwal	4x250	1000.00	Bhilangna/Bhagirathi/ Ganga	2024-25 (Oct'24)	95
11	Rammam-III (NTPC)	West Bengal	Darjeeling	3x40	120.00	Rammam/ Rangit/Teesta Brahmaputra	2026-27 (Sept'26)	44
12	Rangit-IV (NHPC)	Sikkim	West Sikkim	3x40	120.00	Rangit/ Teesta/ Brahmaputra	2025-26 (May'25)	66
13	Ratle (RHEPPL / NHPC)	UT of Jammu & Kashmir	Kishtwar	4x205 + 1x30	850.00	Chenab/Indus	2026-27 (May'26)	10
14	Kwar (CVPPPPL)	UT of Jammu & Kashmir	Kishtwar	4x135	540.00	Chenab/Indus	2026-27 (Nov'26)	8
15	Sunni Dam (SJVN)	Himachal Pradesh	Shimla/Mandi	4x73+1x73+1x17	382.00	Satluj/Indus	2027-28 (Mar'28)	23
16	Dibang Multipurpose Project (NHPC)	Arunachal Pradesh	Lower Dibang Valley	12x240	2880.00	Dibang/Brahmaputra	2031-32 (Feb'32)	Initial stage of construction
Sub-Total: Central Sector					12056.00			
State Sector								
17	Polavaram (APGENCO/ Irrigation Dept., A.P.)	Andhra Pradesh	East & West Godavari	12x80	960.00	Godavari/EFR	2024-26 (Mar'26)#	18
18	Lower Kopli (APGCL)	Assam	Dima Hasao & Karbi Anglong	2x55+2x2.5+1x5	120.00	Kopili/Brahmaputra	2024-25 (Mar'25)	54
19	Uhl-III (BVPCL)	Himachal Pradesh	Mandi	3x33.33	100.00	Uhl/Beas/ Indus	2024-25 (Dec'24)	95
20	Shongtong Karcham (HPPCL)	Himachal Pradesh	Kinnaur	3x150	450.00	Satluj/ Indus	2026-27 (Nov'26)	49
21	Parnai (JKSPDC)	UT of Jammu & Kashmir	Poonch	3x12.5	37.50	Jhelum/ Indus	2025-26 (Dec'25)	56
22	Pallivasal (KSEB)	Kerala	Idukki	2x30	60.00	Mudirapuzha/ Periyar/ Baypore Periyar/ WFR	2023-24 (Mar'24)	96
23	Thottiyar (KSEB)	Kerala	Idukki	1x30+1x10	40.00	Thottiyar/ Periyar/ Baypore Periyar/ WFR	2023-24 (Mar'24)	96
24	Shahpurkandi (PSPCL/ Irrigation Deptt., Pb.)	Punjab	Pathankot	3x33+3x33+1x8	206.00	Ravi/ Indus	2025-26 (Oct'25)	66

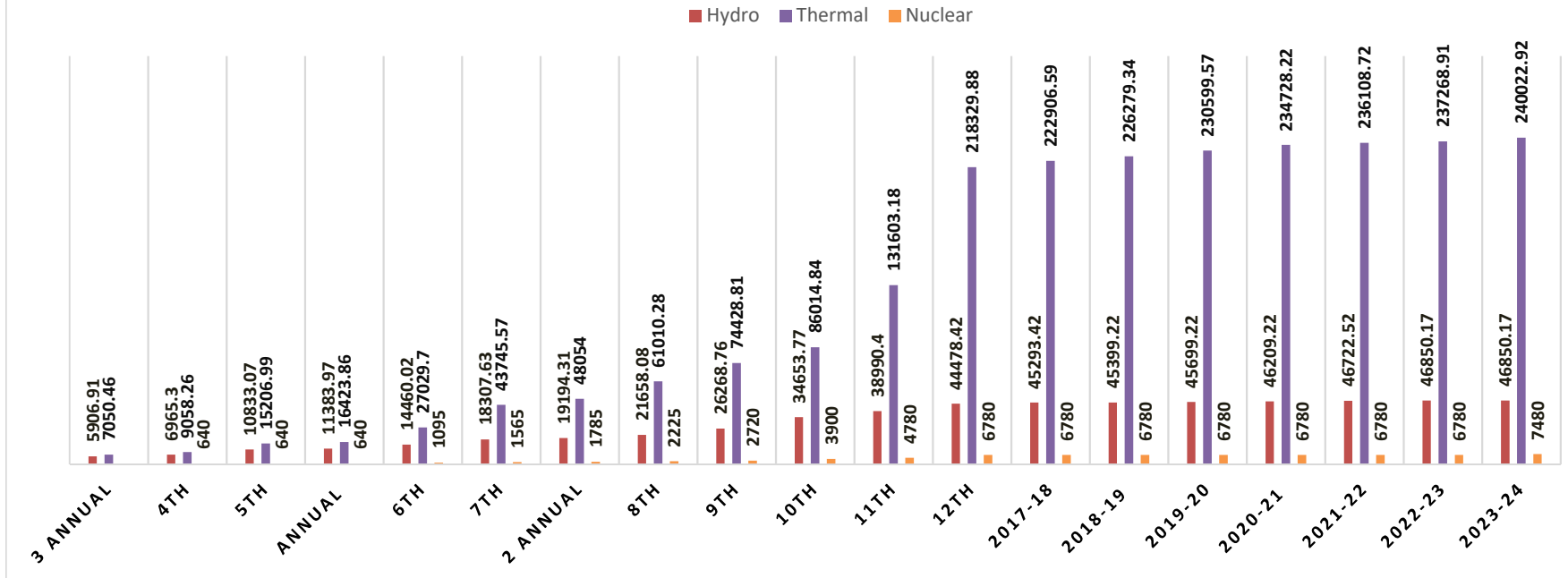
25	Kundah Pumped Storage Phase-I,II&III)	Tamil Nadu	Nilgiris	4x125	500.00	Kundah/Bhavani/ Cauvery/EFR	2025-26 (Jul'25)	71
26	Chanju-III (HPPCL)	Himachal Pradesh	Chamba	3x16	48.00	Chanju Nallah	2027-28 (Jul'27)	Initial stage of construction
27	Mankulam (KSEB)	Kerala	Idukki	2x20	40.00	Melachery	2026-27 (May'26)	7
28	Lakhwar Multipurpose Project (UJVNL)	Uttarakhand	Dehradun & Tehri Garhwal	3x100	300.00	Yamuna	2028-29 (Oct'28)	8
29	Lower Sileru Extension (APGENCO)	Andhra Pradesh	Alluri Sitharamaraju	2x115	230.00	Sileru/Godavari	2025-26 (Mar'26)	Initial stage of construction
Sub-Total: State Sector					3091.50			
Private Sector								
30	Tidong-I (Statkraft IPL)	Himachal Pradesh	Kinnaur	3x50	150.00	Tidong/Satluj/Indus	2024-25 (Jun'24)	91
31	Kutehr (JSW Energy Ltd)	Himachal Pradesh	Chamba	3x80	240.00	Ravi/ Indus	2025-26 (Nov'25)	70
32	Pinnapuram (Greenko AP01 IREP Private Limited)	Andhra Pradesh	Kurnool	4x240+2x120	1200.00	Pennar Basin	2024-25 (Dec'24)	60
Sub-Total: Private Sector					1590.00			
Total:					16737.50			
# 4 units (320 MW) likely during 2024-25 & 8 units (640 MW) during 2025-26								
Note:-Presently 32 no. of hydro electric project (above 25 MW) totaling to 16737.5 MW are under active construction.								

CH2.3(b)

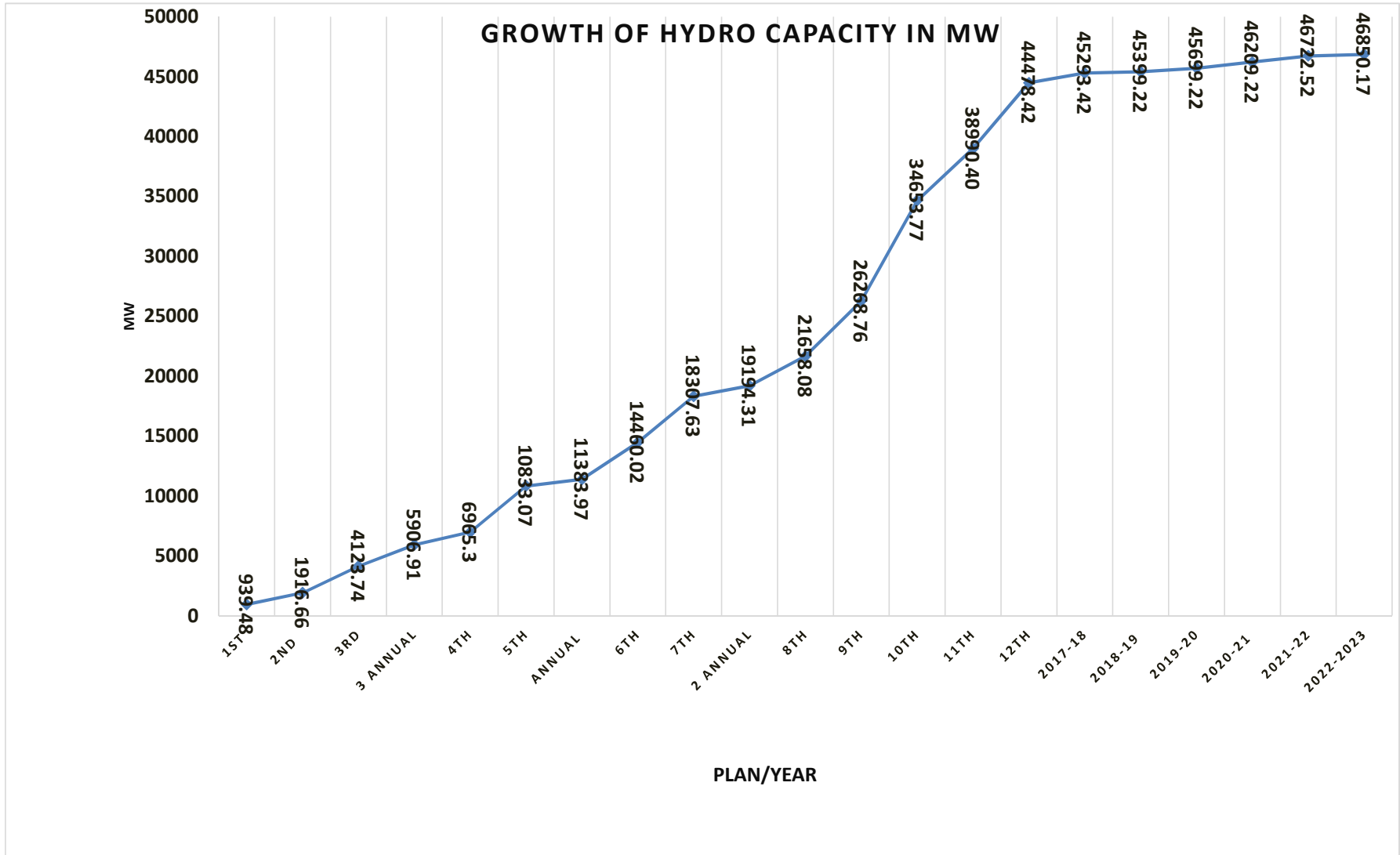
List of Hydro Electric Projects (above 25 MW) held-up									
Sl. No.	Name of Scheme	Sector	State /District	I.C. (No. X MW.)	Cap. Under Execution(MW)	River/Basin	Type	% Physical progress	Present Status
	(Executing Agency)								
A Projects held up due to sub-judice matters									
1	Lata Tapovan (NTPC)	Central	Uttarakhand/Ci	3x57	171	Dhauliganga /Alaknada & 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 /Khardwa & Khandwa	10x40	400	Narmada/CIRS	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 S	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 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.
Sub total					622				
B Projects held up due to funds constraints									
1	Tangu Romai Power Generation Power Ltd.	Private	Himachal Pradd	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 S	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 total					110				
C Project held up due to accessibility to project site									
1	Panan (Himagiri) Hydro Energy Private Ltd.	Private	Sikkim /North S	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 Sikkim PWD which is likely to be completed by Nov' 2024. 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.
Sub total					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	Maharashtra/S	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 (LANCO)	Private	Uttarakhand/Ru	2x38	76	Mandakini/Alaknada Ganga	RoR	74.0%	Works stalled since July, 2017 due to Financial crunch. The project stands allotted 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				
Total:					1236				

Chapter- 3

GROWTH OF INSTALLED CAPACITY (EXCLUDING RES PROJECTS))

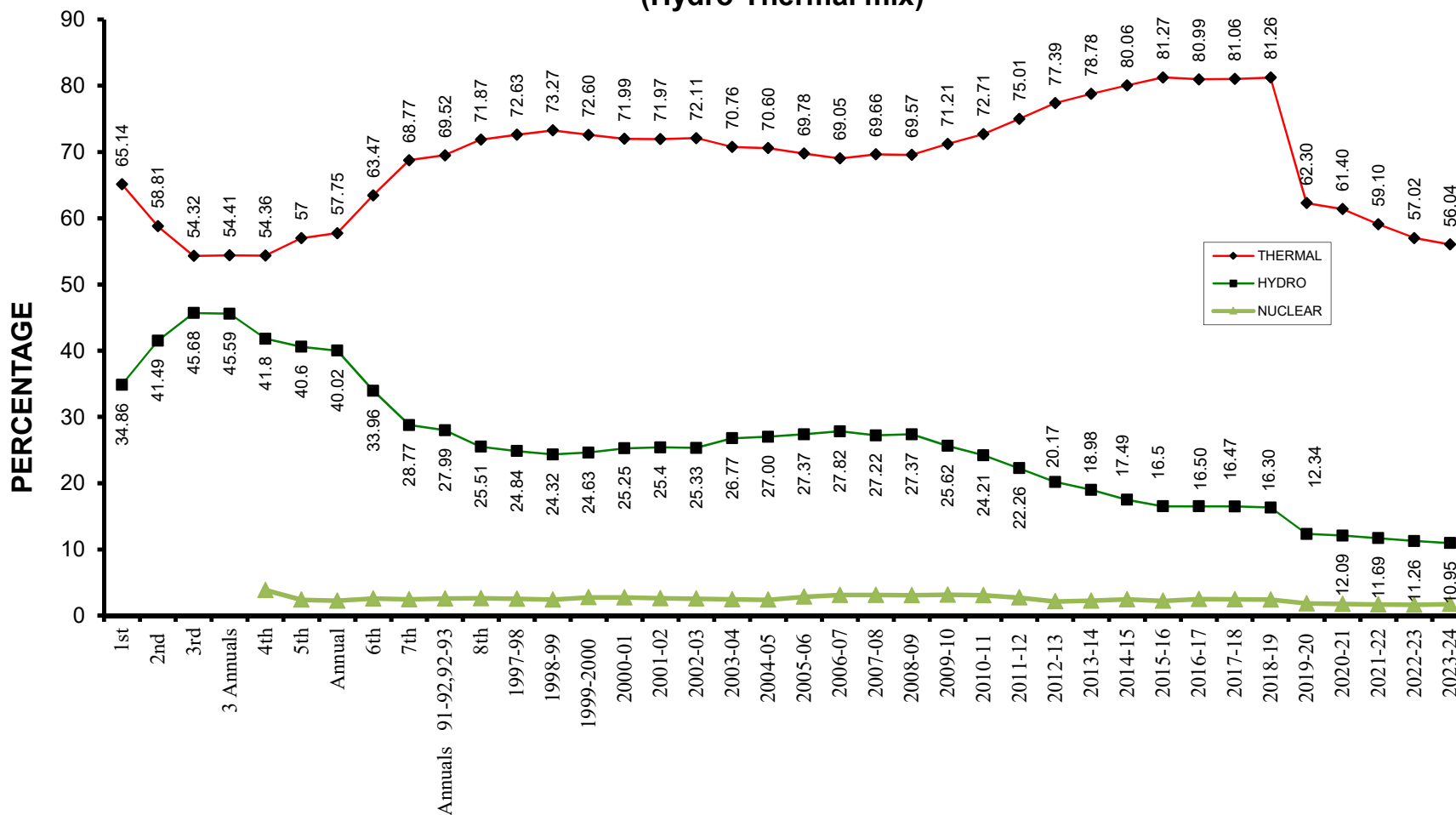


Chapter- 3.1



CHAPTER - 4

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 2019-20 the percentage Hydro /Thermal has been calculated on total installed capacity including RES

Chapter 5
Sanctioned Hydro Electric Projects for Construction
(Excluding projects under Ministry of New & Renewable Energy)

