

Hydro Power Development in Haryana

Identified Hydro Power Potential and its status of Development:

	Nos.	Capacity (MW)	Percentage (%)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)#	1	64	100

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

Hydro Power Development in Himachal Pradesh

Identified Hydro Power Potential and its status of Development:				
			Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)			68	18540
I	Projects in operation		26	9809
II	Projects under construction		8	1885
III	Projects allotted by States for development			
	(i)	Projects cleared by CEA and yet to be taken up for construction	4	696
	(ii)	Projects under Examination in CEA	2	573
	(iii)	Projects returned to project authorities	5	1746
	(iv)	Projects under S&I	3	1032
	(v)	Projects allotted for development on which S&I is held up/ yet to be taken up	5	1630
IV	Projects dropped due to Basin studies/ Other reasons		7	689
V	Projects yet to be allotted by the State for development*		25	2000

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

1. H.E. Projects in Operation:

S. NO.	UTILITY/STATIONS	NO. OF STNS.	NO. OF UNITS	NO. OF UNITS X CAPACITY (MW)	RIVER/ /BASIN*	DISTRICT	CAPACITY (MW)	YEAR OF COMMISSIONING
	CENTRAL SECTOR							
	BBMB							
1	BHAKRA LEFT (BHAKRA NANGAL)	1	5	(2X108+ 3x126)	SUTLEJ	BILASPUR	594	1960-1961
2	BHAKRA RIGHT (BHAKRA NANGAL)	1	5	(5X157)	SUTLEJ	BILASPUR	785	1966-1968
3	DEHAR (PANDOH DIVERSION)	1	6	(6X165)	BEAS	MANDI	990	1977-1983
4	PONG (PONG DAM)	1	6	(6X66)	BEAS	KANGRA	396	1978-1983
	SUB-TOTAL BBMB	4	22				2765	
	NHPC							
5	BAIRA SIUL	1	3	(3X60)	RAVI	CHAMBA	180	1980-1981
6	CHAMERA- I (CHAMERA SHERPUR)	1	3	(3X180)	RAVI	DALHOUSIE	540	1994
7	CHAMERA- II (GWAR)	1	3	(3X100)	RAVI	CHAMBA	300	2003-2004
8	CHAMERA- III (HIBRA)	1	3	(3X77)	RAVI	CHAMBA	231	2012
9	PARBATI-III [SAINJ (PARBATI - III)]	1	4	(4X130)	SAINJ	KULLU	520	2014
	SUB-TOTAL NHPC	5	16				1771	
	SJVNL							
10	NATHPA JHAKRI	1	6	(6X250)	SATLUJ	SHIMLA	1500	2003-2004
11	RAMPUR (RAMPUR NANJAH)	1	6	(6X68.67)	SATLUJ	SHIMLA	412.02	2014-15
	SUB-TOTAL SJVNL	2	12				1912.02	
	NTPC LTD.							
12	KOLDAM	1	4	(4X200)	SATLUJ	BILASPUR	800	2015
	SUB-TOTAL NTPC LTD.	1	4				800	
	TOTAL CENTRAL SECTOR	12	54				7248.02	
	STATE SECTOR							
	HPSEBL							
13	BASSI	1	4	(4X16.5)	BEAS	MANDI	66	1970-1981
14	GIRI BATA *	1	2	(2X30)	YAMUNA	SIRMAUR	60	1978
15	LARJI	1	3	(3X42)	Beas River & its tributaries Sainj & Tirthan	KULLU	126	2006
16	SANJAY [BHABA (SANJAY)]	1	3	(3X40)	SATLUJ	KINNAUR	120	1989
	TOTAL HPSEBL	4	12				372	
	HPPCL							
17	INTEGRATED KASHANG	1	3	(3X65)	SATLUJ	KINNAUR	195	2016-17
18	SAINJ (SAINJ-I)	1	2	(2X50)	SAINJ	KULLU	100	2017
	TOTAL HPPCL	2	5				295	

S. NO.	UTILITY/STATIONS	NO. OF STNS.	NO. OF UNITS	NO. OF UNITS X CAPACITY (MW)	RIVER/ /BASIN*	DISTRICT	CAPACITY (MW)	YEAR OF COMMISSIONING
	PSPCL							
19	SHANAN	1	5	(1X50)+ (4X15)	UHL & Lamba Dug River	MANDI	110	1932-1982
	TOTAL PSPCL	1	5				110	
	TOTAL STATE SECTOR	7	22				777	
	PRIVATE SECTOR							
	MPCL							
20	MALANA	1	2	(2X43)	MALANA	KULLU	86	2001
	TOTAL MPCL	1	2				86	
	GBHPPL							
21	BUDHIL	1	2	(2X35)	RAVI	CHAMBA	70	2012
	TOTAL GBHPPL	1	2				70	
	EPPL							
22	MALANA-II	1	2	(2X50)	MALANA	KULLU	100	2011-12
	TOTAL EPPL	1	2				100	
	IA ENERGY							
23	CHANJU-I	1	3	(3X12)	RAVI	CHAMBA	36	2017
	TOTAL IA ENERGY	1	3				36	
24	ALLAIN DUHANGAN (ALLAIN NALLAH & DUHANGAN)	1	2	(2X96)	ALLAIN NALLAH		192	2010-11
	TOTAL ADHPL	1	2				192	
	JSWHEL							
25	BASPA (BASPA-II)	1	3	(3X100)	BASPA	KINNAUR	300	2003
26	KARCHAM WANGTOO	1	4	(4X250)	SATLAJ	KINNAUR	1000	2011-12
	TOTAL JSWHEL	2	7				1300	
	TOTAL PVT	7	18				1784	
	TOTAL HP	26	94				9809.02	

