# Status of Large Hydro Power Development in Jammu and Kashmir

	_		Nos.	Capacity (MW)
А	Hydroele	Large Hydro Power Potential from ctric Projects having capacity above 25 MW) Study)	32	11567
В	Hydroele	ole Large Hydro Power Potential from ctric Projects having capacity above 25 MW) Study)	32	12264.5
Brea	kup of Hy	dro Power Potential (2017-23 Study)		
I	Projects i	n operation	10	3360
II A	Projects u	under active construction	5	3051.5
II B	Projects of	on which construction is held up	1	48
III	Projects a	allotted by States for development		
	III-A	DPR Prepared		
	(i)	Projects concurred by CEA and yet to be taken up for construction	4	3119
	(ii)	Projects returned to project authorities	1	390
	III-B	DPR Under Preparation		
	(i)	Projects under S&I	3	1256
	(ii) Projects allotted for development on which S&I is held up/ yet to be taken up		1	370
IV	Balance (	Capacity*	7	710

<sup>\*</sup>Balance Capacity is different from arithmetic calculation from the potential accessed due to change in capacity of the Projects, addition/deletion of the projects and merger of two projects into one etc.

Note: R -Run of the River & S- Storage

## A Identified Projects during Reassessment study (1978-87):

Sl.No.	Name of Project	River	Туре	I.C. (MW)
1	Shuas	Chenab	R	505
2	Barinaum	Chenab	R	435
3	Sho	Chenab	R	215
4	Naunut	Chenab	R	1120
5	Kiru	Chenab	R	295
6	Kwar	Chenab	R	440
7	Pakaldul	Marsudar	R	765
8	Bursar	Marsudar	S	195
9	Dulhasti	Chenab	R	1120
10	Naga	Kal Nai	R	29
11	Kiwa	Kal Nai	R	37
12	Tipri	Kal Nai	R	36
13	Dunadi	Kagune Garh	R	60
14	Ratle	Chenab	R	515
15	Shamnot	Chenab	R	200
16	Baglihar	Chenab	R	750
17	Bichlari	Bichlari	R	75
18	Sawalkot	Chenab	R	1350
19	Salal	Chenab	R	780
20	Sonmarg	Sind	S	155
21	Upper Sindh-I	Sind	R	65
22	Upper Sindh-II	Sind	R	140
23	Gangbal	Kankanag	S	55
24	Ganderbal	Sind	R	75
25	Karalpur	Kishan Ganga	S	280
26	Wangam	Bonar	R	60
27	Lower Jhelum	Jhelam	R	170
28	Uri	Jhelam	R	600
29	Chakothi	Jhelam	R	285
30	Chinari	Jhelam	R	475
31	Hatian	Jhelam	R	215
32	Seawa	Seawa	R	70
32	Total O. G. G.	32 Nos. of Proj	jects	11567

Note: R –Run of the River & S- Storage

#### B. Identified Projects during 2017-2023 study

S.no	Name	River	Installed Capacity
1	Uri-I (Uri)	Jhelum	480
2	Uri-II (Uri)	Jhelum	240
3	Lower Jhelum	Jhelum	105
4	Upper Sindh II & Ext.	Sindh nallah	105
5	Kishanganga (Karalpur)	Kishanganga	330
6	Dulhasti	Chenab	390
7	Salal I & II (Salal)	Chenab	690
8	Baghlihar-I (Baglihar)	Chenab	450
9	Baghlihar-II (Baglihar)	Chenab	450
10	Sewa-II (Sewa)	Sewa	120
11	Parnai	Suran	37.5
12	Ratle	Chenab	850
13	Lower Kalnai	Kalnai	48
14	Pakaldul	Marusudar	1000
15	Kiru	Chenab	624
16	Kwar	Chenab	540
17	Kirthai-II (Naunut)	Chenab	930
18	Sawalkot	Chenab	1856
19	New Ganderbal	Sindh Nallah	93
20	Uri-I Stage-II (Uri)	Jhelum	240
21	Kishanganga-II (Wangam)	Kishanganga	42
22	Chandanwari- Laripura	Chandanwari	81
23	Gangbal	Kanknang	48
24	Kirthai-I (Sho)	Jammu & Kashmir	390
25	Bursar MPP	Marusudar	800
26	Ujh	Ujh	196
27	Dulhasti-Stage-II (Dulhasti )	Chenab	260
28	Shamnot	Chenab	330
29	Barinium	Chenab	180
30	Bichlari	Bichlari	64
31	Warddwan Bursar	Wardwan	255
32	Ans I	Ans	40
32	тот	AL	12264.5

Sl.No.	UTILITY/STATIONS	NO. OF STATIONS	NO. OF UNITS X CAPACITY (MW)	RIVER/BASIN*	DISTRICT	CAPACITY (MW)	Type (R/S/R(P))	YEAR OF COMMISSIONING
	JKSPDC							
1	BAGLIHAR-I	1	(3X150)	CHENAB	RAMBAN	450	R(P)	2008
2	BAGLIHAR II	1	(3X150)	CHENAB	RAMBAN	450	R(P)	2015
3	LOWER JHELUM	1	(3X35)	JHELUM	BARAMULLAH	105	R(P)	1978-1979
4	UPPER SINDH-II	1	(3X35)	SINDH	GANDERBAL	105	R(P)	2001-2002
	TOTAL JKSPDC	4				1110		
	NHPC							
1	DULHASTI	1	(3X130)	CHENAB	KISTWAR	390	R(P)	2007
2	SALAL - I&II	1	(6X115)	CHENAB	REASI & UDAMPUR	690	R	1987-95
3	URI-I	1	(4X120)	JHELUM	BARAMULA	480	R	1996-1997
4	URI-II	1	(4X60)	JHELUM	BARAMULA	240	R	2013-14
5	SEWA-II	1	(3X40)	SEWA II	MAHSKA	120	R(P)	2010-11
6	KISHENGANGA	1	(3X110)	KISHENGANGA	BANDIPORA	330	R(P)	2018
	SUB-TOTAL NHPC	6				2250		
10	TOTAL J&K	10				3360		

<sup>\*</sup> ALL PROJECTS ARE IN INDUS BASIN.

#### 2A. H.E. Projects Under Active Construction:

Sl.No.	Name of Project	Agency	District	I.C. (MW)	River	Basin	Type (R/S/R(P))	Likely Commissioning
1	Pakal Dul	CVPPL	Kishtwar	1000	Marusadar/ Chenab	Indus	S	2025-26 (July'25)
2	Parnai	JKSPDC	Poonch	37.5	Jhelum	Indus	R	2024-25 (Jun'24)
3	Kiru	CVPPL	Kishtwar	624	Chenab	Indus	R	2025-26 (July'25)
4	Ratle	RHEPPL / NHPC	Kishtwar	850.00	Chenab	Indus	R(P)	2025-26 (Feb'26)
5	Kwar	CVPPL	Kishtwar	540.00	Chenab	Indus	R(P)	2026-27 (Nov'26)
5	5 Total			3051.5		•	•	•

#### 2B. H.E. Projects on which Construction is held up:

Sl.No.	Name of Project	Agency	District	I.C. (MW)	River	Basin	Type (R/S/R(P))	Status & Likely Commissioning
1	Lower Kalnai	JKSPDC	Kishtwar	48	Chenab	Indus	R	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.
1	1 Total			48				

<sup>\*</sup> The Project is presently stalled. Commissioning is subject to restart of works

#### 3. H.E. Projects concurred by CEA and yet to be taken up for construction:

SI No.	Name of Project	Agency	River	District	I.C. (MW)	Date of CEA Concurrence	Type (R/S/R(P))	Status
	New Ganderwal	JKSPC	Jhelum/Sindh	Ganderwal	93	10.06.14	R(P)	EC accorded on 27.9.13 & FC accorded on 02.04.2012#
2	Kirthai-II	CVPPL	Chandrabhaga /Chenab	Kishtwar	930	14.06.2019	R(P)	EC recommended by MoEF&CC on 15.04.2021. FC yet to be obtained by developer ###
3	Sawalkote	NHPC	Chenab	Ramban & Udhampur	1856	18.04.18	R(P)	EC recommended by EAC in its meeting dated 31.01.2017. Formal letter will be issued after FC-I. (MoEF&CC delisted EC for the project on 04.08.2017 and further relisted on 24.01.2022). FC yet to be obtained. ####
4	Uri-I Stage-II HE Project	NHPC	Jhelum	Baramula	240	16.02.2023	R	EC & FC yet to be obtained by developer
4	4 Total				3119			

<sup>#</sup> Award of contract packages is under progress. PPA signed with State Government. Loan agreement to be signed with finances.

### Survey under process. The projet was handed over to NHPC vide MoU signed on 03.01.21. The project will be executed by CVPPL (A JV of NHPC, JSKPDCL). CEA vide OM dated 29.12.2021 transferred the appraisal of Kirthai-II HEP in the name of M/s. CVPPL. CEA vide letter dated 29.08.2022 extended the validity of appraisal upto 13.06.2024.

####The project was handed over to NHPC vide MoU signed on 03.01.21. The project will be executed by NHPC on BOOT basis. Transfer of Appraisal of Sawalkote HE Project from M/s JKSPDC to M/s NHPC Ltd. and Extension of validity of Appraisal for further 3 years (i.e. beyond 18.04.2021 to 17.04.2024) on same terms & conditions as contained in OM 18.04.2018 was granted vide HPA letter dated 25.03.2022.

#### 4. H.E. Projects Returned to Project Authorities for re-submission after compliance of observations:

Sl. No.	Name of Project	Agency	I.C. (MW)	District	Type (R/S/R(P))	Month of Return
1	Kirthai -I	JKSPDC	390		R(P)	Jul'21
1	Total		390			

### 5. H.E. Projects Under Survey & Investigation:

Sl. No.	Name of Project	Kasın/River	Agency for DPR	District	I.C. (MW)	Type (R/S/R(P)/ MPP)	Date of MoA	Target date pf preparation of DPR
1	Dulhasti St-II	Indus/ Chenab	NHPC	Kishtwar	260	R	03.01.2021	June-23
2	IU:In	Ujh,( tributary of Ravi)	JKPDCL	Kathua	196	MPP		
3	Bursar	Indus/ Marusudar	NHPC	Kishtwar	800	MPP		
3	Total				1256			

#### 6. H.E. Projects allotted for development on which Survey & Investigation is held up/yet to be taken up:

Sl. No.	Project	I. C. (MW)	Agency	District	Date of Allotment/ MoA	Status
1	Shamnot	370	NHPC	Doda	-	S&I held up as the project will submerge National Highway.
1	Total	370				

Note: R= Run of River, S=Storage & R(P)= Run of River with Pondage, MPP=Multipurpose project

## 7. Balance Capacity

Sl.No.	Name of Project River		Туре	I.C. (MW)	District
1	Bichlari	Bichlari	R	64	Doda
2	Kishenganga-II Wangam) Bonar		R	42	Bandipora
3	Barinium (Shaus)	Chenab	R	180	Doda
4	Chandanwari Laripora	Chandanwari	R	81	Anantnang
5	Gangbal	Kanknang	S	48	Ganderbal
6	Wardwan Bursar	Wardwan	S	255	Kisthwar
7	Ans-I Ans		R	40	Reasi
7	Г	otal	710		

Note: R –Run of the River & S - Storage

### 8. Project capacity reduced and became less than 25 MW after Reassessment study

Sl.No.	Name of Project	River	Туре	I.C. (MW)	District
1	Naga	Kalnai	R	19	Kishtwar
2	Kiwa	Kalnai	R	22	Kishtwar
3	Tipri	Kalnai	R	22	Kishtwar

#### 9. Projects Developed below 25 MW

Sl.No.	Name of Project	River	Туре	I.C. (MW)
1	Ranjala Dunadi (Dunadi)	Kagunegarh	R	15
2	Upper Sindh -I	Sindh	R	22.6
3	Ganderbal	Sindh	R	15

## 10. Project having Environment & Forest Issue

Sl.No.	Name of Scehme	River	Type	I.C.(MW)	Remarks
1	Shutkari Kulan (Sonmarg)	Sindh Nallah	R	84	Dam site of Shutkari Kulan HEP is situated inside Baltas-Thajwas Wildlife Sanctuary (Protected Area).

#### Note

<sup>3</sup> projects namely Chakothi, Chinari & Hatian are located in PoK

# Status of Large Hydro Power Development in Ladakh

			Nos.	Capacity (MW)		
А	Identified Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (1978-87 Study)		Projects (Projects having capacity above 25 MW)		23	2046
В	Exploitable Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study)		10	707		
	Breakup (	of Hydro Power Potential (2017-23 Study)				
I	Projects in	operation	2	89		
II	Projects al	llotted by States for development				
	II-A DPR Under Preparation					
	(i) Projects under S&I		1	95		
III	Balance C	'apacity*	8	618		

<sup>\*</sup>Balance Capacity is different from arithmetic calculation from the potential accessed due to change in capacity of the Projects, addition/deletion of the projects and merger of two projects into one etc.

#### $1 (A). \ \ Identified\ Projects\ during\ Reassessment\ study\ (1978-87\ Study);$

Sl.No.	Name of Project	River	Туре	I.C. (MW)
1	Kiari	Indus	R	28
2	Parfila	Zaskar	R	45
3	Paidar	Zaskar	R	46
4	Tillarchu	Zaskar	R	39
5	Nurla	Indus	R	65
6	Khalsi	Indus	R	170
7	Takmaching	Indus	R	75
8	Dumkar	Indus	R	130
9	Achinthang	Indus	R	140
10	Kanyunche	Indus	R	105
11	Batalik	Indus	R	235
12	Parkhachik	Suru	R	110
13	Dandal	Drass	R	26
14	Khabru	Drass	R	30
15	Tahanus	Shingo	R	120
16	Karkit	Shingo	R	190
17	Gunderman	Suru	R	120
18	Chalunka	Shyok	R	45
19	Chechesna	Suru	R	47
20	Leh	Indus	R	29
21	Kesar	Indus	R	42
22	Thambas	Suru	R	29
23	Nimu	Indus	S	180
23	Total			2046

#### 1 (B). Identified Projects during 2017-2023 study

S.no	Name	River	Installed Capacity
1	Nimu Bazgo (Nimu)	Indus	45
2	Chutak	Suru	44
3	Leh	Indus	67
4	Dumkhar	Indus	28
5	Khalsti	Indus	60
6	Achinthang-Sanjak (Achingthang + Kanyunche)	Indus	108
7	Parfila	Zaskar	102
8	Tahanus	Shingo	49
9	Ulitopo (Nurla)	Indus	48
10	Sunit (Batalik) Indus		156
10	TOTAL		707

Sl.No.	UTILITY/STATIONS	NO. OF STATIONS	NO. OF UNITS X CAPACITY (MW)	RIVER/BASIN*	DISTRICT	Type (R/S/R(P))	CAPACITY (MW)	YEAR OF COMMISSIONING
	NHPC		•					
1	CHUTAK	1	(4X11)	INDUS	KARGIL	R	44	2012-13
2	NIMOO BAZGO	1	(3X15)	INDUS	LEH	R(P)	45	2013
	SUB-TOTAL NHPC	2					89	
	TOTAL LADAKH	2					89	

## 2. H.E. Projects Under Survey & Investigation:

Sl. No.	Name of Project	Basin/River	Agency for DPR	District	I.C. (MW)	Type (R/S/R(P)/ MPP)
1	Drass Suru Link Project	Indus/Drass Suru	JKPDCL	Kargil	95	MPP
1		Total			95	

### 3. Balance Capacity

Sl.No.	Name of Project	River	Type	I.C. (MW)	District
1	Parfila	Zaskar	S	102	Leh
2	Ulitopo (Nurla)	Indus	R	48	Leh
3	Khalsti (Khalsi)	Indus	R	60	Leh
4	Dumkhar	Indus	R	28	Leh
5	Achinthang-sanjak (Achingthang + Kanyunche)	Indus	R	108	Leh
6	Sunit (Batalik)	Indus	R	156	Kargil
7	Tahanus	Shingo	R	49	Kargil
8	Leh	Indus	R	67	Leh
8	Total			618	

Note: R= Run of River, S=Storage & R(P)= Run of River with Pondage, MPP= Multipurpose project

# 4. Project having Environment & Forest Issue

Sl.No.	Name of Scehme	River	Type	I.C.(MW)	Remarks
1	Kiari	Indus	R	28	Dam site and Powerhouse site of Kesar HEP are located within Changthang Wildlife Sanctuary
2	Chalunka	Shyok	R	45	Dam site and Powerhouse site of Chalunka HEP are located within the Karakoram Wildlife Sanctuary (Protected Area)
3	Kesar	Indus	R	42	Dam site and Powerhouse site of Kesar HEP are located within Changthang Wildlife Sanctuary

# 5. Projects capacity reduced and became less than 25 MW after Reassessment study

Sl.No.	Name of Scheme	River	Type	I.C.(MW)
1	Paidar	Zaskar	R	18
2	Tillarchu	Zaskar	R	13
3	Takmaching	Indus	R	16
4	Parkhachik Panikar (Parkhachik)	Suru	R	8
5	Drass Suru-I (Dandal)	Drass	R	2.15
6	Khabru	Drass	R	5
7	Karkit	Shingo	R	7
8	Gunderman	Suru	R	19
9	Chechesna	Suru	R	5
10	Thambas	Suru	R	4

## Status of Large Hydro Power Development in Himachal Pradesh

			Nos.	Capacity (MW)
А		d Large Hydro Power Potential from Hydroelectric Projects having capacity above 25 MW) Study)	67	18470
В		ble Large Hydro Power Potential from Hydroelectric Projects having capacity above 25 MW) Study)	72	18305
	Bre	akup of Hydro Power Potential (2017-23 Study)		
I	Projects i	in operation	29	10263
II A	Projects under active construction		9	2446
II B	Projects on which construction is held up		1	44
III	Projects a	allotted by States for development		
	III-A	DPR Prepared		
	(i)	Projects concurred by CEA and yet to be taken up for construction	4	937
	(ii)	Projects returned to project authorities	1	400
	III-B	DPR Under Preparation		
	(i)	Projects under S&I	6	1584
	(ii)	Projects allotted for development on which S&I is held up/ yet to be taken up	7	2494
V	Balance (	Capacity*	15	947

<sup>\*</sup>Balance Capacity is different from arithmetic calculation from the potential accessed due to change in capacity of the Projects, addition/deletion of the projects and merger of two projects into one etc.

1(A). Identified Projects during Reassessment study(1978-87)

1(A). Identified Projects during Reassessment study(1978-87)						
Sl.No.	Name of Project	River	Type	I.C. (MW)		
2	Kyurik Thibda	Spiti	R R	41 55		
3	Khab-I	Spiti Sutlej	S	1640		
4	Ropa	Ropa	S	31		
5	Khab-II	Sutlej	R	425		
6	Tidong-II	Tidong	R	90		
7		Tidong	S	90		
8	Tidong-I Taiti-I	Taiti	S	50		
9	Jangi Thopan	Sutlej	R	410		
10	Thopan Powari	Sutlej	R	650		
11	Baspa-I	Baspa	S	335		
12	Baspa-II	Baspa	R	370		
13	Shongtong Karcham	Sutlei	R	780		
14	Karcham Wangtoo	Sutlej	R	935		
15	Homte	Bhaba	R	60		
16	Bhaba (Sanjay)	Bhaba	R	195		
17	Nathpa Jhakri	Sutlej	R	1990		
18	Rampur Nanjah	Sutlej	R	420		
19	Luhri	Sutlej	R	425		
20	Suni Chaba Dam	Sutlej	S	225		
21	Kol Dam	Sutlej	S	760		
22	Bhakra Nangal	Sutlej	S	1395		
23	Manali	Manalsu	R	37		
24	Allain Nallah	Allain	R	46		
25	Duhangan	Duhangan	R	29		
26	Gandharni	beas	R	49		
27	Gharopa	Beas	R	85		
28	Kulu	Beas	R	90		
29	Malana	Malana	R	60		
30	Parbati-II	Parbati	S	400		
31	Sainj-I	Sainj	R	55		
32	Sainj Kartah-II	Sainj	R	45		
33	Nakthan (Parbati-I)	Parbati	R	420		
34	Sainj-IV	Sainj	R	27		
35	Tirthan-I	Tirthan	R	32		
36	Tirthan-III	Tirthan	R	26		
37	Sainj	Sainj	R	215		
38	Larji	Beas	R	190		
39	Pandoh Diversion	Beas	R	555		
40	Uhl	Uhl	R	70		
41	Uhl at Joginder Nagar	Uhl	R	90		
42	Bassi	Rana Khad	R	75		
43	Rana Khad	Rana Khad	R	29		
44	Gaj	Gaj Khad	R	34		
45	Pong Dam	Beas	S	390		
46	Chulan	Ravi	R	55		
47	Machhetri	Ravi	R	60		
48	Budhil	Budhil	R	38		
49	Tundah	Tundah	R	34		
50	Hibra	Ravi	S	470		
51	Gwar	Ravi	R	395		
52	Baira Siul	Siul	R	225		
53	Chamera	Ravi	S	405		
54	Baroti	Siul	S	40		
55	Chhota Dara	Chandra	R	50		
56	Chhatru	Chandra	R	140		
57	Khoksar	Chandra	R	80		
58	Railing	Chandra	S	155		
59	Gondhala	Chandra	R	90		
60	Gyspa	Bhaga	S	395		
61	Jhalma	Chenab	R	275		
62	Bardang	Chenab	R	145		
63	Udaipur	Miyar Nallah	R	36		
64	Seli	Chanab	R	150		
65	Raoli	Chanab	R	715		
66	Sach Khas	Sarchu	R	70		
67	Pangula Sanail	Pabar	R	26		
67	TO	ΓAL		18470		

#### B. Identified Projects during 2017-2023 study

1   Budhil   Budhil   70	В.				
2   Bairasiul   Siul   180		S.no	Name	River	IC (MW)
3   Chamera-I (Chamera)   Ravi   540		1	Budhil	Budhil	70
Chamera   Ravi   S40		2	Bairasiul	Siul	180
Chamera-III (Hibra)   Ravi   231		3		Ravi	540
S		4		Ravi	300
		5		Ravi	231
Allain Duhangan		6	Chanju-I	Chanju nallah	36
Allain Nallah + Duhangan  Allain   192		7	Bajoli Holi	Ravi	180
10		8		Allain	192
10		9	Malana	Mallana Nallah	86
12		10		Beas	990
13		11		Beas	396
13		12	Malana-II	Malana	100
14		13		Sainj	520
16		14	Sainj	Sainj	100
17		15	Larji	Beas	126
17		16	Bassi & Extn.	Uhl	66
19		17		Uhl	110
Sanjay		18	Baspa( Baspa-II)	Baspa	300
20		19	Karcham Wangtoo	Satluj	1045
22         Nathpa Jhakri         Satluj         1500           23         Rampur (Rampur Nanjah)         Satluj         412           24         Kol Dam         Satluj         800           25         Bhakra Left (Bhakra Nangal)         Satluj         612           26         Bahkra right (Bhakra Nangal)         Satluj         785           27         Sorang         Sorang khar         100           28         Giri& Bata         Giri         60           29         Sawara kudu         Pabar         111           30         Kutehr (Machhetri)         Ravi         240           31         Uhl III (Rana Khad)         Rana & Nerikhar         100           32         Parbati-II         Parbati         800           33         Dhaulasidh         Beas         66           34         Tindong-I         Tidong         150           35         Shongtong Kharcham         Satluj         450		20		Bhabha Khad	120
23         Rampur (Rampur Nanjah)         Satluj         412           24         Kol Dam         Satluj         800           25         Bhakra Left (Bhakra Nangal)         Satluj         612           26         Bahkra right (Bhakra Nangal)         Satluj         785           27         Sorang         Sorang khar         100           28         Giri& Bata         Giri         60           29         Sawara kudu         Pabar         111           30         Kutehr (Machhetri)         Ravi         240           31         Uhl III (Rana Khad)         Rana & Nerikhar         100           32         Parbati-II         Parbati         800           33         Dhaulasidh         Beas         66           34         Tindong-I         Tidong         150           35         Shongtong Kharcham         Satluj         450           Luhri St-I         satluj         210		21	Integrated Kashang	Kashang/Kirankhar	195
23		22	Nathpa Jhakri	Satluj	1500
25   Bhakra Left (Bhakra Nangal)   Satluj   612     26   Bahkra right (Bhakra Nangal)   Satluj   785     27   Sorang   Sorang khar   100     28   Giri& Bata   Giri   60     29   Sawara kudu   Pabar   111     30   Kutehr (Machhetri)   Ravi   240     31   Uhl III (Rana Khad)   Rana & Nerikhar   100     32   Parbati-II   Parbati   800     33   Dhaulasidh   Beas   66     34   Tindong-I   Tidong   150     35   Shongtong Kharcham   Satluj   450     Luhri St-I   Satluj   210		23		Satluj	412
25		24	Kol Dam	Satluj	800
26		25		Satluj	612
27         Sorang         Sorang khar         100           28         Giri& Bata         Giri         60           29         Sawara kudu         Pabar         111           30         Kutehr (Machhetri)         Ravi         240           31         Uhl III (Rana Khad)         Rana & Nerikhar         100           32         Parbati-II         Parbati         800           33         Dhaulasidh         Beas         66           34         Tindong-I         Tidong         150           35         Shongtong Kharcham         Satluj         450           Luhri St-I         satluj         210		26		Satluj	785
29         Sawara kudu         Pabar         111           30         Kutehr (Machhetri)         Ravi         240           31         Uhl III (Rana Khad)         Rana & Nerikhar         100           32         Parbati-II         Parbati         800           33         Dhaulasidh         Beas         66           34         Tindong-I         Tidong         150           35         Shongtong Kharcham         Satluj         450           Luhri St-I         satluj         210		27		Sorang khar	100
30   Kutehr (Machhetri)   Ravi   240		28	Giri& Bata	Giri	60
Machhetri   Ravi   240		29	Sawara kudu	Pabar	111
31		30		Ravi	240
33 Dhaulasidh Beas 66  34 Tindong-I Tidong 150  35 Shongtong Kharcham Satluj 450  Luhri St-I satluj 210		31		Rana & Nerikhar	100
34 Tindong-I Tidong 150  35 Shongtong Kharcham Satluj 450  Luhri St-I satlui 210		32	Parbati-II	Parbati	800
35 Shongtong Kharcham Satluj 450  Luhri St-I satluj 210		33 Dhaulasidh		Beas	66
36 Luhri St-I sathui 210		34	Tindong-I	Tidong	150
1 36 I safiii I 210		35		Satluj	450
(Luhri)		36	Luhri St-I (Luhri)	satluj	210