Sl. No.	Name of Scheme	State	I.C. (No. x MW)	Benefits (MW)	Date of Approval
Central Sector					
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
5	Tehri PSS (THDC)	Uttarakhand	4x250	1000.00	18.07.06
6	Lata Tapovan (NTPC)	Uttarakhand	3x57	171.00	17.07.12
7	Vishnugad Pipalkoti (THDC)	Uttarakhand	4x111	444.00	21.08.08
8	Ramam-III (NTPC)	West Bengal	3x40	120.00	10.09.14
9	Teesta St. VI (NHPC)	Sikkim	4x125	500.00	08.03.19
10	Ratle (Ratle Hydro) (NHPC)	J&K	4x205+1x30	850.00	11.02.21
11	Kiru (CVPPL)	J&K	4x156	624.00	08.03.19
12	Rangit-IV (NHPC)	Sikkim	3x40	120.00	30.03.21
13	Luhri -I (SJVN)	H.P.	2x80+2x25	210.00	20:11:20
14	Dhauilasidh (SJVN)	H.P.	2x33	66.00	01:10:20
15	Kwar (CVPPL)	J&K	4x135	540.00	11.05.22
16	Dibang Multipurpose Project (NHPC)	Arunachal Pradesh	12x240	2880.00	
17	Sunni Dam (SJVN)	HP	4x73+1x73+1x17	382.00	04.01.2023
Sub- total (Central Sector) :				12227.00	
State Sector					
18	Parnai (JKSPDC)	J&K	3x12.5	37.50	25.10.13
19	Lower Kalnai (JKSPDC)	J&K	2x24	48.00	16.08.13
20	Uhl-III (BVPCL)	H.P.	3x33.33	100.00	26.09.03
21	Shongtom Karcham (HPPCL)	H.P.	3x150	450.00	16.08.12
22	Shahpurkandi (PSPCL)	Punjab	3x33+3x33+1x8	206.00	04.05.11
23	Koyna Left Bank (WRDMah)	Maharashtra	2x40	80.00	20.02.04
24	Indrasagar Polavaram (PPA)	Andhra Pradesh	12x80	960.00	25.02.09
25	Pallivasal (KSEB)	Kerala	2x30	60.00	31.01.07
26	Thottiyar (KSEB)	Kerala	1x30+1x10	40.00	05.06.08
27	Kundah Pumped Storage-I (TANGENDCO)	Tamil Nadu	4x125	500.00	03.12.08
28	Lower Kopli (APGCL)	Assam	2x55+2x2.5+1x5	120.00	Nov.2020
29	Chanju-III (HPPCL)	Himachal Pradesh	3x16	48.00	
30	Mankulam (KSEB)	Kerala	2x20	40.00	03.03.2022
31	Lower sileru Extension (APGENCO)	Andhra Pradesh	2x115	230.00	24.08.2020
32	Lakhwar Multipurpose Project (UJVNL)	Uttarakhand	3x100	300.00	23.12.2021
Sub- total (State Sector) :				3219.50	
Private Sector					
33	Tidong-I (Statkraft India Pvt. Ltd.)	H.P.	3x50	150.00	23.07.07
34	Tangnu Romai - I (Tangnu Romai Power Generation)	H.P.	2x22	44.00	30.11.07
35	Phata Byung (LANCO)	Uttarakhand	2x38	76.00	30.11.07
36	Maheshwar (SMHPCL) #	M.P.	10x40	400.00	29.09.06
37	Bhasmey (GATI Infrastructure)	Sikkim	2x25.5	51.00	Dec-08
38	Rangit-II (Sikkim Hydro Power)	Sikkim	2x33	66.00	10.02.10
39	Panan (Himagiri Hydro Energy)	Sikkim	4x75	300.00	07.03.11
40	Kutehr (JSW Energy (Kutehr)Ltd.	H.P.	3x80	240.00	31.03.10
41	Pinnapuram (Greenko AP01 IREP Private Ltd)	A.P.	4x240+2x120	1200.00	20.04.22
Sub- total (Private Sector) :				2527.00	
Total - Under execution (as on 31.12.2023)				17973.50	

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

*Stalled Projects-Commissioning subject to Re-Start of works.

Chapter – 6

Status of Under Execution Hydro Electric Projects (above 25 MW) in the Country

Sl. No.	Name of Project Executing Agency Date of CEA clearance / Approval Capacity (MW) Broad Features Cost (original/latest) In Rs. Crores.	State <u>Comm. Sch.</u> (original/ Now Ant.	Broad Present Status / Critical Area	Remarks/ Critical issues
A	Central Sector			
1	<p>Parbati-II NHPC 11.09.2002 4x200 = 800 MW Broad Features : Dam – 85m High, 109. m long at top, concrete gravity type HRT- 6m x 31.23km P.House- Surface 23.5mx 39.7mx 123m. Turbine- Pelton Swyd.- 13.8/400 kV Cost: <u>Original:3919.59</u> Latest: 9897.59 (04/20 PL) Contractors Civil : Gammon / Valecha HM : Om Metals E&M : BHEL</p>	<p><u>H.P.</u> <u>2009-10</u> <u>2024-25</u> (Sep'24)</p>	<p>CIVIL WORKS Dam & Intake Structure (83.7m high and 3.7m D-shaped intake structure) - Completed. Head Race Tunnel (6m diameter, 31.545Km long) – HRT excavation: Completed (Except 40.72 m rock plug at D/s of Adit-IV) • Overt lining: 28910 m (91.60%) lining out of 31561 m completed. Total 144m Lining progress achieved during Dec-2023. Power House (23.5m x 39.7m x 123m size): Completed. Nallah Works -Completed ELECTROMECHANICAL WORKS: All units synchronized with grid HYDROMECHANICAL WORKS: All the major HM works completed.</p>	<p>-Slow progress of HRT excavation due to geological constraints. -Heavy rainfall since Jul,2023 which has cut off the approach to working fronts in HRT.</p>
2	<p>TapovanVishnugad NTPC 11.08.2004/Nov, 2006 4x130 = 520 MW Broad Features : Barrage–5 bays of 12m HRT- 5.4m x 11.97km P.House- underground Turbine- V.Pelton Cost: Original: 2978.48 Latest: 7700 (4th qtr 22) Agencies: • Barrage Package: M/s RPPL • HRT Package: M/s HCC • Powerhouse and Penstock Package: Ms Patel Engineering Ltd. • HM Package: Om Metals • E&M Package: BHEL • Switchyard Package: M/s GE T&D India Ltd.</p>	<p><u>Uttarakhand</u> <u>2012-13</u> <u>2028-29</u> (Dec'28)</p>	<p>Barrage: Excavation Completed and Concreting almost completed. HRT& Adits: Muck removal works have been completed through all the faces of HRT till Nov,2022. Lastly, Face#2 of HRT cleared in Nov,2022 Desilting Chamber: Concreting under progress. Gate erection completed. TRT, Pressure shaft, Surge shaft completed. E&M works: More than 80% Supply is completed. 2 units are boxed-up and the erection of 3rd unit is 80% complete. The erection agency of M/s BHEL has been demobilized. Hydro-Mechanical works: a. Damage assessment is completed, repair methodology and required supplies has been chalked out. b. Rate finalization for restoration works &BOI's are under process c. Supplies for Radial Gate & other components and start of balance works is being taken-up with agency in parallel to rate finalization. Muck removal (Flash flood occurred on 07 Feb 2021) from all faces almost completed except at SFT. Automatic Flood Warning System has been commenced. HRT Intake Adit Portal Approach Road restored</p>	<p>- 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</p>

	<ul style="list-style-type: none"> GT Package: ABB Ltd. 			
3	<p>Tehri PSS, THDC, 18.7.06 Nov-11 (Revised CCEA) 4x250=1000 MW</p> <p>Broad Features : Surge Shaft: U/s – 2 nos. D/s – 2 nos Power House: U/G TRT: 2, Dia 9m and Length 1070m & 1160m Turbine: VF reversible pump turbine Cost: Original: 1657.60 Latest:6439.60 (Oct-22PL)</p> <p>Contractors Turnkey : Alstom, France/ HCC</p>	<p><u>Uttara khand</u> <u>2010-11</u> <u>2024-25</u> (Oct'24)</p>	<ul style="list-style-type: none"> Works already executed with Tehri Stage-I before award of EPC contract: Main Dam, 2 Headrace Tunnels, Transformer Hall, Main Cable Gallery of PSP. <p>Works being executed under EPC Contract: Electro-mechanical Works: Unit-1: Pre-commissioning activities underway after successful boxing-up. Unit synchronization targeted by 15.03.2024. Unit-2: Boxing up successfully completed on 26.12.2023. Unit synchronization targeted by 31.03.2024. Unit-3: Following the lowering of the Stator and Runner, turbine shaft free completed on 31.10.23. Rotor is targeted to lower by Jan'2024. Unit synchronization targeted by 31.05.2024. Unit-4: Runner has been lowered in generator pit on 22.12.2023. Stator & Rotor assembly is also in progress in service bay. Unit synchronization targeted by 30.06.2024.</p> <p>Civil & Hydro-mechanical Works Upstream Surge Shaft- 1 & 2 (145 m each): Lining of USSS-1 required for commissioning of first two units is near completion and lining of USSS-2 is progressing well and likely to be completed by May'24. Down Stream Surge Shaft – 1 & 2 (70.5 m each): Shaft lining and grouting completed. Erection of fixed wheel gate is in progress. Tail Race Tunnels- 1 & 2 (2406 m): TRT-01 Concrete lining completed and TRT-02 lining is in progress. Outlet works including gate lowering: Concreting work is in advance stage. TRT Gate to be lowered. Dismantling the flood protection wall and accomplish river joining works: All the works in respect of 1st and 2nd Units are targeted for completion by Jan'24 except river joining works. However, as per the discussion with UPID officials and subsequent communication received; the shutdown of Tehri HPP and Koteshwar HEP to complete the river joining works may only be available from 15th May'24/ 01st Jun'24 to 30th Jun'24. In such case, commissioning of 1st Unit can be achieved by 31st Jul'24 and rest three units in a gap of one month each by Oct'24.</p>	-
4	<p>Lata Tapovan, NTPC Aug-2012 3x57= 171 MW</p> <p>Broad Features : Barrage–14 bays of 11m each HRT- 7.51 Km, 4.7m dia P.House- underground Turbine- V.Francis Cost: Original: 1527.00 Latest: 1801.07</p> <p>Contractors Civil & HM : L&T E&M : BHEL</p>	<p><u>Uttara khand</u> <u>2017-18</u> <u>2028-29</u> (Subject to re-start of works)</p>	<p>Infrastructure works are almost completed. Main works to re-start after clearances from Hon'ble Supreme Court. EPC contract for Civil & HM works awarded to M/s L&T on 17-08-2012. E&M package awarded to M/s BHEL on 07.12.12. MoWR vide letter dated 24.01.2019 to MoEF has communicated that only 7 out of 51 Hydro Projects which are under various stages of construction in Uttarakhand has been recommended for implementation. Lata Tapovan project is not included in the 7 recommended projects.</p> <ul style="list-style-type: none"> ➤ Barrage (29 m high)-Not started yet. ➤ Desilting chamber (135 m L x 33m W x 17.5 m H)-Not started yet. ➤ HRT (4.7 m diameter, 7.51 km long)-Not started yet. ➤ Surge Shaft (7 m diameter 144.8 m height)-Not started yet. ➤ Pressure Shaft (3no. 2.0 m diameter 297 m long)-Not started yet. ➤ Power House (85mx 17mx 40.5m)-Not started yet. <p>On 08.07.2020, Director /Conservator forest NDNP, submitted report to Chief Conservator forest</p>	<ul style="list-style-type: none"> •Construction work stopped vide Hon'ble Supreme Court order dated 7.5.14. •Since then, various hearings had been held but the matter is yet to be concluded. Last hearing was held on 22.08.2022, wherein Hon'ble Supreme Court issued the order for listing the matter on 11.10.2022. Matter is likely to be listed on 17.01.2024. • Meanwhile, M/s L&T have raised claims of nearly Rs 336 Cr for disruption to Civil & HM Package awarded to them. The dispute pertaining to the claim was under arbitration. Award for the same has been

			<p>Dehradun for LTHEPP mentioning that as per revised notification, project is out of ESZ boundaries. Project is likely to be commissioned 4 years after restart of works.</p>	<p>passed by Ld. Arbitral Tribunal on 20.05.2022. The award has been challenged by both parties in the Hon'ble High Court of Delhi. Next hearing listed on 12.03.2024.</p> <ul style="list-style-type: none"> • 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.
5	<p>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 Latest:3860.35 (02/2019 PL) Contractors Civil &HM : HCC E&M : BHEL</p>	<p><u>Uttara khand</u> 2013-14 2026-27 (Jun'26)</p>	<p>Civil & HM Works: River Diversion has been completed. Construction of U/S Cofferdam has been completed. Dam excavation: Around 78% completed. Concreting is targeted to start by mid of Jan'24. Frequent resistance from local villagers is being faced for dumping. De-silting Chambers: 95.60% excavation and 54.70% lining work completed in all 3 DCs. Balance work is scheduled to be completed by Feb'25. HRT by DBM (Total 1.5 kms): 100% excavation completed. Kerb concreting and overt lining completed in the length of 572 m and 427 m respectively. HRT by TBM (12 kms): 400 m HRT has been constructed. Machine Hall: In Service Bay, after completion of crane beam by mid of Jan-24, EoT erection is targeted to be completed by end of Feb-24. In Unit area, benching is in progress and Unit-1 pit excavation is targeted by Mar'24. Transformer Hall: Excavation has been completed and support measures are in progress. TRT: Around 57% heading excavation has been completed. TRT outlet area: Slope stabilization work has been completed. Electro - Mechanical Works: 48% supply of equipment/ material has been completed.</p>	<p>-Financial crunch with the civil contractor -Intermittent stoppage of works after the Joshimath subsidence issue Jan'23</p>
6	<p>Subansiri Lower NHPC 09.09.2003 8x250= 2000 MW (1000 MW in 12th 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</p>	<p><u>Arunachal Pradesh</u> Assam <u>2009-11</u> 2025-26 (Oct'25)</p>	<p>> Dam (116m high and 284m long):- Cumulative concreting of 99.84 percent achieved.</p> <p>> Power House (285m x 61m x 64m size):- cumulative qty. achieved 95.77 percent.</p> <p>> E&M Works- unit-1 boxed up and unit-2 boxing is in advanced stage (expected by Dec'23)</p> <p>> HM Works: Testing and commissioning of all 08 nos. Intake Service Gates have been completed. Fabrication of ferrule and erection work of Penstock Liner is in progress (96.45 percent completed).</p>	<p>Radial Gates erection and Diversion Tunnel plugging are critical activities.</p>
7	<p>Teesta-VI</p>	<p><u>Sikkim</u></p>	<p>(A) Civil works:</p>	<p>Poor geology in HRT.</p>

	<p>NHPC 08.3.2019 4x125= 500 MW Broad Features: Barrage: 26.5m high HRT- 2nos,27.52km long Pressure shaft: 4nos. 5.4m dia. 151m to 198m length, TRT: 4nos 247m each length, 7.5x7.0m D-shaped. PH- Under ground Turbine- Francis Cost: Original: 3283.08 Latest : 5748.04 (07/2018 PL) Contractors Civil : JAL & Gammon E&M : Alstom</p>	<p><u>2012-13</u> 2026-27 (Aug'26)</p>	<p>Barrage (31.5 high and 105 m long) Excavation: 7.81 lac cum (98%) out of 8.07 lac cum completed. Concreting: 2.64 lac cum (77%) out of 3.44 lac cum completed. HRT (9.8m diameter) Heading excavation of (16.99) km (61.72%) executed out of total 27.52 km, benching excavation of (5.55) km (20.16%), Overt Lining of (4.18) km (15.18%), Invert lining of (1.65) km (6%) has been completed. Pressure Shaft (2 nos. steel lined 5.4 internal dia.): Excavation 97 % & Backfill concrete 59% completed. Power House (142m x 18.5m x 52.44m size): Excavation 97 %, concreting 81 % (total qty revised) completed. Downstream Surge Chamber: Excavation of Adit has been completed; however concrete lining is still to be taken up. Tail Race Tunnel: Excavation 86%, concrete lining 100 % completed. (B) HM works are in progress (59.92%). (C) E & M works are in progress (61.94%).</p>	
8	<p>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 <ul style="list-style-type: none"> 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- </p>	<p>West Bengal <u>2019-20</u> 2026-27 (Sep'26)</p>	<ul style="list-style-type: none"> Barrage (27m height and 122.5 m length): - River diversion completed. Excavation of 151061 cum (95%) (out of 1,59,000 cum) and concreting of 38949 cum(32%) (out of 1, 22,750 cum) have been completed. De-silting chamber (U/G, 2 nos. each of 140 m length x 7.5 m width x 12.55 m depth):- Excavation & lining of both De-silting chamber completed, SFT excavation: - Out of 360m of SFT, 78m (22%) has been completed. HRT (3.5 m diameter, 8.2 km long): - As of now, 2700 m (32.85%) HRT have been excavated. Adit-2 excavation: 645m/800m (82%) have been done. Adit-1 completed. Intake tunnel, Branch tunnel and Adit-1 to GOC –DC: - excavation completed. Surge Shaft (14.50 m diameter 53.75 m height): - Surge Shaft excavation & Orifice slab casting is completed. Lining is in progress. Pressure Shaft/Penstock (1591m long): – Pressure shaft excavation completed. Powerhouse (73.50m x 22.40 m x 41.60 m): - Out of 1,56,099 cum of excavation, 1,53,417 cum (98%) has been excavated. Concreting 39.5% completed. EM Works: -Tower, Beam, AC kiosk, Bus stringing, Equipment structure and main equipment installation completed. Earth mat laying work is under progress completion. Switchyard: -Civil works completed & handed over to EM agency and under progress. <p>TRC (657m): - Excavation & Concreting completed.</p>	<ul style="list-style-type: none"> Signing of PPA/ATS: - Clearance for signing of PPA by West Bengal Govt. awaited. Power Evacuation Line: Power Evacuation line/ ATS also not getting finalized due to pending decision for PPA. Heavy flood hit the Barrage area on 18.06.2023 and upstream of Barrage and equipment including access road were washed away/damaged <p>Poor financial condition of existing vendors- Financial Assistance/ Support is being provided by NTPC</p>
9	<p>Pakal Dul CVPPL 03.10.2006 4x250 = 1000 MW Broad Features :</p>	<p><u>J&K</u> <u>2020-21</u> 2026-27 (Sept'26)</p>	<p>Civil Works: ➤ Dam Package (CFRD 167m high and 305m width) LoA issued to M/s Jaiprakash Associates on 21.6.201 at a cost of Rs.2853 crores. Construction activities at the site are in progress. Access adit to HRT-1 & 2 have been</p>	<ul style="list-style-type: none"> HRT & Dam works are critical.