* ALL PROJECTS EXCEPT GIRI BATA (GANGA BASIN) ARE IN INDUS BASIN

2. H.E. Projects Under Construction:

Sl. No.	Name of Project	Agency	District	River	Basin	I.C. (MW)	Likely Commissioning
1	Parbati St--II (Parbati -II)	NHPC	Kullu	Parbati/Beas	Indus	800	2021-22 (Dec.'21)
2	Uhl- III	Beas Valley Power Corp. Ltd. (BVPC)	Mandi	Uhl/Beas	Indus	100	2019-20 (Mar.'20)@
3	Sorang	Himachal Sorang Power	Kinnaur	Sorang/Satluj	Indus	100	2020-21 (Oct.'20)
4	Tidong-I	M/s NSL Tidong	Kinnaur	Tidong/Satluj	Indus	100	2021-22 (Oct.'21)
5	Shontong Karcham	HPPCL	Kinnaur	Satluj	Indus	450	2023-25 (Apr.'24)
6	Sawara Kuddu (Pangula Sanail)	HPPCL	Shimla	Pabbar/Tons/Yamuna	Ganga	111	2019-20 (Mar.'20)@
7	Tangu Romai-I	Tangu Romai Power Generation	Shimla	Pabbar/Tons/Yamuna	Ganga	44	2021-22*
8	Bajoli Holi	GMR Bajoli Holi Hydro Power Pvt. Ltd.	Chamba	Ravi	Indus	180	2020-21 (May'20)
	Total					1885	

* Subject to re-start of works

@ critical

3. H.E. Projects Cleared/Appraised by CEA:

Sl. No.	Name of Project	Agency	River	District	I.C. (MW)	Date of CEA Concurrence	Status
1	Chhatru	DCM Shriram Infrastructure Company Ltd. (DSC)	Chenab /Chandra	Lahul & Spiti	126	15.1.2015	EC recommended by EAC on 24.02.15, Letter will be issued after FC-I. FC-I & FC-II yet to be obtained. Land acquisition under process. As per MoEF&CC, developer is not responding.
2	Miyar (Udaipur)	Miyar Hydro Power Company Ltd. (MHPCL)	Chenab /Miyar Nallah	Lahul & Spiti	120	07.02.2013	EC accorded on 30.07.2012. FC-I accorded on 27.07.2012. For FC-II, Compliance Report is awaited from State Govt. Financial closure is in process.
3	Kutehr (Machhetri)	JSW Energy (Kutehr) Power Ltd. (JSWEPL)	Ravi	Chamba	240	31.08.10 Revalidation up to 03.03.2019	EC accorded on 05.07.2011. FC-I accorded on 22.06.2011 & FC-II accorded on 19.02.2013. Validity of earlier bids has expired due to delay in obtaining FC-II and acquisition of Pvt. Land. Award of main works is almost finalized but contract is not signed in absence of PPA. Registry of 6.46 ha land out of 7.82 ha land completed. Award of balance land of 17 Bigha announced by LAO on 30th Sept and Rs. 246 lakhs deposited on 06.10.2015. LoI issued to L-I bidder. Financial closure and financial tie-up is under process. Construction work of 33/11 KV (3 MVA) electrical sub-station for construction power is almost completed. R&R plan submitted to HP Govt. for approval. PPA is under progress.
4	Luhri Stage-I (Luhri)	Satluj Jal Vidyut Nigam Ltd. (SJVN)	Satluj	Shimla & Kullu	210	01.05.18	EC was recommended in EAC meeting held on 27.08.2018. EC is kept pending by MoEF&CC and linking it with outcome of cumulative Impact Assessment studies of Satluj Basin. Cumulative EIA study report of Satluj basin was presented in EAC meeting held on 28.01.19 and EAC suggested additional points for incorporation in the report. All requisite data submitted to ICFRE, Dehradun on 14.10.2019. Final Report of cumulative EIA study of Satluj basin put has been accepted by EAC vide its Minutes of Meeting dated 26.12.2019. Request for EC to MoEF&CC submitted by developer on 30.12.2019. FC-I accorded by MoEF&CC on 19.09.18 and FC-II accorded on 28.03.2019.
	Total				696		

Note: All projects are in Indus basin

4. H.E. Projectss Under Examination/Scrutiny in CEA:

Sl. No.	Name of Project	Sector	I.C. (MW)	Agency	Month of receipt
1	Thana Plaun	State	191	HPPCL	18-Feb
2	Sunni Dam	Central	382	SJVNL	1-Sep
	Total		573		

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

Sl. No.	Name of Project		I.C. (MW)	Reason of Return
	Ravi Basin	Agency		
1	Bara Banghal (Chulan)	MPCL	200	DPR returned due to inadequate geological investigations, environmental & wild life issues, review of I.C. & Cost.
2	Reoli Dugli (Raoli)	L&T HHPL	430	
3	Seli	SHPCL	400	
4	Dugar	DHPL	449	
5	Sach Khas	L&T HHPL	267	
	Total		1746	

6. H.E. Projects Under Survey & Investigation:

Sl. No.	Name of Project	Basin*/River	Agency for DPR	I.C. (MW)	Date of MoA	Target date of Preparation of DPR
1	Tidong-II	Tidong	Tidong Hydro Power Ltd.	60	20.1.2012	
2	Luhri St.-II (Luhri)	Satluj	SJVNL	172	Project allocated to SJVN on standalone basis. MoA yet to be finalized.	Sep-20
3	Jangi Thopan Powari	Satluj	SJVNL	800		Mar-22
Total				1032		

* All projects are in Indus Basin

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

Sl. No.	Project	I.C.	Agency	Date of Allotment/ MoA	Status	
		(MW)				
	Satluj Basin					
1	Khab (Khab-I & Khab-II)	636	HPPCL	22.09.2009	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 Project to be single stage RoR and considering the virgin stretch of river as per MoEF&CC guidelines.	
2	Sumte Kothang (Thibda)	130	Reliance Power Ltd.	31.12.2012	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	S&I held up due to opposition from locals and NGOs. Project stands terminated on 28.07.2017.	
	Sub Total	870				
	Chenab Basin					
1	Gyspa Dam (Gyspa)	300	HPPCL	22.09.2009	S&I held up due to local agitation	
	Sub Total	300				
	Beas Basin					
1	Nakhtan (Parbati-I)	460	HPPCL	22.09.2009	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				
	Total	1630				

8. Projects dropped due to Basin studies/ Other reasons:

Sl. No.	Project	I.C. (MW)	River	Basin	Remarks
1	Chango Yangthang	180	Spiti	Indus	Project has been surrendered by developer vide letter dated 11.07.2017 as the project became unviable due to increased e-flow, local protests etc.
2	Chiroti Saichu	26	Chenab	Indus	Projects dropped after final report of basin studies on cumulative impact
3	Saichu	58	Chenab	Indus	
4	Saichu Sach Khas	117	Chenab	Indus	
5	Tinget	145	Chenab	Indus	
6	Stingiri	98	Chenab	Indus	
7	Patam	65	Chenab	Indus	
	Total	689			