27	Chhatma	Charden	106
37	Chhatru Miyar	Chandra	126
38	(Udaipur)	Miyar Nallah	120
39	Dugar	Chenab	500
40	Thana Plaun	Beas	191
41	Baggi	Beas	42
42	Chango Yangthang	Spiti	180
43	Sunni (Sunni Chaba Dam)	Satluj	382
44	Reoli Dugli (Raoli)	Chenab	456
45	Seli	Chenab	400
46	Purthi	Chenab	232
47	Bardang	Chenab	175
48	Sach Khas	Sarchu	288
49	Gyspa	Bhaga	350
50	Kulu	Beas	52
51	Sainj-I	Sainj	68
52	Triveni Mahadev	Beas	50
53	Jangi thopan Powari (Jangi Thopan+Thopan Powari)	Satluj	804
54	Luhri StII (Luhri-II)	Satluj	172
55	Sumte Kothang (Thibda)	Spiti	50
56	Lara Sumte (kyurik)	Spiti	40
57	Yangthang khab	Spiti	158
58	Khab-I	Satluj	310
59	Khab-II	Satluj	150
60	Kashang Stage IV (Taiti-I)	Kashang & kerang	48
61	Shangling (Khoskar)	Chandra	35
62	Telling (Railing)	Chandra	65
63	Tandi Rashil (Jhalma)	Chenab	166
64	Chota Dara	Chandra	52
65	Lujai	Lujai Nallah	49
66	Tandi Rashil (Rashil)	Chenab	75
67	Chanju-III	Chanju nallah	48
68	Deothal Chanju	Chanju nallah	30
69	Surgani Sundla	Suil	48
70	Tangnu Romai-I	Pabar	44
71	Renukaji Dam	Giri	40
72	Baroti	Suil	30
72	TOTAI	L	18305
L	l		

S. NO.	UTILITY/STATIONS	NO. OF STNS.	NO. OF UNITS	NO. OF UNITS X CAPACITY (MW)	RIVER/ /BASIN*	DISTRICT	CAPACITY (MW)	Type (R/S/R(P))	YEAR OF COMMISSIONING
	CENTRAL SECTOR			, ,					
	ВВМВ								
1	BHAKRA LEFT	1	5	(1X108+ 4x126)	SUTLEJ	BILASPUR	612	S	1960-1961
2	BHAKRA RIGHT	1	5	(5X157)	SUTLEJ	BILASPUR	785	S	1966-1968
3	DEHAR	1	6	(6X165)	BEAS	MANDI	990	R(P)	1977-1983
4	PONG	1	6	(6X66)	BEAS	KANGRA	396	S	1978-1983
	SUB-TOTAL BBMB	4	22				2783		
	NHPC								
5	BAIRA SIUL	1	3	(3X60)	RAVI	СНАМВА	180	R(P)	1980-1981
6	CHAMERA- I	1	3	(3X180)	RAVI	DALHOUSIE	540	S	1994
7	CHAMERA- II	1	3	(3X100)	RAVI	CHAMBA	300	R(P)	2003-2004
8	CHAMERA- III	1	3	(3X77)	RAVI	СНАМВА	231	R(P)	2012
9	PARBATI-III	1	4	(4X130)	SAINJ	KULLU	520	R(P)	2014
	SUB-TOTAL NHPC	5	16				1771		
	SJVNL								
10	NATHPA JHAKRI	1	6	(6X250)	SATLUJ	SHIMLA	1500	R(P)	2003-2004
11	RAMPUR	1	6	(6X68.67)	SATLUJ	SHIMLA	412	R	2014-15
	SUB-TOTAL SJVNL	2	12				1912		
	NTPC LTD.								
12	KOLDAM	1	4	(4X200)	SATLUJ	BILASPUR	800	S	2015
	SUB-TOTAL NTPC LTD.	1	4				800		
	TOTAL CENTRAL SECTOR	12	54				7266		
	STATE SECTOR								
	HPSEBL								
13	BASSI	1	4	(4X16.5)	BEAS	MANDI	66	R(P)	1970-1981
14	GIRI BATA *	1	2	(2X30)	YAMUNA	SIRMAUR	60	R(P)	1978
15	LARJI	1	3	(3X42)	Beas River & its tributaries Sainj & Tirthan	KULLU	126	R(P)	2006
16	SANJAY	1	3	(3X40)	SATLUJ	KINNAUR	120	R(P)	1989
	TOTAL HPSEBL	4	12				372		
	HPPCL								
17	INTEGRATED KASHANG	1	3	(3X65)	SATLUJ	KINNAUR	195	R (P)	2016-17
18	SAINJ	1	2	(2X50)	SAINJ	KULLU	100	R(P)	2017

29	TOTAL HP	29	102				10263		
	TOTAL PVT	9	23				2109		
29	Bajoli Holi	1	3	3x60	Ravi	СНАМВА	180	R	2022
	GMR BAJOLI HOLI HYDRO POWER PVT. LTD.								
28	Sorang	1	2	2x50	Sorang	Kinnaur	100	R	2021 (100 MW)
	HSPPL								•
	TOTAL JSWHEL	2	7				1345		
27	KARCHAM WANGTOO	1	4	(4X261.25)	SATLAJ	KINNAUR	1045	R(P)	2011 (1000 MW)
26	BASPA	1	3	(3X100)	BASPA	KINNAUR	300	R(P)	2003
	HBPCL								
	TOTAL ADHPL	1	2				192		
25	ALLAIN DUHANGAN	1	2	(2X96)	ALLAIN NALLAH		192	R(P)	2010-11
	TOTAL IA ENERGY	1	3				36		
24	CHANJU-I	1	3	(3X12)	RAVI	СНАМВА	36	R(P)	2017
	IA ENERGY								
	TOTAL EPPL	1	2				100		
23	MALANA-II	1	2	(2X50)	MALANA	KULLU	100	R(P)	2011-12
	EPPL								
	TOTAL GBHPPL	1	2				70		
22	BUDHIL	1	2	(2X35)	RAVI	СНАМВА	70	R(P)	2012
	GBHPPL								
21	TOTAL MPCL	1	2	(2243)	MALAINA	KULLU	86	15(1)	2001
21	MALANA	1	2	(2X43)	MALANA	KULLU	86	R(P)	2001
	MPCL								
	TOTAL STATE SECTOR PRIVATE SECTOR	8	25				888		
	TOTAL PSPCL	1	5				110		
20	SHANAN (Uhl at Joginder Nagar)	1	5	(1X50)+ (4X15)	UHL & Lamba Dug River	MANDI	110	R(P)	1932-1982
	PSPCL								
	TOTAL HPPCL	3	8				406		
19	SWARA KUDDU	1	3	(3X37)	Pabbar/Tons/ Yamuna	SHIMLA	111	R	2020

 $<sup>\</sup>ast$  ALL PROJECTS EXCEPT GIRI BATA & SWARA KUDDU (GANGA BASIN) ARE IN INDUS BASIN

#### **2A. H.E. Projects Under Active Construction:**

Sl. No.	Name of Project	Agency	District	River	Basin	I.C. (MW)	Type (R/S/R(P))	Likely Commissioning
1	Parbati StII	NHPC	Kullu	Parbati/Beas	Indus	800	R	2024-25 (June'24)
2	Uhl- III	Beas Valley Power Corp. Ltd. (BVPC)	Mandi	Uhl/Beas	Indus	100	R	2024-25 (Dec'24)
3	Tidong-I	M/s NSL Tidong	Kinnaur	Tidong/Satluj	Indus	150	R	2024-245 (June'24)
4	Shontong Karcham	HPPCL	Kinnaur	Satluj	Indus	450	R	2026-27 (Nov'26)
5	Kutehr	JSW Energy (Kutehr) Power Ltd. (JSWEPL)	Chamba	Ravi	Indus	240	R	2025-26 (Nov'25)
6	Luhri St.I	SJVNL	Shimla/Kullu	Satluj	Indus	210	R	2025-26 (Jan'26)
7	Dhaulasidh	SJVNL	Hamirpur/ Kangra	Beas	Indus	66	R	2025-26 (Nov'25)
8	Sunni Dam	SJVNL	Shimla/Mandi	Satluj	Indus	382		2027-28 (March'28)
9	Chanju-III HPPCL Chamba Chanju Nallah Indus				Indus	48.00		2027-28 (June'27)
9		Т	otal		2446			

#### 2B. H.E. Projects on which Construction is held up:

Sl. No.	Name of Project	Agency	District	River	Basin	I.C. (MW)	Type (R/S/R(P))	Status & Likely Commissioning
1	Tangu Romai Power Generation Shimla Pabbar/Tons/ Yamuna Ganga					44	R	Works are on hold since Aug 2016 due to fund constraints with developer.
1		Т	otal	44				

<sup>\*</sup> The Project is presently stalled. Commissioning is subject to restart of works

#### 3. H.E. Projects concurred by CEA and yet to be taken up for construction:

Sl. No.	Name of Project	Agency	River	District	I.C. (MW)	Date of CEA Concurrence	Type (R/S/R(P))	Status
1	Miyar	NTPC	Chenab /Miyar Nallah	Lahul & Spiti	120	07.02.2013	R(P)	EC accorded on 30.07.12. FC-I accorded on 27.07.12. FC-II yet to be obtained. FRA compliance under process #
2	Chhatru	DSIL	Chandra	Lahaul-Spiti	126	15.01.15	R(P)	EC recommended by EAC on 24.02.15, Letter will be issued after FC-I. FC-I & FC-II yet to be obtained ###
3	Thana Plaun	HPPCL	Beas	Mandi	191	07.09.2021	R cum S	EAC in its meeting dated 27.11.2018 has recommended Environmental Clearance (EC) to MoEF&CC subject to condition of Stage-I FC and adherance to the condition of Cumulative EIA study of Beas Basisn . FC yet to be obtained.####
4	Dugar	NHPC	Chenab	Chamba	500	26.04.22	R(P)	EC recommended by EAC on 06.09.2022. FC yet to be obtained
4	Total				937			

#### Note: All projects are in Indus basin

# MoU was signed between Government of Himachal Pradesh and NTPC Ltd. on 25.10.2019 to set-up the hydro project. All clearances and concurrence are yet to be transferred in favour of NTPC Ltd. NTPC exploring for execution by either NEEPCO or THDCIL. NEEPCO has denied due to high tariff. THDC is examining the project. Validity of Concurrence to the project expired on 07.02.2016.

###Govt of Himachal Pradesh vide its letter dated 3.10.2019 has since cancelled allotment of Chhatru HEP which was allotted on 28.7.2007 to M/S DCM Shriram Infrastructure limited, and terminated the Pre- ImplementationAgreement (PIA) signed on 15.2.2008. Further, validity of Concurrence to project expired on 15.01.2020

#### CAT Plan has been approved by Government of Himachal Pradesh on 03.01.2019. Forest Case has been recommended by State Govt. for further submission to MoEF&CC, New Delhi.

Social Impact Assessment (SIA) study for acquisition of Private land has been completed and approved from GoHP vide notofication dated 16.12.2020.

Financial tie-up under process. Land Aquisition shall be processed after achieving financial closure. HPPCL exploring possibility of funding from ADB, PFC and other commercial banks.

#### ${\bf 4} \quad \textbf{H.E. Projects Returned to Project Authorities for re-submission after compliance of \ observations:}$

Sl. No.	Name of Project Agency		I.C. (MW)	Type (R/S/R(P))	Month of Return
	Ravi Basin				
1	Seli SHPCL		400	R(P)	May-19
1	Tot	al	400		

#### 5. H.E. Projects Under Survey & Investigation:

Sl. No.	Name of Project	Basin*/River	Agency for DPR	I.C. (MW)	District	Type (R/S/R(P))	Date of MoA	Target date of Preparation of DPR
1	Luhri StII	Satluj	SJVNL	172	Mandi & Kullu	R	25.09.2019	Sept'24
2	Purthi	Chenab	SJVNL	234	Lahaul & Spiti	R	25.09.2019	Nov-23
3	Bardang	Chenab	SJVNL	166	Lahaul & Spiti	R	25.09.2019	Jun-24
4	Sach khas	Chenab	SJVNL	288	Chamba	R	05.01.21	Dec-23
5	Tandi Rashil HEP	Chenab	SJVN Ltd.	268	Lahaul & Spiti	R	30.09.2022	01/24
6	Reoli Dugli HEP	Satluj	SJVN Ltd.	456	Lahaul & Spiti	R	18.03.2021	12/23
6	Total			1584				

<sup>\*</sup> All projects are in Indus Basin

#### 6. H.E. Projects allotted for development on which Survey & Investigation is held up/yet to be taken up:

Sl. No.	Project	I.C. (MW)	Agency	Date of Allotment/ MoA	District	Status
	Satluj Basin					
1	Khab	636	HPPCL	22.09.2009	Kinnaur	Govt. of HP has confirmed the TWL of Upstream project i.e. Yangthang Khab and FRL of Downstream project Jhangi Thopan vide letter dated 15.06.2017. Accordingly a revised PFR for Khab HEP is being prepared considering the scheme to be single stage RoR and considering the virgin stretch of river as per MoEF&CC guidelines.
2	Sumte Kothang	130	Reliance Power Ltd.	31.12.2012	Lahaul & Spiti	S&I held up due to opposition from locals and NGOs.  Project stands terminated on 28.07.2017.
3	Lara Sumta	104	Reliance Power Ltd.	31.12.2012	Kinnaur	S&I held up due to opposition from locals and NGOs.  Project stands terminated on 28.07.2017.
4	Tidong-II	60	Tidong Hydro Power Ltd.	20.01.2012	Kinnaur	S&I is held up due to local public agitation & there is no progress in the S&I activities of the project for a long time.
5	Jangi Thopan Powari	804	SJVN Ltd.	25.09.2019	Kinnaur	Pre-DPR Chapters returned after there is no progress in the S&I activities by the developer
	Sub Total	1734				
	Chenab Basin					
6	Gyspa Dam	300	HPPCL	22.09.2009	Lahaul & Spiti	S&I held up due to sustained opposition from local people.
	Sub Total	300				
	Beas Basin					
7	Nakhtan (Parbati-I)	460	HPPCL	22.09.2009	Kullu	Request of HPPCL for monitoring of Nakthan HEP to be put on hold received on 31.12.18 on account of CEIA study of Beas Basin & Hearing of court case on regular basis.
	Sub-Total	460				
7	Total	2494				

#### 7. Balance Capacity

Sl.No.	Name of Project	River	Туре	I.C.(MW)
1	Kashang Stage-IV (Taiti-I)	Taiti	R	48
2	Baroti	Siul	S	30
3	Chhota Dara	Chandra	R	52
4	Shangling (Khoskar)	Chandra	R	35
5	Telling (Railing)	Chandra	S	65
6	Kulu	Beas	R	52
7	Sainj-I	Sainj	R	68
8	Yangthang Khab	Spiti	R	158
9	Lujai	Lujai Nallah	R	49
10	Renukaji Dam	Giri	S	40
11	Triveni Mahadev	Beas	R	50
12	Baggi	Beas	R	42
13	Deothal Chanju	Chanju Nallah	R	30
14	Sugani Sundla	Suil	R	48
15	Chango Yangthang	Spiti	R	180
15	Total		_	947

Note: R -Run of the River & S- Storage

#### 8. Project having Environment & Forest Issue

Sl.No.	Name of Scehme	River	Type	I.C.(MW)	Remarks
1	Baspa-I	Baspa	s	335	Dam site and Powerhouse site of Baspa-I HEP are located at a distance of 0.2 km and 1.2 km away from Sangla valley Wildlife Sanctuary (Protected Area)
2	Manali	Manalsu	R	37	Dam and Powerhouse site of Manali HEP is located within Manali Wildlife Sanctuary (Protected Area)
3	Tirthan-I	Tirthan	R	32	Tirthan river has been marked as No Go area for hydropower development by the state Fisheries
4	Tirthan-III	Tirthan	R	26	Development for fish conservation
5	Bara Banghal (Chulan)	Ravi	R	200	Dam site of Bara Bangahal is located within Dhauladhar Wildlife Sanctuary (Protected Area)
6	Tundah	Tundah	R	34	Dam site and Powerhouse site of Tundah HEP are located within Draft Tundah Eco Sensiive Zone Wildlife Sanctuary (Protected Area)

#### 9. Projects developed below 25 MW

Sl.No.	Name of Scehme	River	Type	I.C.(MW)
1	Wangar Homte (Homte)	Bhaba	R	24.6
2	Gaj	Gaj Khad	R	10.5
3	Uhl	Uhl	R	14

#### 10. Technically Not Feasbile

Sl.No.	Name of Scehme	River	Туре	I.C.(MW)	Remarks
1	Gharopa	Beas	R	114	Abandoned due to technical reason in comments received from state
2	Gondhala	Chandra	R	144	Abandoned due to technical reason in MOEF report.

#### 11. Projects capacity reduced and became less than 25 MW after Reassessment study

Sl.No.	Name of Scheme	River	Туре	I.C.(MW)
1	Ropa -II (Ropa)	Ropa	R	13
2	Ropa -III (Ropa)	Ropa	S	14
3	Tidong-II	Tidong	R	17.86
4	Gandharni	Beas	R	18

# Status of Large Hydro Power Development in Punjab

		Nos.	Capacity (MW)
Α	Identified Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (1978-87 Study)	5	971
В	Exploitable Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study)	10	1300.73
	Breakup of Hydro Power Potential (2017-23 Study)		
I	Projects in operation	9	1096.3
II	Projects under active construction	1	206

## A. Identified Projects during Reassessment study (1978-87):

Sl.No.	Name of Project	River	I. C.(MW)
1	Mukerian-I,II, III & IV	Beas	207
2	Anadpur Sahib-I & II	Sutlej	134
3	Thein	Ravi	325
4	Shahpur	Ravi	215
5	UBDC	Ravi	90
5	TOTAL		971

B. Identifi	B. Identified Projects during 2017-2023 study					
S.no	S.no Name River		Installed Capacity			
1	1 Ranjit Sagar Dam Ra (Thein)		600			
2	Shahpurkhandi Ravi		206			
3	3 Mukerian Phase I		45			
4	Mukerian Phase II	Beas	45			
5	Mukerian Phase III	Beas	58.5			
6	Mukerian Phase IV	Beas	58.5			
7	Anandpur Sahib-I	Satluj	67			
8	Anandpur Sahib-II	Satluj	67			
9	9 Kotla		77.34			
10	Ganguwal	Satluj	76.39			
10	10 TOTAL 1300.73					

S.No	UTILITY/ STATIONS	NO. OF STATIONS	NO. OF UNITS X CAPACITY (MW)	RIVER/ BASIN*	DISTRICT	I.C. (MW)	Type (R/S/R(P))	YEAR OF COMMISSIONING
	PSPCL							
1	ANANDPUR SAHIB-I	1	(2X33.5)	AHC (CANAL)	RUPNAGAR	67	R	1985
2	ANANDPUR SAHIB-II	1	(2X33.5)	AHC (CANAL)	RUPNAGAR	67	R	1985
3	MUKERIAN-I	1	(3X15)	TAIL WATER OF PONG DAM	HOSHIARPUR	45	R	1983
4	MUKERIAN-II	1	(3X15)	TAIL WATER OF PONG DAM	HOSHIARPUR	45	R	1988-89
5	MUKERIAN-III	1	(3X19.5)	TAIL WATER OF PONG DAM	HOSHIARPUR	58.5	R	1989
6	MUKERIAN-IV	1	(3X19.5)	TAIL WATER OF PONG DAM	HOSHIARPUR	58.5	R	1989
7	RANJIT SAGAR	1	(4X150)	Reservoir on River Ravi	PATHANKOT	600	S	2000
	TOTAL PSPCL	7				941		
	ввмв							1
8	GANGUWAL	1	(2X24.2)+ (1X29.25)	SATLUJ	RUPNAGAR	77.65	R	1955-1962
9	KOTLA	1	(2X24.2)+ (1X29.25)	SATLUJ	RUPNAGAR	77.65	R	1956-1961
	SUB-TOTAL BBMB (PUNJAB)	2				155.3		
9	TOTAL PUNJAB	9				1096.3		

#### \* ALL PROJECTS ARE IN INDUS BASIN

Note: R= Run of River, S=Storage & R(P)= Run of River with Pondage

#### 2. H.E. Projects under active Construction:

Sl. No.	Name of Project	Implementing Agency	District	River /Basin	I. C. (MW)	Type (R/S/R(P))	Likely Commissioni ng
1	Shahpurkandi	Irr. Deptt. & PSPCL	Gurdaspur	Ravi /Indus	206	R	2025-26 (Oct.'25)
1	Total				206		

#### ${\bf 3.\ Projects\ developed\ below\ 25\ MW}$

Sl.No.	Name of Scehme	River	Type	I.C.(MW)
1	UBDC	Ravi	R	15*

 $<sup>^*</sup>$ All three units of UBDC Stage-I have been developed in different locations with I.C. (15 MW) less than 25 MW each.

#### Status of Large Hydro Power Development in Haryana

		Nos.	Capacity (MW)
A	Identified Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (1978-87 Study)#	1	64
В	Exploitable Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study)	-	-

#Western Yamuna Canal Project (64 MW) has been developed in 4 stages each having Installed Capacity below 25 MW.

# Status of Large Hydro Power Development in Rajasthan

		Nos.	Capacity (MW)
А	Identified Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (1978-87 Study)	5	483
В	Exploitable Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study)	4	411
]	Breakup of Hydro Power Potential (2017-23 study)		
I	Projects in operation	4	411

Note: In addition to above, three pumped storage project, namely Sukhpura Off-Stream (2560 MW), Shahpur (1800MW) & Sirohi (1200MW) are under S&I

# **Identified Projects during Reassessment study (1978-87)**

S.No.	Name	River	IC
1	Rana Pratap Sagar	Chambal	172
2	Jawahar Sagar	Chambal	99
3	Gandhi sagar	Chanmbal	115
4	Mahi Bajajsagar St. II	mahi	60
5	Mahi Bajajsagar St. I	Mahi	37
5	Total		483

**Identified Projects during Reassessment study (2017-23)** 

S.No.	Name	River	IC
1	Rana Pratap Sagar	Chambal	172
2	Jawahar Sagar	Chambal	99
3	Mahi Bajaj-I	Mahi	50
4	Mahi Bajaj-I	Mahi	90
4	Total	411	

	UTILITY/ STATIONS	NO. OF STATIONS	NO. OF UNITS X CAPACITY (MW)	RIVER	BASIN	DISTRICT	I.C. (MW)	Type (R/S/R(P))	YEAR OF COMMISSIONING
1	JAWAHAR SAGAR	1	(3X33)	CHAMBAL	GANGA	BUNDI	99	R(P)	1972-1973
2	R P SAGAR	1	(4X43)	CHAMBAL	GANGA	CHITTORGARH	172	S	1968
3	Mahi Bajaj-I	1	2	Mahi	CIR	BANSWARA	50.00	MP	1986 (50 MW)
4	Mahi Bajaj-II	1	2	Mahi	CIR	BANSWARA	90.00	R(P)	1989 (90 MW)
4							411		

Note-Gandhi Sagar (115 MW) is In Operation in the state of Madhya Pradesh

#### Status of Large Hydro Power Development in Uttarakhand

	•		Nos.	Capacity (MW)
Α	Project (Projec	ed Large Hydro Power Potential from Hydroelectric s ts having capacity above 25 MW) 37 Study)	84	17998
В	Project (Projec	able Large Hydro Power Potential from Hydroelectric s ts having capacity above 25 MW) 23 Study)	55	13481.35
	Brea	akup of Hydro Power Potential (2017-23 Study)		
		Total		
I	-	s in operation	18	3975.35
II A	Project	s under active construction	4	1324
II B	Project	s on which construction is held up	2	247
III	Project	s allotted by States for development		
	III-A	DPR Prepared		
	(i)	Projects concurred by CEA/State Govt.	3	815
	(ii)	Projects returned to project authorities	7	939
	III-B	DPR Under Preparation		
	(i) Projects under S&I		5	1166
	(ii) Projects allotted for development on which S&I is held up/ yet to be taken up		5	1296
IV	Balance Capacity*		13	2451

Note: In addition to above, one pumped storage project, namely Tehri (4x250 = 1000 MW) is under active construction and is likely to be commissioned by 2023-24(Feb 24).

\*Balance Capacity is different from arithmetic calculation from the potential accessed due to change in capacity of the Projects, addition/deletion of the projects and merger of two projects into one etc.