	<p>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 Latest: 8112.12</p> <p>Contractors Civil : Afcons – JAL – JV L&T,JAL HM: PES E&M : Voith Hydro Ltd</p>		<p>completed of a total length of 1797.5 m and 1841.5m respectively.</p> <p>Diversion Tunnel (1 no, diameter 11 m, length 855 m.): Works of Diversion Tunnel completed. River Diversion achieved on 01.11.2021 and the same was inaugurated by Hon'ble Minister of Power & NRE in presence of senior officers from GoI, GoJK, NHPC and CVPPPL.</p> <p>Construction of upstream and downstream coffer dam is in progress.</p> <p>➤ HRT-TBM Package (HRT 2Nos., 7.2m dia, 9.6 km long each (7.3 Km through TBM))- All 97 nos. consignments of TBM-1 and 95 nos. consignment of TBM-2 have also been reached at site. Excavation of Adit-1 including false portal of Cumulative length of 104m completed on 31.05.2023. Excavation of Adit-2 of 126m has completed on 19.10.2023.. Tunnel Boring Machine-1 for construction of Head Race Tunnel-1 has been launched successfully on 25.07.2023 and Excavation started from 29.07.23 & Cumulative progress of Adit-1 by TBM-01 is 384.69 m out of 494m . TBM-02 (Askini) assembly started on dated 01.04.2023& 55% completed and it is anticipated to be launched in March'2024.</p> <p>➤ Power House Civil Works (PH Cavern 166m (L) x 20.2 m(W) x 50.5 m(H))- Construction activities are in progress. Construction of Power House Cavern, MIV cavern Transformer Hall cavern, Valve House, Adit to Pressure Shafts, Surge shaft, TRT and part-HRTs are in progress.</p> <p>➤ E&M Works - Detailed Engineering of E&M equipment's including submission/checking of drawings, layout plan and equipment manufacturing/supply/inspection is in progress. Installation of MIV Crane Embedments in MIV Service bay has been completed. Installation of GT rails and embedments in service bay, Connecting Tunnel and Transformer Cavern upto GT-4 (Grid-9) has been completed. Erection of MIV EOT Crane, Erection of Draft Tube of Unit-1 & Unit -2, Erection of draft tube of Unit#3, Earthmat erection in U#4 have been completed. Erection of Spiral Casing of Unit#1 and Unit#2 is in progress with the lowering of Staying in Unit#1 & 2 in respective pits.</p>	
10	<p>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</p> <p>Contractors Civil : Patel Engg. HM: PES Engineers E&M : Andritz Hydro</p>	<p>J&K <u>2023-24</u> 2025-26 (Mar'26)</p>	<p>Civil works - Construction of Cofferdam, PH Cavern, TH Cavern, Adit to Pressure Shaft top & bottom is in progress. Activity for filling of material for construction of u/s and D/s Cofferdam has been completed on 08.05.2022. Dam abutment stripping and dam excavation below river bed is in progress. Dam concreting has been started on 05.05.2022 and is in progress.</p> <p>Diversion Tunnel (1 no, diameter 9 m, length 666 m): River Diversion achieved on 31.12.2021.</p> <p>HM Works: Detailed Design Engineering/ manufacturing & supply of HM components is in progress.</p> <p>Power House Civil Works (182m (L)x 23.6m(W) x 51.2m(H))- Power House Pilot Excavation (182m) completed on 31.03.22. Benching in progress.</p>	<ul style="list-style-type: none"> • The project is in initial stage of construction.
11	<p>Ratle Ratle Hydro Electric Project Pvt. Ltd. / NHPC 19.12.2012 4x205+1x30= 850 MW Broad Features :</p>	<p>J&K <u>2017-18</u> 2026-27 (May'26)</p>	<ul style="list-style-type: none"> • Improvement / Construction of Roads: - Completed. • Excavation of Diversion Tunnels / MAT: In progress. 	<ul style="list-style-type: none"> •

	<p>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 : <u>Original: Rs 5281.94 Crore</u> <u>Latest Rs. 5281.94 Crore</u> Contractors Civil & HM : GVK E&M : Alstom</p>		<p>Excavation in Power House (78%), Power House Cavern (80%), Dam abutment excavation (62%) Tail Race Tunnel (TRT) Excavation (18%) Achieved.</p>	
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<p>12</p>	<p>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)</p>	<p><u>Sikkim</u> <u>2011-12</u> <u>2025-26</u> (May'25)</p>	<p>CIVIL WORKS: Dam (44 m high and 135.35 m long) - Excavation 95.27% completed. Concreting 83.26% completed. Removal/ clearance of material deposited due to flooding in working area. 1.09 lac cum (54.69%) out of 2.0 lac cum completed. HRT (6.4 m diameter) - Heading excavation of approx. 5.69 km (87.73%) executed out of total 6.48 km, benching excavation of approx. 5.18 km (79.85%), Overt lining of 1115.50 m (17.19%) has been completed. Desilting Chamber (3 nos. each of 120 m length x 13m width x 15 m depth) - 3187 m (94.86%) excavation out of 3360 m is completed. 2558 m (76.14%) concreting out of 3360 m is completed. Surge Shaft (1 nos., 18 M dia., 56 M height): Excavation 100% completed, concreting 82.2% completed. Pressure Shaft (1 no. 5.5m dia., 236m length) : Excavation 100.00 % completed Surface Power House (75.3m (L) x 20.20m (W) x 41.35 m (H): Excavation 96.88% completed & Concreting 0.313 lac cum (89.68%) out of 0.35 lac (revised qty.) cum completed. ELECROMECHANICAL WORKS: In progress (47.51%). Hydro Mechanical works For Execution of balance works, HM package LOT-II awarded on 28.06.2021. 34.40 % of HM Packages achieved</p>	<p>-Slow progress of works on account of Covid-19 associated lockdowns and restrictions. -Poor geology in HRT. -Methane in HRT</p>
<p>13</p>	<p>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</p>	<p><u>Himachal Pradesh</u> <u>2025-26</u> <u>2025-26</u> (Jan'26)</p>	<p>Investment approval accorded on 20.11.2020. Civil & Hydro-mechanical Works awarded on 24.11.2020. Electro-mechanical package awarded on 16.07.2021. Dam works: Dam excavation: In progress and cumulative 6,27,673 cum (75%) out of 8,37,912 cum Completed. Dam concreting: Started on 10.04.2023 and 3,421 cum out of 4,33,790 cum completed. Work hampered</p>	

	<p>Cost: Original - 1810.56(05/2020)</p> <p>Contractor : Civil: Luhri Hydro Power Consortium dt. 24.11.2020</p> <p>E&M works: Voith Hydro dt. 16.7.2021</p> <p>Transmission line from Switchyard to Polling station: M/s Kalpatru Power dt. 6.7.2022</p>		<p>in monsoon due to overtopping of coffer dam and accumulation of silt.</p> <p>Power house: Excavation: In progress and cumulative 4,40669 cum (88%) out of 4,99,615 cum completed. Service way: Concreting of Columns and Beams completed on 10.11.2023. Roof work is in progress.</p> <p>Tail Race Channel: - In progress and cumulative 4,73,809 cum (74%) out of 6,40,220 cum completed. E&M Works: Design/drawings of DT liner, Spiral Case, pit liner, generator foundation, runner assembly and generator stator frame & core assembly have been approved. Draft tube liners for unit-1 (Main) and unit-3 & 4 (Auxiliary) were received at the site. Inspection of DT liner for Unit-2 completed on 02.11.2023. Manufacturing of the spiral case & EOT crane is in progress.</p>	
14	<p>Dhulasidh Hydro Electric Project SJVN Ltd (2x33 MW = 66 MW)</p> <p>Cost: <u>Original: Rs. 687.97 Cr</u></p> <p>Civil & HM works: M/s Rithwik Projects Pvt. Ltd. dt. 6.5.2021</p> <p>EM works: M/s Voith Hydro dt. 19.1.2022</p>	<p><u>Himachal Pradesh</u></p> <p><u>2025-26</u> <u>2025-26</u> (Nov '25)</p>	<p>Investment approval accorded on 1.10.2020.</p> <p>River Diversion achieved on 15.02.2022. Coffer dam: D/s Coffer dam: Completed on 11.04.2022. U/s Coffer dam: Completed on 05.07.2022.</p> <p>Dam works: Left Bank Stripping: Completed on 14.06.2022. Right Bank Stripping: Completed on 28.03.2023. River Bed Excavation: Completed on 20.03.2023. Dam Concreting: In progress and 32,659 cum out of 3,11,450 cum completed. Tail Race Channel: Excavation completed on 28.03.2023. Power House works: Excavation up to unit pit: Completed on 20.12.2022. Concreting: In progress and 1581 cum out of 32,225 cum completed. EM Works: 1. EM Package: Design & engineering of EM components is in progress. Draft tube liners for both main units were received at the site. Fabrication of spiral cases and Stator frames for the Generator are in progress. 2. EOT crane: Crane fabricated and inspection completed on 26.10.2023.</p>	<p>Works hampered in monsoon due to flash flood.</p>
15	<p>Kwar Hydro Electric Project, CVPPPL (4x135 MW = 540 MW)</p> <p>Cost: <u>Original: Rs. 4526.12 Cr</u></p> <p>Civil works: M/s Patel Engg. Limited dtd. 11.05.2022</p>	<p><u>UT of J&K</u> <u>2026-27</u> (Nov'26)</p>	<p>Mobilization in progress. DT outlet portal development & DT inlet portal development have been completed & further work of tunnel excavation work from DT outlet side and DT inlet side, Excavation of MAT portal & Dam excavation (stripping of dam abutments) are under progress. DT Overt Concrete Lining- 686 m progress out of cumulative 701m has been made till date. DT Invert Concrete Lining- 207m progress out of 701m has been made till date Dam Stripping excavation- 101070 cum progress out of cumulative 220000 cum has been made till date. Adit to TRT- 249 m progress out of cumulative 550m has been achieved till date MAT Excavation- 504m progress out of cumulative 600m has been made till date. CVT Excavation- cumulative 273 m completed on 31.08.2023. Surge Gallery- 326m progress out of cumulative 766m has been made till date. GIS Cavern Excavation (Pilot at crown)- 65 m progress out of cumulative 65 m has been made till</p>	<p>The works have recently been awarded.</p>

			date.	
16	Sunni Dam SJVN 4x73+1x73+1x17=382 MW Cost: <u>Original: Rs. 2614.51 crs</u> <u>(05/21)</u> Civil & HM works: M/s Rithwik Projects Pvt. Ltd. dt. 14.1.2023 EM works: Yet to be awarded	<u>Himachal Pradesh</u> <u>2027-28</u> <u>2027-28</u> <u>(Mar'28)</u>	Investment approval accorded on 4.1.2023 Major Civil Work and HM works awarded on 14.01.2023. ➤ Heading of Diversion Tunnel: 476m (93%) out of 510m completed. Benching under progress. ➤ Stripping for dam left abutments started and 20020 cum out of 1,21,130 cum completed. ➤ Suspension bridge (110m span) completed. Road from Dam Top to DT Inlet Portal under progress. Approach roads to project components under progress. Construction power: Construction power for initial requirement provided to Contractor. For peak requirement, work of construction of 22 kV line from HPSEB substation at Gumma to dam site through HPSEBL is in progress.	
17	Dibang HEP, NHPC (12x240=2880MW) Cost: Rs. 31876.39 Cr Infrastructure Works: M/s L&T dated 27.02.2023	<u>Arunachal Pradesh</u> <u>2031-32</u> <u>(Feb'32)</u>	The works have recently been awarded.	

B	<u>State Sector</u>			-
18	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	<u>UT of J&K</u> <u>2017-18</u> <u>2025-26</u> <u>(Dec.25)</u>	➤ 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 works nearing completion. Laying of deck completed in spillway portion. The deck slab in under sluice portion shall be started after diversion of water on spillway side. Progress is slow by the Contractor. ➤ HRT (D-shaped, 3.2m diameter, 9.156km long) 6494 RM out of 9236 m excavation completed. 77 m out of 9236 m lining completed. ➤ Surge Shaft (3.2m dia):- ➤ Pressure shaft (1 no., 2m dia, 1733m long) Excavation 20791.50 cum out of total 34560 cum completed. 2002.25 cum out of 7497 cum concrete has been completed. ➤ Power House (Surface 60x12x28m):- Excavation 62081.72 cum out of total 65000 cum completed.	- Slow progress of works - Contractual Issues.
19	Lower Kalnai JKSPDC 16.08.2013 2x24= 48 MW Broad Features: Dam: 110m Span, 49m High HRT: D Shape, 3960m long, 4m dia Surge Shaft: 14m Dia Power House- 55x23.45x32.4 Cost: Original: 576.87 Latest 576.87 Contractors Civil : Coastal E&M : GE	<u>UT of J&K</u> <u>2017-18</u> (Commissioning Subject to re-start of works)	EPC contract awarded to M/s. CPL in Sept., 2013. Diversion tunnel has been completed and river diversion made on 30.11.2016. Work on coffer dams has been started Dam:- Excavation work completed for right abutment of the dam bridge. Excavation of left abutment completed upto 50%. HRT:- Adit excavation is in progress. 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 The Balance Work stands tendered out by JKSPDC in EPC mode vide E-NIT No 01 on 24-03-2022.	- 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.