9. H. E. Projects yet to be allotted by the State for development

Sl.No.	Name of Project	River	Type	I.C.(MW)
1	Kyurik	Spiti	R	41
2	Ropa	Ropa	S	31
3	Taiti-I	Taiti	S	50
4	Homte	Bhaba	R	60
5	Gandharni	Beas	R	49
6	Gharopa	Beas	R	85
7	Tirthan-I	Tirthan	R	32
8	Tirthan-III	Tirthan	R	26
9	Rana Khad	Rana Khad	R	29
10	Tundah	Tundah	R	34
11	Baroti	Siul	S	40
12	Chhota Dara	Chandra	R	50
13	Khoksar	Chandra	R	80
14	Telling (Railing)	Chandra	S	155
15	Gondhala	Chandra	R	90
16	Jhalma	Chenab	R	275
17	Bardang	Chenab	R	145
18	Baspa-I	Baspa	S	335
19	Manali	Manalasu	R	37
20	Kulu	Beas	R	90
21	Sainj Kartah-II	Sainj	R	45
22	Sainj-4	Sainj	R	27
23	Uhl	Uhl	R	70
24	Uhl at Joginder Nagar	Uhl	R	90
25	Gaj	Gaj Khad	R	34
25	Total	25 Nos. of Projects		2000

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

Hydro Power Development in Jammu and Kashmir

Identified Hydro Power Potential and its status of Development:

			Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)#			31	11497
I	Projects in operation		10	3360
II	Projects under construction		4	1935.5
III	Projects allotted by States for development			
	(i)	Projects cleared by CEA and yet to be taken up for construction	5	4043
	(ii)	Multi purpose Projects approved by MoWR	2	996
	(iii)	Projects under Examination in CEA	1	390
	(iv)	Projects allotted for development on which S&I is held up/ yet to be taken up	1	370
IV	Projects dropped as per Reconciliation Study by CEA in 2014		4	1030
V	Projects yet to be allotted by the State for development*		10	1472

***The numbers and 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, etc.**

Dunadi (60 MW) has been developed below 25 MW as Ranjala Dunadi (15 MW) as per Reconciliation Study by CEA in 2014.

1. Identified Projects during Reassessment study:

Sl.No.	Name of Project	River	Type	I.C. (MW)
1	Shuas	Chenab	R	505
2	Berinaum	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
31	Total	31 Nos. of Projects		11497

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

2. H.E. Projects in Operation:

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

* ALL PROJECTS ARE IN INDUS BASIN.

Sewa-II was identified in HP.

3. H.E. Projects Under Construction:

Sl.No.	Name of Project	Agency	District	I.C. (MW)	River	Basin	Likely Commissioning
1	Pakal Dul	CVPPL	Kishtwar	1000	Marusadar/Chenab	Indus	2024-25 (Dec.'24)
2	Parnai	JKSPDC	Poonch	37.5	Jhelum	Indus	2021-22 (Feb'22)
3	Lower Kalnai	JKSPDC	Kishtwar	48	Chenab	Indus	2023-24**
4	Ratle	RHEPPL	Kishtwar	850	Chenab	Indus	2023-24 **
4	Total			1935.5			

** Subject to restart of works

4. H.E. Projects Cleared/Appraised by CEA:

Sl No.	Name of Project	Agency	River	District	I.C. (MW)	Date of CEA Concurrence	Status
1	New Ganderwal	JKSPC	Jhelum/Sindh	Ganderwal	93	10.06.14	EC obtained on 27.9.13 and FC obtained on 02.04.2012.
2	Kiru	CVPPL	Chenab	Doda	624	13.06.16	EC accorded on 24.06.2016 & FC accorded on 19.05.2016. CCEA sanctioned the proposal of Kiru HEP amounting to Rs. 4287.59 at July PL in the meeting held on 07.03.2019. Tendering for all the packages issued and packages will be awarded soon. Issue of letter of award is pending for want of sanction of Rs. 1500 Crs. subordinate debt from GOI. MOP, GoI vide letter dated 11.12.2019 has intimated to furnish fresh PIB proposal incorporating subordinate debt of Rs. 1500 crs. Draft PIB proposal has been submitted by NHPC to MOP, GoI vide letter dated 13.12.2019
3	Kwar	CVPP	Chenab	Kishtwar	540	23.02.17	EC accorded on 10.04.17. FC accorded on 08.08.14. For Civil Works package, technical evaluation of bids completed and price bids are under evaluation. For E&M, HM Works Package, tenders shall be reinvented through online mode shortly. Works will be awarded after investment approval by Government.
4	Kirthai-II (Naunut)	JKPDC	Chandrabhaga /Chenab	Kishtwar	930	14.06.2019	EC & FC awaited
5	Sawalkot	JKSPC	Chenab	Ramban & Udhampur	1856	18.04.18	EC recommended by EAC on 31.01.17 subject to FC-I clearance. FC yet to be obtained. Joint survey under process.
5	Total				4043		

Note: Two projects namely Bursar (800 MW) & Ujh (196 MW) have been cleared as Multi purpose project (MPP).

5. Multipurpose projects approved by MoWR:

Sl. No.	Name of Project	Sector	I.C. (MW)	Month of receipt	Status
1	Bursar	Central	800	Jan-17	Cleared: PPS (14.12.16)
2	Ujh (Including Dam Toe PH)	State	196	Jan-18	Cleared: PPS (29.10.18)
2	Total		996		

6. Hydro Projects Under Examination in CEA:

Sl. No.	Name of Project	Sector	I.C. (MW)	Agency	Month of receipt
1	Kirthai -I (Sho)	State	390	JKSPDC	17-Jul-18
1	Total		390		

7. 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	Status
1	Shamnot	370	NHPC	-	S&I held up as the project will submerge National Highway.
1	Total	370			

8. Projects dropped as per Reconciliation Study by CEA in 2014

Sl. No.	Project Name	River	Type	I.C. (MW)	Remarks
1	Chakothi	Jhelam	R	285	Project located in POK. Hence dropped
2	Chinari	Jhelam	R	475	
3	Hatian	Jhelam	R	215	
4	Gangbal	Kankanag	S	55	Dropped due to Environmental issue
4	Total			1030	