P	A. Identified Projects during Reassessment study (1978-87):						
	Sl. No.	Name of Project	River	Type			

Sl. No.	Name of Project	River	Type	I. C. (MW)
1	Nakot Patlasu	Pabar	R	43
2	Pisha Naitwar	Rupin	R	30
3	Taluka Saul	Tons	R	39
4	Sankri Kunare	Tons	R	33
5	Naitwar Mori	Tons	R	70
6	Ugmir	Tons	R	28
7	Tuini	Tons	R	128
8	Kishau Dam	Tons	S	350
9	Chibro	Tons	R	245
10	Khodri	Tons	R	130
11	Kuwa ford	Yamuna	R	42
12	Lakhwar Vyasi-I	Yamuna	S	115
13	Lakhwar Vyasi-II	Yamuna	R	80
14	Dhakrani	Yamuna	R	60
15	Dhalipur	Yamuna	R	100
16	Kulhal	Yamuna	R	65
17	Nelang	Jadh Ganga	R	190
18	Karmoli	Jadh Ganga	R	190
19	Jadh Ganga	Jadh Ganga	R	110
20	Gangotri	Bhagirathi	R	70
21	Bhairon Ghati	Bhagirathi	R	60
22	Harsil Dam	Bhagirathi	R	350
23	Lohari Nag Tharang	Bhagirathi	R	360
24	Pala Bhela Tipri	Bhagirathi	R	165
25	Bhela Tipri	Bhagirathi	R	100
26	Maneri Bhali I	Bhagirathi	R	165
27	Maneri Bhali II	Bhagirathi	R	235
28	Diulong Sumangaon	Bhagirathi	R	26
29	Dhargaon Jhandarwali	Bhagirathi	R	29
30	Jamolna Ghansyali	Bhagirathi	R	44
31	Tehri Dam Stage-I	Bhagirathi	S	740
32	Koteswar	Bhagirathi	R	215
33	Kotlibhel	Bhagirathi	S	1875
34	Rishikesh Hardwar	Bhagirathi	R	360
35	Nayar Dam	Nayar	S	34
36	Badri Nath	Alaknanda	R	260
37	Benakuli	Alaknanda	R	40
38	Vishnu Prayag	Alaknanda	R	430
39	Khel Kuran Neti	Dhauli Ganga	R	49
40	Niti Ghansali	Dhauli Ganga	R	32

41	Bampa Kurkuti	Dhauli Ganga	R	60
42	Girthi Ganga	Girthi Ganga	R	34
43	Malari Jhelam	Dhauli Ganga	R	90
44	Jhelam Tamak	Dhauli Ganga	R	150
45	Tamak Lata	Dhauli Ganga	R	200
46	Deodi	Rishi Ganga	R	65
47	Rishi Ganga I	Rishi Ganga	R	115
48	Rishi Ganga II	Rishi Ganga	R	65
49	Lata Tapoban	Dhauli Ganga	R	320
50	Tapoban Chunar	Dhauli Ganga	R	485
51	Vishnu Gad Pipalkoti	Alaknanda	R	480
52	Gohana Tal	Birahi Ganga	S	95
53	Bowala Nand Prayag	Alaknanda	R	170
54	Nand Prayag Langasu	Alaknanda	R	180
55	Khatima	Sarda	R	41
56	Tikh Gurupha	Pindar	R	26
57	Malkhet Dam	Pindar	S	37
58	Devasari Dam	Pindar	S	78
59	Banoli Nalgam	Pindar	R	55
60	Mandakini	Mandakini	R	36
61	Uttyasu Dam	Alaknanda	S	1140
62	Srinagar	Alaknanda	R	375
63	Ramganga Dam (Kalagarh)	Ramganga	S	198
64	Bokang Bailing	Dhauli Ganga	R	145
65	Chhunger Chal	Dhauli Ganga	R	145
66	Sela Urthing	Dhauli Ganga	R	165
67	Urthing Sobla	Dhauli Ganga	R	340
68	Sobla Jhimirigaon	Dhauli Ganga	R	145
69	Khet Tawaghat	Dhauli Ganga	R	225
70	Garba Tawaghat	Sarda	R	195
71	Tawaghat Dharchula	Sarda	R	310
72	Kalika Dantu	Sarda	R	140
73	Mapang Bogudiyar	Gori Ganga	R	185
74	Bogudiyar Sirkaribhyol	Gori Ganga	R	240
75	Sirkaribhyol Rupsiya Bagar	Gori Ganga	R	145
76	Rupsiya Bagar Khasiyabara	Gori Ganga	R	280
77	Devibagar Khartoli	Gori Ganga	R	40
78	Khartoli Lumti Talli	Gori Ganga	R	105
79	Garjia Dam	Gori Ganga	S	295
80	Ramganga Dam	Ramganga	S	75
81	Pancheshwar - I	Sarda	S	1335
82	Pancheshwar - II	Sarda	S	1065
83	Tanakpur	Sarda	R	210
84	Ganga Canal	Ganga	R	31
84	TOTAL			17998

B. Identified Projects during 2017-23 study:					
	, e	·			
1	Chibro	240			
2	Khodri	120			
3	Vyasi	120			
4	(Lakhwar Vyasi-II)	22.75			
4	Dhakrani	33.75			
5 6	Dhalipur Kulhal	51 30			
7	Maneri Bhalli-I	90			
8	Maneri Bhalli-II	304			
9	Tehri	1000			
10	Koteswar	400			
10		400			
11	Chilla (Rishikesh Hardwar)	144			
12	Vishnu Prayag	400			
13	Singoli Bhatwari	99			
	(Mandakini)				
14	Srinagar	330			
15	Ramganga	198			
16	Tanakpur	94.2			
17	Khatima	41.4			
18	Dhauliganga (Khet Tawaghat)	280			
19	Naitwar Mori	60			
20	Lata Tapovan	171			
21	Tapovan Vishnugad	520			
2,1	(Tapoban Chunar)	320			
22	Vishnu Gad Pipalkoti	444			
23	Phata Byung	76			
24	Jakhol Sankari	44			
25	Goriganga IIIA (Devibagar Khartoli)	150			
26	Bowala Nand Prayag	300			
	Pancheswar MPP				
27	(Pancheshwar-I)	2400			
	Rupaligad Regulating				
28	Dam	120			
	(Pancheshwar-II)				
29	Kishau Dam	660			
20	Lakhwar MPP	200			
30	(Lakhwar Vyasi-I)	300			
31	Kuwa ford	106			
	Arakot Tiuni				
32	(Nakot Patlasu)	100			
	, , , , , , , , , , , , , , , , , , , ,				
33	Tiuni Plasu	62			
	(Tuini)				
24	Mori Hanol	06			
34	(Ugmir)	26			
35	Hanol Tiuni	62			
36	Nand Prayag Langasu	106			
37	Uttyasu Dam	720			
38	Bampa Kurkuti	31			
39	Jhelum Tamak	135			
0,7	onerum ramak	100			

40	Tamak Lata	130
41	Tikh Kunwargarh	82
	(Tikh Gurupha)	02
42	Bagoli Dam	126
43	Devasari Dam	164
44	Garba Tawaghat	398
45	Tawaghat Dharchula	470
46	Kalika Dantu	190
47	Bokang Bailing	192
48	Chunger Chal	130
49	Sela Urthing	126
50	Urthing Sobla	228
51	Sobala Jhimirigaon	118
52	Mapang Bogidiyar	280
53	Bogidiyar Sirkaribhyol	100
54	Sirkari Bhyol	135
55	Ramganga Dam	44
	TOTAL	13481.35

S. NO.	UTILITY/ STATIONS	NO. OF STNS.	NO. OF UNITS X CAPACITY (MW)	RIVER	DISTRICT	I.C. (MW)	Type (R/S/R(P))	YEAR OF COMMISSIONING
	CENTRAL SECTOR							
	NHPC							
1	DHAULI GANGA	1	(4X70)	DHAULIGANGA	PITHORAGARH	280	R(P)	2005
2	TANAKPUR	1	(3X31.4)	SARDA	CHAMPAVAT	94.2	R	1992
	SUB-TOTAL NHPC	2				374.2		
	THDC							
3	TEHRI ST-I	1	(4X250)	BHAGIRATHI	TEHRI GARHWAL	1000	S	2006-2007
4	KOTESHWAR	1	(4X100)	BHAGIRATHI	TEHRI GARHWAL	400	R(P)	2010-12
	TOTAL THDC	2				1400		
	SUB TOTAL CENTRAL	4				1774.2		
	STATE SECTOR							
	UJVNL							
5	CHIBRO (YAMUNA)	1	(4X60)	Tons River at Ichari Dam	DEHRADUN	240	R(P)	1975-1976
6	CHILLA	1	(4X36)	GANGA	HARIDWAR	144	R	1980-1981
7	DHAKRANI	1	(3X11.25)	Tons & Yamuna Rivers at Dakpathar Barrage	DEHRADUN	33.75	R	1965-1970
8	DHALIPUR	1	(3X17)	Tons & Yamuna Rivers at Dakpathar Barrage	DEHRADUN	51	R	1965-1970
9	KHATIMA	1	(3X13.8)	SHARDA	UDHAM SINGH NAGAR	41.4	R	1955-1956
10	KHODRI	1	(4X30)	TONS	DAK PATHAR	120	R(P)	1984
11	KULHAL	1	(3X10)	TONS	DEHRADUN	30	R	1975
12	MANERI BHALI- I	1	(3X30)	BHAGIRATHI	UTTARKASHI	90	R(P)	1984
13	MANERI BHALI- II	1	(4X76)	BHAGIRATHI	UTTARKASHI	304	R(P)	2008
14	RAMGANGA	1	(3X66)	RAMGANGA	PAURI GARHWAL	198	S	1975-1977
15	VYASI	1	(2x60)	YAMUNA/GANGA	DEHRADUN	120	R(P)	2022
	TOTAL UJVNL	11				1372.15		
	PRIVATE	ļ						
	AHPC							
16	SHRINAGAR	1	(4X82.50)	ALAKNANDA	TRHRI & PAURI	330	R(P)	2015
	JPPVL		(4774.00)			400	D.	2004
17	VISHNU PRAYAG	1	(4X100)	ALAKNANDA		400	R	2006
10	ReNew Power		(23/22)			00		2020
18	SINGOLI BHATWARI	1	(3X33)			99	R	2020
	SUB TOTAL PRIVATE	3				829		
18	TOTAL UTTARAKHAND	18				3975.35		

Note: ALL PROJECTS ARE IN GANGA BASIN

### 2A. H.E. Projects under active Construction:

SI. No.	Name of Project	Agency	District	I.C. (MW)	River	Basin	Type (R/S/R(P)/MPP)	Likely Commissioning
1	Vishnugad Pipalkoti	THDC	Chamoli	444	Alaknanada	Ganga	R	2024-25 (Mar'25)
2	Naitwar Mori	SJVNL	Uttarkashi	60	Tons/ Yamuna	Ganga	R(P)	2023-24 (July'23)
3	Tapovan Vishnugad	NTPC	Chamoli	520	Dhauliganga / Alaknanada	Ganga	R	2025-26 (Dec'25)
4	Lakhwar MPP	UJVNL	Dehradun & Tehri Garhwal	300	Yamuna	Ganga	MPP	2028-29 (Oct'28)
4	Total			1324				

Note: In addition to above, one pumped storage project, namely Tehri (4x250 = 1000 MW) is under active construction and is likely to be commissioned by 2023-24 (Oct 23).\*\*

##Trial run of Unit-2 and Unit-1 completed during April'22 and May'22 respectively.

\*\* 2 units (500 MW) likely during 2022-23 & 2 units (500 MW) during 2023-24

### 2B. H.E. Projects on which Construction is held up:

Sl. No.	Name of Project	Agency	District	I.C. (MW)	River	Basin	Type (R/S/R(P))	Status & Likely Commissioning
1	Lata Tapovan	NTPC	Chamoli	171	Dhauliganga / Alaknanada	Ganga	R	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 Uttrakhand 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.
2	Phata Byung	LANCO	Rudraprayag	76	Mandakini/ Alaknanda	Ganga	R	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 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. Once the Resolution Plan is approved by the NCLT, the successful Resolution Applicant will take over the company and revive the project.
2	Total			247				

 $<sup>\</sup>ensuremath{^{*}}$  The Project is presently stalled. Commissioning is subject to restart of works

Note: R= Run of River, S=Storage & R(P)= Run of River with Pondage, MPP=Multipurpose project

### 3. H.E. Projects concurred by CEA and yet to be taken up for construction:

Sl. No.	Name of Project	River	Agency	District	I.C. (MW)	Type (R/S/R(P))	Status
1	Kotlibhel St-IA	Bhagirathi	NHPC	Tehri Garhwal	195		EC accorded on 9.05.07. However, NHPC vide email dated 02.04.2021 furnished that EC expired in May'2012 FC-I accorded on 13.10.11 & for FC-II, Compliance Report is awaited from State Govt. However, NHPC vide email dated 02.04.2021 furnished that FC-I expired in Oct'2016#
2	Kotlibhel St-IB	Alaknanda	NHPC	Pauri & Tehri Garhwal	320	R	EC accorded earlier on 14.08.07 is withdrawn on 15.09.10. MoEF&CC declined FC-I on 7.07.11##
3	Alaknanda (Badri Nath)	Alaknanda	GMR	Chamoli	300	R	EC accorded on 12.3.08.  FC-I accorded on 8.11.11. FC-II accorded on 09.11.2012. The project is included in the list of 24 projects under review by Hon'ble Supreme Court.  Validity of Concurrence expried on 07.08.2019.
3	Total				815		

# The project is included in the list of 24 projects under review by Hon'ble Supreme Court. Hon'ble Supreme Court vide order dated 13.08.2013 directed the MoEF&CC as well as State of Uttrakhand not to grant any further Environmental Clearance for any hydropower projects in the State of Uttrakhand until further orders. In compliance to the above order, MoEF & CC constituted an Expert Body vide order dated 12.05.2015. Expert Body has recommended, in its report to MoEF&CC issued in Sept, 2017, that the project should operate to run one turbine continuously during lean season to minimize peaking impact at Devprayag. Hon'ble Supreme Court vide order dated 24.11.2015 directed MoP, MoEF&CC and MoWR to arrive at a common policy framework amongst three ministries which is yet to be formulated.

M/s. NHPC vide letter dated 22.10.2021 informed that the project has been closed w.e.f. 01.04.2021 vide NHPC office order dated 12.04.2021. Further, MoEF&CC has filed the affidavit dated 17.08.2021 before Hon'ble Supreme Court of India incorporating the responses of MoP and MoJS. It has been mentioned in the affidavit that there is consensus on only 7 projects, where substantial progress and sizeable investment have already been made, for implementation amongst the three Ministries and the Govt. of Uttarakhand. Kotlibhel- 1A HE Project of NHPC does not figure in this list.

##The project is included in the list of 24 projects under review by Hon'ble Supreme Court. Hon'ble Supreme Court vide order dated 13.08.2013 directed the MoEF&CC as well as State of Uttrakhand not to grant any further Environmental Clearance for any hydropower projects in the State of Uttrakhand until further orders. Further, MoEF&CC has filed the affidavit dated 17.08.2021 before Hon'ble Supreme Court of India incorporating the responses of MoP and MoJS. It has been mentioned in the affidavit that there is consensus on only 7 projects, where substantial progress and sizeable investment have already been made, for implementation amongst the three Ministries and the Govt. of Uttarakhand. Kotlibhel- 1B HE Project of NHPC does not figure in this list.

# 4. Hydro Projects Returned to Project Authorities for re-submission after compliance of observations:

Sl. No.	Name of Project	River	Agency	Sector	Type (R/S/R(P))	I.C. (MW)	Month of Return
1	Nand Prayag Langasu	Alaknanda	UJVNL	State	R	100	Apr-11
2	Mori Hanol	Tons	KKHPL	Private		63	Feb-10
3	Bogudiyar Sirkari Bhyol	Gori Ganga	GGHPL	Private	R	146	Sep-10
4	Tiuni Plasu	Tons	UID	State	R	72	Oct-10
5	Jhelum Tamak	Dhauliganga	THDCIL	Central	R(P)	108	Aug-19
6	Bowala Nand Prayag	Alaknanda	UJVNL	State	R	300	Sep-22
7	Goriganga-IIIA		NHPC	Central	R	150	Jan-23
7	Total					939	

# 5. H.E. Projects under Survey & Investigation:

Sl. No.	Name of Project	Basin/River	I.C. (MW)	Agency	District	Type (R/S/R(P))	Date of MOA	Target date of preparation of DPR
	Sirkari Bhyol Rupsiabagar	Gori Ganga	120	UJVNL	Pithoragarh	R	09.12.2004	March'23
2	Bokang Bailing	Dhauliganga	200	THDC	Pithoragarh	R	21.11.2005	June'23
3	Sela Urthing	Dhauliganga	114	UJVNL	Pithoragarh	R	09.12.2004	Dec-23
4	Kishau MPP	Ganga/Tone	660	UJVNL	Dehradun	MPP		
5	Arakot -Tiuni HEP	Ganga/Pabar	72	UJVNL	Uttarkashi	R	2003	April'25
5	Total		1166					

# $\textbf{6.} \ \ \textbf{H.E. Projects allotted for development on which Survey \& Investigation is held up/yet to be taken up:}$

Sl. No.	Project	River	I. C. (MW)	Agency	District	Date of Allotment/ MoA	Status
1	Chhunger - Chal	Dhauliganga	120	NHPC	Pithoragarh	21.11.2005	S&I was held up due to MoEF Clearance. Project in Askot wild life Sanctuary. PCCF (Wildlife) and Chief Warden Wildlife, Dehradun has since granted permission for S&I on 17.05.2016.  NHPC vide letter dated 09.04.2018 intimated GoUK that it is not presently prudent to proceed further with implementation of Chungar Chal HE Project. State Govt. has requested NHPC to inform about their final decision on the project.
2	Garba Tawaghat	Goriganga	630	NHPC	Pithoragarh	21.11.2005	MoEF&CC haas issued draft notification on 29.01.2019 regarding proposed ESZ of Askot Wildlife Sancutary. Publication of final notification of boundaries is still awaited. Being located on Mahakali River, the project would need to be developed jointly with Nepal under the provision of Mahakali Treaty.
3	Tamak Lata	Dhauliganga	280	UJVNL	Chamoli	09.12.2004	Project <b>included in the list of 24 HE peroject</b> named in PIL under consideration by Hon'ble Supreme Court.
4	Devsari	Pinder	194	SJVN Ltd.	Chamoli	Nov., 2005	Pre-DPR Chapters returned after there is no progress in the S&I activities by the developer
	Arakot Tuini	Tons	72	UID	Uttarakashi		MoEF Clearance awaited. S&I yet to be taken up.
5	Total		1296				

# 7. Balance Capacity

Sl.No.	Name of Project	River	Туре	I.C.(MW)	District
1	Ram Ganga Dam	Ram Ganga	S	44	Pithoragarh
2	Kuwa ford	Yamuna	R	106	Uttarkashi
3	Bampa Kurkuti	Dhauli Ganga	R	31	Chamoli
4	Tikh Kunwargarh ( Tikh Gurupha)	Pindar	R	82	Bageshwar
5	Uttyasu Dam	Alaknanda	S	720	Rudraprayag
6	Sobla Jhimirigaon	Dhauli Ganga	R	118	Pithoragarh
7	Tawaghat Dharchula	Sarda	R	470	Pithoragarh
8	Kalika Dantu	Sarda	R	140	Pithoragarh
9	Hanol tiuni	tons	R	62	Uttarkashi
10	Bagoli Dam	Pindar	R	126	chamoli
11	Jakhol sankari	Supin	R	44	Uttarkashi
12	Urthing Sobla	Dhauliganga	R	228	Pithoragarh
13	Mapang Bogidiyar	Goriganga	R	280	Pithoragarh
13	Total			2451	

Note: R -Run of the River & S- Storage

### 8. Project having Environment & Forest Issue

Sl.No.	Name of Scehme	River	Type	I.C.(MW)	Remarks
1	Pisha Naitwar	Rupin	R	30	Dam Site and Power House site is located 4.65 km and 0.15 km inside the Govind Pashu Vihar Wildlife Sanctuary
2	Nelang	Jadh Ganga	R	190	Dam Site of Nelang HEP is located on boundary of the Gangotri Wildlife Sanctuary. Powerhouse site of Nelang HEP is located 251 m inside the Gangotri Wildlife Sanctuary
3	Karmoli	Jadh Ganga	R	140	Projects fall in Gangotri National Park.
4	Jadh Ganga	Jadh Ganga	R	50	Projects fall in Gangotri National Park.
5	Bhairon Ghati (Bhairon Ghati + gangotri +Harsil Dam)	Bhagirathi	R	381	Project falls within Bhagirathi Eco sensitive Area. Bhaironghati Hydrolectric Project was cancelled by National Ganga River Basin authority (NGRBA) in 2010 considering ecological sensitivity of the area.
8	Lohari Nagpala (Lohari Nag Tharang)	Bhagirathi	R	600	Project has been cancelled by National Ganga River Basin Authority (NGRBA) in 2010 considering ecological sensitiveProposed project also falls in Bhagirathi Eco sensitive Area, which is notified in 2012 with a view to maintain environment flow and ecology of the river Bhagirathi from Gaumukh to Uttarkashi.
9	Pala Maneri (Pala Bhela Tipri +Bhela Tipri)	Bhagirathi	R	480	Project has been cancelled by National Ganga River Basin Authority (NGRBA) in 2010 considering ecological sensitivity of the area.Proposed project also falls in Bhagirathi Eco sensitive Zone, which is notified in 2012 with a view to maintain environment flow and ecology of the river Bhagirathi from Gaumukh to Uttarkashi.
11	Malari Jhelam	Dhauli Ganga	R	65	This project has been recommended for dropping by WII. Project is not viable as the e-flows have been increased vide The Gazette of India Dtd. 09.10.2018. Proposed to be dropped as per Draft final Report of EB-II.
12	Deodi	Rishi Ganga	R	60	Dam Site of Deodi HEP is located on the boundary of Nanda Devi National Park and Powerhouse site is located 4.50 km inside the Nanda Devi National Park.
13	Rishi Ganga I	Rishi Ganga	R	70	Dam Site of Rishi Ganga-I HEP is located 3.6 km inside the Nanda Devi National Park. Powerhouse site is located on the boundary of the Nanda Devi National Park
14	Rishi Ganga II	Rishi Ganga	R	35	Dam Site of Rishi Ganga-II HEP is located on the boundary of Nanda Devi National Park. Power house is located about 653 m away from the boundary of Nanda Devi National Park

15	Gohana Tal	Birahi Ganga	S	50	Proposed to be dropped as per Draft final Report of EB-II.
16	Rupsiya Bagar Khasiyabara	Gori ganga	R	261	•Highly sensitive wildlife habitat
17	Khartoli Lumti talli	Gori ganga	R	40	Dam site of Khartoli Lumti Talli HEP is located about 116 m away from Askot Wildlife Sanctuary Power house site is located within Askot Wildlife Sanctuary
18	Garjia Dam	Gori ganga	R	295	Dam site of Garjia Dam HEP is within Askot Wildlife Sanctuary. Power house site Garjia Dam HEP is located about 205 m away from Askot Wildlife Sanctuary
19	Taluka Sankri (Taluka Saul+Sankri Kunare)	Tons	R	140	Project located within Govind Pashu Vihar and Govind National Park.

### 9. Projects developed below 25 MW

Sl.No.	Name of Scehme	River	Туре	I.C.(MW)
1	Diulong Sumangaon	Bhagirathi	R	25
2	Dhargaon Jhandarwali	Bhagirathi	R	25
3	Jamolna Ghansyali	Bhagirathi	R	25
4	Nayar Dam	Nayar	S	34
5	Malkhet Dam	Pindar	S	24.3
6	Ganga Canal	Ganga	R	Developed below25 MW

#### 10. Technically Not Feasbile

	·										
Sl.No.	Name of Scehme	River	Type	I.C.(MW)	Remarks						
1	Benakuli	Alaknanda	R	40	•Technically not feasible as free stretch was not available .						
2	Banoli Nalgam	Pindar	R	55	•Technically not feasible as free stretch was not available .						

# 11. Projects capacity reduced and became less than 25 MW after Reassessment study

Sl.No.	Name of Scheme	River	Type	I.C.(MW)
1	Khel Kuran Neti	Dhauli Ganga	R	19
2	Niti Ghansali	Dhauli Ganga	R	15
3	Girthi Ganga	Girthi ganga	R	25

#### Notes

•2 Multi purpose projects (International Projects) are under examination (India and Nepal) namely, Pancheshwar MPP (2400 MW) whose DPR is being revised & Rupali Garh Regulating Dam (120 MW) which is Under S&I

# Status of Large Hydro Power Development in Uttar Pradesh

		Nos.	Capacity (MW)
А	Identified Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (1978-87 Study)	6	664
В	Exploitable Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study)	4	501.6
	Breakup of Hydro Power Potential (2017-23 Study)		
I	Projects in operation	4	501.6

Note: In addition to above, two pumped storage project, namely kandhaura(1680 MW) and UP01 (3660 MW) are under S&I

Identifie	Identified Projects during Reassessment study (1978-87)							
S.No.	Name	River	IC					
1	Khara	Yamuna	160					
2	Matatila	Betwa	31					
3	Orchha	Betwa	39					
4	Rihand	Rihand	300					
5	Obra	Rihand	99					
6	Eastern Yamuna Canal	Yamuna	35					
6	Total		664					

Identifie	Identified Projects during Reassessment study (2017-23)								
S.No	Name	River	New Installed Capacity						
1	Khara	Yamuna	72						
2	Matatila	Betwa	30.6						
3	Obra	Rihand	99						
4	Rihand Rihand		300						
4	Tot	al	501.6						

SL. NO.	STATIONS	NO. OF STATIONS	NO. OF UNITS X CAPACITY (MW)	RIVER/ BASIN* DISTRICT		I. C. (MW)	Type (R/S/R(P))	YEAR OF COMMISSIONIN G
1	KHARA	1	(3X24)	YAMUNA LINK CHANNEL	SUNEBHADRA	72	R(P)	1992
2	MATATILLA	1	(3X10.2)	BETWA	LALITPUR	30.6	S	1965
3	OBRA	1	(3X33)	RIHAND	SUNEBHADRA	99	S	1970-1971
4	RIHAND	1	(6X50)	GOVIND BALLAB PANT NAGAR	SINGRAULI	300	S	1961-1965
4	TOTAL UPJVNL	4				501.6		

### Note:

<sup>•</sup>Orchha is in Madhya Pradesh state and has an interstate aspect with Uttar pradesh which mainly relate to submergence under the reservoir as well as sharing of water below Orchha

<sup>•</sup>Eastern Yamuna Canal is developed below 25 MW.

# Status of Large Hydro Power Development in Madhya Pradesh

		Nos.	Capacity (MW)
А	Identified Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (1978-87 Study)	13	1970
В	Exploitable Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study)	14	2819
	Breakup of Hydro Power Potential (2017-23 Study)		
I	Projects in operation	9	2235
II	Projects on which construction is held up	1	400
III	Balance Capacity*	4	184

<sup>\*</sup>Balance Capacity is different from arithmetic calculation from the potential accessed due to change in capacity of the Projects, addition/deletion of the projects and merger of two projects into one etc.

Note: In addition to above, one pumped storage project, namely MP30 Gandhi Sagar 5x240+2x120=1440MW) is under S&I

S.No.	Name of Project	River	I.C. (MW)
1	Chorhat	Sone	55
2	Bansagar	Sone	45
3	Beehar	Tons	30
4	Tons	Tons	315
5	Rajghat	Betwa	29
6	Dhurwara	Betwa	28
7	Burhner	Burhner	28
8	Basania	Narmada	60
9	Bargi	Narmada	115
10	Jahanpur	Narmada	75
11	Narmada Sagar	Narmada	675
12	Omkareshwar	Narmada	290
13	Maheshwar	Narmada	225
13	Total		1970

# $\boldsymbol{B}$ . Identified Projects during Reassessment study (2017-23)

S.No.	Name of Project	River	I.C.
1	Bargi	Narmada	90
2	Indira Sagar (Narmada Sagar)	Narmada	1000
3	Omkareshwar	Narmada	520
4	Maheshwar	Narmada	400
5	Basania	Narmada	56
6	Hoshangabad (Jahanpur)	Narmada	58
7	Bauras	Narmada	44
8	Burhner	Burhner	26
9	Gandhi Sagar	Chambal	115
10	Rajghat	Chambal	45
11	Madhikheda	Sindh	60
12	Bansagar-III (Bansagar)	Sone	60
13	Bansagar-II (Beehar)	Sone	30
14	Bansagar-I (Tons)	Tons	315
14	Total		2819

S. No.	Utility/ Stations	No. of Stns.	No. Of units x Capacity (MW)	River	Basin	District	I.C. (MW)	Type (R/S/R(P))	Year of commissioning
	NHDC								
1	INDIRA SAGAR	1	(8X125)	NARMADA	CIR	KHANDWA	1000	S	2004-2005
2	OMKARESHWAR	1	(8X65)	NARMADA	CIR	KHANDWA	520	S	2007
	SUB-TOTAL NHDC	2					1520		
	TOTAL CENTRAL	2					1520		
	MPPGCL								
3	BANSAGAR TONS-I	1	(3X105)	TONS	GANGA	SATNA	315	R(P)	1991-1992
4	BANSAGAR TONS-III	1	(2X15)	SONE	GANGA	SATNA	30	R	2000-2002
5	BANSAGAR TONS-II	1	(3X20)	TONS	GANGA	REWA	60	S	2002
6	BARGI	1	(2X45)	NARMADA	CIR	JABALPUR	90	S	1988
7	GANDHI SAGAR	1	(5X23)	CHAMBAL	GANGA	MANDSAUR	115	s	1960-1966
8	MADHIKHERA	1	(3X20)	KALI SINDH	GANGA	SHIVPURI	60	S	2006-2007
9	RAJGHAT	1	(3X15)	BETWA	GANGA	ASHOK NAGAR	45	S	1999
	SUB-TOTAL MPPGCL	7					715		
9	TOTAL MP	9					2235		

# H.E. Projects on which Construction is held up:

Sl. No.	Name of Project	I. C. (MW)	District	River	Basin	Agency	Type (R/S/R(P))	Status & Likely Commissioning
1	Maheshwar (Pvt.)	400	Khargone & Khandwa	Narmada	CIR	SMHPCL	R	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.
1	Total	400						

<sup>\*</sup> The Project is presently stalled.Commissioning is subject to restart of works

# **Balance Capacity**

S.No.	Name of Project	River	Type	I.C. (MW)	District
1	Burhner	Burhner	S	26	Mandla
2	Basania	Narmada	S	56	Mandla
3	Hoshangabad (Jahanpur)	Narmada	R	58	Hoshangabad
4	Bauras	Narmada	R	44	Raisen
4		184			

Note: R -Run of the River & S- Storage

# 4. Technically Not Feasbile

Sl.No.	Name of Scehme	River	Туре	I.C.(MW)	Remarks
1	Dhurwara	Betwa	R	28	•Dam Axis of proposed Dhurwara project is encroaching submergence (FRL) of Matatila Dam.