20	<p>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</p>	<p><u>Punjab</u> <u>2015-16</u> <u>2025-26</u> (Oct'25)</p>	<p>Main Dam: Overall 95% work of Main Dam portion has been completed. Hydel Channel: Almost 95% works has been completed. Power House: Excavation completed. Concreting started and 28% completed. E&M: Initial stage of procurement of equipment. Draft tube liner works for two units completed.</p>	<p>Delay in E&M works is critical for schedule commissioning.</p>
21	<p>Uhi-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 Cost: Original: 431.56 Latest:1281.52 Contractors Civil : Continental / Abir HM : PES E&M : BHEL</p>	<p><u>H.P.</u> <u>2006-07</u> <u>2024-25</u> (Dec'24)</p>	<p>All works completed in July, 2018. During Hydro Static pressure Test (HST) of Penstock, some leakage was observed. Repair of penstock & HST completed by March, 2020. On 17.05.2020 after Trial run of Unit-1, during synchronisation to grid transmission load rejection was done but the penstock ruptured along penstock ferrule # 345 which is about 110m upstream of surface power house. The restoration of the Penstock works awarded to M/S P&R Infraprojects Pvt Ltd on November 06, 2021. The work of dismantling of ruptured penstock almost completed and design of penstock rehabilitation work has been approved by GM (D). plates is under transportation stage. Fabrication of Steel Ferrules and erection is under process.</p>	
22	<p>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</p>	<p><u>H.P.</u> <u>2016-17</u> <u>2026-27</u> (Nov'26)</p>	<ul style="list-style-type: none"> ➤ Barrage (95.40m long at top):-Downstream Cofferdam completed. Upstream Cofferdam 84% completed. ➤ Barrage Work:- 53% of excavation completed ➤ Power Intake:- 29.79% Excavation completed. ➤ Desilting chamber (4 nos. each of 260 m length x 17m width x 22.80 m depth):- Excavation of Desilting chambers 74% completed. ➤ Silt Flushing Tunnel (SFT):-Excavation of SFT 41% completed. ➤ HRT (10.5m diameter, 7.7125 km long):- Heading excavation 97% completed. Benching excavation 69% completed. ➤ Surge Shaft (30.6m diameter 98.5m height):- Excavation-81.67%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 Powerhouse Cavern, 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. 	<p>Dam is critical due to change in design and approval of same.</p>

			Erection yet to start. Overall E&M works 57.51% completed ➤ Draft Tube:- 50.83% excavation completed	
23	<p>Koyna Left Bank PSS WRD, Mah. 20.02.2004 2x40 = 80 MW</p> <p>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</p> <p>Contractors Civil &HM : BT Patil – Malaxmi JV / Patel E&M : LitostrojSlovenia&Koncar, Croatia</p>	Maharashtra <u>2014-15</u> <u>2027-28</u> (Subject to re-start of works)	<p>Civil Works: Excavation of intake structure 4781 cum out of 14105 cum and lining 2485 cum out of 3381 cum completed. Excavation of Switchyard completed. Excavation of Approach tunnel & Ventilation tunnel is in progress. Tail surge shaft :Excavation in soft strata completed. Excavation for inclined / vertical / lateral shafts in hard rock 6448 / 9223 cum completed. TRT : 364 / 24003 cum excavation completed. Machine Hall : Underground Excavation is under progress. 31500 cum excavation out of 55050 cum completed. E&M works: The contract for details engineering manufacturing supply, supervision erection, testing and commissioning of pump turbine, generator motor and associated equipment is signed with M/s IVRCL Ltd., Pune on 16.12.2010. Further TG set has been ordered as under: Turbine/Pump: M/s Litosroj Power, Slovenia (European Union) Generator/Motor: M/s Koncar Power, Plant & Electric Traction Engineering, Croatia (European Union). EOT Crane :- Works awarded to M/s Pedvak Cranes Private Limited Hyderabad on 12.04.2013. Tail surge shaft: Excavation for inclined/vertical/lateral shafts in hard rock 6448 cum out of 9223 completed. Excavation in soft strata completed.</p>	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.
24	<p>Polavaram APGENCO / Irrigation Deptt., A.P. 21.07.2010/ 25.02.2009 12x80= 960 MW</p> <p>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.</p> <p>Cost: <u>Original: 4956.39</u> Latest:5338.95 (Power Component)</p> <p>Contractors Civil :Navyug contract terminated and awarded to M/s Megha Engineering and Infrastructure Ltd. (MEIL) (EPC contractor) E&M : BHEL</p>	Andhra Pradesh <u>2017-18</u> <u>2024-26</u> <u>(Mar'26)</u>	<p>Pressure Tunnels (1 to 12) : Erection: Completed – 208 Nos., Balance- 80 Nos. Concreting: Completed – 204 Nos., Balance -84 Nos. U/s Transition : Completed – 1048Cum , Balance -4552 Cum D/s Transition: Completed – 7258 Cum, Balance -8142 Cum</p> <p>Power House area – Concreting work: Completed:18691 Cum, Balance: 64109Cum.</p> <p>Overall Physical progress: 22.97%</p> <p>Overall financial progress: 20%</p>	

25	<p>Lower Sileru extension APGENCO 2x115 = 230 MW 24.08.2020 Contractors M/s SSEL-PES Consortium Cost: <u>Original: 571 (2020-21)</u> <u>Latest: 571 (2020-21)</u></p>	Andhra Pradesh 2025-26 (Mar'26)	Project is in initial stage of construction	
26	<p>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: <u>222.00</u> 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.</p>	Kerala <u>2010-11</u> <u>2023-24</u> (Mar'24)	<p>Contract for Civil &HM works has been terminated w.e.f. 13.09.18. Balance work has been rendered on the risk & cost of Contract, Subsequently balance works have been awarded to M/s. Sri Sarvasna Industries Pvt. Ltd. and M/s. DSE Anchor Structure.</p> <p>Civil Works: 99.35% completed. HM Works: 98.80% completed. E&M Works: 73% completed. Intake structure: Intake structure completed including gate erection. Leading channel of Water conductor system replaced by cut & cover/soil accordingly intake is shifted. HRT: Excavation 3347m/3347m completed. Invert conc: 3347m/3347m completed. Surge Tank/Forebay : Excavation completed. Conc.843/843 cum. Pressure Shaft: Excavation - Completed. fabrication of steel Liner completed and erection of 1096/1906 m completed. Surface penstock: Excavation 122500/122600 cum. Concreting- 12850/12850 cum. Fabrication of ferrule completed, Erection completed. Power House: Excavation and Concreting completed. Finishing works of Power House in progress. Tail race Channel (2 Nos.): Excavation & lining completed. The overall progress achieved: - 96.66%. The overall financial progress achieved:- 95.04%.</p>	
27	<p>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 Turbine : Vertical Pelton Cost: <u>Original: 136.79</u> Latest: 280 Contractors Civil & HM : PRIL- Sri Sarvana Industries</p>	Kerala <u>2012-13</u> <u>2023-24</u> (Mar'24)	<p>Original contract for Civil & HM works foreclosed without risk & cost of Contractor M/s. Coastal Project Ltd. -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.</p> <p>Civil Works: Weir: Excavation – 44.13% completed, Concreting – 77.90% completed. Approach Channel & Intake: 100% works completed. Tunnel – 100% works completed. Penstock, Anchors, Rocker support: Excavation – 87.24% completed, concreting -76.6% completed, Fabrication and erection of penstock 100% completed. Power house , switch yard and allied works: Excavation – 95.47%, Concreting – 67.54% completed. Bridge – 100% works completed.</p>	

			<p>E&M works- Erection of supplied Electro/Hydro mechanical equipments for the power house was rendered on 14.02.2020.</p> <p>Physical Progress 96.70% Financial Progress 84.25%</p>	
28	<p>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</p>	<p><u>Kerala</u> <u>2026-27</u> (May'26)</p>	<p>Civil Works : 6.75%completed. HM Works: Not yet started. E&M Works: Not yet tendered. Intake structure: Leading channel of Water conductor system excavated. HRT: Excavation -850 m completed. , Surge Tank/Forebay: Erection of Gantry crane progressing. Pressure Shaft: Excavation -511.6m. Power House: Excavation progressing Bridge and road: Bridge completed and opened for traffic. Dam: Block 7&8 Rock excavation is progressing. Overall Physical progress:9.11% Overall Financial progress: 6.48%</p>	
29	<p>Kundah Pumped storage (Phase-I, Phase-II & Phase-III) TANGEDCO 4x125= 500 MW Broad Features: HRT: Ø 8.5mX1247.33m. Surge Shaft: Ø (28m/16m/10m) x68m depth. Pressure Shaft: 2 Nos. Ø 5.50m X 463.38 m (each) Penstock: 4.nos. Ø 3.9m x45.4m each. Power House: Under Ground. Tail race surge chamber: 10m(W);52m(L);48m(H) Tail Race Tunnel: Ø 8.5mx895m Turbine: Francis reversible turbine. Cost: Original: 1216.59 Revised: 3401 EPC cost: Rs. 2424.09 crore (capital cost under revision by TANGEDCO) Contractors Civil &HM : Patel / Kundah PSP E&M: MEIL</p>	<p><u>Tamil Nadu</u> <u>2022-23</u> 2024-25 (Jul'25)</p>	<p>Civil & H&M Works: - Phase-I, Package I & II (Civil and HM works), LOI issued for package - I to M/s Patel engineering, and for package - II M/s Kundah PSP Consortium on 15.02.2018. The site was handed over on 05.03.2018. MAT & CCVT: Mining works completed. Lining in CCVT to be done. ADITS in Power House & TRT, HRT Complexes: Mining works completed. Power House: Mining completed fully mining in 4 Nos. Bus ducts completed. Draft tube pit and drainage pit excavation completed, service bay raft concreting laying completed. Service bay column concrete 12 nos completed. Service Bay and Machine hall concrete under progress. TRT Surge Tank: Mining works completed. Transformer Cavern:Mining completed fully. Excavation for Draft tube, Gate shafts are completed. Transformer cavern sump excavation iscompleted. Transformer Hall Raft Concrete, waste oil sump under progressLining to be done. TRT: Mining completed and overt Concrete lining under progress. Lower intake:Work stopd since reservoir water lelevel raised above the Coffe dam top due to incessant monsoon rain. TRT Gate shaft: Mining completed. Lining work to be taken up. Draft Tube Tunnel: Mining in DT Tunnel-1, 2, 3, 4completed (5m & 4.5 m). Draft Tube Gate shaft (4 nos):Mining completed.</p>	

30	<p>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: <u>Original:1115.91</u> Latest:1795 Contractors Civil : L&T</p>	<p><u>Assam</u> <u>2023-24</u> <u>2024-25</u> (Mar'25)</p>	<p>Overall Physical progress – 61% Overall financial progress – 54.74% E&M Work:- EOT Crane for main power House erection work to be start December' 23. Power House:- Power House Excavation work 100% completed. Penstock (UG, Upper Hor, inclined) excavation 100% completed. HRT:- HRT excavation work 100% completed, HRT concreted work 40% completed.</p>	
31	<p>Chanju-III H.P. Power Corpn. Ltd. Clearance: 14.07.2015 3x16= 48 MW Broad Features: HRT- D shape, 5090m long. Power House- Under ground Turbine- Vertical shaft Pelton Cost: <u>Original: 418.57</u> Latest: <u>418.57</u> Contractors Civil & HM : MFB- ACNC (JV) E&M :</p>	<p><u>H.P.</u> <u>2027-28</u> <u>2027-28</u> (Jul'27)</p>	<p>➤ Mobilization by Civil Contractor in respect of Package-I & II:- Adit-1 of HRT –Excavation completed(136 m). Temporary Jhula (Ropeway) is under installation to start the excavation of HRT from Adit-1. Main Access Tunnel(205m): - MAT Portal excavation has been completed. Under ground excavation of MAT has been carried out up to 30m through local contractor. Now work is to be carried out by main contractor. E&M WORKS: Technical bids were opened on 22.07.2023 & evaluation of technical bids are under process. Tail Race Tunnel cum Adit to the bottom of pressure shaft: Portal excavation/development work of TRT is in progress since 24.09.2023. Backfilling work behind the rib for portal development is in progress. Diversion of additional Forest Land (2.62 ha): The case was uploaded on web portal of MoEF&CC on 13.02.2023.The joint inspection held on 18.03.2023. Thereafter case was uploaded on MoEF&CC web portal on 09.10.2023. Concerned DFO raised some observations & reply of the same was submitted on 24.10.2023.</p>	
32	<p>Lakhwar Multipurpose Project (UJVNL) Clearance: 23.12.2021 3x100= 300 MW Cost: <u>Original: 5747.17.</u> Latest: 5747.17</p>	<p><u>Uttara khand</u> <u>2028-29</u> <u>2028-29</u> (Oct'28)</p>	<p>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.</p>	
C	Private Sector			
33	<p>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</p>	<p><u>H.P.</u> <u>2014-15</u> (Subject to re-start of works)</p>	<p>Civil works awarded on 14.06.2010 to M/s Sai Urja Hydel Project (P) Ltd. Barrage and Diversion Cannel: 26211 cum out of 93800 cum excavation completed. Desilting Chambers & SFTPC: Excavation completed. SFT excavation 420 / 450.66 m completed. HRT: 2826m out of 6300m excavation completed. Power House, Switchyard & Misc.: 60275 m³ out of 72000 m³ excavation completed. In February-2015, due to land slide the steel bridge on Pabbar River, connecting Project</p>	<p>- Works on hold since Aug 2016. Funds constraints with the developer. Project is likely to be commissioned 4 years after restart of works.</p>

	<p>Penstock- 2 m dia& 609.3 m length P.House- Surface Turbine – Vertical Francis Cost: <u>Original:255.00</u> Latest:641.89 Contractors Civil & HM : Sai Urja E&M : Andritz</p>		<p>components has been completely damaged. The restoration works are completed.</p>	
34	<p>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: <u>Original 543.15</u> Latest 1850 Contractors Civil &HM : SCL Infratech / Himalaya E&M : Alstom</p>	<p><u>H.P.</u> <u>2021-22(</u> <u>New</u> <u>Developer)</u> 2024-25 (June'24)</p>	<p>River Diversion Works: Excavation completed and 32144/37159 cum concreting completed. Head Works: Head works for the project are nearing completion. HRT (8409m): HRT Excavation completed. 8356/8409 m lining completed. Surge Shaft: Surge shaft Excavation completed & Lining (10 m) out of 89m 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, 98% Power House civil works has been completed. E&M Works: 100 MW, 100% works completed. 50 MW, 55% completed. T Line – 57% completed. Overall physical progress achieved is 91%. M/s Statkraft India Pvt Ltd has acquired the 100% equity of the project on 04.09.2018.</p>	<p>- Pressure shaft &Transmission Line critical.</p>
35	<p>Kutehr M/s JSW Energy (Kutehr) Ltd. 3x80 = 240 MW 31.08.2010 Broad Features: Cost: <u>Original: 1798.13</u> Latest : 2879 Contractors Civil &HM : M/s Angelique – PCC consortium, M/s MF BumiGeotech Pvt. Ltd. & M/s. PES Engineers Pvt. Ltd. E&M : M/s Andritz Hydro Pvt Ltd.</p>	<p><u>H.P.</u> <u>2024-25</u> <u>2025-26</u> (Nov'25)</p>	<p>Civil works, HM works and E&M works awarded on 20.10.2019, 19.09.2019 and 13.02.2020 respectively. River diversion achieved on 25.01.2020. Barrage (27m high): Concreting of Upstream keys &Apron floor(85m) completed. Concrete of Left Half of barrage: 73076.85 cum completed out of 75000 cum. HRT: Six out of Six Construction Adits to HRT completed,14566.35m out of14566.35 m. HRT:- Face02 and Face 03 daylighted as on 27.10.2023. Concreted lining of HRT completed on the tune of 3417.50 out of 14566.35m. Physical Progress 70.67% Financial 74.90%</p>	<p>-</p>
36	<p>Phata Byung M/s Lanco 06.10.2008 2x38 MW = 76 MW Broad Features: Dam – 26m high HRT- 3.2 m dia& 9.38 km length Turbine – Frances Cost: <u>Original: 520.00</u> Latest : 1132 Contractors Civil : Lanco HM : Cimcco E&M : Alstom</p>	<p><u>Uttara khand</u> <u>2012-13</u> (Subject to re-start of works)</p>	<p>Dam concreting: 17800/18000 cum concreting completed. P.H.: Excavation completed & Concreting in progress. HRT: Excavation almost completed. 1400 m Lining has been completed. Excavation and lining of Intake-I & Intake-II completed. Pressure shaft: Excavation completed & lining is under progress. TRT: Excacation 178/235m completed. E&M Works: Pit liner erection of units completed. EOT Crane installed and Commissioned. Ferrule Fabrication work is in progress.</p>	<p>- 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 resolution professional appointed by the NCLT initiated the process for inviting prospective investors for the project. On 25.02.2022, the CoC</p>

			<p>Work progress is stalled since July'17 on account of main EPC contractor and holding Company M/s LancoInfratech Limited (LITL) being referred to NCLT under the Corporate Insolvency Resolution Process (CIRP) and subsequently, the initiation of liquidation proceeding as per NCLT Liquidation order in August 2018. However, the preservation works of Project are being carried out regularly at site by the Company, LancoMandakini Hydro Energy Private Limited (LMHEPL).</p> <p>Presently, 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 resolution professional appointed by the NCLT has initiated the process for inviting prospective investors for the project.</p>	<p>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.</p> <p>Works stalled since July, 2017 due to Financial crunch. The project stands allotted 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.</p>
37	<p>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: <u>Original: 1569.27</u> Latest: 8121.00 Contractors Civil & HM : Sew E&M : BHEL</p>	<p><u>M. P.</u> <u>2001-02</u> (Subject to re-start of works)</p>	<p>Civil & HM Works: All major civil works completed. All 27 nos radial gates commissioned. Unit Erection: Unit-10: Initial spinning achieved on 14.10.2011. Unit-9 & 8: Ready for spinning. Unit-7: Guide apparatus trial assembly in progress. Unit-6: Erection of turbine embedded parts & foundation parts completed. Unit-5 to 1: Erection of units is in initial stages.</p> <p>Works suspended since Nov-11 due to cash flow problem with developer.</p> <p>M.P. Power Management Company Ltd. has terminated the Power Purchase Agreement, R&R Agreement & Escrow Agreement with SMHPCL on 18.04.2020 & 20.04.2020 respectively.</p>	<p>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.</p>
38	<p>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 Swtyard-132/11 KV Cost :Original : 408.50 Latest :746.01 Contractors Civil : Simplex E&M : Voith</p>	<p><u>Sikkim</u> <u>2012-13</u> (Subject to re-start of works)</p>	<p>Project is in initial stage of construction. River diversion achieved. Barrage: 61555cum/194600cum excavation completed. HRT: 1670m/4460m excavation completed. PH: 136105 cum/185937cum excavation completed.</p> <p>Surge Shaft: 8567cum / 22000cum Surface excavation completed. Overall Physical progress: 38%.</p>	<p>- 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.</p>
39	<p>Rangit-II Sikkim Hydro Power Limited</p>	<p><u>Sikkim</u> <u>2015-16</u></p>	<p>EPC contract awarded to M/s Coastal in February, 2012. Diversion Tunnel: River diversion through diversion tunnel has been achieved.</p>	<p>Works stalled since Dec., 2017. Funds constraints with the developer. Project is likely to be</p>