9. H. E. Projects yet to be allotted by the State for development

Sl.No.	Name of Project	River	Type	I.C. (MW)
1	Shuas	Chenab	R	505
2	Berinaum	Chenab	R	435
3	Naga	Kal Nai	R	29
4	Kiwa	Kal Nai	R	37
5	Tipri	Kal Nai	R	36
6	Bichlari	Bichlari	R	75
7	Sonmarg	Sind	S	155
8	Upper Sindh-I	Sind	R	65
9	Ganderbal	Sind	R	75
10	Wangam	Bonar	R	60
10	Total	10 Nos. of Projects		1472

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

Hydro Power Development in Ladakh

Identified Hydro Power Potential and its status of Development:

		Nos.	Capacity (MW)
Identified Hydro Power Potential as per Reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)		23	2046
Project Identified below 25 MW capacity in Reassessment Study and developed above 25 MW capacity		1	44
Total		24	2090
I	Projects in operation	2	89
II	Projects yet to be allotted by U.T. of Laddakh for development*	22	1866

*The capacity yet to be allotted by U.T. of Laddakh for development is different from arithmetic calculation from the potential assessed due to change in capacity of the projects, addition of the projects, etc.

1A. Hydro Power Development in Ladakh

Sl.No.	Name of Project	River	Type	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 (Ulitopo)	Indus	R	65
6	Khalsi (Khalsti)	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 (Sunit)	Indus	R	235
12	Parkhachik (Parkhachik Panikar)	Suru	R	110
13	Dandal (Drass Suru-I)	Drass	R	26
14	Khabru (Drass Suru-II)	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	23 Nos. of Projects		2046

1B. Project Identified below 25 MW capacity in Reassessment Study and developed above 25 MW capacity:

Sl.No.	Name of Project	River	Type	I.C. (MW)
1	Chutak (Suru)	Suru	R	44

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

2. H.E. Projects in Operation:

Sl.No.	UTILITY/STATIONS	NO. OF STATIONS	NO. OF UNITS X CAPACITY (MW)	RIVER/BASIN*	DISTRICT	TYPE	CAPACITY (MW)	YEAR OF COMMISSIONING
	NHPC							
1	CHUTAK	1	23	INDUS	KARGIL	R	44	2012-13
2	NIMOO BAZGO (NIMU)	1	(3X15)	INDUS	LEH	R	45	2013
	SUB-TOTAL NHPC	2					89	
	TOTAL LADAKH	2					89	

3. H. E. Projects yet to be allotted by U.T. of Laddakh for development

Sl.No.	Name of Project	River	Type	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 (Ulitopo)	Indus	R	65
6	Khalsi (Khalsti)	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 (Sunit)	Indus	R	235
12	Parkhachik (Parkhachik Panikar)	Suru	R	110
13	Dandal (Drass Suru-I)	Drass	R	26
14	Khabru (Drass Suru-II)	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
22	Total	22 Nos. of Projects		1866

Note: R –Run of the River

Hydro Power Development in Punjab

Identified Hydro Power Potential and its status of Development:

		Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)		5	971
I	Projects in operation	9	1096.3
II	Projects under construction	1	206
III	Projects held up due to Inter-State aspects	1	50
IV	Projects yet to be allotted by the State for development*	1	90

***The numbers and 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 of projects, etc.**

1. Identified Projects during Reassessment study:

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

2. H.E. Projects in Operation:

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

* ALL PROJECTS ARE IN INDUS BASIN

3. H.E. Projects under Construction:

Sl. No.	Name of Project	Implementing Agency	District	River /Basin	I. C. (MW)	Likely Commissioning
1	Shahpurkandi [Shahpur]	Irr. Deptt. & PSPCL	Gurdaspur	Ravi /Indus	206	2022-23 (May'22)
	Total				206	

4. H.E. Projects held up due to Inter-State aspects:

Sl. No.	Name of Project	I.C. (MW)	Location (State)	States Involved	Status
1	SYL (2x18+2x7 =50 MW)	50	Punjab	Punjab/ Haryana/ Rajasthan.	•Cleared by CEA in 12/1987 at an estimated cost of Rs.101.28 crores (5/1985 PL). •Work on the canal on which project is located is held up. • Haryana and Rajasthan have raised question regarding their shares of power as it envisages utilizing common facilities and water belonging to all three states, viz. Haryana, Punjab & Rajasthan.

5. H. E. Projects yet to be allotted by the State for development

Sl.No.	Name of Scheme	River	Type	I.C. (MW)
1.	UBDC	Ravi	R	90
	Total	1 No. of Project		90

Note: R –Run of the River

Hydro Power Development in Rajasthan

Identified Hydro Power Potential and its status of Development:

		Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)		5	483
I	Projects in operation	4	411
Note: Gandhi Sagar (115 MW) was identified in Rajasthan but has been developed in Madhya Pradesh.			
1. Identified Projects during Reassessment study:			
Sl. No.	Name of Project	River	I. C.
			(MW)
1	Gandhi Sagar	Chambal	115
2	Rana Pratap Sagar	Chambal	172
3	Jawahar Sagar	Chambal	99
4	Mahi Bajaj - I [Mahi Bajaj Sagar St-II]	Mahi	60
5	Mahi Bajaj - I [Mahi Bajaj Sagar St-I]	Mahi	37
	TOTAL		483

2. H.E. Projects in Operation:

SL. NO.	UTILITY/ STATIONS	NO. OF STATIONS	NO. OF UNITS X CAPACITY (MW)	RIVER	BASIN	DISTRICT	I.C. (MW)	YEAR OF COMMISSIONING
1	JAWAHAR SAGAR	1	(3X33)	CHAMBAL	GANGA	BUNDI	99	1972-1973
2	MAHI BAJAJ-I [Mahi Bajaj Sagar St-I]	1	(2X25)	MAHI	CIR	BANSWARA	50	1986
3	MAHI BAJAJ-II [Mahi Bajaj Sagar St-II]	1	(2X45)	MAHI	CIR	BANSWARA	90	1989
4	R P SAGAR	1	(4X43)	CHAMBAL	GANGA	CHITTORGARH	172	1968
	TOTAL RRVUNL	4					411	

Note: Mahi Bajaj Sagar I & II (140 MW) were identified for I.C. of 97 MW.