Note:

• DPR of Sone (Chorhat)was returned due to non-furnishing of basic inputs/clearances. Since the project is not feasible with the re-conceptualized proposal of lower FRL, the MPPGCL has dropped the project in April, 2017

# Status of Large Hydro Power Development in Chhattisgarh

		Nos.	Capacity (MW)
А	Identified Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (1978-87 Study)	15	70
В	Exploitable Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study)	11	1311
	Breakup of Hydro Power Potential (2017-23 Study)		
I	Projects in operation	1	120
II	Balance Capacity	10	1191

# A. Identified Projects during Reassessment study(1978-87):

Sl.No.	Name of Project	River	I. C. (MW)
1	Joka	Kanhar	28
2	Kharauli	Mahan	46
3	Pasal	Rihand	55
4	Duniadhin	Rihand	80
5	Karri	Rihand	70
6	Hasdeo (Bango)	Hasdeo	55
7	Konta	Sabari	65
8	Chitrakot	Indravati	38
9	Bodhghat	Indravati	295
10	Kutru-I	Indravati	100
11	Kutru-II	Indravati	155
12	Nugur-I	Indravati	160
13	Bhopalapatnam	Indravati	715
14	Nugur-II	Indravati	270
15	Kotri	Kotri	70
15	Total		2202

l.No.	Name of Project	River	I. C.
1	Hasdeo Bango	Hasdeo	120
2	Bodhghat	Indravati	252
3	Kutru-I	Indravati	96
4	Kutru-II	Indravati	275
5	Nugur-I	Indravati	272
6	Kotri	Kotri	44
7	Konta	Sabari	68
8	Joka	Kanhar	30
9	Pasal	Rihand	82
10	Duniadhih (Duniahin)	Rehar	46
11	Rehar-II (Karri)	Rehar	26
11	Total		1311

S. No.	Utility/ Stations	No. of Station	No. of units x Capacity (MW)	River /Basin	District	I.C. (MW)	Type (R/S/R(P))	Year of commissioning
	CSPGCL							
1	HASDEO BANGO	1	(3X40)	HASDEO/ CIR	KORBA	120	S	1994-1995
1	TOTAL CSPGCL	1				120		

# 2. Balance Capacity

Sl. No.	Name of Project	River	I.C. (MW)	District	Туре
1	Bodhghat	Indravati	252	Dantewada	S
2	Kutru-I	Indravati	96	Bastar	S
3	Kutru-II	Indravati	275	Bastar	S
4	Nugur-I	Indravati	272	Dantewada	S
5	Kotri	Kotri	44	Bastar	S
6	Konta	Sabari	68	Dantewada	R
7	Joka	Kanhar	30	Surguja	S
8	Pasal	Rihand	82	Surguja	S
9	Duniadhih	Rehar	46	Surguja	S
10	Rehar-II (Karri)	Rehar	26	Surguja	S
10	Total		1191		

Note: R= Run of River, S=Storage & R(P)= Run of River with Pondage

# 3. Project having Environment & Forest Issue

Sl.No.	Name of Scheme	River	Туре	I.C.(MW)	Remarks
1	Bhopalpatnam	Indravati	S	90	The dam and powerhouse sites of Bhopalapatnam HEP are located on boundary of the Indravati National Park (Protected Area).
2	Nugur-II	Indravati	S	477	• The dam and powerhouse site of Nugur II HEP is situated on the boundary of Indravati National Park (Protected Area)
3	Kharauli	Mahan	R	46	Dam and Power house site are located 2.14 km and 5.0 km inside Tamor Pingla Wildlife Sanctuary.

### Note:

• Matnar (Chitrakot) HEP seems not to be viable with revised IC of 40 MW

### Status of Large Hydro Power Development in Gujarat

		Nos.	Capacity (MW)
А	Identified Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (1978-87 Study)	2	590
В	Exploitable Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study)	2	550
	Breakup of Hydro Power Potential (2017-23 Study)		
I	Capacity in operation	2	550

Note : In addition to above, two pumped storage projects, namely Kadana (4x60 = 240 MW) and Sardar Sarovar (6x200 = 1200 MW) are constructed but not working in pumping mode. Kadana is not operating in pumping mode due to vibration problem. Sardar Sarovar Project is an interstate project of Gujarat, MP & Maharashtra and the operation of this project in pumping mode is under discussion with Narmada Control Authority (NCA) and concerned State Govts.

#### 1. Identified Projects during Reassessment study:

Sl.No.	Name of Project	River	I. C. (MW)
1	Ukai Dam PH	Tapti	120
2	Sardar Sarovar	Narmada	470
2	TOTAL		590

B. Ide	entified Projects during 2017-2023 study		
S.no	Name	River	Installed Capacity
1	Ukai	Tapti	300
2	Sardar Sarovar CHPH	Narmada	250
2	TOTAL		550

2.	H.E. Projects in Operation:							
S. No.	Utility/ Stations	No. of Stns.	No. of units x Capacity (MW)	River / Basin*	District	I.C. (MW)	Type (R/S/R(P))	Year of commissioning
	GSECL							
1	UKAI	1	(4X75)	TAPI	TAPI	300	S	1974-1976
	SUB-TOTAL GSECL	1				300		
	SSNNL							
2	SARDAR SAROVAR CHPH	1	(5X50)	NARMADA	NARMADA	250	R(P)	2004
	SUB-TOTAL SSNNL	1				250		
2	TOTAL GUJARAT	2				550		

### \* All projects are in CIR Basin

Note: In addition to above, two pumped storage projects, namely Kadana (4x60 = 240 MW) and Sardar Sarovar (6x200 = 1200 MW) are constructed but not working in pumping mode. Kadana is not operating in pumping mode due to vibration problem. Sardar Sarovar Project is an interstate project of Gujarat, MP & Maharashtra and the operation of this project in pumping mode is under discussion with Narmada Control Authority (NCA) and concerned State Govts.

# Status of Large Hydro Power Development in Maharashtra

		Nos.	Capacity (MW)
А	Identified Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (1978-87 Study)	25	3314
В	Exploitable Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study)	16	3144.0
Breakup	of Hydro Power Potential (2017-23)		
I	Projects in operation	12	2647
II	Balance Capacity	4	497

Note: In addition to above, two pumped storage projects, namely Ghatgar (2x125=250~MW) and Bhira (1x150=150~MW) are constructed & working in pumping mode while construction on one project, namely Koyna Left Bank (2x40=80~MW) is held up and it is likely to be commissioned by 2027-28. Six project namely Malshej ghat Bhorande (1500~MW), Warasgaon (1200~MW), Tarali (1500~MW), Bhavali(1500~MW), Patgaon (2100~MW) & Pane (1500~MW) are Under S&I .

# 1 (A). Identified Projects during Reassessment study

Sl.No.	Name of Project	River	I. C. (MW)
1	Vaitarna I	Vaitarna	28
2	Bhira Tail Race	Kundalik	55
3	Tillari	Tillari	39
4	Pench	Pench	85
5	Pathri	Wainganga	40
6	Wainganga	Wainganga	150
7	Samda	Pranhita	95
8	Ghargaon	Pranhita	105
9	Kunghara	Pranhita	115
10	Pranhita	Pranhita	310
11	Sahasrakund I	Penganga	29
12	Bhivpuri	Andhra	85
13	Khopoli	Ganga	70
14	Bhira	Mula	215
15	Koyna St-IV	Koyna	350
16	Koyna St-III	Koyna	145
17	Koyna St-I & II	Koyna	245
18	Koyna Dam PH	Koyna	65
19	Patharpunj	Varna	29
20	Kadvi	Varna	215
21	Varna	Varna	27
22	Kasari-I	Kasari	215
23	Kumbhi-I	Penganga	170
24	Kumbhi-II	Penganga	27
25	Hiranyakeshi II	Vedganga	405
25	тот	AL	3314

3. Ident	ified Projects during 2	017-2023 study	
S.no	Name	River	Installed Capacity
1	Vaitarna (Vaitarna I)	Vaitarna	60
2	Bhira Tail Race	Kundalika	80
3	Tillari	Tillari	60
4	Bhandardara St-II	Pravara	34
5	Pench	Pench	160
6	Wainganga	Wainganga	138
7	Samda	Wainganga	45
8	Kunghara	Wainganga	100
9	Pranhita	Pranhita	214
10	Bhivpuri	Andhra	75
11	Khopoli	Indrayani	72
12	Bhira	Neela& Mula	150
13	Koyna Dam P/H	Koyna	36
14	Koyna St. I & II	Koyna	600
15	Koyna St. III	Koyna	320
16	Koyna St. IV	Koyna	1000
16	TO	TAL	3144

S. No.	Utility/	No. Of stns.	No. Of units x Capacity (MW)	River	Basin	District	I.C. (MW)	Type (R/S/R(P))	Year of commissioning
	MAHAGENCO								
1	BHIRA TAIL RACE	1	(2X40)	KUNDALIKA	WFR	RAIGAD	80	R(P)	1987-1988
2	KOYNA DPH	1	(2X18)	KOYNA	EFR	SATARA	36	S	1980-1981
3	KOYNA-I&II	1	(4X70)+ (4X80)	KOYNA	EFR	PATAN	600	S	1962-1967
4	KOYNA-III	1	(4X80)	Water let out through ulestward units (St-I,II & IV)	EFR	RATNAGIRI	320	R(P)	1975-1978
5	KOYNA-IV	1	(4X250)	KOYNA	EFR	SATARA	1000	S	1999-2000
6	TILLARI	1	(1X60)	TILLARI	WFR	KOLHAPUR	60	R(P)	1986
7	VAITARNA	1	(1X60)	VAITARNA	WFR	NASIK	60	S	1976
	SUB-TOTAL MAHAGENCO	7					2156		
	MPPGCL		L			l			
8	PENCH	1	(2X80)	PENCH	EFR	CHINDWARA	160	S	1986-1987
	SUB-TOTAL MPPGCL	1					160		
	TOTAL STATE SECTOR	8					2316		
	PRIVATE		•			1			
	DODSON-LINDBLOM HYDRO P	OWER P	VT. LTD. (DLH	IP)					
9	BHANDARDHARA ST-II	1	(1X34)	PRAVARA	EFR		34	R(P)	1996
	SUB-TOTAL DLHP	1					34		
	TATA POWER COMPANY (PVT.)								
10	BHIRA	1	(6X25)	NEELA & MULA	EFR	RAIGAD	150	S	1927-1949
11	BHIVPURI	1	(3X24) + (2X1.5)	ANDHRA	EFR	RAIGAD	75	S	1997-1999
12	KHOPOLI	1	(3X24)	INDRAYANI	EFR	RAIGAD	72	S	2001-2003
	SUB-TOTAL TPCL	3					297		
	TOTAL PVT (MAHARASHTRA)	4					331		
12	TOTAL MAHARASHTRA	12					2647		

Note: In addition to above, two pumped storage projects, namely Ghatgar (2x125 = 250 MW) and Bhira (1x150 = 150 MW) are constructed & working in pumping mode while construction on one project, namely Koyna Left Bank (2x40 = 80 MW) is held up and it is likely to be commissioned by 2027-28 subject to re-start of work in immediate future.

# 2. Balance Capacity

Sl .No.	Name of Project	River	Туре	I.C.(MW)	District
1	Wainganga	Wainganga	S	138	Border of Gadchiroli and Chandrapur district
2	Samda	Wainganga	R	45	Border of Gadchiroli and Chandrapur district
3	Kunghara	Wainganga	R	100	Border of Gadchiroli and Chandrapur district
4	Pranhita	Pranhita	S	214	Gadchiroli
4	Total			497	

Note: R -Run of the River & S- Storage

#### 3. Projects Developed below 25 MW

Sl.No.	Name of Project	River	I. C. (MW)
1	Gosikhurd (Pathri)	Wainganga	24
2	Warna (varna)	Warna	16
	Kumbhi		
3	(Kumbhi-II)	Kumbhi	2.5

#### 4. PFR below 25 MW

7. IIIN DC	4. 11K BEIOW 25 WW								
Sl.No.	Name of Project	River	I. C. (MW)						
1	Kadvi	Kadvi	22						
	Kasari								
2	(Kasari-I)	Kasari	25						
	Kumbhi								
3	(Kumbhi-I)	Kumbhi	17						
	Hiryankeshi								
4	(Hiryankeshi-II)	Vedganga	18						

#### Note:

- Ghargaon is developed as irrigational project
- •Sahasrakund -I(25 MW) and Patharpunj (17.3 MW) are proposed to be developed with capacity less than 25 MW

# Status of Large Hydro Power Development in Goa

		No.	I.C. (MW)
Α	Identified Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (1978-87 Study) (Sonal Hydro Electric project)	1	55
В	Exploitable Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study)	*	*

<sup>\*</sup> Dam Site is of Sonal Hydro Electric project is falling within the Madei Sanctuary (Protected Area).

### Status of Large Hydro Power Development in Andhra Pradesh

		Nos.	Capacity (MW)
А	Identified Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (1978-87 Study)	11	3261
В	Exploitable Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study)	7	2596
	Breakup of Hydro Power Potential (2017-23)		
I	Projects in operation	5	1610
II	Projects under active construction	1	960
III	Balance Capacity	1	26

Note: In addition to above, one pumped storage project, namely Pinnapuram (4x240+2x120 = 1200 MW) is under active construction

Eighteen projects namely Yaganti (1000 MW), Rajupalem (350 MW), Kamalapadu (950 MW), Chittimvalasa (800 MW), Kurukutti (1200 MW), Karrivalasa (1000 MW), Gandikota (1000 MW),Owk (800 MW),Somsila (900 MW), Chitravathi (500 MW), Yerrravaram (1200 MW),Paidipalem East (1200 MW), Singanamala(800 MW),Paidipalem North (1000 MW), Veeraballi Off-stream (1800 MW), Vempalli (1500 MW), Raiwada (850 MW) & Gujjili(1500 MW) are under S&I.

One project namely Upper Sileru (1350 MW) is under Examination.

### A. Identified Projects during Reassessment study (1978-87):

Sl.No.	Name of Project	River	I. C. (MW)
1	Machkund	Machkund	205
2	Balimela	Sileru	65
3	Upper Sileru	Sileru	150
4	Lower Sileru	Sileru	385
5	Donkarai Canal	Sileru	44
6	Polavaram	Godavari	545
7	Pondugala	Krishna	95
8	Nagarjunasagar RBC	Krishna	45
9	Srisailam	Krishna	775
10	Tungabhadra HLC	Bhadra	32
11	Inchampalli	Godavari	920
11		Total	3261

### B Identified Projects during Reassessment study (2017-23):

Sl.No.	Name of Project	River	I.C. (MW)
1	Upper Sileru-I&II (Upper Sileru)	Sileru	240
2	Lower Sileru	Sileru	460
3	Polavaram	Godavari	960
4	Balimela Dam Toe	Sileru	26
5	Srisailam	Krishna	770
6	Nagarjunasagar RBC & Ext (Nagarjunasagar RBC)	Krishna	90
7	Nagarjunasagar TPD	Krishna	50
7		2596	

S. No.	Utility/ Stations	No. Of stns.	No. of units x Capacity (MW)	River / Basin*	District	I.C. (MW)	Type (R/S/R(P))	Year of commissioning
1	LOWER SILERU	1	(4X115)	SILERU	KHAMMAM	460	S	1976-1978
2	NAGARJUNA SGR RBC & EXT.	1	(3X30)	KRISHNA	SATRASALA	90	S	1983-90
3	SRISAILAM	1	(7X110)	KRISHNA	MAHABUBNA GAR	770	S	1982-1987
4	UPPER SILERU-I&II	1	(4X60)	SILERU	VISHAKAPATN AM	240	S	1967-1995
5	NJ SAGAR TPD	1	(2X25)	KRISHNA	GUNTUR	50	R(P)	2017
5	TOTAL	5				1610		

<sup>\*</sup> All projects are in EFR Basin

### 2. H.E. Projects under active construction:

Sl. No.	Name of Project	Agency	District	River/ Basin	I. C. (MW)	Type (R/S/R(P))	Likely Commissioning
1	Polavaram	Polavaram Project Authority	East & West Godavari	Godavari/ EFR	960	S	2024-26 (Mar'26)
1	Total				960		_

### 3. Balance Capacity

Sl.No.	Name of Project	River	Type	I. C. (MW)	District	Remarks
1	Balimela Dam Toe	Sileru	S	26	Malkangri	<ul> <li>The Government of Orissa and Government of Andhra Pradesh agreed in year 1962 that AP will construct a 60 MW Power House at Balimela toe for its own use at its cost, using AP's 50% share of water. Though the Dam is situated in orissa, 100% cost and benefits go to State of A.P. as per the agreement</li> <li>This project could not be taken up due to non-issue of NOC by Govt of Odisha for blasting material for power House excavation in spite of lot of correspondence from Govt of AP.</li> <li>The Govt. of Odisha had informed the Govt. of AP on 08-09-2010 to take up the construction of this project jointly by both APGENCO &amp; OHPC on 50:50 basis.</li> <li>The correspondence has been done with Govt. of Odisha from year 2013 to till date on the finalization of the clauses of draft modified agreement to be entered by both Govt. of AP &amp; Govt. of Odisha as the implementation of Balimela Dam Toe HE Project would be taken up jointly by both APGENCO &amp; OHPC duly sharing the costs and benefits in 50:50 ratio as per the decisions of Project Administrative committee (PAC) and after signing of modified agreement.</li> <li>At present, the draft modified agreement is submitted to the Govt. of AP vide dt:07-07-18 for approval. After receiving approval from Govt. of AP, the draft modified agreement will be sent to M/s OHPC for arranging consent of Govt. of Odisha.</li> </ul>
1	Total			26		

Note: R –Run of the River & S- Storage

## 4. Projects Developed below 25 MW

Sl.No.	Name of Project	River	Туре	I. C. (MW)
	5			
	Donkarai			
1	Canal	Sileru	S	25
	Tungabhadra			
2	HLC	Bhadra	R	8.25

#### Note:

- Machkund is in operation in Odisha State for 114.75 MW
- Pondugala hydroelectric project is abandoned in view of Pulichintala project was contemplated
- Tupakulagudem (Inchampalli) is in balance capacity in Telangana with Installed Capacity of 240 MW

# Status of Large Hydro Power Development in Telangana

			Nos.	Capacity (MW)
А	Hydroelec	Large Hydro Power Potential from stric Projects naving capacity above 25 MW) Study)	7	1099
В	Hydroelec	le Large Hydro Power Potential from etric Projects naving capacity above 25 MW) Study)	8	1302.00
	Breakup of	Hydro Power Potential (2017-23 Study)		
I	Projects in	operation	6	800
II	Projects al	llotted by States for development		
	II-A	DPR Prepared		
	(i)	Projects returned to project authorities	1	320
III	Balance C	apacity*	1	240

Note: In addition to above, two pumped storage projects, namely Nagarjuna Sagar (7x100.80 = 705.60 MW) and Srisailam LBPH (6x150 = 900 MW) are constructed & working in pumping mode.

<sup>\*</sup>Balance Capacity is different from arithmetic calculation from the potential accessed due to change in capacity of the Projects, addition/deletion of the projects and merger of two projects into one etc.

# A. Identified Projects during Reassessment study (1978-87 Study):

Sl.No.	Name of Project	River	I. C. (MW)
1	Pochampad	Godavari	47
2	Singareddi	Godavari	250
3 Dummagudem		Godavari	360
4	Pulichintala	Krishna	180
5	Nagarjunasagar LBC	Krishna	42
6	6 Nagarjunasagar Dam PH		115
7	7 Priyadarshini		105
7	TOTAL		1099

# **B** Identified Projects during 2017-2022 study

Sl.No.	Name of Project	River	I.C. (MW)
1	Pochampad	Godavari	36
2	Dummugudem	Godavari	262
3	Tupakulagudem	Godavari	240
4	Priyadarshini Jurala	Krishna	234
5	Lower Jurala	Krishna	240
6	Nagarjunasagar (Nagarjunasagar Dam PH)	Krishna	110
7	Nagarjunasagar LBC Krishna		60
8	Pulichintala Krishna		120
8	Sub Total	1302	

S. No.	Utility/ Stations	No. of Stns.	No. of units x Capacity (MW)	River / Basin*	District	Capacity (MW)	Type (R/S/R(P))	Year of commissioning	
	TSGENCO								
1	PRIYADARSHNI JURALA	1	(6X39)	KRISHNA	MAHABOOB NAGAR	234	R(P)	2008-2011	
2	POCHAMPAD	1	(4X9)	GODAVARI	NIZAMABAD	36	S	1987-1988, 2010	
3	NAGARJUNA SGR	1	(1X110)	KRISHNA	NALGONDA	110	S	1978-85	
4	NAGARJUNA SGR LBC	1	(2X30)	KRISHNA	GUNTUR	60	R	1983	
5	LOWER JURALA	1	(6X40)	KRISHNA	WANPARTHY	240	R(P)	2015-16	
6	PULINCHINTHALA	1	(4X30)	KRISHNA	SURAPETA	120	R(P)	2016-17	
6	TOTAL TSGENCO	6				800			

Note: R= Run of River, S=Storage & R(P)= Run of River with Pondage

# ${\bf 2.} \quad {\bf H.E.\ Projects\ Returned\ to\ project\ Authorities:}$

Sl. No.	Name of Project	I.C. (MW)	Agency	Month of Return	Reason for Return
1	Dummugudem	320	APGENCO		Returned due to non-replying of various comments such as hydro planning, cost of E&M works, hydel civil Engineering, geological aspects etc.
1	Total	320			

# 3. Balance Capacity

5	Sl.No.	Name of Project	River Type		I.C.(MW)	District
	1	Tupakulagudem	Godavari	S	240	Mulugu

### Note:

 $\bullet \ Singared di \ HEP \ is \ not \ included \ as \ there \ was \ submergence \ issue \ with \ Dummugudem \ hydroelectric \ project.$ 

# Status of Large Hydro Power Development in Karnataka

			Nos.	Capacity (MW)
А	_	e Hydro Power Potential from Hydroelectric Projects g capacity above 25 MW)	38	6459
В	1	rge Hydro Power Potential from Hydroelectric Projects g capacity above 25 MW)	20	4414.4
	Breakuj	o of Hydro Power Potential (2017-23 Study)		
I	Projects in open	ration	16	3689.2
II		Projects allotted by States for development		
	II-A	DPR Prepared		
	(i) Projects returned to project authorities		2	665
III	Balance Capaci	ity*	4	747

Note: In addition to above, Two pumped storage projects, namely Narihalla (300 MW) and Saundatti ( 1260 MW) are under S&I. One project namely Sharavathy (2000 MW) is in S&I Held Up category.

\*Balance Capacity is different from arithmetic calculation from the potential accessed due to change in capacity of the Projects, addition/deletion of the projects and merger of two projects into one etc.

# A. Identified Projects during Reassessment study

Sl.No.	Name of Project	River	I. C. (MW)
1	Krishnapur	Mandavi	210
2	Kalinadi I (Supa)	Kalinadi	140
3	Kalinadi I (Dandeli II)	Kalinadi	60
4	Kalinadi I (Nagjhari)	Kalinadi	855
5	Kalinadi I (Kadassali)	Kalinadi	95
6	Kalinadi I (Kadra)	Kalinadi	100
7	Kalinadi I (Mardi)	Kalinadi	175
8	Gangavali (Bedti) St.I	Gangavali	380
9	Gangavali (Sonda) St.II	Gangavali	105
10	Aghnashini	Aghnashini	370
11	Bannehole	Bannehole	55
12	Linganamakki	Saravathi	125
13	Sharavathi	Saravathi	1365
14	Saravathi Tail Race	Saravathi	157
15	Varahi	Varahi	305
16	Machchattu	Varahi	35

17	Netravathy	Netravathy	60
18	Sirpadi	Netravathy	38
19	Kumaradhari	Kumaradhari	49
20	Barapole I	Barapole	335
21	Jaldurg	Krishna	270
22	Narayanpur	Krishna	70
23	Almatti	Krishna	160
24	Ghataprabha	Tungabhadra	41
25	Shivpur	Tungabhadra	26
26	Munirabad	Tungabhadra	41
27	Hampi	Tungabhadra	34
28	Tungbhadra RBC	Tungabhadra	27
29	Bhadra Dam PH	Bhadra	36
30	Krishnarajasagar	Cauvery	55
31	Sivasamudram	Cauvery	44
32	Shimsa PH-I	Cauvery	31
33	Cauvery PH-I	Cauvery	235
34	Shimsa PH-II	Shimsha	42
35	Arkavathi	Arkavathi	42
36	Cauvery PH-II	Cuvery	165
37	Cauvery PH-III	Cauvery	90
38	Cauvery PH-IV	Cauvery	36
38	TOTAL		6459

# B. Identified Projects during 2017-2023 study

Sl.No.	Name of Project	River	I. C. (MW)
1	Almatti	Krishna	290
2	Ghatprabha	Ghataprabha	32
3	Bhadra (Bhadra Dam PH)	Bhadra	39.2
4	Munirabad	Tungbhadra	38
5	Hampi	Tungbhadra	36
6	T B Dam (Tungabhadra RBC)	Tungbhadra	36
7	Shivasamudram	Cauvery	42
8	Kalinadi Supa	Kali	100
9	Kalinadi (Nagjhari)	Kali	855
10	Kodasalli (Kalinadi I (Kadassali))	Kali	120
11	Kadra Kalinadi I(Kadra)	Kali	150
12	Gangavali St.II (Gangavali (Sonda ) St.II)	Gangavali	600
13	Linganamakki	Sharavathy	55
14	Mahatma Gandhi Jog	Sharavathy	139.2
15	Sharavathy (Sharavathi)	Sharavathy	1035
16	Gerusoppa (Sharavathy Tail Race)	Sharavathy	240
17	Varahi	Varahi	460
18	Netravathy	Netravathy	41
19	Sirpadi	Sirpadi Netravathy	
20	Kumaradhari Kumaradhari		70
20	TOTAL	4414.4	

S. No.	Utility/ Stations	No. of Stns.	No. Of units x capacity (MW)	River	Basin	District	I.C. (MW)	Type (R/S/R(P))	Year of commissioning	
	KPCL									
1	ALMATTI	1	(5X55) +(1X15)	KRISHNA	EFR	BIJAPUR	290	S	2004-2005	
2	GERUSOPPA (SHARAVATHY TAIL RACE)	1	(4X60)	SHARAVATHY	WFR	UTTARA KANNADA	240	R(P)	2001-2002	
3	GHAT PRABHA	1	(2X16)	GHATPRABHA	EFR	BELGAUM	32	S	1992	
4	MAHATMA GANDHI JOG	1	(4X21.6) +(4X13.2)	SHARAVATHY	WFR	SHIMOGA	139.2	S	1949-1952	
5	KADRA	1	(3X50)	KALI	WFR	UTTARA KANNADA	150	S	1997-1999	
6	KALINADI (NAGJHARI)	1	6x 150	KALI	WFR	UTTARA KANNADA	900	S	1979-1984	
7	KALINADI SUPA	1	(2X50)	KALI	WFR	UTTARA KANNADA	100	S	1985	
8	KODASALI	1	(3X40)	KALI	WFR	UTTARA KANNADA	120	S	1998-1999	
9	LINGNAMAKKI	1	(2X27.5)	SHARAVATHY	WFR	SHIMOGA	55	S	1979-1980	
10	MUNIRABAD	1	(2X9) +(1X10)	TUNGABHADRA	EFR	KOPPAL	28	S	1962-1965	
11	SHARAVATHY	1	(10X103.5)	SHARAVATHY	WFR	SHIMOGA	1035	S	1965-1977	
12	SIVASAMUNDRUM	1	(4X6)+(6X3)	CAUVERY	EFR	MANDYA	42	R(P)	1922-1934	
13	VARAHI	1	(4X115)	VARAHI	WFR	UDUPI	460	R(P)	1989-2009	
14	BHADRA	1	(2x12)+(1x2)	BHADRA	EFR	CHICKMAGALUR	26	S	1965	
	TOTAL KPCL	14					3617.2			
	APGENCO									
15	T B DAM *	1	(4X9)	TUNGABHADRA		BELLARI	36	S	1957-1964	
16	НАМРІ *	1	(4X9)	TUNGABHADRA	EFR	BELLARI	36	S	1958-1964	
	SUB-TOTAL APGENCO	2					72			
16	TOTAL KARNATAKA	16					3689.2			