	<p>10.02.2010 2x33= 66 MW 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</p>	(Subject to re-start of works)	<p>Dam :Excavation 53100cum out of 85000cum completed. HRT: Excavation 623m out of 4745m completed. Surge Shaft: Excavation completed. Concreting 37/1667 cum done. Pressure shaft: Excavation of pressure shaft I - 25m out of 128m and pressure shaft II - 154m out of 377m completed Power House: Excavation of surface power house is being taken up. Overall Physical progress: 40% .</p>	commissioned 3 years after restart of works
40	<p>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</p>	<p><u>Sikkim</u> <u>2018-19</u> (Subject to re- start of works)</p>	<p>Civil works awarded on 22.02.2014. Infrastructural works and geological investigations are in progress. Starting of civil construction works was held up for want of the National Board of Wild Life (NBWL) clearance. On dismissal of the case in NGT on 21.08.17, the developer has made an application to PCCF cum-Secretary, Forests, Environment & Wild Life Management Department for grant of NOC, in National Board for Wildlife (NBWL) angle. Now, the NoC in regard to NBWL has been received vide state Govt letter dated 4.10.2019. In view of the new hydro policy announced by Ministry of Power, GOI, which will help in convincing the investors to release the funds to start the project works. An artificial lake (Mantham Lake) created in August 2016 due to heavy landslide resulting no accessibility for several years to the Upper Dzongu/ Dam site, which are beyond the control of the company/ force majeure. It is being understood that now Road and Bridge Department of Govt of Sikkim started erecting 60 Tonne Bridge, but work may progress in full stretch only after this rainy season i.e. of year 2022 and the construction work is likely to be completed by 4th quarter of 2022 then the project work will re-start. The project is likely to be commissioned in 2025-26, subject to restart of works. Overall Physical progress: NIL</p>	- Accessibility to Project site. The permanent bridge over Mantam Lake for accessibility to Dam site is being constructed by Sikkim PWD which is likely to be completed by Nov' 2024. 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.
41	<p>Pinnapuram PSP Greenko Energy 20.4.2022 4x240+2x120=1200 MW Broad Features : Upper reservoir: FRL 463m Dam height-40m from ground level Lower reservoir: FRL 337m Dam height-38m from ground level Pressure Shaft : 5, 7.5m dia, 83.5 m- long</p>	<p>Andhra Pradesh <u>2024-25</u> <u>2024-25</u> <u>2024-25</u> (Dec'24)</p>	<p>Upper Reservoir and Upper Intake: Excavation-100% progress achieved. Concreting and erection : Upper reservoir-88% completed. Upper intake - 64% completed. Pressure Shaft: Excavation (5,08,644 cum), Fabrication (17,667 cum) and Erection(17,667 cum)-98% & 75% and 67% completed respectively. Power House: Excavation (11,67,862 cum) completed. & Concreting (69%) completed.</p>	-Developer is planning additional two units of 240MW each.

	<p>P.House-Surface Turbine-Vertical Francis reversible pump turbine Cost :Original: 6465.22 Latest :6465.22</p> <p>Contractors E&M : M/s Andritz Civil : M/s Megha</p>		<p><u>Lower Reservoir, Lower Intake and Tail Race Channel:</u> All Excavation & lower reservoir embankments completed. Out of (40,834 cum) Tail Race Channel lining works 57% completed. Downstream intake and RCC works – 64% completed.</p> <p><u>E&M works:</u> Power House – installation of DT segments ,DT cone, Foundation ring, Spiral segment, stay ring of unit 1 to 4 completed. Stator & Rotor service vav from unit 1&2 in progress.</p> <ul style="list-style-type: none"> • 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 site. • Runners: 6 Units delivered to site. 	
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Grand Total : 41 nos. – 17973.5 MW

Chapter-7

Financial Status of Under Construction H.E.P.														
Sl. No.	Name of project/ State	Capacity (MW)	Benefits (MW)	Cost	Ant .Cost.	Cost Overrun	Total Expend. Upto Mar'21	Actual Expenditure till March 2022	Actual Expend. During FY2022-23 (till Mar'2023)	Total Expend. (till Mar'2023)	Actual Expend. During FY2023-24 (till SEP'23)	Total Expenditure upto (SEP'23)	Actual Expend. During FY2023-24 (till Dec'23)	Total Expenditure upto (Dec'23)
				(PL)	(PL)									
	<u>Under Execution</u>													
	<u>Central Sector</u>													
1	Pakal Dul (CVPPPL) J&K	4x250	1000	8112.12 (03/2013)	8112.12 (03/2013)	-	1894.99	2223.86	698.42	2922.28	435.68	3357.96	717.14	3639.42
2	Parbati -II(NHPC) H.P.	4x200	800	3919.59 (12/2001)	11134.54 (07/2022)	7214.95	8848.44	9596.51	833.94	10430.45	256.04	10686.49	478.49	10908.94
3	Tehri PSP (THDC), Uttarakhand	4x250	1000	1657.60 (12/2005)	6439.60 (10/2022)	4782	3940.54	4497.78	792.97	5290.75	492.23	5782.98	741.07	6031.82
4	Tapovan Vishnugad (NTPC) Uttarakhand	4x130	520	2978.48 (03/2004)	7700.00 (4th Qtr/2022)	4721.52	4893.42	5292.43	512.13	5804.56	261.02	6065.58	390.87	6195.43
5	Lata Tapovan(NTPC) Uttarakhand	3x57	171	1527.00 (07/2012)	1527.00 (07/2012)	0	149.21	149.93		149.93	0.00	149.93	0.00	
6	Vishnugad Pipalkoti (THD) Uttarakhand	4x111	444	2491.58 (03/2008)	3860.35 (02/2019)	1368.77	2207.95	2454.35	534.70	2989.05	250.71	3239.76	406.90	3395.95
7	Raman-III (NTPC) West Bengal	3x40	120	1381.84 09/2014	1381.84 09/2014	0	660.06	774.98	96.06	871.04	85.89	956.93	133.98	1005.02
8	Subansiri Lower (NHPC) Ar. Pradesh/Assam	8x250	2000	6285.33 (12/2002)	19992.43 (01/2020)	13707.1	13606.68	15506.40	2603.69	18110.09	1349.22	19459.31	1920.14	20030.23
9	Teesta St. VI (NHPC) Sikkim	4x125	500	5748.04 (07/2018)	5748.04 (07/2018)	-		1440.5	877.84	2318.34	655.63	2973.97	746.16	3064.5
10	Ratle (NHPC) J&K	4x205 + 1x30	850	5281.94 (11/2018)	5281.94 (11/2018)	0		10.36	152.38	162.74	267.94	430.68	346.38	509.12
11	Kiru (CVPPPL) J&K	4x156	624	4287.59 (07/2018)	4287.59 (07/2018)		491.03	707.60	292.40	1000.00	257.90	1257.9	450.02	1450.02
12	Luhri-I H.P.	2x80+2x25	210	1810.56 (05/2020)	1810.56 (05/2020)		417.96	645.19	448.60	1093.79	116.31	1210.1	211.22	1305.01
13	Rangit-IV (NHPC) Sikkim	3x40	120	726.16 (2011-12)	938.29 (10/2019)	212.13		209.43	347.17	556.60	235.09	791.69	331.87	888.47
14	Dhaulasidh (SJVN) Himachal Pradesh	2x33	66	688 (05/2020)	688 (05/2020)		144.32	226.89	152.63	379.52	76.65	456.17	142.33	521.85
15	Kwar (CVPPPL) J&K	4x135	540	4526.12 (09/2020)	4526.12 (09/2020)			136.17	245.38	381.55	73.74	455.29	138.82	520.37
16	Dibang (NHPC) J&K	12x240	2880	31876.39 (05/2021)	31876.39 (05/2021)			2000.14	91.16	2091.30	176.30	2267.6	183.42	2274.72
17	Sunni Dam (SJVN) H.P.	4x73 +1x72+1x17	382	2614.51 (03/2021)	2614.51 (03/2021)	Nil		265.99	178.62	444.61	73.57	518.18	185.51	630.12
A	Sub Total: Central Sector		12287.00	85912.82	117919.32		37254.60	46138.51	8999.90	54996.60	5063.92	60060.52	7524.32	62370.99
	<u>State Sector</u>													
18	Parnai J&K	3x12.5	37.50	640.86 (NA)	640.86 (NA)	-	241.17	287.25	62.82	350.07	29.40	379.47	53.06	403.13
19	Lower Kalnai J&K	2x24	48	576.87 (NA)	576.87 (NA)	-		*	0		0.00		0.00	
20	Uhl-III H.P.	3x33.33	100	431.56 (09/2002)	2400 (09/2002)	1968.44	2084.87	2150.91	336.35	2487.26	58.46	2545.72	123.89	2611.15
21	Shontong Karcham H.P.	3x150	450	2807.83 (07/2011)	2807.83 (07/2011)	-	1320.32	1503.74	189.63	1892.14	118.99	2011.13	177.36	2069.5
22	Shahpurkandi # Punjab	3x33+3x33+1x8	206	1835.50 (4/2008)	2368.55 (2/2018)	533.05	1483.42	1799.12	427.28	2226.40	312.03	2538.43	373.06	2599.46

23	Koyna Left bank PSS	2x40	80	245.02	379.78	134.76	165.39	*	0.00		0.00		0.00	
	Maharashtra			(1999)	(2014)									
24	Polavaram HEP (PPA)	12x80	960	3013.68	5338.95	2325.27		802.18	230.11	884.89	234.47	1119.36	341.22	1226.11
	Andhra Pradesh			(2010-11)	(2016-17)									
25	Pallivasal (KSEB)	2x30	60	222	550	328	395.43	436.76	63.66	500.42	26.56	526.98	29.76	530.18
	Kerala			(1999)	(2018)									
26	Thottiyar (KSEB)	1x30 + 1x10	40	136.79	280	143.21	124.24	134.95	30.86	165.82	9.40	175.213	13.15	178.963
	Kerala			(2007)	(2018)									
27	Kundah Pumped Storage-I	4x125	500.00	1216.59	3401	2184.41	340.71	476.83	927.31	1404.14	596.28	2000.42	825.53	2229.67
	Tamil Nadu / (TANGENDCO)			(2007-08)	(2014)									
28	Lower Kopili	2x55+2x2.5+1x5	120	1116	1795			478.63	2.00	808.93	178.14	987.07	297.38	1106.31
	Assam			(2021)										
29	Mankulam	2x20	40	600	600				104.38	104.38	15.29	119.67	22.01	126.39
	Kerala(KSEB)			(2016)	(2016)									
30	Chanju-III (HPPCL)	3x16	48.00	418.57	418.57					45.41	3.54	48.95	15.55	60.96
	H.P.													
31	Lakhwar Multipurpose Pro	3x100	300.00	5747.17	5747.17					438.46	55.30	493.76	110.63	549.09
	Uttarakhand													
32	Lower Sileru Extension	2x115	230.00								68.40	68.4	81.22	81.22
	Andhra Pradesh													
B	Sub-total: State Sector		3219.50	19008.44	27304.58		6155.55	8070.37	2374.40	11308.32	1706.25	13014.573	2463.82	13772.133
	Private Sector													
33	Tidong-I	3x50	150	543.15	1850.00	-	858.00	1174.10	257.00	1431.50	110.72	1542.22	231.44	1662.94
	H.P.			(06/2018)	(06/2018)									
34	Tangnu Romai- I	2x22	44	255.00	641.89	386.89		*			0.00		0.00	
	H.P.			(1/2007)	(2018)									
35	Phata Byung	2x38	76	520.00	1132.00	612		*			0.00		0.00	
	Uttarakhand			(2013-14)	(9/2016)									
36	Maheshwar	10x40	400	1569.27	6793.00	5223.73		Nil			0.00		0.00	
	M.P.			(1996-97)	(2016-17)									
37	Bhasmey	2x25.5	51	408.50	746.01	337.51		Nil			0.00		0.00	
	Sikkim			(2012-13)	(03/2018)									
38	Rangit- II	2x33	66	496.44	496.44	-		*			0.00		0.00	
	Sikkim			(2011-12)	(2011-12)									
39	Panan	4x75	300	1833.05	2671.00	837.95	155.10	0.05	100.38	100.43	0.00		0.00	
	Sikkim			(2009)	(2018)									
40	Kutehr (JSW Energy (Kutehr))	3x80	240.00	1798.13	1798.13		412.97	995.00	427.22	1579.49	295.62	1875.11	440.14	2019.63
	H.P.			(09/2011)	(09/2011)									
41	Pinnapuram (Greenko)	4x240+2x120	1200.00	6465.22	6465.22			1632.26	3657.34	5289.26	1422.00	6711.26	2113.00	7402.26
	C													
	Sub-total: Private Sector		2527.00	13888.76	22593.69		1426.07	3801.41	4441.94	8400.68	1727.91	10128.59	2784.58	11084.83
	Total : (Under Execution):		18,033.50	118,810.02	167,817.59	47021.69	44,836.22	58,010.29	15,816.24	74705.60	8498.08	83203.683	12772.72	87227.953

Note:-It is to mention that investment data is tentative (un-audited) as furnished by the developers in the monthly progress reports

Total expenditure excludes the stalled projects of state and private sector.

Chapter 8

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

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	Pakal Dul (CVPPPL)	J&K	4x250	1000	03.10.06	12.07.12	15.12.15	28.10.14
2	Parbati-II (NHPC)	H.P.	2x400	800.00	03.01.01	04.06.01	04.09.2001	11.09.02
3	Tehri PSS (THDC)	Utt.	4x250	1000.00	10.10.88	19.07.90	04.06.87	18.07.06
4	Tapovan Vishnugad (NTPC)	Utt.	4x130	520.00	11.08.04	08.02.05	22.04.06	11/2006
5	Lata Tapovan (NTPC)	Utt.	3x57	171.00	08.02.06	21.02.07	30.04.07	01.08.12
6	Vishnugad Pipalkoti (THDC)	Utt.	4x111	444.00	09/2006	22.08.07	28.05.13	21.08.08
7	Ramam-III (NTPC)	W.B.	3x40	120.00	12.09.06	17.08.07	18.10.08	10.09.14
8	Subansiri Lower (NHPC)	Ar. Pr./Asm.	8x250	2000.00	13.01.03	16.07.03	24.06.2004	09.09.03
9	Teesta St. VI	Sikkim	4x125	500.00	27.12.2006	21.09.06	23.05.2008	08.03.2019
10	Ratle (NHPC)	J&K	4x205+1x30	850.00	19.12.2012	12.12.12	15.10.14	11.02.2021
11	Kiru (CVPPPL)	J&K	4x156	624.00	13.06.2016	24.06.16	19.05.16	08.03.19
12	Rangit-IV	Sikkim	3x40	120.00	06.07.2007	16.05.07	26.12.07	30.03.2021
13	Luhri -I (SJVN)	H.P.	2x80+2x25	210.00	01.05.2018	17.03.2020	28.03.2019	20.11.2020
14	Dhaulasidh (SJVN)	H.P.	2x33	66.00	25.06.2011	21.02.2013	11.08.2020	01.10.2020
15	Dibang Multipurpose Project (NHPC)	Arunachal Pradesh	12x240 4x73+1x73+	2880.00 382.00	18.09.2017	19.05.2015	12.03.2020	27.02.2023
16	Sunni Dam (SJVN)	HP	1x17		11.02.2021	04.02.2022	23.08.2022	04.01.2023
17	Kwar (CVPPPL)	J&K	4x135	540.00	23.02.2017	10.04.2017	08.08.2014	11.05.2022
Sub-total (Central Sector):				12227.00				
II State Sector								
18	Parnai (JKSPDC)	J&K	3x12.5	37.50	11.12.1992	24.12.2010	17.05.2013	25.10.2013
19	Lower Kalnai (JKSPDC)	J&K	2x24	48.00	16.08.2013	22.08.2014		16.08.2013
20	Uhl-III	H.P.	3x33.33	100.00	19.09.02	15.11.02	20.12.02	26.09.03
21	Shongtong Karcham	H.P.	3x150	450.00	16.8.12	19.05.11	22.03.11	-
22	Shahpurkandi	Punjab	3x33+3x33+1x8	206.00	08/2009	18.11.81	Not Reqd.	04.05.11
23	Koyna Left Bank PSS	Mah.	2x40	80.00	-	16.05.07	Not Reqd.	20.02.04
24	Indrasagar Polavaram (PPA)	Andhra Pr.	12x80	960.00	21.07.2010	28.07.10	21.07.10	25.02.09
25	Pallivasal Extn.	Kerala	2x30	60.00	31.01.07	Not Reqd.	11.07.07	31.01.07
26	Thottiyar	Kerala	1x30 + 1x10	40.00	05.06.08	Not Reqd.	11.07.07	05.06.08
27	Kundah Pumped Storage-I (TANGENDC)	Tamil Nadu	4x125	500.00	15.02.18	08.05.07	27.11.08	03.12.08
28	Lower Kopli (APGCL)	Assam	2x55+2x2.5+1	120.00	24.05.16	04.09.2019	04.12.2020	Nov,2020
29	Chanju-III (HPPCL)	H.P.	3x16	48	14.07.2015	29.09.2017	11.10.2019	
30	Mankulam (KSEB)	Kerala	2 x 20	40.00	03.03.2022	Not required	11.07.2007	03.03.2022
	Lakhwar Multipurpose Project (UJVNL)	Uttarakhand	3x100	300.00	14.12.2012	02.02.2021	31.01.2014	23.12.2021
31	Lower Sileru Extension	Andhra Pradesh	2x115	230.00	Not required	24.04.2023	04.08.2022	24.08.2020
32								
Sub-total (State Sector):				3219.50				
III Private Sector								
33	Tidong-I	H.P.	3X50	150.00	-	18.06.08	18.06.08	23.07.07
34	Tangnu Romai- I	H.P.	2x22	44.00	-	01.05.09	19.01.10	30.11.07
35	Phata Byung	Uttarakhand	2x38	76.00	-	01.05.09	-	30.11.07
36	Maheshwar	M.P.	10x40	400.00	-	07.01.94	Not Reqd.	29.09.06
37	Bhasmey	Sikkim	2x25.5	51.00	-	15.05.07	13.09.10	-
38	Rangit- II	Sikkim	2x33	66.00	-	16.04.10	22.10.10	10.2.10
39	Panan	Sikkim	4x75	300.00	-	02.01.07	21.09.10	07.03.11
40	Kutehr	H.P.	3x80	240.00		05.07.11	19.02.13	31.03.10
41	Pinnapuram (Greenko AP01 IREP Private)	A.P.	4x240+2x120	1200.00	20.04.22	14-07-2020	23-04-2020 Stage-I	
Sub-total (Private Sector):				2527.00				
Total : Under Execution				17973.50				