Hydro Power Development in Uttar Pradesh

Identified Hydro Power Potential and its status of Development:			
		Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)		6	664
I	Projects in operation	4	501.6
II	Projects held up due to Inter-State aspects	1	90

1. Identified Projects during Reassessment study:

Sl. No.	Name of Project	River	Type	I. C. (MW)
1	Khara	Yamuna	R	160
2	Matatila	Betwa	S	31
3	Orchha #	Betwa	R	39
4	Rihand	Rihand	S	300
5	Obra	Rihand	R	99
6	Eastern Yamuna Canal ##	Yamuna	R	35
TOTAL				664

Orchha is under Inter-State issue in the State of M.P. for 90 MW.

Eastern Yamuna Canal project (35 MW) has been developed in 2 stages each having Installed Capacity below 25 MW

2. H.E. Projects in Operation:

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

* ALL PROJECTS ARE IN GANGA BASIN.

3. H.E. Projects held up due to Inter-State aspects:

Sl. No.	Name of Project	I.C. (MW)	Location (State)	States Involved	Status
1	Panchnad MPP (6x15 = 90MW)	90	U.P.	U.P./M.P/ Rajasthan	DPR with Project estimated cost of Rs 559 Crores (6/1983 PL) returned. Involves submergence in MP and Rajasthan.

Status of Hydro Power Development in Uttarakhand

Identified Hydro Power Potential and its status of Development:

			Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)			84	17998
I	Projects in operation		16	3756.4
II	Projects under construction		7	1490
III	Projects allotted by States for development			
	(i)	Projects cleared by CEA and yet to be taken up for construction	4	1067
	(ii)	Projects under Examination in CEA	2	450
	(iii)	Projects returned to project authorities	5	489
	(iv)	Multi purpose projects (International Projects) under examination by India and Nepal	2	2400
	(v)	Projects under S&I	2	320
	(vi)	Projects allotted for development on which S&I is held up/ yet to be taken up	15	2402
IV	Projects dropped due to Basin studies/ Other reasons		5	2012
V	Projects yet to be allotted by the State for development*		25	3394

*The numbers and 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 more than one projects into one etc.

1. H.E. Projects in Operation:

S. NO.	UTILITY/ STATIONS	NO. OF STNS.	NO. OF UNITS X CAPACITY (MW)	RIVER	DISTRICT	I.C. (MW)	YEAR OF COMMISSIONING
	CENTRAL SECTOR						
	NHPC						
1	DHAULI GANGA [KHET TAWAGHAT]	1	(4X70)	DHAULIGANGA	PITHORAGARH	280	2005
2	TANAKPUR	1	(3X31.4)	SARDA	CHAMPAVAT	94.2	1992
	SUB-TOTAL NHPC	2				374.2	
	THDC						
3	TEHRI ST-I [TEHRI DAM ST-I]	1	(4X250)	BHAGIRATHI	TEHRI GARHWAL	1000	2006-2007
4	KOTESHWAR	1	(4X100)	BHAGIRATHI	TEHRI GARHWAL	400	2010-12
	TOTAL THDC	2				1400	
	SUB TOTAL CENTRAL	4				1774.2	
	STATE SECTOR						
	UJVNL						
5	CHIBRO (YAMUNA) [CHIBRO]	1	(4X60)	Tons River at Ichari Dam	DEHRADUN	240	1975-1976
6	CHILLA [RISHIKESH HARDWAR]	1	(4X36)	GANGA	HARIDWAR	144	1980-1981
7	DHAKRANI	1	(3X11.25)	Tons & Yamuna Rivers at Dakpathar Barrage	DEHRADUN	33.75	1965-1970
8	DHALIPUR	1	(3X17)	Tons & Yamuna Rivers at Dakpathar Barrage	DEHRADUN	51	1965-1970
9	KHATIMA	1	(3X13.8)	SHARDA	UDHAM SINGH NAGAR	41.4	1955-1956
10	KHODRI	1	(4X30)	TONS	DAK PATHAR	120	1984
11	KULHAL	1	(3X10)	TONS	DEHRADUN	30	1975
12	MANERI BHALI- I	1	(3X30)	BHAGIRATHI	UTTARKASHI	90	1984
13	MANERI BHALI- II	1	(4X76)	BHAGIRATHI	UTTARKASHI	304	2008
14	RAMGANGA [RAMGANGA DAM (KALAGARH)]	1	(3X66)	RAMGANGA	PAURI GARHWAL	198	1975-1977
	TOTAL UJVNL	10				1252.15	
	PRIVATE						
	AHPC						
15	SHRINAGAR	1	(4X82.50)	ALAKNANDA	TRHRI & PAURI	330	2015
	JPPVL						
16	VISHNU PRAYAG	1	(4X100)	ALAKNANDA		400	2006
	SUB TOTAL PRIVATE	2				730	
	TOTAL UTTARAKHAND	16				3756.35	

Note: ALL PROJECTS ARE IN GANGA BASIN

2. H.E. Projects under Construction:

Sl. No.	Name of Project	Agency	District	I.C. (MW)	River	Basin	Likely Commissioning
1	Lata Tapovan	NTPC	Chamoli	171	Dhauliganga / Alaknanada	Ganga	2023-24 *
2	Tapovan Vishnugad [Tapovan Chunar]	NTPC	Chamoli	520	Dhauliganga / Alaknanada	Ganga	2021-22 (Dec'21)
3	Vishnugad Pipalkoti	THDC	Chamoli	444	Alaknanada	Ganga	2022-23 (Dec'22)
4	Naitwar Mori	SJVNL	Uttarkashi	60	Tons/ Yamuna	Ganga	2021-22 (Dec-21)
5	Vyasi [Lakhwar Vyasi - II]	UJVNL	Dehradun	120	Yamuna/Ganga	Ganga	2020-21 (Mar'21)
6	Phata Byung	LANCO	Rudraprayag	76	Mandakini/ Alaknanda	Ganga	2021-22 *
7	Singoli Bhatwari [Mandankini]	L&T	Rudraprayag	99	Mandakini/ Alaknanda	Ganga	2020-21 (May'20)
	Sub-total: Uttarakhand			1490			