\* Utilities are in Andhra Pradesh

# 2. Hydro Projects Returned to Project Authorities for re-submission after compliance of observations:

Sl. No.	Name of Project	Agency	I.C.(MW)	Reason of Return
1	Sivasamudram	KPCL	345	Presentation meeting held on 16.5.2012 as it involves interstate issues; DPR could not be processed and returned the same for resubmission after resolution of interstate aspects.
2	Mahadayi	KPCL	320	Returned due to non-tie up of inputs/clearances, the project involves interstate aspects.
2	Total		665	

# 3. Balance Capacity

Sl.No.	Name of Project	River	Туре	I.C.(MW)	District
1	Netravathy	Netravathy	s	41	Dakshina Kannada
2	Sirpadi	Netravathy	R	36	Dakshina Kannada
3	Kumaradhari	Kumaradhari	S	70	Dakshina Kannada
4	Gangavali St.II (Gangavali (Sonda ) St.II)	Gangavali	S	600	Uttara Kannada
4	Total			747	

Note: R -Run of the River & S- Storage

### . Project having Interstate Issues

Sl.No.	Name of Scehme	River	Туре	I.C.(MW)	Remarks
1	Mekadatu (Cauvery PH-II)	Cauvery	R	400	•Involve Interstate Issue between Kerala, Tamil Nadu and Karnataka
2	Rasimanal (Cauvery PH-III)	Cauvery	R	360	Project located in Tamil Nadu and involve interstate issue between Kerala, Tamil Nadu and Karnataka
3	Hogenekkal (Cauvery PH-IV)	Cauvery	R	120	Project located in Tamil Nadu and involve interstate issue between Kerala, Tamil Nadu and Karnataka

### 6. Project having Environment & Forest Issue

Sl.No.	Name of Scehme	River	Туре	I.C.(MW)	Remarks
1	Kalinadi II (Dandeli)	Kali	R	60	•The Project could not be taken up as Forest Dept. has stated that KPCL would not take up any further new projects within Kali Basin after giving clearance to Kadra & Kodasali Hydroelectric Projects.
2	Kalinadi III (Kalinadi I (Mardi)	Kalinadi	S	300	•All Dams and Power House Sites are falling within the Dandeli Wild Life Sanctuary/ Dandeli Eco Sensitive Area.
3	Bedthi (Gangavali (Bedti) St. I))	Gangavali	S	380	Both Dam & Power house sites are falling within Bedthi Conservation Reserve
4	Aghnashini	Aghnashini	R	600	Aragutti Dam, Badagutti Dam and Power house sites are falling within Aghanashini Lion Tailed Macaque (LTM) Conservation Reserve (Protected Area) and Mavinagadde Dam is 550m away from Aghnashini Lion Tailed Macaque (LTM) Conservation Reserve

5	Bennehole	Aghnashini	S	55	Sampikatte Forebay Dam & Power House Sites are located within Aghnashini Lion Tailed Macaque (LTM) Conservation Reserve (Protected Area)
6	Machchattu	Varahi	R	35	Dam and Power House Sites are falling within the Eco- Sensitive Area of Someshwara Wildlife Sanctuary (Protected Area)
7	Barapole-I	Barapole	S	335	Dam Site is falling within Brahmagiri Wildlife Sanctuary (Protected Area) and Power House Site is falling within the Eco-Sensitive Area of Brahmagiri Wildlife Sanctuary (Protected Area).

# ${\bf 5.\ Projects\ developed\ below\ 25\ MW}$

Sl.No.	Name of Scehme	River	Туре	I.C.(MW)
1	Shivapur Dam (Shivpur)	Tungabhadra	R	18
2	Krishnarajsagar	Cauvery	S	12
3	Shimsha PH-I	Cauvery	R	17.2
4	Shimsha PH-II	Cauvery	R	24

### Note:

- •Jaldurg & Tamankal (Narayanpur) may not be feasible due to commercially unviability
- •Arkavathi is developed as irrigational project

# Status of Large Hydro Power Development in Kerala

			Nos.	Capacity (MW)
А		ydro Power Potential from Hydroelectric Projects pacity above 25 MW)	28	3378
В		Hydro Power Potential from Hydroelectric Projects pacity above 25 MW)	23	2472.75
	Breakup of			
I	Projects in operation		14	1864.15
II	Projects under active construction		3	140
III	Projects allotted by	States for development		
	III-A	DPR Under Preparation		
	(i)	Projects under S&I	1	800
IV	Balance Capacity*		6	419

<sup>\*</sup>Balance Capacity is different from arithmetic calculation from the potential accessed due to change in capacity of the Projects, addition/deletion of the projects and merger of two projects into one etc.

## A. Identified Projects during Reassessment study (1978-87):

Sl.No.	Name of Project	River	IC
1	Baraple II	Barapole	85
2	Kuttiyadi	Kuttiyadi	80
3	Chalipuzha	Baypore	50
4	Cholathipuzha	Baypore	80
5	Pandiyar Punnapuzha II	Pandiyar	85
6	Silent Valley	Kundipuzha	130
7	Idukki I & II	Periyar	565
8	Iddukki III	Periyar	130
9	Lower Periyar	Periyar	145
10	Pallivasal Replacement	Mudirapuzha	190
11	Sengulam	W. Kallar	55
12	Panniar	Panniar	40
13	Neriamangalam	Mudirapuzha	65
14	Perinjankutty	Perinjankutty	120
15	Manali	Idamlayar	36
16	Kudal	Idamlayar	47
17	Puyanukutty	Puyanukutty	285
18	Idamalayar	Idamalayar	55
19	Sholaiyar	Sholaiyar	75
20	Kuriakutty	Kuriakutty	65
21	Poringalkuthu(R.B)	Chalakuddi	65
22	Poringalkuthu(L.B)	Chalakuddi	60
23	Adirapally	Chalakuddi	65
24	Sabarigiri	Pamba	410
25	Kakkad	Kakkad	75
26	Lower Sabarigiri	Kakkad	55
27	Twin Kallar Multipurpose	Achankovil	65
28	Mananthavady	Kabini	200
28	Total		3378

## B Identified Projects during 2017-2023 study

Sl.No.	Name of Project	River	IC
1	Kuttiyadi (Kuttiyadi)	Kuttiyadi	75
2	Kuttiyadi Extension (Kuttiyadi)	Kuttiyadi	50
3	Kuttiyadi Addl. Extension (Kuttiyadi)	Kuttiyadi	100
4	Chalipuzha	Baypore	80
5	Idukki (Idukki I&II & Idukki III)	Periyar	780
6	Lower Periyar	Periyar / Muthirapuzha	180
7	Pallivasal (Pallivasal Replacement)	Muthirapuzha	37.5
8	Pallivasal Extension	Muthirapuzha	60
9	Thottiyar	Thottiyar	40
10	Sengulam	Muthirapuzha	51.2
11	Panniar	Panniar	32.4
12	Neriamangalam	Muthirapuzha	52.65
13	Manali	Manali Ar	26
14	Kudal	Idamalayar	56
15	Idamalayar	Idamalyar	75
16	Sholaiyar	Sholayar	54
17	Poringalkuthu (Proringalkuthu (L.B.))	Chalakudy	36
18	Athirapilly (Adirapally)	Chalakudy	163
19	Sabarigiri	Pamba	340
20	Kakkad	Pamba/Kakkad	50
21	Lower Sabarigiri	Kakkad	68
22	Twin-Kallar (Twin Kallar Multipurpose)	Achankovil	26
23	Mankulam	Puyankutty	40
23	Total		2472.75

#### 1. Hydro Electric Projects in Operation:

S. No.	Utility/Stations	No. of Stns.	No. of units x Capacity (MW)	River / Basin*	District	I.C. (MW)	Type (R/S/R(P))	Year of commissioning
	KSEB							
1	IDAMALAYAR	1	(2X37.5)	IDAMALAYAR	ERNAKULAM	75	S	1987
2	IDUKKI	1	(6X130)	PERIYAR	IDUKKI	780	S	1976-1986
3	KAKKAD	1	(2X25)	PAMBA	PATHANAMTHI TTA	50	R(P)	1999
4	KUTTIYADI	1	(3X25)	KUTTIYADI	KOZHIKODE	75	S	1972
5	KUTTIYADI EXTN.	1	(1X50)	KUTTIYADI	KOZHIKODE	50	S	2001
6	KUTTIYADI ADDN EXTN	1	(2X50)	KUTTIYADI	KOZHIKODE	100	S	2010
7	LOWER PERIYAR	1	(3X60)	PERIYAR	IDUKKI	180	R(P)	1997
8	NERIAMANGLAM	1	(3X17.55)	MUTHIRAPUZHA	IDUKKI	52.65	S	1961-63
9	PALLIVASAL	1	(3X5) +(3X7.5)	MUTHIRAPUZHA	IDUKKI	37.5	S	1948-2001
10	PANNIAR	1	(2X15)	PANNIAR	IDUKKI	30	S	1963-2001
11	PORINGALKUTTU	1	(4X8)	CHALAKUDY	COIMBATORE	32	S	1957-1960
12	SABARIGIRI	1	(6X50)	PAMBA	PATHANAMTHI TTA	300	S	1960-1967
13	SENGULAM	1	(4X12)	MUTHIRAPUZHA	IDUKKI	48	S	1954-2001
14	SHOLAYAR	1	(3X18)	SHOLAYAR	COIMBATORE	54	S	1956-1968
14	TOTAL KSEB	14				1864.15		

<sup>\*</sup> All projects are in WFR Basin

## 2 H.E. Schemes under active Construction:

Sl. No.	Name of Project	Agency	District	River /Sub-Basin/ Basin	I.C. (MW)	Type (R/S/R(P))	Likely Commissioning
1	Pallivasal	KSEB	ldukki	Mudirapuzha/ Baypore Periyar/ WFR	60	R	2023-24 (Jun'23)
2	Thottiyar	KSEB	ldukki	Thottiyar/ Baypore Periyar / WFR	40	R	2022-24 (Jun'23)*
3	Mankulam	KSEB	ldukki	Melachery	40		2026-27 (May'26)
3	Total				140		

<sup>\* 1</sup> unit (10 MW) likely during 2022-23 & 1 unit (30 MW) during 2023-24

## 3. H.E. Projects under Survey & Investigation:

Sl. No.	Name of Project	Basin/River	I.C. (MW)	Agency	District	Type (R/S/R(P))	Target date of preparation of DPR
1	Idukki Extension Scheme	WFR/ Periyar	800	KSEB	Idukki	S	Dec-23
1	TOTAL		800				

## 4. Balance Capacity

Sl. No.	Name of Project	River	I.C.(MW)	District	Туре
1	Chalipuzha	Baypore	80	Wayanad	S
2	Manali	Idamlayar	26	Idukki	S
3	Kudal	Idamlayar	56	Ernakulam	S
4	Lower Sabarigiri	Pamba	68	Pathanamthitta	S
5	Twin-Kallar	Achankovil/Kallar	26	Pathanamthitta	S
6	Athirapilly	Chalakudy	163	Thrissur	R
6	Total		419		

## 5. Projects developed below 25 MW

Sl.No.	Name of Scehme	River	Type	I.C.(MW)
1	Barapole-II	Barapole	R	15MW
2	2 Perinjankutty Perinja		S	24MW
3	Poringalkuthu (R. B.)	Chalakudi	S	Developed below 25 MW

## 6. Project having Environment & Forest Issue

Sl.No.	Name of Scehme	River	Type	I.C.(MW)	Remarks
1	Silent valley	Ponnai	S	130	Dam Site is falling within Silent Valley Wildlife Sanctuary.
2	Puyanukutty	Puyankutty	S	285	Project is stalled due to Forest clearance and present proposal of KSEBL has also been referred to Western Ghat Ecological Expert Panel (WGEEP)
3	Kuriarkutty	Kuriarkutty / Karapara	S	66	•Kuriarkutty Dam and Karappara Power House Sites are falling within Parambikulam Wildlife Sanctuary & Karappara Dam site is falling within Eco-Sensitive Area.

## 7. Project having Interstate Issues

Sl.No.	Name of Scehme	River	Type	I.C.(MW)	Remarks
1	Cholatipuzha	Baypore (Cholatipuzha)	S	60	Project located in Tamil Nadu and has an interstate issue with Kerala
2	Pandiyar Punnapuzha Tail Race (Pandiyar Punnapuzha II)	Punnapuzha	R	105	•Involve interstate issue between Kerala & Tamil Nadu
3	Mananthavady	Kabini	S	225	•Involve interstate issue with Kerala, Tamil Nadu and Karnataka

# Status of Large Hydro Power Development in Tamil Nadu

		Nos.	Capacity (MW)
А	Identified Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (1978-87 Study)	23	1693
В	Exploitable Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study)	26	1785.20
	Breakup of Hydro Power Potential (2017-23 Study)		
I	Projects In Operation	26	1778.2

Note: In addition to above, one pumped storage project, namely Kadamparai (4x100 = 400 MW) is constructed & working in pumping mode, one pumped storage project, namely Kundah Pump Storage (Stage I,II,III&IV) (4x125=500 MW) is under active construction [likely commissioning by 2024-25 (Oct. 2024)] and two pumped storage projects, Kodayar (500 MW) & Sillahalla St.-I (4x250=1000 MW) are under S&I Held up

## A. Identified Projects during Reassessment study:

Sl.No.	Name of Project	River	I. C. (MW)
1	Pandiyar-Punnapuzha I	Pandiyar	125
2	Upper Aliyar	Bharatpuzha	90
3	Periyar Lake	Periyar	145
4	Nirar	Idamalayar	26
5	Sholaiyar- I	Sholaiyar	75
6	Sarkarpathi	Periyar	33
7	Kodayar I	Kodayar	65
8	Kodayar II	Kodayar	30
9	Paraliyar	Paraliyar	39
10	Mettur Dam PH	Cauvery	32
11	Mettur Tunnel PH	Cauvery	100
12	Lower Mettur	Cauvery	115
13	Bhawani Kattalai	Cauvery	115
14	Lower Bhawani	Bhavani	34
15	Lower Moyar	Moyar	33
16	Moyar	Moyar	75
17	Pykara (Singara)	Moyar	115
18	Pykara (Ultimate)	Moyar	60
19	Avalaanche Em'ld (Kundah-I)	Kundah	70
20	Kundapallam (Kundah-II)	Kundah	160
21	Pengumbahalla (Kundah-III)	Kundah	95
22	Suruliar	Suruliar	30
23	Papanasam	Tambraparni	31
23	TOTAL		1693

B. Identified Projects during 2017-2023 study

S.no	Name	River	Installed Capacity
3.110		MVEI	mstaneu Capacity
1	Aliyar (Upper Aliyar)	Bharatapuzha/Aliyar	60
2	Sarkarpathy	Periyar	30
3	Sholayar I	Sholayar	70
4	Periyar (Periyar Lake)	Periyar	168
5	Kodayar I	Kodayar	60
6	Kodayar II	Kodayar	40
7	Kundah-I (Avalaanche Em'ld(Kundah-I))	Avalanche Stream	60
8	Bhavani Kattalai Barrage -I	Cauvery	30
9	Bhavani Kattalai Barrage -II	Cauvery	30
10	Bhavani Kattalai Barrage -III	Cauvery	30
11	Kundah-II (Kundapallam (Kundah-II))	Kundah	175
12	Lower Mettur-I (Lower Mettur)	Cauvery	30
13	Lower Mettur-II (Lower Mettur)	Cauvery	30
14	Lower Mettur-III (Lower Mettur)	Cauvery	30
15	Lower Mettur-IV (Lower Mettur)	Cauvery	30
16	Mettur Dam	Cauvery	50
17	Mettur Tunnel	Cauvery	200
18	Moyar	Moyar	36
19	Parson's valley	Bhavani	30
20	Kundah-III (Pengumbahalla (Kundah-III))	Pegumbahallah	180
21	Kundah-IV	Bhavani	100
22	Pykara (Pykara (Singara))	Pykara	59.2
23	Pykara Ultimate	Pykara	150
24	Kundah-V	Bhavani	40
25	Papanasam	Thamirabarani	32
26	Suruliyar	Vaigai	35
26	T	Total	1785.2

## 1 H.E. Projects in Operation:

S. No.	Utility/ Stations	No. Of stns.	No. of units x Capacity (MW)	River	Basin	District	Capacity (MW)	Type (R/S/R(P))	Year of commissioning
	TANGEDCO								
1	ALIYAR	1	(1X60)	MASONARY DAM	WFR	COIMBATORE	60	S	1970
2	BHAVANI KATTALAI BARRAGE-I	1	(2X15)	CAUVERY	EFR	ERODE	30	R(P)	2006
3	BHAVANI KATTALAI BARRAGE-II	1	(2X15)	CAUVERY	EFR	ERODE	30	R(P)	2013
4	BHAVANI KATTALAI BARRAGE-III	1	(2X15)	CAUVERY	EFR	ERODE	30	R(P)	2012
5	KODAYAR-I	1	(1X60)	KODAYAR	WFR	KANYAKUMARI	60	S	1970
6	KODAYAR-II	1	(1X40)	KODAYAR	WFR	KANYAKUMARI	40	S	1971
7	KUNDAH-I	1	(3X20)	AVLANCHE STREAM	EFR	NILGRIS	60	S	1960-1964
8	KUNDAH-II	1	(5X35)	KUNDAH	EFR	NILGRIS	175	S	1960-1965
9	KUNDAH-III	1	(3X60)	PENGUNBAH ALLAH	EFR	COIMBATORE	180	S	1965-1978
10	KUNDAH-IV	1	(2X50)	BHAVANI	EFR	COIMBATORE	100	S	1966-1978
11	KUNDAH-V	1	(2X20)	BHAVANI	EFR	NILGRIS	40	S	1964-1988
12	LOWER METTUR-I	1	(2X15)	CAUVERY	EFR	SALEM	30	R(P)	1988
13	LOWER METTUR-II	1	(2X15)	CAUVERY	EFR	SALEM	30	R(P)	1988
14	LOWER METTUR-III	1	(2X15)	CAUVERY	EFR	SALEM	30	R(P)	1987-1988
15	LOWER METTUR-IV	1	(2X15)	CAUVERY	EFR	SALEM	30	R(P)	1988-1999
16	METTUR DAM	1	(4X12.5)	CAUVERY	EFR	SALEM	50	S	1937-1946
17	METTUR TUNNEL	1	(4X50)	CAUVERY	EFR	SALEM	200	S	1965-1966
18	MOYAR	1	(3X12)	MOYAR	EFR	NILGRIS	36	S	1952-1953
19	PAPANASAM	1	(4X8)	THAMBRAPA RANI	EFR	TIRUNELVELI	32	S	1944-1951
20	PARSON`S VALLEY	1	(1X30)	BHAVANI	EFR	NILGIRIS	30	S	2000
21	PERIYAR	1	(3X42)+ (1X35)	PERIYAR	WFR	IDUKKI	161	S	1958-1965
22	PYKARA	1	(3X7)+ (2X13.6)+ (1X11)	Glenmorgan Forebay dam	EFR	NILGRIS	59.2	S	1932-2005
23	PYKARA ULTMATE	1	(3X50)	PYKARA	EFR	NILGRIS	150	S	2005
24	SARKARPATHY	1	(1X30)	PARABIKUL AM	WFR	KOZHIKODE	30	R(P)	1966
25	SHOLAYAR I	1	(2X35)	SHOLAYAR	WFR	COIMBATORE	70	S	1971
26	SURULIYAR	1	(1X35)	ERAVANGAL AR	EFR	TIRUNELVELI	35	S	1978
26	TOTAL	26					1779 2		
26	TOTAL	20					1778.2		]

## 2. Projects developed below 25 MW

Sl.No.	Name of Scehme	River	Type	I.C.(MW)
1	Lower Bhavani	Bhavani	S	8

## 3. Project having Environment & Forest Issue

Sl.No.	Name of Scehme	River	Type	I.C.(MW)	Remarks
1	Nirar	Idamalayar	R	26	Dam and Power House Sites are falling within the Indira Gandhi National Park (Protected Area)
2	Paraliyar	Paraliyar	R	39	All Dam and Power House Sites are falling within Kanyakumari Wildlife Sanctuary (Protected Area)
3	Lower Moyar	Cauvery	S	33	The pickup dam site of Lower Moyar is located on the boundary of Bandipur Wildlife Sanctuary (protected Area) The Forebay dam is located of the project is located 4.1 km away from Bandipur Wildlife Sanctuary (protected Area). The Powerhouse site is located 0.5 km inside Bandipur Wildlife Sanctuary (protected Area)

# **4. Project having Interstate Issues**

Sl.No.	Name of Scehme	River	Type	I.C.(MW)	Remarks
1	Pandiyar Punnapuzha (Pandiyar-Punnapuzha I)	Pandiyar	S		•Involve interstate issue between Kerala & Tamil Nadu

# Status of Large Hydro Power Development in Jharkhand

		Nos.	Capacity (MW)
А	Identified Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (1978-87 Study)	8	582
В	Exploitable Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study)	4	300
	Breakup of Hydro Power Potential (2017-23 Study)		
I	Projects in operation	3	210
II	Balance Capacity	1	90

## A. Identified Projects during Reassessment study (1978-87):

Sl.No.	Name of Project	River	I. C. (MW)
1	Panchet Hill	Damodar	40
2	Maithon #	Damodar	60
3	Subernrekha MPP	Subernrekha	30
4	Koel Karo St-I (Lumpungkhel PH)	N.Koel	145
5	Serengada	N.Koel	37
6	Upper Sankh St-II	Sankh	55
7	Lower Sankh	Sankh	55
8	Khadwan	Sone	160
8	TOTAL		582

## B. Identified Projects during Reassessment study (2017-23):

Sl.No.	Name of Project	River	I. C. (MW)
1	Subernarekha-I	Subernarekha	65
2	Subernarekha-II	Subernarekha	65
3	Lower Sankh	Sankh	90
4	Panchet (Panchet Hill)	Damodar	80
4		300	

#### 1. H.E. Projects in Operation:

S. NO.	UTILITY / STATIONS	NO. OF STNS.	NO. OF UNITS X CAPACITY (MW)	RIVER / BASIN	DISTRICT	LC. (MW)	Type (R/S/R(P))	YEAR OF COMMISSIONING	
	DVC								
1	PANCHET	1	(2X40)	DAMODAR	DHANBAD	80	S	1990	
	SUB-TOTAL DVC	1				80			
	JUUNL								
1	SUBERNREKHA -I	1	(1X65)	SUBERNAR EKHA	RANCHI	65	S	1977	
2	SUBERNREKHA -II	1	(1X65)	SUBERNAR EKHA	RANCHI	65	R(P)	1980	
	TOTAL JUUNL	2				130			
3	TOTAL JHARKHAND	3				210			

Note: In addition to above, one pumped storage project, namely Panchet (1x40 = 40 MW) was constructed but not working in pumping mode as tail pool dam was not constructed and as per meeting held on 16th August , 2021 it was decided to remove the project from CEA's list of Pumped storage project .

#### 2. Balance Capacity

Sl. No.	Name of Project	River	Туре	I.C. (MW)	District
1	Lower Sankh	Sankh	S	90	Simdega
1	Total			90	

Note: R= Run of River, S=Storage & R(P)= Run of River with Pondage

### 3. Projects developed below 25 MW

Sl.No.	Name of Scehme	River	District	I.C.(MW)
1	Chandil dam (Subernrekha MPP)	Swarnrekha	Saraikela Kharsawan	8

## 4. Projects capacity reduced and became less than 25 MW after Reassessment study

Sl.No.	Name of Scheme	River	Туре	I.C.(MW)
1	Serengda	N. Karo	R	10

## 8. Project having Environment & Forest Issue

Sl.No.	Name of Scehme	River	Туре	I.C.(MW)	Remarks
1	Sankh-II (Upper Sankh st-Ii)	Sankh	s	316	•Budhamba forebay dam and power house site are falling 2.3 km and 3.7 km respectively within the Palkot Wildlife Sanctuary

#### Note:

<sup>·</sup> Maithon is in operation in West Bengal State
•Indrapuri( Kahdwan) is in Bihar and has an interstate aspect with UP, Jharkhand & MP.

<sup>•</sup>Koel Karo(Koel Karo st-I(Lumpungkhel P/H)) has been dropped due to financial difficulty and exorbitant rise in project cost & estimate

# **Status of Large Hydro Power Development in Bihar**

		Nos.	I.C. (MW)
А	Identified Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (1978-87 Study)	1	40
В	Exploitable Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study)	1	130.1
	Breakup of Hydro Power Potential (2017-23 Study)		
I	DPR Prepared		
(i)	Projects returned to project authorities	1	130.1

A. Identified Projects during Reassessment study (1978-87)

S.No.	Name	River	IC
1	Eastern Gandak Canal	Gandak	40
1	Total	40	

# B. Identified Projects during Reassessment study (2017-23)

S.No.	Name	River	IC	District	Type
1	Dagmara	Kosi	130.1	Supaul	ROR
1	Total	130.1			

## 1. H.E. Projects Returned to Project Authorities for re-submission after compliance of observations:

S1.No.	Name of Project	River	I.C. (MW)	Date of return	Status
1	Dagmara	Kosi	130.1	Jan-22	Returned
	Total		130.1		

## 9. Projects developed below 25 MW

Sl.No.	Name of Scehme	River	Type	I.C.(MW)
1	Eastern Gandak Canal	Gandak	R	15

## Status of Large Hydro Power Development in Odisha

			Nos.	Capacity (MW)
A	Identified Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (1978-87 Study)		13	2981
В	Projec (Projec	itable Large Hydro Power Potential from Hydroelectric ts cts having capacity above 25 MW) 23 Study)	13	2824.50
	Breaku	p of Hydro Power Potential (2017-23 Study)		
I	Projec	ts In Operation	7	2154.55
II	Projec	ts allotted by States for development		
	II-A DPR Under Preparation			
	(i)	Projects on which S&I held up	2	128
Ш	Balanc	ce Capacity*	4	544

Note : In addition to above, one pumped storage namely Upper Indravati (4x150 =600 MW) is under S&I and two pumped storage projects, namely , Upper Kolab (2x160 =320 MW) and Balimela (2x250= 500 MW) are under S&I Held Up

\*Balance Capacity is different from arithmetic calculation from the potential accessed due to change in capacity of the Projects, addition/deletion of the projects and merger of two projects into one etc.