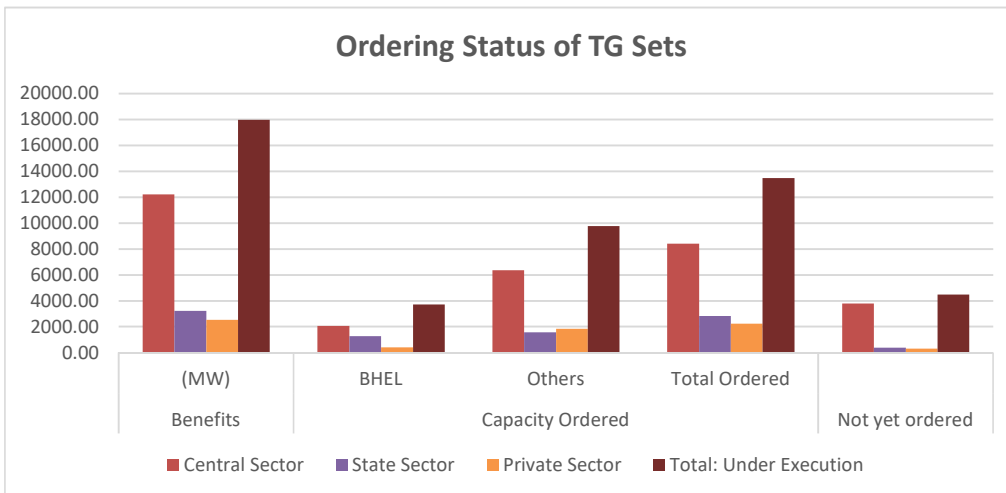
Chapter 9

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

Sl. No.	Name of Project	State	Capacity (MW)	Benefits	Date of CCEA/ Investment	Date of letter of award
Central Sector						
1	Pakal Dul(CVPPPL)	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	11/06	11/2006
5	Lata Tapovan (NTPC)	Uttarakhand	3x57	171.00	08/2012	17.08.2012
6	Vishnugad Pipalkoti (THDC)	Uttarakhand	4x111	444.00	21.08.08	17.01.2014
7	Ramam-III	W.B.	3x40	120.00	10.9.14	10.09.2014
8	Subansiri Lower (NHPC)	Ar.Pr./ Assam	8x250	2000.00	09.09.03	19.12.2003
9	Teesta St. VI	Sikkim	4x125	500.00	08.03.19	31.03.2020
10	Ratle (NHPC)	J&K	4x205+1x30	850.00	11.02.2021	18.01.2022
11	Kiru (CVPPPL)	J&K	4x156	624.00	08.03.2019	24.02.2020
12	Rangit-IV	Sikkim	3x40	120.00	30.03.2021	27.08.2021
13	Luhri -I (SJVN)	H.P.	2x80+2x2	210.00	20.11.20	24.11.2020
14	Dhulasidh (SJVN)	H.P.	2x33	66.00	01.10.2020	06.05.2021
15	Dibang (NHPC)	Arunachal Pradesh	12x240	2880.00	27.02.2023	27.02.2023
16	Sunni Dam (SJVN)	H.P.	4x73+1x73+1x17	382.00		
17	Kwar (CVPPPL)	J&K	4x135	540.00	11.05.2022	11.05.2022
Sub-total (Central Sector):				12227.00		
State Sector						
18	Parnai (JKSPDC)	J&K	3x12.5	37.50	21.10.2013	25.10.2013
19	Lower Kalnai (JKSPDC)	J&K	2x24	48.00	16.08.2013	12.09.2013
20	Uhi-III	H.P.	3x33.33	100.00	19.09.02	02.04.2003
21	Shongton Karcham	H.P.	3x150	450.00	16.08.12	04.08.2012
22	Shahpurkandi	Punjab	3x33+3x33+1x8	206.00	04.05.11	11.02.2013
23	Koyna Left Bank PSS	Mah.	2x40	80.00	20.02.04	20.06.2007
24	Indrasagar Polavaram (PPA)	Andhra Pr.	12x80	960.00	21.02.2012	20.12.2017
25	Pallivasal	Kerala	2x30	60.00	31.08.07	31.01.2007
26	Thottiyar	Kerala	1x30 + 1x10	40.00	05.06.08	22.12.2008
27	Kundah Pumped Storage-I (TANGENDCO)	Tamil Nadu	4x125	500.00	03.12.08	15.02.2018
28	Lower Kopli (APGCL)	Assam	2x55+2x2.5+1x5	120.00	Nov,2020	21.08.2020
29	Chanju-III (HPPCL)	H.P.	3x16	48.00	14.07.2015	07.10.2022
30	Mankulam (KSEB)	Kerala	2 x 20	40.00	03.03.2022	03.03.2022
31	Lakhwar Multipurpose Project (UJVNL)	Uttarakhand	3x100	300.00	23.12.2021	01.02.2023
32	Lower Sileru Extension	Andhra Pradesh	2x115	230.00	24.08.2020	24.08.2020
Sub-total (State Sector):				3219.50		
Private Sector						
33	Tidong-I	H.P.	3X150	150.00	23.07.07	07.11.2008
34	Tangnu Romai- I	H.P.	2x22	44.00	2014-15	14.06.2010
35	Phata Byung	Uttarakhand	2x38	76.00	06.10.08	12.04.2008
36	Maheshwar	M.P.	10x40	400.00	30.12.96	20.02.1997
37	Bhasmey	Sikkim	2x25.5	51.00	Dec-08	12.04.2010
38	Rangit-II	Sikkim	2x33	66.00	10.02.10	24.10.2011
39	Panan	Sikkim	4x75	300.00	07.03.11	22.02.2014
40	Kutehr (JSW Energy (Kutehr)Ltd)	H.P.	3x80	240.00	31.03.10	20.10.2019
41	Pinnapuram (Greenko AP01 IRE)	A.P.	4x240+2x120	1200.00	-	-
Sub-total (Private Sector):				2527.00		
Total - Under Execution:				17973.50		

Chapter 9.1

Ordering Status of TG sets for Under Construction Hydro Electric Projects					
Summary- Units Ordered					
Sector	Benefits (MW)	Capacity Ordered			Not yet ordered
		BHEL	Others	Total Ordered	
Central Sector	12227.00	2055.00	6370.00	8425.00	3802.00
State Sector	3219.50	1266.00	1565.50	2831.50	388.00
Private Sector	2527.00	400.00	1827.00	2227.00	300.00
Total: Under Execution	17973.50	3721.00	9762.50	13483.50	4490.00



Chapter 9.2

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. J	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		
B State Sector					
BHEL Units					
15	Uhi-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		
Chinese					
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- Chinese			100.00		
OTHER UNITS					
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		

Sl. No.	Name of the Project/State	Capacity (No.x MW)	Benefits (MW)	Make/Supplier of TG set	Date of Order
C 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	
34	Kutehr(HP)	3x80	240.00	Andritz Hydro Pvt. Ltd., India	13.02.20
Sub-total- Others			1827.00		
Sub-total (Private Sector):			2227.00		
Under Execution Total (Units Ordered):			13483.50		
is not yet ordered					
A Central Sector					
35	Dibang Multipurpose Project (NHPC)	12x240	2880.00		
36	Sunni Dam (SJVN)	4x73+1x73+1x17	382.00		
37	Kwar (CVPPPL)	4x135	540.00		
Sub-total (Central Sector):			3802.00		
B 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		
Sub-total (State Sector):			388.00		
C Private Sector					
41	Panan, Sikkim	4x75	300.00		
Sub-total (Private Sector):			300.00		
Total: (Units not yet ordered)			4490.00		
Total: Under execution			17973.50		

Chapter 9.3

Status of ordering of various packages for Under Construction Hydro Electric Projects

Sl. No.	Project name/ Exec. Agency CEA clearance/ Approval Capacity (MW)	State <u>Region</u>	Contract	Scope of works & brief details	Contracting Agency (Name & Location)	Contract value (Rs. Crs.)	Date of Contract (commencem ent)/ Completion			
Under Execution										
A Central Sector										
1	Pakal Dul CVPPL 03.10.2006/ 28.10.2014 4x250 = 1000MW	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	<u>21.02.2018</u> 20.12.2022			
				Dam Pkg. - Diversion Tunnel works, Dam works, Spillways, and Part of HRT by DBM and associated works.	M/s Jaiprakash Associates	2853.00	<u>21.06.2018</u> 20.03.2023			
				Letter of Award Issued: Supply, Erection & commissioning of E&M components.	M/s. Voith Hydro Limited	703.63	<u>02.01.2019</u> 01.11.2023			
				Letter of Award Issued: Supply, Erection & commissioning of HM components.	M/s PES Engineers Pvt. Ltd	286.58	<u>26.08.2019</u> 25.06.2023			
				Letter of Award Issued- HRT by TBM	M/s L&T Ltd.	2575.63	<u>03.07.2020</u> 02-01-2025			
2	Parbati-II NHPC 12.10.1999/ 11.09.2002 4x200 = 800 MW	Himachal Pradesh, North Region	Civil works	Lot-1: Civil & HM works for Dam and Part HRT (0- 3500m)	M/s Patel-SEW JV,	322.9	<u>11.09.2002</u> <u>13.08.2011</u> (revised)			
				Lot-2: Civil & HM works of HRT (3500-24733m)	M/s Himachal JV	419.89	11.09.2002 10.09.2007			
				Contract terminated in March-12 and Fresh awarded as under.						
				Lot-2A: Balance civil works of HRT by TBM	M/s Gammon-CMC JV, Mumbai	455.63	<u>13.08.2013</u> 27.01.2020 (revised)			
				Lot-2B: Balance civil works of HRT by DBM and associated HM works *contract has been terminated on 22.12.2018	M/s Valecha Engg. Ltd, Mumbai	176.30	<u>21.11.2013</u> 24.01.2018 (revised)			
				Lot 2C : Execution of 1500 m Head Race Tunnel by DBM	M/s Gammon Engineers Contractors Pvt Limited	211.64	<u>02.06.2020</u> <u>01.03.2023</u>			
				Lot-3: Civil & HM works of Power House, Pressure Shaft, Surge Shaft & Part HRT (24733-31525)	M/s Gammon India Ltd.	603.69	<u>13.09.2002</u> 24.05.2016 (revised)			
				Lot-4: Jiwa Nallah Works	M/s BJ_Techno-HAS (JV)	56.47	<u>11.09.2002</u> 10.09.2007			
				Contract terminated and Fresh awarded as under:						
				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	<u>22.06.2011</u> 24.03.2015 (revised)			

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	Generating Units, EOT Crane Main step up Transformers, Switch Yard and	M/s BHEL	354.44	<u>24.12.2002</u> 23.04.2007			
				Electrical & Mechanical Auxiliaries	M/s BHEL	34.2	<u>24.12.2002</u> 23.04.2007			
				Design, Manufacture, Supply, Erection , Testing & commg.	M/s BHEL	391.11	<u>29.12.2006</u> 02/2011			
			H&M Works	Hydro-Mechanical Packages	M/s Patel-Sew JV	23.61	<u>11.09.2002</u> 13.08.2011 (revised)			
3	Tehri PSS, THDC, 18.7.06 Nov-11 (Revised CCEA) 4x250=1000 MW	<u>Uttara</u> <u>khand</u> <u>NR</u>	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.	<u>23.06.2011</u> 27.07.11 26.01.2016 (Commencem ent Date)			
							U-1: 48 Mth. U-2: 50 Mth. U-3: 52 Mth. U-4: 54 mth. (from commenc.)			
4	Tapovan Vishnugad NTPC 11.08.2004/Nov, 2006 4x130 = 520 MW	<u>Uttara</u> <u>khand</u> <u>NR</u>	Civil works	Construction of Barrage and De-silting chambers	M/s SSJV Projects Pvt. Ltd. and M/s ZVS, Russia	269..15	01/2007 07/2012			
				Contract terminated in November-10 and fresh award made in July-12						
				Construction of Barrage and De-silting chambers (Balance Works)	M/s Rithwik Projects Pvt. Ltd., Hyderabad.	457.57	07/2012 03/2015			
				Construction of HRT	M/s L&T Ltd. and M/s Alpine Mayreder Bau GmbH	455.921	11/2006 08/2012			
				HRT contract terminated on 09.01.2014. HRT package re-awarded on 09.03.2016.						
				Construction of HRT(Balance Works)	M/s HCC	634.03	03/2016 01/2019			
				Power House & Penstock package	M/s Patel Engg. Pvt. Ltd.	221.28 Cr. + Euro 37.58m	05/2007 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				
5	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			
6	Vishnugad Pipalkoti, THDC 21.08.2008 4x111= 444 MW	<u>Uttara</u> <u>khand</u> <u>NR</u>	Civil & HM works	EPC Contract	M/s HCC Ltd	1597.30	17.01.2014 16.07.2018			
			E&M Package	EPC Contract	BHEL	360.36	18.11.2014 17.11.2018			

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
7	Teesta-VI NHPC 08.03.2019/ 07/.2007(FC) 4x125= 500MW	<u>Sikkim</u> <u>NER</u>	Civil works	Barrage, Desilting Basin, SFT, Intake part of HRT-I &HRT-II & other associated structure	M/s Jaiprakash Associate Limited	1710	31.03.2020
				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 works	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 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 Aavids 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
8	Subansiri Lower NHPC 07.06.2001/09.0 9.03 8x250= 2000 MW	<u>Ar.Pr/</u> <u>Assam</u> <u>NER</u>	Civil works	Dam/Barrage	M/s BGS – SGS - Soma JV, Hyderabad	1098.32	19.12.2003 12/2009
				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)
				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
			E&M works	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
				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