* Subject to restart of works

3. H.E. Projects Concurred by CEA:

Sl. No.	Name of Project	River	Agency	District	I.C. (MW)	Status
1	Kotlibhel St-IA # [Kotlibhel]	Bhagirathi	NHPC	Tehri Garhwal	195	EC accorded on 9.05.07. FC-I accorded on 13.10.11 & for FC-II, Compliance Report is awaited from State Govt. 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 Uttarakhand not to grant any further Environmental Clearance for any hydropower projects in the State of Uttarakhand until further orders. In compliance to the above order, MoEF & CC constituted an Expert Body vide order dated 12.05.2015. Expert Body has given its report to MoEF&CC in Sept, 2017. The expert Body has recommended the project should operate to run one turbine continuously during lean season to minimize peaking impact at Devprayag. In compliance of directions of Hon'ble SC of India for arriving at a common policy framework amongst three ministries viz. MoP, MoWR,RD&GR and MoEF&CC, additional time sought by MoEF&CC for the eighth time from Hon'ble SC of India for arriving a a policy framework has lapsed on 06.02.2019. Meanwhile, a committee constituted by MoWR,RD&GR visited the project site on 24.03.2019 for assessment of the project. A meeting was held at MoP on 24.05.2019 under the chairmanship of Secretary (Power) to discuss the way forward on the reports of the committee constituted by MoWR,RD&GR for 'On the spot assessment of HEP's in Uttarakhand'.
2	Kotlibhel St-IB # [Kotlibhel]	Alaknanda	NHPC	Pauri & Tehri Garhwal	320	EC accorded earlier on 14.08.07 is withdrawn on 15.09.10. MoEF&CC declined FC-I on 7.07.11. 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 Uttarakhand not to grant any further Environmental Clearance for any hydropower projects in the State of Uttarakhand until further orders.
3	Devsari [Devasari Dam]	Pindar	SJVNL	Chamoli	252	EC was recommended by EAC on 27.03.2018 with additional conditions. FC-I accorded by MoEF&CC on 26.02.18. FC-II Pending. The Developer has informed that the DPR of the project is being revised considering e-flows notified in the Gazette notification no.4009 issued by NMCG under Ministry of Jal Shakti dated 09.10.2018. Revised chapter on PPS submitted by Developer on 18.10.2019. PPS has been cleared for an IC of 162 MW vide HPA letter dated 12.12.2019.
4	Alaknanda # [Badri Nath]	Alaknanda	GMR	Chamoli	300	08.08.08/ Revalidation up to 07.08.19 E.C. - Obtained on 12.3.08 F.C. - St-I obtained on 8.11.11. St-II obtained on 09.11.2012.
	Total				1067	

Note: All projects are in Ganga Basin**# Matter is sub judiced in Hon'ble Supreme Court.**

4. Hydro Projects Under Examination in CEA:

Sl. No.	Name of Project	River	Sector	I.C. (MW)	Agency
1	Bowala Nand Paryag	Alaknanda	State	300	UJVNL
2	Goriganga-IIIA [Devi Bagar Khartoli]	Goriganga	Central	150	NHPC
	Total			450	

5. Multi purpose projects (International Projects) under examination by India and Nepal

Sl.No.	Name of Project	River	Type	I.C.(MW)
1.	Pancheshwar MPP [Pancheshwar - I]	Sarda	S	1335
2.	Rupali Garh Regulating Dam [Pancheshwar - II]	Sarda	S	1065
	Total			2400

Note: S- Storage

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

Sl. No.	Name of Project	River	Agency	Sector	I.C.	Month of Return
					(MW)	
1	Nand Prayag Langasu	Alaknanda	UJVNL	State	100	Apr-11
2	Mori Hanol [Ugmir]	Tons		Private	63	Jan-10
3	Bogudiyar Sirkari Bhyol	Gori Ganga	GVK L&T	Private	146	Sep-10
4	Tiuni Plasu [Tiuni]	Tons	UID	State	72	Oct-10
5	Jhelum Tamak #	Dhauliganga	THDCIL	Central	108	Aug-19
	Total				489	

Matter is sub judiced in Hon'ble Supreme Court.

NOTE: As per MoP letter dated 24.12.2010 in the meeting of NGRBA held on 1.11.2010 under the chairmanship of Hon'ble Prime Minister, it was decided to discontinue Loharinag Pala, Pala Maneri and Bhaironghati H.E. Projects on Bhagirathi.

7. H.E. Projects under Survey & Investigation:

Sl. No.	Name of Project	Basin/River	I.C. (MW)	Agency	Target date of preparation of DPR
1	Sirkari Bhyol Rupsiabagar	Gori Ganga	120	UJVNL	Sep-20
2	Bokang Bailing	Dhauliganga	200	THDC	Oct-20
	Total		320		

8. 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	Date of Allotment/ MoA	Status
1	Arakot Tiuni [Nakot Patlasu]	Pabar , Tons	72	UID	-	MOEF clearance awaited. S&I yet to be taken up.
2	Chhunger - Chal	Dhauliganga	120	NHPC	21.11.2005	S&I held up due to non-clearance of MOEF
3	Garba Tawaghat	Goriganga	630	NHPC	21.11.2005	S&I held up. MoP approached MEA for taking up the matter of dev. of Garba Tawaghat H.E. Project under the aegis of Mahakali treaty.
4	Urthing Sobla	Dhauliganga	280	Reliance Power Ltd.	-	MoEF Clearance awaited. S&I heldup as the project area falls under ASkot Musk deer Sanctuary
5	Sela Urthing	Dhauliganga	230	UJVNL	09.12.2004	Road connectivity is not proper upto the project site. S&I shall be taken up after carrying out detail survey at project site & confirmation of levels.
6	Jadh Ganga	Jadh Ganga	50	THDC	21.11.2005	S&I yet to be taken up.· Located in Eco sensitive Zone of Gangotri National Park.
7	Karmoli	Jadh Ganga	140	THDC	21.11.2005	S&I yet to be taken up.· Located in Eco sensitive Zone of Gangotri National Park.
8	Rishi Ganga - I	Rishi Ganga	70	UJVNL	09.12.2004	S&I yet to be taken up.· Located in Nanda Devi National Park. MoEF Clearance awaited.
9	Rishi Ganga - II	Rishi Ganga	35	UJVNL	09.12.2004	S&I yet to be taken up.· Located in Nanda Devi National Park. MoEF Clearance awaited.
10	Taluka Sankri [Taluka Saul + Sankri Kunare]	Tons	140	UJVNL	09.12.2004	S&I yet to be taken up. Project falls under Govind Pashu Vihar WLS.