## A. Identified Projects during Reassessment study (1978-87):

Sl.No.	Name of Project	River	IC
1	Bhimkund	Baitarni	29
2	Baljori	Baitarni	230
3	Lodani	Brahmani	42
4	Rengali	Brahmani	135
5	Naraj	Mahanadi	215
6	Tikkarpara	Mahanadi	205
7	Hirakud St-III	Mahanadi	175
8	Hirakud St-II	Mahanadi	155
9	Hirakud St-I	Mahanadi	150
10	Upper Indravati	Indravati	585
11	Upper Kolab	Sabari	280
12	Lower Kolab	Sabari	375
13	Balimela	Balimela	405
13	Total		2981

## B. Identified Projects during Reassessment study (2017-23):

Sl.No.	Name of Project	River	IC
1	Bhimkund	Baitarni	30
2	Baljori	Baitarni	230
3	Lodani	Brahmani	64
4	Rengali	Brahmani	250
5	Tikarpara	Mahanadi	220
6	Hirakud (Burla) (Hirakud-I)	Mahanadi	275.5
7	Hirakud (Chiplima) (Hirakud-II)	Mahanadi	72
8	Salki	Salki	70
9	Kharag	Kharag	63
10	Upper Indravati	Indravati	600
11	Upper Kolab	Kolab	320
12	Machkund	Machkund	120
13	Balimela	Sileru	510
13	Total		2824.5

## 1. H.E. Projects in Operation:

S. NO.	UTILITY/ STATIONS	NO. OF STNS.	NO. OF UNITS X CAPACITY (MW)	RIVER	DISTRICT	I.C. (MW)	Type (R/S/R(P))	YEAR OF COMMISSIONING
	ОНРС							
1	BALIMELA	1	(6X60)+ (2X75)	SILERU	MALKANGIRI	510	S	1973-1977, 2008
2	HIRAKUD (BURLA)	1	(2X43.65)+ (1X37.5)+(2X4 9.5)+(2X32)	MAHANADI	SAMBALPUR	287.8	s	1956-1990
3	HIRAKUD (CHIPLIMA)	1	(3X24)	MAHANADI	SAMBALPUR	72	R(P)	1962-1964
4	RENGALI	1	(5X50)	BRAHMANI	ANGUL	250	S	1985-1992
5	UPPER INDRAVATI	1	(4X150)	INDRAVATI	KALAHANDI	600	S	1999-2001
6	UPPER KOLAB	1	(4X80)	KOLAB	KORAPUT	320	S	1988-1993
	TOTAL OHPC	6				2039.8		
	APGENCO							
1	MACHKUND	1	(3X17)+ (3X21.25)	MACHKUND	KORAPUT	114.75	S	1959
	SUB-TOTAL APGENCO	1				114.75		
7	TOTAL ODISHA	7				2154.55		

Note: Hirakud (Burla & Chiplima) and Rengali are in CIR basin & others are in EFR Basin.

## 2. H.E. Projects on which Survey & Investigation held up:

Sl. No.	Name of Project	Basin/River	I.C. (MW)	Agency
1	Salki	Salki	65	OHPCL
2	Kharag	Kharag	63	OHPCL
2	Total		128	

#### 3. Balance Capacity

Sl.No.	Name of Project	River	Туре	I.C. (MW)	District
1	Bhimkund	Baitarni	S	30	Keonjhar
2	Baljori	Baitarni	S	230	Keonjhar
3	Lodani	Brahmani	S	64	Sundergarh
4	Tikkarpara	Mahanadi	S	220	Angul
4	Total			544	

## 4. Project having Environment & Forest Issue

Sl.No.	Name of Scehme	River	Туре	I.C.(MW)	Remarks
1	Naraj	Mahanadi	S	287	Dam site is falling 600 m within the Chandaka Eco-Sensitive Area

#### Note:

- •Hirakud St. III was identified in one stage and now it is proposed in three stages namely Sindol I, Sindol II & Sindol III . Sindol II & Sindol III are in interstate issue as the consent of the upstream States viz. Jharkhand, Bihar, Madhya Pradesh, Chhattisgarh and Maharashtra is not available.
- •Lower Kolab is located at the Downstream of Middle Kolab which is Under Interstate issue. As the outflows of Middle Kolab would be taken as inflows for Lower Kolab, therefore Lower Kolab could be taken up for further study only after the resolution of Middle Kolab Interstate Issue

# **Status of Large Hydro Power Development in West Bengal**

			Nos.	Capacity (MW)
А	Hydroelectric Pr	capacity above 25 MW)	6	2829
В	Hydroelectric Pr	capacity above 25 MW)	10	809.2
Br	reakup of Hydro	Power Potential (2017-23 Study)		
I	Projects in operation		5	441.2
II	Projects under a	ctive construction	1	120
III	Projects allotted	by States for development		
	III-A	DPR Under Preparation		
	(i)	Projects under S&I	1	90
	Projects allotted for development on which S&I is held up/ yet to be taken up		1	71
IV	Balance Capacit	y*	2	140

Note : In addition to above, one pumped storage namely Purulia (900 MW) is In Operation & One Pumped storage namely Turga (1000 MW) is in Concurred category

<sup>\*</sup>The capacity yet to be allotted by the State for development is different from arithmetic calculation from the potential accessed due to change in capacity of the projects, addition/deletion of the projects and merger of two projects into one etc.

# A. Identified Projects during Reassessment study (1978-87)

Sl.No.	Name of Project	River	I. C. (MW)
1	Balason	Balason	33
2	Teesta High Dam	Teesta	2505
3	Rammam-I	Rammam	70
4	Rammam-II	Rammam	85
5	Rammam-III	Rammam	100
6	Jaldhaka-I	Jaldhaka	36
6	TOTAL		2829

# **B** Identified Projects during Reassessment study (2017-23)

S.no	Name	River	Installed Capacity(MW)
1	Rammam I	Rammam	60
2	Rammam II	Rammam	50
3	Rammam III	Rammam	120
4	Tessta Low dam -IV (Teesta High Dam)	Teesta	160
5	Teesta Low Dam III	Teesta	132
6	TLDP- I&II	Great Rangit	56
7	Teesta Intermediate	Teesta	52
8	Teesta Low Dam Project V	Teesta	80
9	Jaldhaka (Jaldhaka I)	Jaldhaka	36
10	Maithon	Basakar	63.2
10	TOTAL		809.2

## 1. H.E. Projects in Operation:

Sl.No.	Name of Project	Agency	District	River /Basin*	I. C.	Type (R/S/R(P))	Year of Commissioning
1	Jaldhaka	WBSEDCL	KALIMPONG	Di chu, Ni chu & Bindu Khola River	36	R(P)	1967- 72,2012
2	Rammam-II	WBSEDCL	DARJEELING	Rammam	50	R	1995-96
3	Teesta Low Dam-III	NHPC	DARJEELING	Teesta	132	R(P)	2013-14
4	Maithon	DVC	WEST DHANBAD	Basakar	63.2	S	1957-58
5	Teesta Low Dam-IV	NHPC	DARJEELING	Teesta Kalikhola confluence	160	R(P)	2016
5	Total				441.2		

<sup>\*</sup> Maithon is in Ganga and others are in Brahmaputra Basin.

Note: In addition to above, one pumped storage project, namely Purulia PSS (4x225 = 900 MW) is constructed & working in pumping mode while one project, namely Turga PSS (4x250 = 1000 MW) is concurred by CEA.

## 2. H.E. Projects under active Construction:

Sl. No.	Name of Project	Agency	District	River / Basin	I. C. (MW)	Type (R/S/R(P))	Likely Commissioning
1	Rammam-III	NTPC	Darjeeling	Rammam/ Rangit/ Teesta /Brahmaputra	120	R	2025-26 (July'25)
1					120		

## 3. H.E. Projects Under Survey & Investigation:

Sl. No.	Name of Project	Basin/River	Agency for DPR	I.C. (MW)	District	Type (R/S/R(P))	Date of MOA	Target date of Preparation of DPR
1	Teesta Intermediate	Teesta	WBSEDCL	90	Darjeeling	ROR		03/24
1				90				

#### 4. H.E Projects on which Survey & Investigation held up:

Sl.No.	Name of Project	Basin /River	Agency	I.C. (MW)	Date of MOA	Remarks
1	TLDP-I&II	Teesta/Badi (Great Rangit)	NHPC	71	30.07.15	S&I held up due to withdrawal of consent for the project by Govt. of Sikkim on 30.01.2017. The project handed over to WBSEDCL, Govt. of West Bengal due to Non-availability of consent from Govt. of Sikkim and also due to commercial unviability. Project Concept note with revised capacity of 71 MW with an estimated cost of Rs. 800 Cr. prepared by WBSEDCL.
1	Total			71		

# 5. Balance Capacity

Sl.No.	Name of Project	River	Туре	I.C.(MW)	District
1	Rammam-I	Rammam	RoR	60	Darjeeling
2	Teesta Low Dam Project V	Teesta	RoR	80	Darjeeling
2	Total			140	

Note: R-Run of the River

# 6. Projects capacity reduced and became less than 25 MW after Reassessment study

Sl.No.	Name of Scheme	River	Туре	I.C.(MW)
1	Balason	Balason	R	9

# Status of Large Hydro Power Development in Sikkim

			Nos.	Capacity (MW)
А	Hydroele	Large Hydro Power Potential from ctric Projects having capacity above 25 MW) Study)	24	4248
В	Exploitable Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study)		34	6051
	Breakup o	f Hydro power Potential (2017-23)		
I	Projects i	n operation	8	2282
II A	Projects under active construction		2	620
ΗВ	H.E. Projects on which Construction is held up		3	417
III	Projects a	illotted by States for development		
	III-A	DPR Prepared		
	(i)	Projects concurred by CEA and yet to be taken up for construction	1	520
	III-B DPR Under Preparation			
	(i) Projects allotted for development on which S&I is held up/ yet to be taken up		2	92
IV	Balance (	Capacity*	18	2146

<sup>\*</sup>Balance Capacity is different from arithmetic calculation from the potential accessed due to change in capacity of the Projects, addition/deletion of the projects and merger of two projects into one etc.

Sl.No.	Name of Project	River	Туре	IC
1	Kalep	Tista	R	41
2	Talem	Tista	R	65
3	Jedang	Lhonak	R	185
4	Zema	Tista	R	125
5	Serum	Sebokung	R	50
6	Lachung	Lachung	R	30
7	Ringpi	Ringpi	R	160
8	Lingza	Ringpi	R	160
9	Rukel	Tolung	R	90
10	Rangyong	Tolung	R	175
11	Dikchu	Dikchu	R	90
12	Chhota Pathing	Rongpo	R	55
13	Rongni Storage	Rongni	R	95
14	Mana	G.Ranjit	R	37
15	Yoksam	Rathong	R	44
16	Namlum	G.Ranjit	R	175
17	Gompa	G.Ranjit	R	46
18	Ligship	G.Ranjit	R	115
19	Chunthang	Tista	R	830
20	Singhik	Tista	R	685
21	Panan	Tolung	R	230
22	Mangan	Tista	R	445
23	Samdong	Tista	R	280
24	Lower Lagyap	Rongpi	R	40
24	Total		<del>                                     </del>	4248

# B. Identified Projects during Reassessment study (2017-23):

S.no	Name	River	Installed Capacity
	W-1	Tista	54
2	Kalep Talem	Tista	44
3	Jedang	Lhonak	160
	Teesta-I		
4	(zeema)	Teesta	320
5	Serum	Sebokung	115
6	Lachung	Lachung	75
7	Teesta-II	Lachen Chu	410
8	Lachen (Chunthang)	Teesta	160
9	Ringpi	Ringpi	120
10	Rukel	Rongni chu	26
11	Rangyong	Rongni chu	248
12	Panan	Toulng	300
13	Teesta-III (Singhik)	Teesta	1200
14	Teesta St-IV (Mangan)	Teesta	520
15	Dikchu	Dikchu	96
16	Teesta- V (samdong)	Teesta	510
17	Lower lagyap	Rongni	26
18	Chhot pathing	Rangpo	55
19	Rongnichu (Rongni Storage)	Rangpo	113
20	Mana	G. Rangit	44
21	Lethang (Yoksam)	Ranthang chu	98
22	Namlum	G. Rangit	50
23	Rangit (Gompa+ Ligship)	Teesta	60
24	Chujachen	Rangpo	110
25	Jorethang Loop	Rangit	96
26	Rangit-II	Rimbi	66
27	Teesta-VI	Teesta	500
28	Rangit-IV	Rangit	120
29	Bhasmey	Rangpo	51
30	Tashiding	Ranthang chu	97
31	Kalez Khola	KalezKhola	34
32	Suntaleytar	Rangpo Chu	32
33	Bimkyong	Lachung Chu	66
34	BOP	Lachung Chu	75
34			6051

## 1. H.E. Projects in Operation:

S. NO.	UTILITY/ STATIONS	NO. OF STNS.	NO. OF UNITS X CAPACITY (MW)	RIVER / BASIN*	DISTRICT	I.C. (MW)	Type (R/S/R(P))	YEAR OF COMMISSIONING			
	NHPC										
1	RANGIT	1	(3X20)	RANGIT	GANGTOK	60	R(P)	2000			
2	TEESTA-V	1	(3X170)	TEESTA	EAST SIKKIM	510	R(P)	2008			
	SUB-TOTAL NHPC	2				570					
	STATE										
	TEESTA URJA LTD. (TUL)										
3	TEESTA-III	1	(6X200)	TEESTA	NORTH SIKKIM	1200	R(P)	2017			
	SUB-TOTAL TUL	1				1200					
	PRIVATE										
	GIPL (GATI INFRA PRIVATE LTD.)										
4	CHUZACHEN	1	(2*55)	RONGLI & RANGPO	EAST SIKKIM	110	R(P)	2013			
	SNEHA KINETIC PO	WER PROJI	ECTS PVT LTD (	SKPPPL)							
5	DIKCHU	1	(2*48)		EAST & NORTH SIKKIM	96	R(P)	2017			
	SHIGA ENERGY PVI	LTD (SEPL	)								
6	TASHIDING	1	(2*48.50)	RATHANG CHU		97	R(P)	2017			
	DANS ENERGY PVT	LTD. (DEPL	)								
7	JORETHANG LOOP	1	(2*48)	RANGIT	SOUTH /WEST	96	R(P)	2015			
	Madhya Bharat Pvt Co	ompany (MB	PC)								
8	RONGNICHU	1	2*56.5	Rongnichu/ Teesta/Brahmaputra	EAST SIKKIM	113	R	2021			
	SUB-TOTAL PRIVATE	5				512					
8	TOTAL SIKKIM	8				2282					

<sup>\*</sup> All projects are in Brahamputra Basin

## 2. H.E. Projects under active Construction:

Sl. No.	Name of Project	Agency	District	I.C. (MW)	River/ Basin	Type (R/S/R(P))	Likely Commissioning
1	Teesta St. VI	NHPC	South Sikkim	500	Teesta/ Brahmaputra	R	2026-27 (August'26)
2	Rangit-IV	NHPC	West Sikkim	120	Rangit/ Teesta/ Brahmaputra	R	2024-25 (Aug'24)
2	Total			620			

## 3. H.E. Projects on which Construction is held up:

Sl. No.	Name of Project	Agency	District	I.C. (MW)	River/ Basin	Type (R/S/R(P))	Status & Likely Commissioning	
					Rangpo/ Teesta			
1	Bhasmey	Gati Infrastructure	East Sikkim	51	Brahmaputra	R	Works are stalled since Sept., 2016 due to funds constraints with developer.	
			Greater Rangit/ Teesta		Works are stalled since December, 2017 due to funds			
2	Rangit-II	Sikkim Hydro	West Sikkim	66	Brahmaputra	R	constraints with developer. Project is in NCLT since 30.07.2020.	
					Rangyongchu/ Teesta			
3	3 Panan Himagiri Nor		North Sikkim 300		Brahmaputra	R	Construction of bridge on Mantham lake for accessibility of site is now being started. The works are likely to start soon after accessibility to Dam site is achieved.	
3	Total			417				

 $<sup>\</sup>ensuremath{^*}$  The Project is presently stalled. Commissioning is subject to restart of works

#### 4. H.E. Projects concurred by CEA and yet to be taken up for construction:

Sl. No	Name of Project	Agency	River	LC. (MW)	District	Date of CEA Concurrence	Type (R/S/R(P))	Status	
1	Teesta St-IV	NHPC	Teesta	520	North Sikkim	13.05.10	R(P)		EC accorded on 09.01.14. FC-I accorded on 26.02.13. FC-II is yet to be obtained #
1		Total			520				

#• NHPC on. 21.8.2020 has requested DC (North), Sikkim to intervene into the matter of pending Gram Sabha meetings at remaining 3 GPU's for settlement of rights under FRA, 2006.

• NHPC vide letter dt. 15.03.2021 has again requested DC (North), Sikkim to intervene into the matter of pending Gram Sabha meetings at remaining 3 GPU's and completion of settlement of rights under FRA, 2006

• CMD, NHPC along with Senior Officers of NHPC had a meeting with Chief Secretary & Addl. Chief Secretary of Sikkim on 0.2.03.2021 and with Sh. Prem Singh Tamang, Hon'ble CM of Sikkim on 2.0.03.21, During the meetings, various pending issues related to the projet were discussed and they assured all possible cooperation and assistance of the State Accomment to NHPC

dated 24.05.2021 has requested Hon'ble Minister, Rural Development, Cooperation and Ecclesiastical department, Govt. of Sikkim for expeditious resolution of issues related Forest Clearance St-II and private land acquisition of Teesta-IV HEP.

\*\*NHPC\*\* vide letter dated 25.5.2021 has requested DC (North), Sikkim for completing the process under FRA, 2006 and for persuasion of early publication of Notice under section 11 (1) RFCTLARR act, 2013

CMD, NHPC met Hon'ble Chief Ministers, Sikkim on 29.10.2022 to discuss early implementation of Teesta Stage-IV HE Project. NHPC vide letter dated 12.11.2022 requested Chief Secretary, Govt of Sikkim for completion of remaining Gram Sabha meetings and process of settlement of rights.

#### 5. H.E. Projects on which Survey & Investigation held up:

Sl. No.	Name of Project	Basin/River	Agency	I.C. (MW)	Date of MOA	District	Remarks
1	Kalez khola	Kalez khola/ Rangit	cwc	52	12.2.2007	West Sikkim	Due to objection raised by local people against Topographical Survey.
2	Suntaleytar	Rangpochu	Hindustan Electric Power Ltd.	40	LOI date 23.02.12	East Sikkim	S&I to be taken up after finalization of MOA.
2	Total			92			

## 6.Balance Capacity

Sl.No.	Name of Project	River	Type (R/S/R(P))	IC	District
1	Kalep	Tista	R	54	North Sikkim
2	Talem	Tista	R	44	North Sikkim
3	Jedang	Lhonak	R	160	North Sikkim
4	Teesta-I (zeema)	Tista	R	320	North Sikkim
5	Serum	Sebokung	R	115	North Sikkim
6	Lachung Lachung		R	75	North Sikkim
7	Ringpi	Ringpi	R	120	North Sikkim
8	Rukel	Tolung	R	26	North Sikkim
9	Rangyong	Tolung	R	248	North Sikkim
10	Chhota Pathing	Rongpo	R	55	East Sikkim
11	Mana	G.Ranjit	R	44	South Sikkim
12	Namlum	G.Ranjit	R	50	North Sikkim
13	Lower Lagyap	Rongpi	R	26	East Sikkim
14	Teesta St-II	Teesta	R	410	North Sikkim
15	Lachen (Chunthang)	Teesta	R	160	North Sikkim
16	Bimkyong	Lachung Chu	R	66	North Sikkim
17	BOP Lachung Chu		R	75	North Sikkim
18	Lethang (Yoksam) Ranthang chu		R	98	West Sikkim
18		Total		2146	

Note: R= Run of River, S=Storage & R(P)= Run of River with Pondage

## 7. Projects capacity reduced and became less than 25 MW after Reassessment study

Sl.No.	Name of Scheme	River	Type	I.C.(MW)
1	Lingza	Ringpi	R	21

# Status of Large Hydro Power Development in Meghalaya

			Nos.	Capacity (MW)
А	(Projec	ied Large Hydro Power Potential from Hydroelectric Projects ets having capacity above 25 MW) 87 Study)	25	2298
В	(Projec	table Large Hydro Power Potential from Hydroelectric Projects ets having capacity above 25 MW) 23 Study)	22	2026
Brea	ıkup of	Hydro Power Potentia (2017-23 Study)		
I	Project	ss In Operation	5	322
II	Project	s allotted by States for development		
	II-A	DPR Prepared		
	(i)	Projects concurred by CEA and yet to be taken up for construction	1	85
	II-B	DPR Under Preparation		
	(i) Projects under S&I		2	270
	(ii)	Projects allotted for development on which S&I is held up/ yet to be taken up	2	620
III	Balanc	e Capacity*	12	1156

<sup>\*</sup>Balance Capacity is different from arithmetic calculation from the potential accessed due to change in capacity of the Projects, addition/deletion of the projects and merger of two projects into one etc.

# $\boldsymbol{A}$ . Identified Projects during Reassessment study (1978-87)

Sl.No.	Name of Project	River	I. C. (MW)
1	Umlamphang	Umiam	28
2	Umiam Umtru-III	Umiam	41
3	Umiam Umtru-IV	Umiam	38
4	Umiam Umtru-V	Umiam	27
5	Umiam Umtru-VI	Umiam	145
6	Simsang Dam P.H.	Someshri	65
7	Kynshi-I	Kynshi	295
8	Sushen	Myntdu	150
9	Selim	Myntdu	125
10	Umjaut	Umjaut	85
11	Umduma	Umtrew	95
12	Manhu	Umtru	90
13	Nonglyngkien	Umtru	47
14	Umngi Storage	Umngi	35
15	Rangmaw	Umngi	42
16	Nongkolait	Umngi	180
17	Nongnam	Umngi	36
18	Mawpat	Umngi	55
19	Kynshi-II	Umrilang	175
20	Nangmawlar	Kynshi	29
21	Mawsyrpat	Kynshi	45
22	Mawthaba	Kynshi	70
23	Mawblei Storage	Kynshi	100
24	Amagam Storage	Rongdi	35
25	Umngot Storage	Umngot	265
25	TOTAL	2298	

# **B.** Identified Projects during Reassessment study (2017-23)

S. No.	Name	River	Installed Capacity				
1	Kyrdamkulai (Umiam Umtru-III)	Umtru	60				
2	Umiam (Umtru) St IV	Tail Water of Umaim st. III	60				
3	Umium-Ummtru VI	Umtru	39				
4	Umlamphang	Umiam	28				
5	Umaim Stage -I	Umiam	36				
6	New Umtru	Umtru	40				
7	Selim	Myntdu	54				
8	Umanghot	Umngot	220				
9	Umjaut	Umiew	72				
10	Umduna (Umduma)	Umiam	60				
11	Wah Umiam Stage-III (Mawhu+ Nonglyngkien)	Umiew	85				
12	Umngi Stage-I (Umngi Storage+ Rangmaw)	Umngi	30				
13	Nongam	Umngi	165				
14	Mawpat	Umngi	30				
15	Kynshi II (Mawthaba)	Kynshi	278				
16	Kynshi I (Mawsyrpat+ Kynshi -I storage)	Kynshi	270				
17	Nangmawlar (Nongmawlar)	Kynshi	106				
18	Mawblei Storage	Wahblei	110				
19	Simsang Dam P/H	Someshri	66				
20	Amagam Storage	Rongdi	26				
21	Myntdu Leshka stage I	Myntdu	126				
22	Myntdu Leshka St-II	Myntdu	65				
22	, , , , , , , , , , , , , , , , , , ,						

## 1. H.E. Projects in Operation:

S. No.	Utility/Stations	No. of Stns.	No. of units x Capacity (MW)	River / Basin*	District	I.C. (MW)	Type (R/S/R(P))	Year of commissioning		
	MePGCL									
1	KYRDEMKULAI	1	(2X30)	Tail water of Umiam stage-II & Umtru river	RI-BHOI	60	R(P)	1979		
2	UMIAM ST-I	1	(4X9)	UMIAM	RI-BHOI	36	S	1965		
3	NEW UMTRU	1	(2X20)	UMTRU	RI-BHOI	40	R(P)	2017		
4	UMIAM ST-IV	1	(2X30)	Tail water of Stage-III PH & own catchment	RI-BHOI	60	R(P)	1992		
5	MYNTDU ST-I	1	(3X42)	MYNTDU	JAINTIA HILLS	126	R(P)	2012		
5	TOTAL MePGCL	5				322				

<sup>\*</sup> All projects are in Brahamputra Basin

## 2. H.E. Projects concurred by CEA and yet to be taken up for construction:

Sl No.	Name of Project	Agency	District	I.C. (MW)	Date of CEA Concurrence	Type (R/S/R(P))	Status
1	Wah Umiam Stage-III	NEEPCO	East Khasi Hills	85	26.07.2021	R	EC recommended by EAC on 26.02.2018. However, EC will be issued immediately on submission of Stage-I Forest Clearance. FC yet to be obtained. Stage-II Forest Clearance (Final FC) will be issued only after compliance of Stage-I Forest Clearance by NEEPCO.
1	Total			85			

#### 3. H.E. Projects Under Survey & Investigation:

Sl. No.	Name of Project	Basin /River	Agency	I.C. (MW)	District	Type (R/S/R(P))	Date of MOA	Target date of Preparation of DPR
1	Myntdu Leshka st-II	Myntdu	MePGCL	210	West Jaintia Hills	R	20.4.12	Dec-22
2	Simsang Dam Project	/Somershwari	Brahmaputra Board	60	South Garo Hills	МРР		
2	Total			270				

## $\textbf{4.} \quad \textbf{H.E. Projects allotted for development on which Survey \& Investigation is held up/yet to be taken up:} \\$

Sl. No.	Name of Project	I. C.(MW)	Agency	Date of Allotment/ MoA	District	Status
1	Kynshi-II	450	GoMe & Jaiprakash Power Venture Ltd. (JV)	11.12.2007	West Khasi Hills	S&I held up on account of non-finalisation of dam location/height due to deposit of Uranium. I.C. revised to 325 MW. GoMe informed vide their letter dated 28.11.2019 that project has been kept in abeyance since 2012 due to presence of Uranium deposits within the Dam & Reservoir areas of the project.
2	Selim	170	MePGCL	2008	East & West Jaintia Hills	S&I held up due to irregular allocation/release of funds, the hostile terrain, non and non-availability of geologists from GSI, India.  MePGCL vide their letter dated 01.11.2019 informed that installed capacity is likely to be 60 MW.
2	Total	620				

Note: R= Run of River, S=Storage & R(P)= Run of River with Pondage

#### 5. Balance Capacity

	тапсе Сараспу				
Sl.No.	Name of Project	River	I.C (MW)	District	Туре
1	Umium-Ummtru VI	Umtru	39	Ri-Bhoi	S
2	Umlamphang	Umiam	28	Ri-Bhoi	R
3	Nongam	Umngi	165	East Khasi Hills	R
4	Mawpat	Umngi	30	West Khasi Hills	R
5	Nangmawlar	Kynshi	106	West Khasi Hills	R
6	Amagam Storage	Rongdi	26	East Garo hills	S
7	Umjaut	Umiew	72	Umiew	R
8	Umduna (Umduma)	Umiam	60	Umiam	R
9	Umngi Stage-I (Umngi Storage+ Rangmaw)	Umngi	30	Umngi	S
10	Kynshi I (Mawsyrpat+ Kynshi -I storage)	Kynshi	270	Kynshi	S
11	Mawblei Storage	Wahblei	110	Wahblei	S
12	Umanghot (Umngot Stor.)	Umngot	220	Umngot	R
12	Total		1156		
Note: R -F	Run of the River & S- Stora	ge	•		

## 6. Project having Environment & Forest Issue

Sl.No.	Name of Scehme	River	Туре	I.C.(MW)	Remarks
1	Umiam Umtru-V	Umiam	R	27	Dam Site and powerhouse site of Umium-Ummtru V HEP is located within Nongkhyllem Wildlife

## 7. Projects capacity reduced and became less than 25 MW after Reassessment study

Sl.No.	Name of Scheme	River	Туре	I.C.(MW)
1	Sushen	Myntdu	R	22
2	Nongkolait	Umngi	R	12

# **Status of Large Hydro Power Development in Tripura**

No Large Hydroelectric Project has been identified in the Tripura State. However, a small Hydel power station in south Tripura named Gumti Hydel project having only 3x5 MW capacities. The details are as under:

Name of Project	Unit		Year of Installation	Phase	
	Unit-I	5.00 MW	1976	Phase I	
Gumti H.E. Project	Unit-II	5.00 MW	1976		
	Unit-III	5.00 MW	1984	Phase II	

# **Status of Large Hydro Power Development in Manipur**

		Nos.	Capacity (MW)
А	Identified Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (1978-87 Study)	15	1761
В	Exploitable Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study)	9	615
Br	eakup of Hydro Power Potential (2017-23 Study)		
I	Projects in operation	1	105
II	Balance Capacity*	8	510

<sup>\*</sup>Balance Capacity is different from arithmetic calculation from the potential accessed due to change in capacity of the Projects, addition/deletion of the projects and merger of two projects into one etc.