Sl. No.	Project name/ Exec. Agency CEA clearance/ Approval Capacity (MW)	State <u>Region</u>	Contract	Scope of works & brief details	Contracting Agency (Name & Location)	Contract value (Rs. Crs.)	Date of Contract (commencem ent)/ Completion
				Local transportation including port clearance and port charges and inland insurance and installation services.	M/s Alstom Project India Ltd.	1,23,74,37,486.00	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
9	Ramam-III NTPC Ltd. 3x40= 120 MW	<u>W.B.</u> <u>E.R.</u>	Civil works & HM 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	360.83	<u>10.09.14</u> 09/2019
				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	<u>12.12.14</u> <u>12/2019</u>
			E&M works	Design, Engineering, Manufacturing, Supply, Insurance, Erection, Testing & Commissioning works for EM works EPC contract package.	M/s. BHEL	224.67	<u>19.02.2015</u> <u>11/2018</u>
10	Ratle GVK Ratle HEP Pvt. Ltd. (GRHEPPL) 19-12-2012 <u>4x205+1x30=</u> <u>850 MW</u>	<u>J&K</u> <u>NR</u>	Turnkey execution of 850MW Ratle Hydroelectric project has been awarded to M/s Megha Engineering & Infrastructures Limited on 18.01.2022 on EPC basis for 52 months at contract value Rs. 3485.14 crores.				
11	Kiru CVPPL 13.06.2016 4x156=624 MW	<u>J&K</u> <u>NR</u>	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>
			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	<u>24.02.2020</u> <u>23.07.2024</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 (commencem ent)/ Completion
12.	Rangit-IV Jal Power Corp. Ltd. 06.07.2007/23. 10.2007(FC) 3x40 MW= 120	<u>Sikkim</u> <u>NER</u>	Civil works	Construction of Balance Civil works package: Diversion Channel, Cofferdams, 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 & Commissioning of Balance of Plant (BOP) items	M/s Andritz HydroPrivate Limited	80.12	08.07.2021
13.	Luhri Stage-1 SJVN Ltd. 01.05.2018 2x80+2x25=210 MW	Himachal 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
			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
14	Dhulasidh Hydro Electric Project SJVN Ltd (2x33 MW = 66MW)	Himachal 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
			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
15	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
			E&M works				
16	Dibang Multipurpose Project (NHPC)	<u>Arunachal Pradesh</u>	Infrastructure 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
17	Sunni Dam (SJVN) 4.1.2023	<u>Himachal Pradesh</u>	Civil and HM works	Design & engineering services, Civil and HM works of project.	M/s Rithwik Projects Pvt Ltd		14.1.2023

Sl. No.	Project name/ Exec. Agency CEA clearance/ Approval Capacity (MW)	State <u>Region</u>	Contract	Scope of works & brief details	Contracting Agency (Name & Location)	Contract value (Rs. Crs.)	Date of Contract (commencem ent)/ Completion
	4x73+1x73+1x17=382 MW		E&M works	Yet to be awarded			
B State Sector							
18	Parnai JKSPDC 21.10.2013 3x12.5= 37.5 MW	NR <u>J&K</u>	Civil works	EPC contract	M/s. Patel Engineering Ltd. & M/s. Alstom India.		25.10.2013
			E&M works	T.G. Set	M/S.Andritz Hydro, India		
19	Lower Kalnai JKSPDC 16.08.2013 2x24= 48 MW	NR <u>J&K</u>	Civil works	EPC contract	M/s Coastal Projects Ltd.		<u>12.09.2013</u>
			E&M works	T.G. Set	M/s. GE Power India Pvt. Ltd.		
20	Uhl-III, BVPC Ltd. 19.09.02 / ----- - (TEC -2x50 MW) 3x33.3 =100	<u>H.P.</u> <u>NR</u>	Civil works & HM Works	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	<u>18.04.05</u> 15.8.07 Re-awarded on 25.10.08
				Head Race Tunnel (HRT)	M/s SSJVPP Ltd. 12 th floor S.N.Tower 25/2 M.G.Road, Banglore 560001 Package re-awarded to: Continental Corp Project Ltd.. Re-awarded to M/s Abir Infrastructure Pvt. Ltd., Gurgaon.	69.58	<u>02.04.03</u> 30.04.07 15.10.2010
				Rana Intake Works & Power channel	M/s TRG Industries Pvt Ltd E- 461 Greater Kailash –II New Delhi	17.53	<u>26.07.05</u> 26.10.07
				Penstock fabrication, erection	M/s PES.Engineers Pvt. Ltd. Hyderabad-500016	57.26	<u>27.05.05</u> 27.11.07
				Power House	M/s Pilot Engg., Ludhiana	9.87	<u>19.6.2007</u> 12/2009
			E&M works	Generating Equipment & Associated Aux, Transformers	M/s BHEL	117.36	<u>15.02.07</u> 15.04.10
21	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	<u>04.08.2012</u> 03.08.2017
22	Shahpurkandi, Irrigation Deptt/PSPCL 04.05.2011 3x33+3x33+1x8 = 206 MW	<u>Punjab</u> <u>NR</u>	Civil works & HM works	Main Dam alongwith Two head regulators	SOMA-BUREYA Joint Venture	687.51	<u>11.02.2013</u> Oct- 2016
				Hydel Channel	M/s Gurinder Singh Contractor	90.11	<u>26.02.2013</u> Oct- 2015
			E&M works	EPC Contract	BHEL		<u>28.02.14</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 (commencem ent)/ Completion
23	Koyna Left Bank PSS WRD, Govt. of Mah. 20.02.2004 2x40 = 80 MW	Maha. WR	Civil and H&M works	Barrage, Intake tunnel, Twin lake tap, Ventilation tunnel, Power house, Intake structure ,HRT, Pressure shaft, tail surge shaft, pen stoke, TRT, Bus duct tunnel, Lower intake structure	M/s B.T. Patil-Malaxmi (JV), Pune M/s Patel Engg. Ltd. Mumbai	131.91 Crs. 118.86 Crs.	<u>20.06.2007</u> 30.06.2013 <u>03.10.2007</u> 30.06.2016
			E&M works	Design, manufacture, testing & commissioning of TG unit and auxiliaries	M/s IVRCL Ltd. Pune Turbine- Litostrój Slovenia Generator- Koncar, Croatia	Euro 4.03 Crs + 177.99 Crs	<u>16.12.2010</u> 15.12.2014
24	Polavaram (PPA) 21.07.10/ 25.02.09 12x80 = 960MW	Andhra Pradesh S.R.	Civil works & HM works & E&M works	Investigation and L.P schedules etc., (Balance) &	M/s. Trans stroy- JSCECUES (JV), Hyderabad	4054.00	<u>02.03.2013</u> <u>01.03.2018</u>
				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 2810.88 Cr.	<u>20.12.2017</u> <u>01.11.2019</u>
25	Pallivasal KSEB/ Not Req./31.1.2007 2x30=60	Kerala SR	Civil, H&M works and E&M works	The work was awarded to M/s ESSAR – DEC – CPPL consortium as a single package and an agreement in this regard was executed on 31.01.2007. The contractual date of completion is 48 months i.e. 01.3.2011. E&M: Dongfang Electric Corporation, China (DEC)		242.96 Crs + US\$57 million	<u>31.01.2007</u> 01.03.2011
26	Thottiyar KSEB 1x30 + 1x10= 40 MW	Kerala SR	Civil works	Dam, Water Conductor System, power House	M/s Coastal Projects Private Ltd- Chongqing Joint Venture, Hyderabad E&M: Chongqing, China	44.23	<u>22.12.2008</u> 19.05.2012
			H&M works	Gates, erection, commissioning		24.09	<u>22.12.2008</u> 19.05.2012
			E&M works	Planning, Engineering, Manufacture, Supply, Erection, testing & commissioning		75.68	<u>22.12.2008</u> 19.05.2012
27	Kundah Pumped Storage Phase -4 x125=125 MW	Tamil Nadu	Civil & HM Works	Package-I: Power House HM works on the Downstream side of P/House (Phase-I).	M/s. Patel Engg., Mumbai - Package-I	346.48	<u>15.02.18</u> 15.02.22
				Package-II: Head Race Tunnel, Head Surge Shaft, Pressure Shafts, HM works on the Upstream side of P/House (Phase-I).	M/s. Kundah PSP Consortium - Package-II	321.34	<u>15.02.18</u> 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 (commencem ent)/ Completion
	Phase-I, II & III		E & M Works	Phase –I, Package-III: 1x125 MW Phase-II: 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)	M/s Megha Engineering Infrastructure Ltd,Hydrabad.	604.62 (Phase-I, Package-III) 756.54 (Phase-II) 401.85 (Phase-III)	<u>28.11.2019</u> 28.05.2023 <u>28.11.2019</u> <u>28.05.2023</u> <u>28.11.2019</u> <u>28.05.2023</u>
28	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	<u>June 2024</u>
			EM Works	E&M work awarded on 09.09.2021.	M/s Andritz Hydro Pvt. Ltd.	306.72	<u>June 2024</u>
29	Chanju-III (HPPCL)	<u>H.P.</u> <u>NR</u>	Civil Works	Civil works {Package-I and Package –II} awarded on 07.10.2022	(M/s. MFB-ACNC (JV)	350.52	<u>07.10.2022</u>
30	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
31	Lakshwar Multipurpose Project (UJVNL)	<u>Uttarakha</u> <u>nd</u> <u>NR</u>	Civil Works	Civil works awarded on 01.02.2023	M/s L&T	3241.08	01.02.2023

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
32	Lower Sileru Extension (APGENCO)	<u>Andhra Pradesh</u>	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
C	Private Sector						
33	Tidong-I M/s NSL Tidong Power Gen. Ltd. 2x50 = 100 MW	<u>HP NR</u>	Civil works	Construction of River diversion, barrage, intake, Desilting basins, storage reservoir & HRT (RD 0 m - 905 m)	M/s SCL Infratech Ltd. Hyderabad	127.996	<u>07.11.2008</u> <u>06.11.2011</u>
				Construction of HRT (RD 905 m-RD 5537 m)	M/s SCL Infratech Ltd. Hyderabad	83.327	<u>7.11.2008</u> <u>09/2014</u>
				Construction of HRT (RD 5537 m -RD 8537 m)	M/s Himalaya Construction (P) Ltd.	31	<u>07.07.2011</u> <u>06.07.2015</u>
				Construction of Surge Shaft, Pressure Shaft, Power House and Tail Race Channel	M/s Himalaya Construction (P) Ltd.	40	<u>07.07.2012</u> <u>06.06.2015</u>
			E&M works	Supply, Installation, testing & commissioning of TG sets	M/s Alstom Projects, India	84	<u>28.02.2011</u> <u>27.05.2013</u>
34	Tangu Romai-I M/s Tangu Romai Power generation 2x22= 44 MW 30.11.2007 HPSEB	<u>HP NR</u>	Civil works	Construction of Diversion Barrage, Intake, desilting, HRT, Surge Shaft, Penstock, Power House & Tail Race Channel	M/s Sai Urja Hydel Projects (P) Ltd., Shimla	164.7	<u>14.06.2010</u> <u>06/2014</u>
			E&M works	Supply, installation, T&C of TG set, Switchyard equipment & associated auxiliaries	M/s Andritz Hydro, India	56	<u>17.04.2013</u> <u>16.07.2015</u>
35	Phata Byung M/s Lanco 06.10.2008 2x38 MW = 76 MW	<u>Uttarakhand NR</u>	Civil works	Dam, water conductor System, power House	Lanco Infratech Ltd.	206	<u>12.04.2008</u> <u>07/2012</u>
			H&M works	Design, Engineering, Manufacture, Farication & Erectio,n of all hydro-mechanical equipment	M/s CIMMCO	34	<u>12.04.2008</u> <u>08/2012</u>
			E&M works	Manufacturing., Supply, erection & commng. of TG units	M/s Alstom Project, India	84	<u>12.04.2008</u> <u>08.2012</u>
36	Mareshwar, SMHPCL 12 96/ 29.9.2006 (FC) 10x40= 400MW	<u>M. P. 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	<u>22.02.1997</u> <u>03/2005</u>
			E&M works	Manuf., Supply, erection & commng. of TG units	M/s BHEL	470.5 Crs. + USD \$ 11.74 M 18.05.2001	<u>25.06.2007</u> <u>10/ 2009</u>
37	Bhasmey Gati Infrastructure 2x25.5 = 51 MW	<u>Sikkim NER</u>	Civil works	Dam, Tunnels , Power House, Surge Shaft, Pressure Shaft, Intake	M/s Simplex Infrastructure Ltd.	160	<u>12.04.2010</u> <u>11/2012</u>
			H&M works	N.A.			
			E&M works	Manufacturing., Supply, erection & commng. of TG units	M/s Voith Hydro, India	93	<u>14.04.2010</u> <u>10/2012</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 (commencem ent)/ Completion
38	Rangit-II Sikkim Hydro Power Limited 2x33= 66 MW	Sikkim NER	Civil &HM works	EPC Contract	M/s Coastal Project Limited	220.35	<u>13.12.2011</u> 23.10.2013
			E&M works		M/s. Gammon India Ltd.		<u>24.03.2012</u>
39	Panan Himagiri Hydro Energy Pvt. Ltd. 07.03.2011 4x75= 300 MW	Sikkim NER	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)	<u>22.02.2014</u> 21.02.2018 (48 months)
			E&M works	Manufacturing., Supply, erection & commng. of TG units	Under Award		
40	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 Ltd. -M/s Greyhound Engineers India Private Ltd.	567.00 507.40 60.00 18.00	<u>20.10.2019</u> 19.06.2023 <u>25.11.2019</u> <u>24.05.2023</u> <u>06.01.2020</u> <u>05.05.2023</u> <u>21.07.2020</u> <u>20.07.2023</u>
			E&M works	Electro Mechanical works.	M/s Andritz Hydro Pvt. Ltd.	220	29.07.2020 28.07.2023
			Design	Project Design and Engineering	M/s AF Consult India Private Ltd, Tower 1, Steller IT Park, Sector 62, NOIDA- 201 301	11.5	<u>11.04.2019</u> <u>10.05.2024</u>
			Colony	Construction of Jura Colony	M/s Swastik Prefab Private Limited, Sector - 16, NOIDA-201 031	16	<u>06.02.2020</u> <u>30.11.2022</u>
41	Pinnapuram (Greenko AP01 IREP Private Ltd)	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
			E&M works	Package -III Electro- mechanical works	M/s Andritz Hydro Pvt. Ltd.		21.05.2020

CHAPTER – 10

Status of financial closure of Under Execution Private Sector H. E. Projects

I. No.	Name of Project, State, Capacity, Date of TEC	Implementing Agency	Financial Closure Status	Remarks/ Constraints
Under Execution				
1	Maheshwar, M.P., 10x40 MW, 30.12.96	Shree Maheshwar Hydel Power Corporation Ltd.	Financial closure achieved on 29.9.2006.	
2.*	Teesta-VI, Sikkim 4x125 MW 27.12.2006	M/s Lanco Energy Pvt. Ltd.	Financial closure achieved in July, 07.	
3.*	Rangit-IV, Sikkim 3x40 MW 06.07.2007	M/s Jal Power corporation Ltd.	Financial closure achieved on 25.01.2010.	
4.	Tidong-I ,H.P. 150 MW 23.07.2007	M/s NSL Tidong.	Financial closure achieved on 25.03.2010.	
5.	Tangu Romai,H.P. 2x22 MW 30.11.2007	Tangu Romai Power Gen. Pvt. Ltd.	Financial closure achieved on 22.01.2010.	
6.	Phata Byung Uttarakhand 2x38 MW 06.10.2008	M/s Lanco	Financial closure achieved on 25.07.2009.	
7.	Bhasmey, Sikkim 2x25.5= 51 MW Dec, 2008	M/s Gati Infrastructure	Financial closure achieved on 25.03.2010	
8.	Rangit Stage- II Sikkim 2x33= 66 MW 10.02.2010	M/s Sikkim Hydro Power Ventures Limited	Financial closure achieved on 15 th Jan, 2014, 31 st March 2015 (Revised).	
9.*	Ratle, J&K 4x205+1x30= 850 MW	M/s GVK Ratle HEP Pvt. Ltd. (GRHEPPL)	Financial closure achieved.	
10.	Panan, Sikkim 4x75= 300 MW 07.03.2011	Himagiri Hydro Energy Pvt. Ltd.	Financial closure with total debt of Rs. 1516.42 is tied up with PFC ((808.76 Crores), PTC (Rs. 120 Crores) & REC (Rs 587.67 Crores).	
11.	Kutehr,H.P. 3x80=240 MW	M/s JSW Energy (Kutehr) Ltd	Financial closure achieved on 14.01.2021	
12.	Pinnapuram, Andhra pradesh 4x240 + 2x120 = 1200 MW	Greenko AP01 IREP Private Limited)	Financial Closure for 1200 MW: 06.04.2022 Financial Closure for total capacity of 1680 MW: 13.12.2023	

*Now these are CPUS's Projects

Chapter - 11

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

Sl. No	Project Name/(I.C.)/ Executing Agency	Unit No.	Cap. (MW)	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	4	5	6	7	8	9	10	11	12
	Andhra Pradesh									
1	Polavaram (12x80 = 960 MW) APGENCO / Irr. Deptt., A.P.	1 2 3 4 5 6 7 8 9 10 11 12	80 80 80 80 80 80 80 80 80 80 80 80	2016-17 2016-17 2016-17 2016-17 2016-17 2016-17 2017-18 2017-18 2017-18 2017-18 2017-18 2017-18 (Mar'18)	2024-25 2024-25 2024-25 2024-25 2025-26 2025-26 2025-26 2025-26 2025-26 2025-26 2025-26 2025-26 (Mar,26)	96	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	1 2 3 4 5 6	240 240 240 240 120 120	2024-25 2024-25 2024-25 2024-25 2024-25 2024-25 (Mar'25)	2024-25 2024-25 2024-25 2024-25 2024-25 2024-25 (Dec'24)	Nil	6465.22 (Feb'2021 PL)	6465.22 (Feb'2021 PL)	Nil	Not applicable/ No time overrun
3	Lower Sileru Extension (2x115MW)(APGENCO)	1 2	115 115	2025-26 2025-26 (Mar'26)	2025-26 2025-26 (Mar'26)	NIL	571 (2020-21 PL)	571 (2020-21 PL)	NIL;	The project is in initial stage of construction.
	Arunachal Pradesh									