Sl. No.	Project	River	I. C. (MW)	Agency	Date of Allotment/ MoA	Status
11	Gohana Tal	Birahi Ganga	50	THDC	21.11.2005	Project included in the list of 24 HE project named in PIL under consideration by Hon'ble Supreme court
12	Karmoli Lumti Tulli [Khartoli Lumti Talli]	Goriganga	40	NHPC	07.04.2005	S & I was held up.PCCF (Wildlife) and chief Warden Wildlife, Dehradun has since granted permission for S& I on 13. 12. 2016.Preparation of PFR is in progress for obtaining approval of ToR from MoEF & CC for carrying out S& I works.
13	Maleri Jhelam [Malari Jhelam]	Dhauliganga	65	THDC	21.11.2005	Project included in the list of 24 HE project named in PIL under consideration by Hon'ble Supreme court
14	Mapang - Bogidiyar	Goriganga	200	GVK-L&T	07.05.2005	S&I held up due to Supreme Court order directing MoEF and State of Uttarakhand not to grant any Environmental Clearance or Forest Clearance for any hydroelectric project in the State of Uttarakhand until further orders.
15	Tamak Lata	Dhauliganga	280	UJVNL	09.12.2004	Project included in the list of 24 HE project named in PIL under consideration by Hon'ble Supreme court
	Total		2402			

9. Pumped Storage Projects under Construction:

Sl. No.	Name of Project	I. C.	Remarks
		(MW)	
1	Tehri St.II	4x250=1000	Likely commissioning by 2021-23* (June'22)
	Total	1000	

* Subject to restsrt works

10. Projects dropped due to Basin studies/ Other reasons:

Sl. No.	Project	I.C. (MW)	River	Basin	Remarks
1	Pala Maneri * [Pala Bhela Tipri + Bhela Tipri]	480	Bhagirath	Ganga	The project has been discontinued by Govt. of Uttarakhand due to additional conditions for environmental safeguards vide order dated 3.01.11.
2	Kotlibhel St-II [Kotlibhel]	530	Bhagirath	Ganga	MoEF on 22.11.2010 has withdrawn the environment clearance. FC-I declined on 5.07.11. 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 Uttarakhand not to grant any further Environmental Clearance for any hydropower projects in the State of Uttarakhand until further orders. In compliance to the above order, MoEF&CC constituted an Expert Body vide order dated 12.05.2015. Expert Body has given its report to MoEF&CC in Sept, 2017. The expert Body has recommended to drop the project to preserve Mahseer.
3	Loharinagpala * [Lohari Nag Tharang]	360	Bhagirath	Ganga	Project discontinued by NGRBA
4	Bhaironghati * [Gangotri + Bhairon ghati + Harsil Dam]	381	Bhagirath	Ganga	Project discontinued by NGRBA
5	Rupsiyabagar Khasiyabara	261	Gauri Ganga	Ganga	EC accorded on 26.03.09. FC-I accorded on 17.06.2006 and FC-II yet to be obtained. MoEF&CC declined FC due to project location in highly sensitive wild life habitat.
	Total	2012			

* As per MoP letter dated 24.12.2010 in the meeting of NGRBA held on 1.11.2010 under the chairmanship of Hon'ble Prime Minister, it was decided to discontinue Loharinag Pala, Pala Maneri and Bhaironghati H.E. Projects on Bhagirathi.

11. H. E. Projects yet to be allotted by the State for development

Sl.No.	Name of Project	River	Type	I.C.(MW)
1.	Kishau Dam	Tons	S	350
2.	Pisha Naitwar	Rupin	R	30
3.	Ram Ganga Dam	Ram Ganga	S	75
4.	Kuwa ford	Yamuna	R	42
5.	Nelang	Jadh Ganga	R	190
6.	Ganga Canal	Ganga	R	31
7.	Diulong Sumangaon	Bhagirathi	R	26
8.	Dhargaon Jhandarwali	Bhagirathi	R	29
9.	Jamolna Ghansyali	Bhagirathi	R	44
10.	Nayar Dam	Nayar	S	34
11.	Benakuli	Alaknanda	R	40
12.	Khel Kuran Neti	Dhauli Ganga	R	49
13.	Niti Ghansali	Dhauli Ganga	R	32
14.	Bampa Kurkuti	Dhauli Ganga	R	60
15.	Girithi Ganga	Girithi Ganga	R	34
16.	Deodi	Rishi Ganga	R	65
17.	Tikh Gurupha	Pindar	R	26
18.	Malkhet Dam	Pindar	S	37
19.	Banoli Nalgam	Pindar	R	55
20.	Lakhwar MPP (Lakhwar Vyasi - I)	Yamuna	S	115
21.	Uttyasu Dam	Alaknanda	S	1140
22.	Sobla Jhimirigaon	Dhauli Ganga	R	145
23.	Tawaghat Dharchula	Sarda	R	310
24.	Kalika Dantu	Sarda	R	140
25.	Garjia Dam	Gori Ganga	S	295
	Total	25 nos. of projects		3394

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

Hydro Power Development in Chhattisgarh

Identified Hydro Power Potential and its status of Development:

		Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)		15	2202
I	Projects in operation	1	120
II	Projects dropped due to Basin studies/ Other reasons	1	60
III	Projects yet to be allotted by the State for development*	13	2109

*The capacity, yet to be allotted by the State for development is different from arithmetic calculation from the potential assessed due to change in capacity of the Projects.