## A Identified Projects during Reassessment study(1978-87):

Sl.No.	Name of Project	River	I. C. (MW)
1	Laniye-II	Laniye	27
2	Laniye-I	Laniye	34
3	Khongnem Chakha-II	Barak	90
4	Khongnem Chakha-III	Barak	48
5	Nungnang	Irang	70
6	Nungliban	Leimatek	85
7	Khunou	Leimatek	115
8	Thinghat	Tuivai	41
9	Sinjal	Tuivai	39
10	Bungpuilong	Tuivai	80
11	Tipaimukh	Barak	510
12	Irang	Irang	75
13	Pabaram	Barak	232
14	Loktak	Loktak	105
15	Tuivai	Tuivai	210
15	TOT	AL	1761

## B. Identified Projects during Reassessment study (2017-23)

S. No.	Name	River	Installed Capacity	
1	Khongem Chakha II	Barak	40	
2	Khongem Chakha III	Barak	28	
3	Irang	Irang	60	
4	Pabaram	Barak	213	
5	Nungnag	Irang	28	
6	Loktak D/s (Khunou)	Leimatak	66	
7	Loktak	Imphal	105	
8	Thinghat	Tuival	45	
9	Maklang - Tuyungbi	Maklang Tuyungbi	30	
9	TOTAL		615	

#### 1. H.E. Projects in Operation:

Sl.No.	Name of Project	Agency	I. C. (MW)	River/ Basin	District	Type (R/S/R(P))	Year of Commissioning
NHPC							
1	Loktak	NHPC	105	Loktak Lake/ Brahmputra	Churachandpur	S	1983
1	Total		105				

Note: R= Run of River, S=Storage & R(P)= Run of River with Pondage

#### 2. Balance Capacity

Sl.No.	Name of Project	River	Туре	I.C.(MW)	District
1	Khongnem Chakha-II	Barak	S	40	Senapati
2	Khongnem Chakha-III	Barak	R	28	Senapati
3	Nungnag Iran		S	28	Tamenglong
4	Thinghat	Tuivai	S	45	Churachandpur
5	Irang	Irang	S	60	Tamenglong
6	Pabaram	Barak	S	213	Tamenglong
7	Maklang - Tuyungbi	Maklang & Tuyungbi	S	30	Ukhrul
8	Loktak D/S (Khunou)	Leimetak	R	66	Tamenglong
8	Total		•	510	

Note: R –Run of the River & S- Storage

#### 3. Project having Environment & Forest Issue

Sl.No.	Name of Scehme	River	Type	I.C.(MW)	Remarks
1	Tipaimukh	Barak	S	1500	Project Unexploitable due to MOEF&CC declining diversion of forest land falling in Manipur and Mizoram.

## 4.. Projects capacity reduced and became less than 25 MW after Reassessment study

Sl.No.	Name of Scheme	River	Type	I.C.(MW)
1	Laniye-I	Laniye	S	25
2	Laniye-II	Laniye	R	11
3	Nunglieban	Leimatek	S	14
4	Sinjal	Tuivai	S	20

#### Note:

ulletTuivai is in Balance capacity in Mizoram and the project has been overlapped Bungpuilong .

## Status of Large Hydro Power Development in Assam

			Nos.	Capacity (MW)
А	Projects	Hydro Power Potential from Hydroelectric capacity above 25 MW)	9	650
В	Projects	e Hydro Power Potential from Hydroelectric capacity above 25 MW)	8	643
	Breakup of Hyd	ro Power Potential (2017-23 study)		
I	Projects in opera	tion	3	350
II	Projects under ac	tive construction	1	120
III	Projects allotted	by States for development		
	III-A DPR Prepared			
	(i)	Projects returned to project authorities	1	60
IV	Balance Capacity	·*	3	143

<sup>\*</sup>Balance Capacity is different from arithmetic calculation from the potential accessed due to change in capacity of the Projects, addition/deletion of the projects and merger of two projects into one etc.

#### A. Identified Projects during Reassessment study (1978-87):

Sl.No.	Name of Project	River	I. C. (MW)
1	Dilli Stor.	Disang	33
2	Jamuna Dam P/H	Jamuna	28
3	Diyung Dam P/H	Diyung	47
4	Langey	Borpani	37
5	Kopili I	Kopili	50
6	Kopili II	Kopili	265
7	Lower Borpani	Borpani	90
8	Amring	Amring	40
9	Upper Borpani	Borpani	60
9	TOTAL	650	

## B. Identified Projects during Reassessment study (2017-23):

S.no	Name	River	Installed Capacity (MW)
1	Dilli (Dilli Stor.)	Disang	28
2	Diyung Dam P/H	Diyung	45
3	Khandong (Kopili-I) Kopili		50
4	Kopili (Kopili II )	Umrong	200
5	Amring	Amring	70
6	Karbi Langpi (Upper Borpani)	Borpani	30
7	Karbi langpi (Lower Borpani)	Borpani	100
8	Lower Kopili Kopili		120
8	TOTAL		643

#### 1. H.E. Projects in Operation:

S.No	UTILITY/ STATIONS	NO. OF STATIONS	No. of Units	NO. OF UNITS X CAPACITY (MW)	RIVER/ BASIN*	DISTRICT	CAPACITY (MW)	Type (R/S/R(P))	YEAR OF COMMISSIONING
	NEEPCO								
1	KOPILI	1	4	(4X50)	KOPILI	DIMA HASAO	200	S	1988
2	KHONDONG	1	2	(2X25)	KOPILI	DIMA HASAO	50	S	1984
	SUB-TOTAL NEEPCO	2	6				250		
	APGCL								
3	KARBI LANGPI [Lower Borpani]	1	2	(2X50)	BORPANI	KARBI ANGLONG	100	R(P)	2007
	SUB-TOTAL APGCL	1	2				100		
3	TOTAL ASSAM	3	8				350		

<sup>\*</sup> All projects are in Brahamputra Basin

#### 2. H.E. Projects under active construction:

Sl No.	Name of Project	Agency	District	River / Basin*	I.C.(MW)	River	Type (R/S/R(P))	Likely Commissioning
1	Lower Kopili	APGCL	Karbi Anglong & Dima Hasao	Kopili / Brahamputra	120	Kopili	R	2024-25 (Mar'25)
1	Total				120			

Note :R= Run of River, S=Storage & R(P)= Run of River with Pondage

# 3. H.E. Projects Returned to Project Authorities for re-submission after compliance of observations:

Sl. No	Name of Project	Agency	I.C. (MW)	Month of Return/Reason of Return
1	Karbi Langpi (Upper Borpani)	ASEB	60	Returned on 12/08 due to involvement of interstate aspects with Meghalaya, updated hydrology not been utilized for carrying out power potential study, cost estimates not framed at current PL and inadequate geological investigations etc.
1	Total		60	

## 4. Balance Capacity

Sl.No.	Name of Project	River	Туре	I.C.(MW)	District
1	Dilli Stor.	Disang	S	28	Dibrugarh
2	Diyung Dam P/H	Diyung	S	45	Cachar
3	Amring	Amring	S	70	Karbi Anglong
3	Total	3 Nos. of Projects		143	

Note: R –Run of the River & S- Storage

## 5. Project having Environment & Forest Issue

Sl.No.	Name of	River	Type	I.C.(MW)	Remarks
1	Jamuna dam P/H	Jamuna	S	28	Powerhouse site of Jamuna Dam is on the boundary of Marat Longri Wildlife Sanctuary

## 6. Projects capacity reduced and became less than 25 MW after Reassessment study

Sl.No.	Name of Scheme	River Type		I.C.(MW)	
1	Langey	Borpani	R	12	

# **Status of Large Hydro Power Development in Nagaland**

			Nos.	Capacity (MW)
А	Hydroelectr	ving capacity above 25 MW)	11	1452
В	Hydroelectr	ving capacity above 25 MW)	4	325
Br	eakup of Hy	ydro Power Potential (2017-23 Study)		
I	Projects in o	pperation	1	75
II	Projects allo	otted by States for development		
	II-A	DPR Prepared		
	(i)	Projects concurred by CEA and yet to be taken up for construction	1	186
III	Balance Cap	pacity	2	64

## A. Identified Projects during Reassessment study (1978-87):

Sl.No.	Name of Project	River	I. C. (MW)
1	Dikhu Lift Dam	Dikhu	125
2	Yangnyu	Dikhu	135
3	Jhanji storage	Jhanji	75
4	Doyang-V	Doyang	55
5	Dikhu Dam P.H.	Dikhu	470
6	Sakhai-II	Tizu	31
7	Khuzami	Tizu	32
8	Rurrur	Zangki	36
9	Zungki	Zangki	48
10	Laruri	Tizu	80
11	Tizu	Tizu	365
11	TOTAL		1452

## B. Identified Projects during Reassessment study (2017-23):

S.no	Name	River	Installed Capacity (MW)
1	Dikhu (Dikhu Dam P.H.)	Dikhu	186
2	Yangnyu (Yangnyu Stor.)	Yangnyu	36
3	Jhanzi Storage	Jhanzi	28
4	Doyang (Doyang V)	Doyang	75
4	TOTAL	325	

#### 1. H.E. Projects in Operation:

	Utility/Stations	No. of Stns.	No. of units x Capacity (MW)	River / Basin	District	I.C.(MW)	Type (R/S/R(P))	Year of commissioning
	NEEPCO							
1	DOYANG	1	(3X25)	DOYANG / Brahamputra	WOKHA	75	S	2000
1 1	TOTAL NAGALAND	1				75		

#### 2. H.E. Projects concurred by CEA and yet to be taken up for construction:

Sl No.	Name of Project	Agency	District	River / Basin	I.C. (MW)	Date of CEA Concurrence	Type (R/S/R(P))	Status
1	Dikhu	NMPPL	Longleng	Dikhu and Yangnyu / Brahamputra	186	31.03.2014	Seasonal S cum R	EC yet to be obtained by developer. TOR issued on 27/12/2018. FC not applicable as forest land is not involved.#
1	Total				186			

#EIA/EMP studies are in progress and are likely to be completed soon. Consent of PPA as per CERC Tariff is obtained. Govt. of Nagaland has forwarded PPA tariff calculations for the approval of Nagaland Regulatory Commission. Authority Meeting was held on 27.01.2022. Govt of Nagaland will resume land acquisition after monsoon.

CEA vide letter dated 04.08.2022 informed developer that Central Electricity Authority is not in a position to extend the validity of Concurrence of Dikhu HE Project further as inspite of giving two extensions for validity of concurrence, development of Dikhu HE Project (186MW) is not satisfactory. A meeting held on 08.09.2022 under the chairmanship of Chairperson, CEA regarding reconsideration of extension of validity of Dikhu HEP (186 MW) up to 30.03.2023. As deliberated in the meeting, NMPPL was once again requested to convey concrete plan along with timeline for start of works of Dikhu HEP".

M/s NMPPL vide email dated 29.09.2022 has given their plan with timelines. Principle Secretary to the Govt of Nagaland Power Department Nagaland vide letter dated 28.09.2022 has highlighted some points for special consideration. M/s NMPPL further requestest to extend the TEC for another 3 years and 9 months from the last date TEC was valid, so as enable to start main construction of Dikhu Project by 31.12.2024. In a meeting under the chairmanship of Chairperson, CEA with representatives of State Govt. and developer of the project on 21.10.2022, it was brought out by representative of State Govt. that land acquisition negotiation with villagers of remaining two villages is becoming very difficult and in such situation, the Government of Nagaland is willing to bring down the Installed Capacity of the project to 140 MW or below to minimize the submergence.

In view of above, the developer needs to recast the DPR with revised IC and get fresh concurrence. In such circumstances, re-validation of earlier concurrence of Dikhu HE Project with IC of 186 MW has no relevance

Note: R= Run of River, S=Storage & R(P)= Run of River with Pondage

## 3. Balance Capacity

Sl.No.	Name of Scheme	River	Туре	I.C.(MW)	District
1	Yangnyu (Yangnyu Stor.)	Dikhu	S	36	Longleng
2	Jhanji storage	Jhanji	S	28	Mokokchung
2	Total	2 Nos. of Projects		64	

Note: R -Run of the River & S- Storage

# 4. Projects capacity reduced and became less than 25 MW after Reassessment study

Sl.No.	Name of Scheme	River	Туре	I.C.(MW)
1	Sakhai II	Tizu	R	18
2	Khuzami	Tizu	S	21
3	Rurrur	Zangki	S	20
4	Zungki (Laruri)	Zangki	S	10.5
5	Lower Tizu (Tizu)	Tizu	R	19
6	Dikhu Lift Dam	Dikhu	S	16

## Status of Large Hydro Power Development in Arunachal Pradesh

			Nos.	Capacity (MW)
А	Projects	rge Hydro Power Potential from Hydroelectric ing capacity above 25 MW) dy)	87	50064
В	Projects	arge Hydro Power Potential from Hydroelectric ing capacity above 25 MW)	109	50394.00
Breakup	of Hydro Pov	ver Potential (2017-23 Study)		
I	Projects in op	peration	3	1115
П	Projects unde	r active construction	2	4880
III	Projects allot	ted by States for development		
	III-A	DPR Prepared		
	(i)	Projects concurred by CEA and yet to be taken up for construction	14	13798
	(ii)	Projects returned to project authorities	13	5323
	III-B	DPR Under Preparation		
	(i) Projects under S&I		7	15947
	(ii)	Projects allotted for development on which S&I is held up/ yet to be taken up	2	1945
IV	Balance Capa	acity*	67	9656

<sup>\*</sup>Balance Capacity is different from arithmetic calculation from the potential accessed due to change in capacity of the Projects, addition/deletion of the projects and merger of two projects into one etc.

# A. Identified Projects during Reassessment study (1978-87)

S.No.	Name	River	IC
1	Hutong	Luhit	950
2	Gimliang	Dau	31
3	Raigan	Delai	32
4	Tidding-I	Tiding	31
5	Kalai	Luhit	2550
6	Demwe	Luhit	3765
7	Etalin	Dibang	3045
8	Emra-II	Emra	870
9	Amulin	Matun	235
10	Emini	Matun	295
11	Agoline	Dibang	235
12	Mulinye	Tangon	335
13	Emra-I	Emra	275
14	Tato-II	Siyom	360
15	Naying	Siyom	495
16	Passighat	Dihang	14685
17	Mihundon	Dibang	145
18	Attunli	Angon	175
19	Elango	Ahi	180
20	Yangsang	Yangsang	70
21	Rigong	Rigong	130
22	Mirak	Sigong	160
23	Minnying	Sigong	195
24	Pauk	Yarjap	50
25	Нео	Yarjap	90
26	Jarong	Siyom	85
27	Hirong	Siyom	180
28	Tato-I	Yarjap	80
29	Gameng	Sike	37
30	Jaru	Yamne	60
31	Yapin	Yamne	95
32	Pengging	Yamne	60
33	Sesseri	Sesseri	55
34	Dibang Stor.	Dibang	2355
35	Oju-I	Subansiri	1925
36	Oju-II	Subansiri	2580
37	Niare	Subansiri	1405
38	Naba	Subansiri	1290
39	Hegio	Kurung	250
40	Kurung Dam-I	Kurung	200
41	Kurung Dam-II	Kurung	115

42	Tammu	Siu	55
43	Milli	Kurung	75
44	Sape	Kurung	38
45	Chomi	Kurung	80
46	Chela	Kurung	75
47			32
	Nyepin	Payam	3 <u>/</u> 41
48 49	Hiya Tamen	Payam	175
		Kamala	
50 51	Par	Dikrong	65 60
52	Dardu	Dikrong	
-	Yazali Storage	Ranga	95
53	Dudmukh Storage	Dikrong	170
54	Subansiri Dam	Subansiri	4520
55	Tago-I	Yarjap	55 415
56	Yazali Div.II	Ranga	415
57	Bichom-II	Bichom	205
58	Bhareli Lift Dam-I	Kameng	240
59	Bhareli Lift Dam-II	Kameng	330
60	Tenga	Tenga	275
61	Kameng Dam	Kameng	280
62	Kimi	Bichom	535
63	Chanda	Kameng	110
64	Badao	Kameng	120
65	Rebby	Kameng	30
66	Para	Kameng	55
67	Talong	Kameng	150
68	Satuk	Pachuk	47
69	Kapak Leyak	Pachuk	195
70	Lachung	Pachi	41
71	Phanchung	Pachi	90
72	Utung	Bichom	110
73	Nazong	Bichom	65
74	Dibbin	Bichom	95
75	Khuitam	Digen	29
76	But	Digen	26
77	Mathithing	Digen	40
78	Bichom Storage-I	Bichom	190
79	Pichang	Kuru	31
80	Tarang Warang	Pacha	65
81	Sepla	Pacha	46
82	Pasar	Pasar	32
83	Pakke	Pakke	120
84	Seba	Pakke	105
85	Papu	Papu	160
86	Yangman Stor.	Burhi	60
87	Tipang	Tirap	80
87	Sub Total		50064

B. Identified Projects during 2017-2023 study

		Installed Capacity
		226
Amulin	Matun	212
Emini	Matun	326
Agoline	Dibang or Dri	220
Attunli	Tangon	680
Etalin	Dri& Tangon	3097
Emra-I	Emra	450
Emra-II	Emra	210
Elango	Ahi	128
Dibang (Dibang Stor.)	Dibang	2880
Sissiri (Sesseri)	Sesseri	60
Ithun I	Ithun	76
Ithun II	Ithun	48
Etabue	Ange Pani	122
Jidu (Yangsang)	Yangsang	90
Rigong	Ringong	85
Mirak	Sigong	78
Pango (Minnying)	Sirapatang/ Sigong	72
Pauk	Yarjep	128
Нео	Yarjep	240
Hirong	Siyom	500
Tato-II	Siyom	700
	Name Mihundon  Amulin  Emini  Agoline  Attunli  Etalin  Emra-I  Emra-II  Elango  Dibang (Dibang Stor.)  Sissiri (Sesseri)  Ithun II  Ithun II  Etabue  Jidu (Yangsang)  Rigong  Mirak  Pango (Minnying)  Pauk  Heo  Hirong	Mihundon Dibang (Dri)  Amulin Matun  Emini Matun  Agoline Dibang or Dri  Attunli Tangon  Etalin Dri& Tangon  Emra-I Emra  Emra-II Emra  Elango Ahi  Dibang (Dibang Stor.)  Sissiri (Sesseri)  Ithun I Ithun  Ithun II Ithun  Etabue Ange Pani  Jidu (Yangsang)  Rigong Ringong  Mirak Sigong  Pango (Minnying)  Pauk Yarjep  Heo Yarjep  Hirong Siyom

		1	
23	Tato-I	Yarjep	186
24	Naying	Siyom	1000
25	Yamne-I	Yamne	106
26	Yamne St II	Yamne	70
27	Lower Siang (Passighat)	Siang	2700
28	Siyom (Middle) (Passighat)	Siyom	1000
29	Tagurshit	Tagurshit	52
30	Pemashelphu	Yargyap Chu	78
31	Kangtangshri	Siyom	68
32	Lower Yamne-I (Jaru)	Yamne	66
33	Rapum	Siyom	60
34	Rego	Siyom	63
35	Lower Yamne St-II (Yapin)	Yamne	74
36	Sippi	Ringong	75
37	Simang I	Simang	32
38	Simang- II	Simang	32
39	Siang Upper Stage-II (Passighat)	Siang	3750
40	Saing Upper Stage-I (Passighat)	Siang	6834
41	Kalai-I (Kalai)	Lohit	1140
42	Hutong -II (Hutong)	Lohit	900
43	Demwe Lower (Demwe)	Lohit	1750
44	Demwe Upper St-I (Demwe)	Lohit	210
45	Demwe Upper St-II (Demwe)	Lohit	210
46	Demwe Upper St-III (Demwe)	Lohit	150
47	Gimliang	Dau	82

48	Raigam	Delai	180
49	Tidding -I	Tidding	82
50	Tidding -II	Tidding	70
51	Kalai II (Kalai)	Lohit	1200
52	Anjaw	Lohit	230
53	Oju (Oju-I + Oju-II)	Subansiri / Si Nigit	2060
54	Niare	Subansiri	860
55	Naba	Subansiri/ Si Ngit	905
56	Milli	kurung	138
57	Sape	kurung	65
58	Chomi	Kurung	165
59	Chela	Kurung	180
60	Nyepin	Payam	48
61	Hiya	Payam	65
62	Kurung (Kurung Dam I + Kurung Dam II)	Kurung	300
63	Hegio	Kurung	320
64	Subansiri Lower (Subansiri Dam)	Subansiri	2000
65	Tago I	Kale	48
66	Ranganadi St II (Yazali Storage)	Ranganadi	100
67	Nalo	Subansiri	372
68	Dengser	Subansiri	545
69	Subansiri Upper	Subansiri	1320
70	Subansiri Middle (kamla) (Tamen)	Kamala	1500
71	Panyor	Panyor (Ranganadi)	130

72	Ranganadi St-I (Yazali DivII)	Ranganadi	405
73	Turu	Dikrong	100
74	Par	Dikrong	85
75	Dardu	Dikrong	85
76	Doimukh [Dudmukh Storage]	Dikrong	34
77	Pare	Dikrong	110
78	Tipang	Tirap	26
79	Chanda	Kameng	115
80	Badao	Kameng	94
81	Para	Para	144
82	Talong Londa (Talong)	Kameng	225
83	Pachuk II (Satuk)	Pachuk	54
84	Pachuk II Lower (Kapak Leyak)	Pachuk	62
85	Phanchung	Pachi	36
86	Utung	Bichom	76
87	Dibbin	Bichom	120
88	Khuitam	Digo/Digen	62
89	Dinchang (But +Maithing)	Digo/Digen	295
90	Kameng HEP (Bichom storage-I + Bichom-II)	Bichom/ Tenga	600

91	Papu	Papu	100
92	Jameri (Tenga)	Tenga	172
93	Kimi	Bichom	535
94	Gongri	Gongri	144
95	Nafra	Bichom (Kameng)	120
96	Meyong	Tim Kong Rong	32
97	Marjingla	Kameng	38
98	Marijingla Lower	Kameng	44
99	Pachuk I	Pachuk	95
100	Pakke Bung I	Pakke Bung	48
101	Papu Valley	Papu	45
102	Tawang St-I	Tawang Chu	600
103	Tawang St-II	Tawang Chu	800
104	Magochu	Mago Chu	48
105	Nyukcharong Chu	Nyukcharong Chu	160
106	Rho	Tawang Chu	145
107	Tsa Chu - I Lower	Nykrong Chu	145
108	Tsa Chu - II	Nykrong Chu	148
109	New Melling	Mago Chu	48
109	Total	50394	

#### 1. H.E. Projects in Operation:

S. No.	Name of Project	No. Of units	No. of units x capacity (MW)	River	District	Capacity (MW)	Type (R/S/R(P))	Year of commissioning
	NEEPCO							
1	RANGANADI	3	(3X135)	RANGANADI	LOWER SUBANSIRI	405	R(P)	2002
2	PARE	2	(2X55)	BRAHAMPUTRA	Papum Pare	110	R (P)	2018
3	Kameng	4	(4x150)	Bichom & Tenga / Kameng	West Kameng	600	R (P)	2020-21
3	Total	9				1115		

Note: All projects are in Brahamputra Basin

#### 2. H.E. Projects Under Active Construction:

Sl. No.	Name of Project	Agency	District	I.C. (MW)	River	Type (R/S/R(P)/ MPP)	Likely Commissioning	
1	Subansiri Lower	NHPC	L.Subansiri/ Dhemaji	2000	Subansiri	R(P)	2023-24 (Mar'24)	
	Dibang Multipurpose Project	NHPC	Lower Dibang valley	2880	Dibang/Brahma putra	MPP	2031-32 (feb'32)	
2	Total			4880				

Note: All projects are in Brahamputra Basin

\* 2 units (500 MW) likely during 2022-23 & 6 units (1500 MW) during 2023-24

Note :R= Run of River, S=Storage & R(P)= Run of River with Pondage, MPP= Multipurpose project

#### 3. H.E. Projects concurred by CEA and yet to be taken up for construction:

Sl No.	Name of Project	Agency	District	River	I.C. (MW)	Date of CEA Concurrence	Type (R/S/R(P)	Status
							,	EC & FC yet to be obtained by developer.
1	Lower Siang	JAVL	East Siang	Siang	2700	16.02.10	R(P)	MoEF&CC in Jan'2016 closed the proposal due to non-response of developer. Developer is required to carry out fresh EIA/EMP studies. #
2	Tawang St-I	NHPC	Tawang	Tawang Chu	600	10.10.11	R	EC accorded on 10.06.2011 (valid till June 2021). EAC in its 13th meeting held on 16.06.2021 has recommended an extension of validity of EC for 3 years. FC-I & FC-II are pending. ##
3	Tawang St-II	NHPC	Tawang	Tawang Chu	800	22.09.11	R	EC accorded on 10.06.2011 (valid till June 2021). MoEF&CC vide letter dated 18.10.2021 accorded extension of validity of EC for 3 years till 09.06.2024. FC-I accorded on 08.01.2014. FC-II yet to be obtained ###
4	Demwe Lower	ADPL	Lohit	Lohit	1750	20.11.09	R(P)	EC accorded on 12.02.2010. EC extended till 11.02.2023. FC-I accorded on 01.03.2012. FC-II accorded on 03.05.2013. However, FC is subjudice due to an appeal filed against grant of FC before the NGT on 03.05.2014. ####
5	Hirong	JAPL	West Siang	Siang	500	10.04.2013	R	EC & FC yet to be obtained by developer. EIA/EMP report being revised as per Siang BSR. FC-I under process at state level. However, as per MoEF&CC, matter of FC is closed vide letter dated 02.12.2015 #####
6	Talonga Londa	GMR	East Kameng	Kameng	225	16.08.2013	R(P)	EC accorded on 07.08.2015. FC-I & FC-II yet to be obtained. ######
7	Etalin	EHEPCL	Dibang Valley	Dri & Tangon	3097	12.07.2013	R	EC recommended by EAC on 31.01.2017. Letter will be issued after FC-I. FC-I & FC-II yet to be obtained. #######
8	Naying HEP	NEEPCO	West Siang	Siang	1000	11.09.2013	R	EC & FC yet to be obtained by developer. \$
9	Kalai –II	Kalai PPL	Anjaw	Lohit	1200	27.3.2015	R(P)	EC accorded 20.05.2015. Final order will be issued after obtaining FC-I. FC-I and FC-II yet to be obtained.  Land acquisition under process. Validity of Concurrence to the project expired on 27.03.2018. MOP vide letter dated 22.12.2021 indicated Kalai-II HEP to be pursued by THDC.
10	Нео	HHPPL	West Siang	Yarjep	240	28.07.2015	R	EC accorded on 10.11.2015. FC-I accorded on 27.10.2015. FC-II yet to be obtained. The issue of shifting of quarry is pending with FAC which is linked with Pauk, Heo and Tato-I and needs to be resolved for accord of FC-II. Observations of Regional Office awaited. Land acquisition is in progress. Validity of Concurrence to the project expired on 29.07.2020. MOP vide letter dated 22.12.2021 indicated that Heo HEP to be pursued by NEEPCO.
11	Tato-I	SHPPL	West Siang	Yarjep	186	28.10.2015	R	EC accorded on 10.11.2015. FC-I accorded on 27.10.2015. FC-II yet to be obtained.  MoEF&CC stated that the matter of shifting of quarry area was considered by FAC and observations of Regional office are being sought & thereafter it will be again considered by FAC. Land acquisition is in progress. Validity of Concurrence to the project expired on 29.10.2020. MOP vide letter dated 22.12.2021 indicated that Tato-I HEP to be pursued by NEEPCO.
12	Attunli	AHEPCL	Dibang Valley	Tangon	680	02.07.18	R(P)	Both EC and FC are yet to be obtained.  MoEF&CC stated that fresh ToR was issued in May'2019. Forest survey under progress.  DISCOMS are reluctant to sign long term PPA's for the Hydro Projects. Land Acquisition under process. MOP vide letter dated 22.12.2021 indicated that Attunli HEP to be pursued by SJVNL. Validity of Concurrence to the project expired on 02.07.2021.
13	Nafra	NEEPCO	West kameng		120	11.02.11	R(P)	EC accorded on 19.08.2013. FC-I accorded on 12.07.2011 & FC-II accorded on 26.06.2012. \$\$
14	Tato-II	NEEPCO	West Siang		700	22.05.12	R(P)	EC accorded on 27.6.2011. FC is linked to Cumulative Impact Assessment Study of Siang Basin which has been carried out and accepted by MoEF&CC. There is no need to change in IC but as per recommendations in BSR, FRL needs to be reduced for free flow stretch and hence there may be change in other parameters including shift in location of Dam/ Barrage etc.  MOP vide letter dated 22.12.2021 indicated that Tato-II HEP will be pursued by NEEPCO.
14	Total				13798			
17	Lotai				15/70			

<sup>#</sup> As per Cumulative Impact Assessment recommendations for Siang basin, parameter of Lower Siang HEP has been suggested to be altered and enhance the e-flows which has great impact on designand installation capacity of this project. The final decision on the parameters of the project and norms for e-flows needs to be taken by State Government and Government of India. Validity of Concurrence to the project expired on 16.02.2019.