Sl. No	Project Name/(I.C.)/ Executing Agency	Unit No.	Cap. (MW)	Original Comm. Sched.	Latest/ Anticipated Comm. Sched.	Time over run (month s)	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	4	5	6	7	8	9	10	11	12
4	Subansiri Lower (8x250 = 2000 MW) NHPC	1 2 3 4 5 6 7 8	250 250 250 250 250 250 250 250	2009-11 2009-11 2009-11 2009-11 2009-11 2009-11 2009-11 2009-11 (Sep'10)	2025-26 2025-26 2025-26 2025-26 2025-26 2025-26 2025-26 2025-26 (Oct'25)	181	6285.33 (12/02)	21247.54 (Completion Cost)	14962.21 (238)	<ul style="list-style-type: none"> ➤ 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.
5	Dibang Multipurpose Project (12x240 = 2880 MW) NHPC	1 2 3 4 5 6 7 8 9 10 11 12	240 240 240 240 240 240 240 240 240 240 240 240	2031-32 2031-32 2031-32 2031-32 2031-32 2031-32 2031-32 2031-32 2031-32 2031-32 2031-32 2031-32 (Feb'32)	2031-32 2031-32 2031-32 2031-32 2031-32 2031-32 2031-32 2031-32 2031-32 2031-32 2031-32 2031-32 (Feb'32)	NIL	31876.39 (05/21)	31876.39 (05/21)	NIL	The project is in initial stage of construction.
Assam										
6	Lower Kopili (2x55+2x2.5+1x5 =120MW)	1 2 3 4 5	55 55 5 2.5 2.5	2024-25 2024-25 2024-25 2024-25 2024-25 (Jun'24)	2024-25 2024-25 2024-25 2024-25 2024-25 (March'25)	9	1115.91 (01/15)	1795 (2021)	679.09 (60.86)	The project is in initial stage of construction.
Himachal Pradesh										
7	Parbati - II (4x200 = 800 MW) NHPC	1 2 3 4	200 200 200 200	2009-10 2009-10 2009-10 2009-10	2024-25 2024-25 2024-25 2024-25	180	3919.59 (12/01)	11134.54 (07/22)	7214.95 (184.07)	<ul style="list-style-type: none"> ➤ 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.

Sl. No	Project Name/(I.C.)/ Executing Agency	Unit No.	Cap. (MW)	Original Comm. Sched.	Latest/ Anticipated Comm. Sched.	Time over run (month s)	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	4	5	6	7	8	9	10	11	12
				(Sept'09)	(Sept,24)					<ul style="list-style-type: none"> ➤ Flash flood in 2004,2005,2010 and 2011. ➤ Contractual issues. ➤ Cash flow issues with civil contractors.
8	Uhl-III (3x33.33 = 100 MW) BVPCL	1 2 3	33.33 33.33 33.33	2006-07 2006-07 2006-07 (Mar'07)	2024-25 2024-25 2024-25 (Dec,24)	} 213	431.56 (09/02)	2948.94 (03/2023)	2517.38 (583.32)	<ul style="list-style-type: none"> ➤ Delay in transfer of forest land. ➤ Delay in acquisition of private land ➤ 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
9	Shongtom Karcham (3x150 = 450 MW) HPPCL	1 2 3	150 150 150	2016-17 2016-17 2016-17 (Mar'17)	2026-27 2026-27 2026-27 (Nov,26)	} 116	2807.83 (07/11)	3708.51	900.68 (32.07)	<ul style="list-style-type: none"> ➤ Shifting of Army Ammunition Depot. ➤ Disruption of works by local people.
10*	Tangnu Romai-I (2x22 = 44 MW) TRPGPL	1 2	22 22	2014-15 2014-15 (Jun'14)	2027-28 2027-28 (subject to re-start of works(4 years))	} 165	255.00 (01/07)	641.89 (2018)	386.89 (151.72)	<ul style="list-style-type: none"> ➤ Works on hold since Aug 2016. Funds constraints with the developer. Project is likely to be commissioned 4 years after restart of works.
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)	1 2 3	50 50 50	2021-22 2021-22 (Oct'21) New Developer	2024-25 2024-25 (Jun'24)	} 32	543.15 (01/2007)	1850.00 (06/2018)	1306.85 (240.6)	<ul style="list-style-type: none"> ➤ 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 .
12	Kutehr 3x80=240 MW JSW Energy (Kutehr) Ltd	1 2 3	80 80 80	2024-25 2024-25 2024-25 (Nov'24)	2025-26 2025-26 2025-26 (Nov'25)	} 12	1798.13 (09/2011)	2879 (03/2019)	1080.87 (60.11)	<ul style="list-style-type: none"> ➤ Slow mobilization due to Covid-19 Lockdown.
13	Luhri Hydro Electric Project Stage-I (2X 80+2X25 MW = 210 MW)	1 2 3	80 80 25	2025-26 2025-26 2025-26	2025-26 2025-26 2025-26	NIL	1810.56 (05/20)	1810.56 (05/20)	NIL	<ul style="list-style-type: none"> ➤ Work started recently ➤ Rs. 1810.56 Crore which includes project cost of Rs. 1744.37 Crores (05/2020 PL)

Sl. No	Project Name/(I.C.)/ Executing Agency	Unit No.	Cap. (MW)	Original Comm. Sched.	Latest/ Anticipated Comm. Sched.	Time over run (month s)	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	4	5	6	7	8	9	10	11	12
		4	25	(Jan'26)	(Jan'26)					and Rs. 66.19 Crore for enabling infrastructure (to be availed as budgetary support from GoI)
14	Dhauasidh (SJVN) 2x 33=66MW Hamirpur/ Kangra	1 2	33 33	2025-26 2025-26 (Nov'25)	2025-26 2025-26 (Nov'25)	NIL	687.97 (05/2020)	687.97 (05/2020)	NIL	<ul style="list-style-type: none"> 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	1 2 3 4 5	73 73 73 73 17	2027-28 2027-28 2027-28 2027-28 2027-28 2027-28 (Mar'28)	2027-28 2027-28 2027-28 2027-28 2027-28 2027-28 (Mar'28)	Nil	2614.51 (Mar'21)	2614.51 (Mar'21)	Nil	The project is in initial stage of construction.
16	Chanju-III (3x16 = 48 MW) HPPCL	1 2 3	16 16 16	2027-28 2027-28 2027-28 (Jul'27)	2027-28 2027-28 2027-28 (Jul'27)	Nil	418.57 (01/15)	418.57 (01/15)	Nil	The project is in initial stage of construction.
	Govt. of UT of J&K									
17	Pakal Dul (4x250= 1000 MW) CVPPL	1 2 3 4	250 250 250 250	2020-21 2020-21 2020-21 2020-21 (Apr'20)	2026-27 2026-27 2026-27 2026-27 (Sept'26)	77	8112.12 (03/13)	8112.12 (03/13)	#	<ul style="list-style-type: none"> 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	1 2 3	12.5 12.5 12.5	2017-18 2017-18 2017-18 (Jan'18)	2025-26 2025-26 2025-26 (Dec,25)	95	640.86 (Completion cost)	640.86 (Completion cost)	#	<ul style="list-style-type: none"> Delay in Land acquisition. Slow progress in HRT. Contractual issues
19*	Lower Kalnai 2x24= 48 MW JKSPDC	1 2	24 24	2017-18 2017-18 (Sep'17)	2026-27 2026-27 (subject to re- start of works (4 years))	114	576.87 (12/12) (Completion cost)	576.87 (12/12) (Completion cost)	#	<ul style="list-style-type: none"> 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 re-

Sl. No	Project Name/(I.C.)/ Executing Agency	Unit No.	Cap. (MW)	Original Comm. Sched.	Latest/ Anticipated Comm. Sched.	Time over run (month s)	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	4	5	6	7	8	9	10	11	12
										tendering for selection of EPC contractor is under process.
20	Kiru (4x156=624 MW) <u>CVPPL</u>	1 2 3 4	156 156 156 156	2023-24 2023-24 2023-24 2023-24 (Aug,23)	2025-26 2025-26 2025-26 2025-26 (Mar,26)	31	4287.59 (07/18)	4287.59 (07/18)	Nil	<ul style="list-style-type: none"> ➤ 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
21	Ratle (4x205+1x30) = 850 MW RHPPL / NHPC	1 2 3 4 5	205 205 205 205 30	2025-26 2025-26 2025-26 2025-26 2025-26 (Feb'26)	2026-27 2026-27 2026-27 2026-27 2026-27 (May'26)	3	5281.94 (11/18)	5281.94 (11/18)	Nil	<ul style="list-style-type: none"> ➤ Project was stalled since 11.07.2014 due 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.
22	Kwar (4x135=540 MW) CVPPL	1 2 3 4	135 135 135 135	2026-27 2026-27 2026-27 2026-27 (Nov'2026)	2026-27 2026-27 2026-27 2026-27 (Nov'2026)	Nil	4526.12 (Sep.'20)	4526.12 (Sep.'20)	Nil	<ul style="list-style-type: none"> ➤ The project is in initial stage of construction.
	Kerala									
23	Pallivasal 2x30 = 60 MW KSEB	1 2	30 30	2010-11 2010-11 (Mar'11)	2023-24 2023-24 (Mar,24)	156	222 (1999)	550.00 (2018)	328 (147.74)	<ul style="list-style-type: none"> ➤ 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.
24	Thottiyar (1x30+1x10)= 40MW KSEB	1 2	30 10	2012-13 2012-13 (Apr'12)	2023-24 2023-24 (Mar,24)	143	136.79 (2007)	280 (2018)	143.21 (104.69)	<ul style="list-style-type: none"> ➤ 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.

Sl. No	Project Name/(I.C.)/ Executing Agency	Unit No.	Cap. (MW)	Original Comm. Sched.	Latest/ Anticipated Comm. Sched.	Time over run (month s)	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	4	5	6	7	8	9	10	11	12
25	Mankulam (2x20)= 40MW KSEB	1 2	20 20	2026-27 2026-27 (May 26)	2026-27 2026-27 (May 26)	Nil	600 (08/22)	600 (08/22)	Nil	➤ The project is in initial stage of construction.
	Madhya Pradesh									
26*	Maheshwar (10x40 = 400 MW) SMHPCL	1 2 3 4 5 6 7 8 9 10	40 40 40 40 40 40 40 40 40 40	2001-02 2001-02 2001-02 2001-02 2001-02 2001-02 2001-02 2001-02 2001-02 2001-02 (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									
27*	Koyna Left Bank PSS 2x40 = 80 MW WRD, Maha	1 2	40 40	2014-15 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.
	Punjab									
28	Shahpurkandi 3x33+3x33+1x8 =206 MW, Irrigation Deptt. &PSPCL	1 2 3 4 5 6 7	33 33 33 33 33 33 8	2015-16 2015-16 2015-16 2015-16 2015-16 2015-16 2015-16 (Mar,16)	2025-26 2025-26 2025-26 2025-26 2025-26 2025-26 2025-26 (Oct, 25)	115	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									
29	Teesta Stage VI (4x125 = 500 MW) LancoTeesta Hydro Power Ltd. (LTHPL) (Project taken	1 2 3 4	125 125 125 125	2023-24 2023-24 2023-24	2026-27 2026-27 2026-27 2026-27	29	5748.04 (07/2018)	5748.04 (07/2018)	Nil	➤ Poor geology. ➤ Land acquisition. ➤ Contractual issues

Sl. No	Project Name/(I.C.)/ Executing Agency	Unit No.	Cap. (MW)	Original Comm. Sched.	Latest/ Anticipated Comm. Sched.	Time over run (month s)	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	4	5	6	7	8	9	10	11	12
	over by NHPC w.e.f. 08.03.2019)			2023-24 (March'24)	(Aug,26)					<ul style="list-style-type: none"> ➤ 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.
30*	Bhasmey (2x25.5 =51 MW) Gati Infrastructure	1 2	25.5 25.5	2012-13 2012-13 (Jun'12)	2027-28 2027-28 (subject to re- start of works(3 years))	189	408.50 (2012-13)	746.01 (03/18)	337.51 (82.62)	<ul style="list-style-type: none"> ➤ 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.
31	Rangit-IV HE Project (3X40 = 120 MW) NHPC	1 2 3	40 40 40	2023-24 2023-24 2023-24 (March'24)	2025-26 2025-26 2025-26 (May'25)	14	938.29 (10/19)	938.29 (10/19)	Nil	<ul style="list-style-type: none"> ➤ 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.
32*	Rangit-II 2x33= 66 MW Sikkim Hydro Power Ltd.	1 2	33 33	2015-16 2015-16 (Apr'15)	2027-28 2027-28 (subject to re- start of works(2- ½ years))	155	496.44 (2011-12)	496.44 (2011-12)	#	<ul style="list-style-type: none"> ➤ Works stalled since Dec., 2017. Funds constraints with the developer. Project is likely to be commissioned 3 years after restart of works
33*	Panan 4x75= 300 MW	1 2	75 75	2018-19 2018-19	2028-29 2028-29	120	1833.05 (2009)	2675.00 (2020)	841.95 (45.93)	<ul style="list-style-type: none"> ➤ Accessibility to Project site. The permanent bridge over Mantam Lake for

Sl. No	Project Name/(I.C.)/ Executing Agency	Unit No.	Cap. (MW)	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	4	5	6	7	8	9	10	11	12
	Himagiri Hydro Energy Pvt. Ltd.	3 4	75 75	2018-19 2018-19	2028-29 2028-29 (subject to re-start of works(4-½ years)					accessibility to Dam site is being constructed by Sikkim PWD which is likely to be completed by Nov' 2024. 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.
	Tamil Nadu									
34	Kundah PSP (Phase-I, Phase-II & Phase-III) (4x125=500 MW) TANGEDCO	1 2 3 4	125 125 125 125	2021-22 2021-22 2021-22 2021-22 (Aug,21)	2025-26 2025-26 2025-26 2025-26 (Jul,25)	47	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
	Uttarakhand									
35*	Lata Tapovan (3x57 = 171 MW) NTPC	1 2 3	57 57 57	2017-18 2017-18 2017-18 (Aug' 17)	2028-29 2028-29 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.
36	Tapovan Vishnughad (4x130 = 520 MW) NTPC	1 2 3 4	130 130 130 130	2012-13 2012-13 2012-13 2012-13 (Mar'13)	2028-29 2028-29 2028-29 2028-29 (Dec'28)	188	2978.48 (03/04)	7700 (09/22)	4721.52 (158.52)	➤ 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

Sl. No	Project Name/(I.C.)/ Executing Agency	Unit No.	Cap. (MW)	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	4	5	6	7	8	9	10	11	12
										due to subsidence in Joshimath area. Hon'ble High Court allowed for some essential works vide order dated 23.05.2023
37	Tehri PSS (4x250 = 1000 MW) THDC	1 2 3 4	250 250 250 250	2015-16 2015-16 2015-16 2015-16 (Feb'16)	2024-25 2024-25 2024-25 2024-25 (Oct'24)	104	1657.60 (12/05)	4825.60 (02/19)	3168 (191.11)	<ul style="list-style-type: none"> ➤ 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.
38	Vishnugad Pipalkoti (4x111 = 444 MW) THDC	1 2 3 4	111 111 111 111	2013-14 2013-14 2013-14 2013-14 (Jun'13)	2026-27 2026-27 2026-27 2026-27 (Jun'26)	156	2491.58 (03/08)	3860.35 (02/19)	1368.77 (54.93)	<ul style="list-style-type: none"> ➤ 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.
39	Lakhwar Multipurpose project (3x100=300 MW) UJVNL	1 2 3	100 100 100	2028-29 2028-29 2028-29 (Oct. 28)	2028-29 2028-29 2028-29 (Oct. 28)	Nil	5747.17 (07/18)	5747.17 (07/18)	Nil	<ul style="list-style-type: none"> ➤ The project is in initial stage of construction.
40*	Phata Byung (2x38 = 76 MW), LANCO	1 2	38 38	2012-13 2012-13 (Jun'12)	2025-26 2025-26 (subject to re-start of works(3 years))	165	520.00 (2013-14)	1132 (09/16)	612 (117.69)	<ul style="list-style-type: none"> ➤ Works stalled since July, 2017 due to Financial crunch.The project stands allotted 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.
	West Bengal									
41	Rammam-III (3x40= 120 MW)	1 2 3	40 40 40	2019-20 2019-20 2019-20 (Sep'19)	2026-27 2026-27 2026-27 (Sept,26)	84	1381.84 (09/14)	1381.84 (09/14)	#	<ul style="list-style-type: none"> ➤ 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.

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.

* Construction is held-up.

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