MoP vide letter dated 22.12.2021 indicated that Lower Siang HEP to be pursued by NHPC.

##FRA is under process. In the review meeting held on 29.05.2019 in CEA, Developer stated that FC-II of Tawang-I will be taken up after obtaining FC-II of Tawang-II. There is issue of habitation of Black Necked Crane in the project area. MoEF&CC informed that the report of WII on Black Necked Crane for the project is submitted to MoEF&CC and is under review.MOP vide letter dated 22.12.2021 indicated that Tawang-I HEP to be pursued by NEEPCO. Validity of Concurrence to the project expired on 11.10.2021.

###For FC-II, additional information sought by MoEF&CC vide letter 23.02.2017. NHPC informed that local resident are not cooperating. Minister of State (I/C), MOP through DO letter dated 02.02.2018 requested Hon'ble CM, Ar. Pr. to intervene in the matter for submitting compliance report under FRA 2006 by State Govt. to MoEF for accord of FC-II. CMD NHPC vide DO letter dated 28.10.19 and 2.12.2020 had again requested Chief Secretary, Govt. of Arunachal Pradesh to intervene in the matter. Matter is being pursued with District Administration. NHPC vide letter dated 11.12.2020 has again requested IG (FC), MoEF&CC to extend the validity of FC-I clearance of the project by another 5 years. MOP vide letter dated 22.12.2021 indicated that Tawang-II HEP to be pursued by NEEPCO. Proposal for Revalidation of Concurrence submitted By M/s NHPC Ltd vide their Letter dated 15.06.2021 for another two years i.e. up to 22.09.2023 has been return on 28.04.2022 due to non-submission of desired information sought vide this office letter dated.07.09.2021. Validity of Concurrence to the project expired on 23.09.2021.

#### Hon'ble NGT vide its Order dated 24th October, 2017 dismissed the Forest Clearance appeal of the project and directed the Standing Committee of NBWL to reconsider the issue relating to Demwe Lower HEP and pass appropriate orders. Till such orders are passed, the forest clearance of the project stands suspended.

Developer informed that the project is under NCLT since 2017 and fate of project will be decided after NCLT proceedings are over. Validity of Concurrence to the project expired on 19.05.2017. MOP vide letter dated 22.12.2021 indicated that Demwe lower HEP to be pursued by THDC.

##### . As per Cumulative Impact Assessment recommendations for Siang basin, parameter of Hirong HEP has been suggested to be altered and enhance the e-flows which has great impact on design and installation capacity of this project. The final decision on the parameters of the project and norms for e-flows needs to be taken by State Government and Government of India. Government of Arunachal Pradesh vide letter dated 09.07.201 informed CEA that allottment of Hirong HEP to M/s. JAPL has been withdrawn/ cancelled vide GoAP letter dated 21.04.2021. Further, validity of Concurrence to project expired on 10.04.2016. MOP vide letter dated 22.12.2021 indicated that Hirong HEP to be pursued by NEEPCO. Govt. of Arunachal Pradesh has approved the allotment of Hirong HEP to NEEPCO Ltd. on 13.01.2023. MoA is yet to be signed.

##### The Environmental Clearance (EC) is approved in-principle by MoEF&CC, but its formal issuance is pending for want of Stage-1 Forest Clearance, which is under process. (GOAP has been requested for necessary recommendation to MOEF&CC to grant the Forest clearance vide developer's submission dated 29.6.2020.) Subsequently, request for grant of FC- stage-1 was made to MOEF&CC, Arunachal Pradesh by developer vide its letter dated 08th Dec'20. MOP vide letter dated 22.12.2021 indicated that Talong Londa HEP to be pursued by NEEPCO. Validity of Concurrence to the project expired on 15.08.2016.

###### The Biodiversity studies have been completed by Wild Life Institute of India (WII) in July 2019 after which FAC considered it in October 2019 wherein it recommended that a Sub-Committee shall be formed who shall visit the project site and submit its report on grant of forest Clearance for the project considering various aspects. Sub-Committee submitted its report to MOEF&CC and is available in their website. Sub-Committee recommended for the forest clearance of the project. Further, As noted in the agenda note for meeting in respect of projects on PMG portal, FAC has raised certain observations to GoAP, MOP, NTCA and Environment division of MOEF&CC during the meeting of 23rd April 2020, . GoAP has submitted replies to all the observations raised to them by FAC, in August 2020. MOP has submitted its observations, favorable to the project, in September 2020. Final recommendations of FAC are pending. FAC in its meeting held on 11.05.2022 has recommended to constitute two committees and will submit their reports within three weeks from their constitution.

Validity of Concurrence to the project expired on 12.07.2021. MOP vide letter dated 22.12.2021 indicated that Etalin HEP tol be pursued by SJVNL.

\$- EC is linked with Siang BSR, which is completed and accepted by MoEF&CC. FC-I pending with State Govt. MoEF&CC stated that developer needs to apply afresh for EC online as old proposal is not valid anymore. DISCOMs are reluctant to sign PPA. Government of Arunachal Pradesh vide letter dated 09.07.201 informed CEA that allottment of Naying HEP to M/s. NDSCPL has been withdrawn/ cancelled vide GoAP letter dated 27.04.2021. Further, validity of Concurrence to project expired on 11.09.2019. MOP vide letter dated 22.12.2021 indicated that Naying HEP to be pursued by NEEPCO.Govt. of Arunachal Pradesh has approved the allotment of Naying HEP to NEEPCO Ltd. on 13.01.2023. MoA is yet to be signed.

\$\$Government of Arunachal Pradesh vide letter dated 09.07.2021 informed CEA that allotment of Nafra HEP to M/s. SNEL has been withdrawn/ cancelled vide GoAP letter dated 23.12.2019. Further, validity of Concurrence to project expired on 01.01.2017. NEEPCO vide letter dated 23.08.2021 to HPA informed that it has signed MoA with GoAP on 14.08.2021 for Nafra HEP. Subsequently, HPA Division vide letter dated 31.08.2021 requested NEEPCO to submit allotment letter of GoArP and fresh DPR as per revised e-flows under Cumulative Basin Studies of Bichom Basin. NEEPCO vide letter dated 03.09.2021 submitted Allotment letter.

MOP vide letter dated 22.12.2021 indicated that Nafre HEP will be pursued by NEEPCO. NEEPCO vide letter dated 10.01.2022 submitted updated hydrology chapter for vetting by CWC. NEEPCO vide letter dated 02.06.2022 (received on 03.06.2022) submitted PPS of Nafra HEP based on updated hydrology with incorporation of e-flow based on BSR for examination and vetting of CEA.Recommendation of HPA division on PPS chapter issued vide HPA letter dated 24.06.2022 for installed capacity of 95 MW. Developer vide letter dated 06.07.2022 has requested CEA to maintain installed capacity of 120 MW citing various reasons. HPA division vide letter dated 07.07.2022 requested developer to carry out commercial viability at 120 MW and submit proposal to CEA

FC-I accorded on 15.04.2015.

FC-II accorded on 12.03.2020

CCEA at its meeting held on 17.07.2019 has accorded approval for incurring expenditure of Rs. 1600 crore on Pre-investment activities for the project including NPV, CA, CAT Plan and Wildlife Management. Investment approval under progress.CEA vide letter dated 29.08.2022 extended the validity of concurrence upto 13.06.2024. Project is in advanced stage for CCEA clearance.

Note: R= Run of River, S=Storage & R(P)= Run of River with Pondage

#### 4. H.E. Projects Returned to Project Authorities for re-submission after compliance of observations:

Sl. No.	Name of Project	Agency	I.C. (MW)	Type (R/S/R(P))	Month of Return/Reason of Return	
1	Ranganadi St-II	NEEPCO	130	S	Returned on 04/06 and NEEPCO has been asked to review the Project and resubmit DPR after cost and tariff are brought down. MOU with State Govt. yet to be signed.	
2	Yamne St-II	SSYEVPL	84	R	DPR returned on 05/11 due to inadequate geological investigations at dam site, diversion tunnel, surge shaft & power house etc.	
3	Hutong –II	MFIPL	1200	R	The DPR was returned on 5.12 as the Project is now to be developed as storage Project. Hydrology & PPS cleared on 9.5.2011 & 27.3.2012.	
4	Kalai-I	MFIPL	1352	S	Returned on 05/12 and STC decided that M/S MFIPL should carry out the detailed investigation for the revised DPR as per CEA's letter dt 24.5.2012.	
5	Pemashelphu HEP	MHPL	90	R	Returned on 02/13 due to non-replying of the comments and likely change in location of Dams benefits from the project, DPR of project has been returned.	
6	Sissiri HEP	SSHPL	100	S	Returned on 02/13 reason being DPR could not be accepted to detailed examination as representation of State Govt. pointed out that irrigation and drinking water component should be internal part of two project and cost of same should be included in cost of project. DPR returned to developer for sort out the issue with State Govt.	
7	Gimiliang	SKI Pvt. Ltd.	80	R	DPR returned on 06/13 during presentation meeting held on 03.5.2013 due to inadequate geological investigation. Developer was told to submit revised DPR after carrying out necessary investigation and IC got fixed by CEA.	
8	Raigam	SKI Pvt. Ltd.	141	R	DPR returned on 06/13 during presentation meeting held on 03.5.2013 due to inadequate geological investigation. Developer was told to submit revised DPR after carrying out necessary investigation and IC got fixed by CEA.	
9	Kangtangshiri	KHPPL	80	R(P)	Returned on 29.07.2013 due to inadequate investigation and in proper layout etc.	
10	Nyukcharong Chu	SNCPCL	96	R	Returned on 04/15 due to non-submission of investigation suggested by GSI.	
11	Subansiri Middle (Kamla)	KHEPCL	1800	S	Returned on 29.01.2018. All the partial clearances issued till date were rescinded as no progress has been made by the Developer towards resolving the issues pending with various	
12	Magochu	MCPCL	96	R	appraising groups.	
13	Tagurshit	L&T Power Development Ltd	74	R	Returned in 06/19.	
13	Total		5323			

Note: R= Run of River, S=Storage & R(P)= Run of River with Pondage

## 5. H.E. Projects Under Survey & Investigation:

Sl. No.	Name of Project	Basin/River	Agency for DPR	Original I.C. (MW)	District	Type (R/S/R(P))	Date of MOA	Target date of Preparation of DPR
1	Anjaw	Lohit	Athena Energy Ventures Ltd.	270	Anjaw	R	09.07.2007	March'23
2	Demwe UpperSt-I	Lohit	Lohit Urja Pvt Ltd	270	Anjaw	R	09.07.2007	March'23
3	Niare	Subansiri	Andra Power Private Limited	909	Upper Subansiri	R	02.05.2011	Dec'22
4	Upper Siang Project	Siang	NHPC	11200	Upper siang	S		
5	Oju Hydro-Electric Project	Subansiri/ Singit	Oju Subansiri Hydro Power Corporation Pvt. Ltd.	1878	Upper Subansiri	R		04/25
6	Naba	Subansiri	Naba power Pvt Ltd	1105	Upper Subansiri	R	21.06.2010	04/26
7	Emra-II	Emra	Athena emra Power Pvt Ltd	315	Dibang	R	02.02.2008	04/27
7	Total			15947				

## 6. H.E. Projects allotted for development on which Survey & Investigation is held up/yet to be taken up:

Sl. No.	Name of Project	I.C. (MW)	Agency	Date of Allotment/ MoA	District	Status
1	Subansiri Upper	1800	KSK Energy Ventures Ltd.	18.03.2010	Upper Subansiri	S&I held up due to lack of clarity on funding of Flood Moderation cost. Second show cause notice was issued on 26/06/2015.
2	Pauk	145	Velcan Energy Pvt Ltd	30.06.2007 (rev MOA- 31.07.09)	West Siang	S&I held up due to land disputes between clans and law & order problem.
2	Total	1945				

Note: R=Run of River, S=Storage & R(P)=Run of River with Pondage

#### 9. Balance Capacity

Sl.No.	Name of Project	River	Туре	I.C. (MW)	District	Remarks
1	Agoline	Dibang	R	220	Dibang valley	
2	Elango	Ahi	R	128	Dibang valley	
3	Rigong	Rigong	R	85	Upper Siang	
4	Mirak	Sigong	R	78	Upper Siang	
5	Hegio	Kurung	R	320	Kra Daadi	
6	Doimukh [Dudmukh Storage]	Dikrong	R	34	Papum pare	
7	Kimi	Bichom	R	535	West Kameng	
8	Chanda	Kameng	R	115	East Kameng	
9	Milli	Kurung	R	138	Kurung Kumey	
10	Sape	Kurung	R	65	Kurung Kumey	
11	Nyepin	Payam	R	48	Kurung Kumey	
12	Hiya	Payam	R	65	Kurung Kumey	
13	Par	Dikrong	R	85	Papum Pare	
14	Tago-I	Yarjap	R	48	Lower Subansiri	
15	Utung	Bichom	R	76	West Kameng	
16	Tipang	Tirap	S	26	Changlang	
17	Jameri (tenga)	Tenga	R	172	West Kameng	
18	Meyong	Timkong Rong	R	32	West Kameng	
19	Gongri	Gongri	R	144	West Kameng	
20	Badao	Kameng	R	94	East Kameng	
21	Amulin	Mathun	R	212	Dibang valley	
22	Emini	Mathun	R	326	Dibang valley	

	,			1		
23	Mihumdon	Dri	R	226	Dibang valley	
24	Lower Yamne St-II (Yapin)	Yamne	R	74	Upper Siang	
25	Nalo	Subansiri	R	372	Upper Subansiri	
26	New Melling	Magochu	R	48	Tawang	
27	Tsa Chu-I Lower	Nykrongchu	R	145	Tawang	
28	Demwe Upper St-II	Lohit	R	210	Anjaw	
29	Demwe Upper St-III	Lohit	R	150	Anjaw	
30	Etabue	Ange Pani	R	122	Dibang Valley	•Indicated to SJVN
31	Simang I	Simang	R	32	East Siang	
32	Ithun II	Ithun	R	48	Ithun	
33	Simang- II	Simang	R	32	Simang	
34	Turu	Dikrong	R	100	Dikrong	
35	Phanchung	Pachi	R	36	Pachi	
36	Khuitam	Digen	R	62	Digen	
37	Pachuk I	Pachuk	R	95	Pachuk	
38	Pakke Bung I	Pakke bung	R	48	Pakke bung	
39	Papu Valley	Pappu	R	45	Pappu	
40	Dibbin	Bichom	R	120	Bichom	
41	Siyom (Passighat)	Siyom	R	1000	West Siang	
42	Papu	Papu	R	100	East Kameng	•Yet to be indicated and alotted to CESC Ltd. •issue of interference of levels with the upstream project of M/s Vensar Energy Ltd i.e papu valley HEP requires to be resolved.
43	Emra-I	Emra	R	450	Dibang Valley	•Indicated to SJVN and earlier alloted to Athen Energy Ventures Pvt. Ltd . •No approach road the project site and intent to terminate by GoAP under since 25/07/2018

44	Rho	Tawang Chu	R	145	Tawang	•Yet to be indicated and earlier alloted to SEW energy. •No visible progress since 2015. Drift work pending. •letter issued to the developer to resolve issue with CEA/CWC/GSI on 17/9/19
45	Dardu	Dikrong	R	85	Papum pare	Yet to be indicated and earlier alloted to KVk energy & infrastructure Ltd.     No activity/progress in project. Local public demanding to hand over the project to CPSU. Dikrong study not yet finalised. Interntion to trminated by GOAP is under process since 10/04/18.
46	Dengser	Subansiri	R	545	Upper Subansiri	•Indicated to NHPC and earlier allloted to Coastal Infrastructure Pvt. Ltd. •Unapproachable area/ difficult & inhospitable terrain and local law & order problem
47	Yamne-I	Yamne	R	106	Upper Siang	• Indicated to NEEPCO and earlier alloted to S. S. yamne Power Pvt. Ltd. •Local law and order problem. Under process for termination since 18/05/18
48	Dinchang	Digo/Digen	R	295	West Kameng	Indicated to NEEPCO and earlier alloted to KSK Energy Ventures Ltd     Project under process for termination by GOAP since 13.03.2018
49	Ithun-I	Ithun	R	76	Lower Dibang Valley	Yet to be indicated and earlier alloted to JVKIL consortium.     Non-operationalization of Hunli- Desali road. Very slow progress, hence under process for Intent to Terminate by GoAP since 19/07/2018

50	Kurung	Kurung	S	300	Kra Daadi	Indicated to NEEPCO and earlier also alloted to NEEPCO. Proposal for sanction of Pre-Investment expenditure is on hold and Secy(Power), MoP concern over some of the cluases of MoA between NEEPCO and GoAP
51	Chomi	Kurung	R	165	Kurung Kumey	Yet to be indicated and earlier alloted to Adveta Power.     MoA to be renewed
52	Chela	Kurung	R	180	Kurung Kumey	Yet to be indicated and earlier alloted to Adveta Power.     MoA to be renewed
53	Para	Para	R	144	East Kameng	Yet to be indicated and earlier alloted to Coastal Projects Pvt. Ltd     M/s Coastal projects Ltd (Developer of Para HE Project) are in the Resolution process under NCLT. DPR would be prepared after resolution Process is completed.
54	Tidding-I	Tidding	R	82	Anjaw	Yet to be indicated and earlier alloted to Sai Krishnodaya Ind. (P) Ltd.     There is no progress in the S&I activities of project. ToR has not been obtained and there is no progress in geotechnical investiations.
55	Tidding-II	Tidding	R	70	Anjaw	Yet to be indicated and earlier alloted to Sai Krishnodaya Ind. (P) Ltd.     There is no progress in the S&I activities of project. ToR has not been obtained and there is no progress in geotechnical investiations.

56	Pango (Minnying)	Sirapatang/ Sigong	R	72	Upper Siang	Yet to be indicated and earlier alloted to Meenakshi Power Ltd.     Held up due to lack of infrastructure, poor communication network and remoteness of site.
57	Sippi	Ringong	R	75	Upper Siang	Yet to be indicated and earlier alloted to Meenakshi Power Ltd.     Held up due to lack of infrastructure, poor communication network and remoteness of site.
58	Jidu (Yangsang)	Yangsang	R	90	Upper Siang	Yet to be indicated and earlier alloted to Meenakshi Power Ltd.     Held up due to lack of infrastructure, poor communication network and remoteness of site.
59	Pachuk-II (Satuk)	Pachuk	R	54	Pachuk	Yet to be indicated and earlier alloted to Energy Development Co. Ltd.     No progress in the S&I activities of project reported by developer.
60	Tsa Chu -II	Nykrong Chu	R	148	Nykcharong chu	Yet to be indicated and earlier alloted to Energy Development Co. Ltd.     No progress in the S&I activities of project reported by developer.
61	Pachuk II Lower (kapak Leyak)	Pachuk	R	62	Pakke Bung	Yet to be indicated and earlier alloted to Energy Development Co. Ltd.     No progress in the S&I activities of project reported by developer.
62	Marijingla	Kameng	R	38	Kameng	Yet to be indicated and earlier alloted to Energy Development Co. Ltd.     No progress in the S&I activities of project reported by developer.
63	Marijingla Lower	Kameng	R	44	Kameng	Yet to be indicated and earlier alloted to Energy Development Co. Ltd.     No progress in the S&I activities of project reported by developer.

Note: R	R-Run of the River &	S- Storage				
67	Total			9656		
67	Lower Yamne St-I (Jaru)	Yamne	R	66	Upper Siang	Yet to be indicated and earlier alloted to Yamne Power Pvt. Ltd.     No progress in the S&I activities of project reported by developer.
66	Panyor	Panyor (Ranganadi)	R	130	Lower Subansiri	Yet to be indicated and earlier alloted to Rajratan Energy Holing Pvt . Ltd.     No progress in the S&I activities of project reported by developer.
65	Rapum	Siyom	R	60	West Siang	Yet to be indicated and earlier alloted to Greenko Energies Ltd.     No progress in the S&I activities of project reported by developer.
64	Rego	Siyom	R	63	West Siang	Yet to be indicated and earlier alloted to Greenko Energies Ltd.     No progress in the S&I activities of project reported by developer.

#### 10. Project having Environment & Forest Issue

Sl.No.	Name of Scehme	River	Type	I.C.(MW)	Remarks
1	Hutong-I (Hutong)	Lohit	S	750	Recommended to drop Hutong HEP Stage-1. As after dropping this project. The length of free flow of River will increase from 19.1 km to 34.6 km.
2	Mulinye	Tangon	R	335	Proposed Project falls within Dibang Wildlife Sanctuary
3	Jarong	Siyom	R	90	Project has already been considered unviable, it is recommended not to allot the project again as this will ensure that 5.1 km of Siyom River stretch between upstream Taiyong HEP and downstream Hirong HEP will remain a free flowing River stretch.
4	Gameng	Sike	R	37	The natural river flow is very small in Sike river
5	Pengging	Yamne	R	60	Dropped due to MOEF free stretch study
6	Tammu	Siu/Siyum	R	55	Dam and Powerhouse site of Tamen HEP are about 9.0 km away from Tale Valley Wildlife Sanctuary (Protected Area)
7	Bhareli Lift Dam-I	kameng	R	1120	Falls within Sessa Orchid Wildlife Sanctuary (Protected
8	Bhareli Lift Dam-II	kameng	R	600	Area).
9	Kameng dam	Kameng	R	300	located on the boundary of Pakke/Pakhui Tiger Reserve
10	Nazong	Bichom	R	60	Environmental Clearance may be required from MoEF&CC
11	Pasar	Pasar	S	32	Located on the boundary of Pakke/Pakhui Tiger Reserve
12	Pakke	Pakke	R	110	Project located within the boundary of Pakke/Pakhui Wildlife Sanctuary (Protected Area)
13	Seba	Pakke	R	80	Project located within the boundary of Pakke/Pakhui Wildlife Sanctuary (Protected Area)

#### ${\bf 11.\ Projects\ developed\ below\ 25\ MW}$

Sl.No.	Name of Scehme	River	Type	I.C.(MW)
1	Rebby	Para		20
2	Pichang	Kaya		12
3	Sepla	Pacha		21

#### 12. Projects capacity reduced and became less than 25 MW after Reassessment study

Sl.No.	Name of Scheme	River	Туре	I.C.(MW)
1	Lachung	Pachi	R	20
2	Tarang warang	Pacha	R	25
3	Yangman Stor.	Burhi Dihing	S	14

Note: R -Run of the River & S- Storage

# Status of Large Hydro Power Development in Mizoram

		Nos.	Capacity (MW)
А	Identified Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (1978-87 Study)	7	2131
В	Exploitable Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study)	11	1926.7
	Breakup of Hydro Power Potential (2017-23 study)		
I	Projects in operation	1	60
II	Balance Capacity	10	1866.7

# A. Identified Projects during reassessment study(1978-87)

S. No.	Name of Project	River	I.C. (MW)
1	Lunglang	Tyao	690
2	Boinu	Kaldan	635
3	Mat	Mat	90
4	Sonai	Sonai	55
5	Deh	Deh	26
6	Bhairabi	Dhaleshwari	90
7	Kaldan	Kaldan	545
7	TOTAL		2131

# **B.** Identified Projects during reassessment study(2017-23)

S.no	Name	State	River	Installed Capacity
1	Tuivai	Mizoram	Tuival	140
2	Tuirial (Sonai)	Mizoram	Tuirial	60
3	Lunglang	Mizoram	Tyao	474
4	Mat	Mizoram	Mat	41.7
5	Boinu	Mizoram	Boinu	498
6	Kaldan	Mizoram	kaldan	159
7	Bhairabi	Mizoram	Dhaleshwari	50
8	Tlawng	Mizoram	Dhaleshwari/ Tlawng	37
9	Tuivawl	Mizoram	Tuivawl	50
10	Tuichang	Mizoram	Tuichang	57
11	Kolodyne Stage -II	Mizoram	Kolodyne	360
11	TOTAL			1926.7