1. Identified Projects during Reassessment study:

Sl.No.	Name of Project	River	I. C. (MW)
1	Joka	Kanhar	28
2	Kharauli	Mahan	46
3	Pasal	Rihand	55
4	Duniadhih (Duniadhin)	Rihand	80
5	Rehar-II (Karri)	Rihand	70
6	Hasdeo Bango [Hasdeo (Bango)]	Hasdeo	55
7	Konta	Sabari	65
8	Matnar (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
Total		2202	

2. H.E. Projects in Operation:

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

3. H.E. Projects dropped due to Basin studies/ Other reasons:

Sl. No.	Name of Project	I.C. (MW)	River	Basin	Remarks
1	Matnar [Chitrakot]	60	Indravati	EFR	As per MoEF&CC, matter of FC is closed. As per developer, project seems not to viable with revised IC of 40 MW and it is expected to be dropped
	Total	60			

4. H. E. Projects yet to be allotted by the State for development

Sl. No.	Name of Project	River	Type	I.C. (MW)
1	Joka	Kanhar	S	28
2	Kharauli	Mahan	R	46
3	Pasal	Rihand	S	55
4	Duniadhih (Duniadhin)	Rihand	S	80
5	Rehar-II (Karri)	Rihand	R	70
6	Konta	Sabari	R	65
7	Bodhghat	Indravati	S	295
8	Kutru-I	Indravati	S	100
9	Kutru-II	Indravati	S	155
10	Nugur-I	Indravati	S	160
11	Bhopalapatnam	Indravati	S	715
12	Nugur-II	Indravati	S	270
13	Kotri	Kotri	S	70
	Total	13 Nos. of Projects		2109

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

Hydro Power Development in Goa

Identified Hydro Power Potential and its status of Development :

	No.	I.C. (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)	1	55
Projects yet to be allotted by the State for development	1	55

1. Identified Project during Reassessment study :

Sl.No.	Name of Scheme	River	I. C. (MW)
1	Sonal	Mandavi	55
TOTAL			55

2. H. E. Project yet to be taken up for development

Sl.No.	Name of Project	River	Type	I.C. (MW)
1	Sonal	Mandavi	S	55
	Total	1 No. of Project		55

Note: S- Storage

Hydro Power Development in Gujarat

Identified Hydro Power Potential and its status of development:

		Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)		2	590
I	Capacity in operation	2	550

1. Identified Projects during Reassessment study:

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

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)	Year of commissioning
	GSECL						
1	UKAI [Ukai Dam PH]	1	(4X75)	TAPI	TAPI	300	1974-1976
	SUB-TOTAL GSECL	1				300	
	SSNNL						
2	SARDAR SAROVAR CHPH [Sardar Sarovar]	1	(5X50)	NARMADA	NARMADA	250	2004
	SUB-TOTAL SSNNL	1				250	
	TOTAL GUJARAT	2				550	

* All projects are in CIR Basin

3. Pumped Storage Projects in operation:

Sl. No.	Name of Project	I. C. (MW)	Year of Commissioning
1	Kadana St. I & II #	240	1990-98
2	Sardar Sarovar *	1200	2005-06
	Total	1440	

* Not operational in pumping mode because Garudeshwar weir is under construction. This will work as Lower reservoir. As per information available in CEA the project has been awarded in 2012.

Not operating in pumping mode due to vibration problem.

Hydro Power Development in Maharashtra

Identified Hydro Power Potential and its status of Development:

		Nos.	Capacity (MW)
	Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)	25	3314
I	Projects in operation	12	2647
II	Projects yet to be allotted by the State for development*	14	1932

*The numbers and 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 of the projects, etc.

1. Identified Projects during Reassessment study

Sl.No.	Name of Project	River	I. C. (MW)
1	Vaitarna (Vaitarna I)	Vaitarna	28
2	Bhira Tail Race	Kundalik	55
3	Tillari	Tillari	39
4	Pench	Pench	85
5	Gosikhurd (Pathri)	Wainganga	40
6	Wainganga	Wainganga	150
7	Samda	Pranhita	95
8	Chichdoh Barrage (Ghargaon)	Pranhita	105
9	Kunghara	Pranhita	115

Sl.No.	Name of Project	River	I. C. (MW)
10	Pranhita	Pranhita	310
11	Sahasrakund (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	Warna (Varna)	Varna	27
22	Kasari (Kasari-I)	Kasari	215
23	Kumbhi (Kubhi-I)	Penganga	170
24	Kumbhi (Kumbhi-II)	Penganga	27
25	Hiranyakeshi (Hiranyakeshi II)	Vedganga	405
TOTAL			3314

2. H.E. Projects in Operation:

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

3. Pumped storage H.E Projects in operation:

Sl. No.	Name of Project	I. C. (MW)	Remarks
1	Bhira	1x150 =150	Pumping Mode- Working
2	Ghatgar	2x125 =250	Pumping Mode- Working
	Total	400	

4. Pumped Storage Projects under Construction:

Sl. No.	Name of Project	I. C. (MW)	Remarks
1	Koyna Left Bank	2x40=80	The current expenditure on the project has already reached to original administrative approved cost level hence expenditure on the project is stopped & project works are stalled. Revised cost is under approval by State Government.
	Total	80	

5. H. E. Projects yet to be allotted by the State for development

Sl .No.	Name of Project	River	Type	I.C.(MW)
1	Gosikhurd (Pathri)	Wainganga	S	40
2	Wainganga	Wainganga	S	150
3	Samda	Pranhita	R	95
4	Chichdoh Barrage (Ghargaoon)	Pranhita	R	105
5	Kunghara	Pranhita	R	115
6	Pranhita	Pranhita	S	310
7	Sahasrakund (Sahasrakund I)	Penganga	S	29
8	Patharpunj	Varna	S	29
9	Kadvi	Varna	S	215
10	Kesari (Kasari-I)	Kasari	S	215
11	Kumbhi (Kubhi-I)	Penganga	S	170
12	Kumbhi (Kubhi-II)	Penganga	R	27
13	Warna (Varna)	Varna	S	27
14	Hiranyakeshi (Hiranyakeshi II)	Vedganga	S	405
	Total	14 Nos. of Projects		1932

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

Hydro Power Development in Madhya Pradesh

Identified Hydro Power Potential as per reassessment Study:

		Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)		13	1970
I	Projects in operation	9	2235
II	Projects under construction	1	400
III	Projects held up due to Inter-State aspects	2	140
IV	Projects dropped due to Basin studies/ Other reasons	1	100
V	Projects yet to be allotted by the State for development*	4	191

*The numbers and capacity yet to be allotted by the State for development is different from arithmetic calculation from the potential assessed due to change in capacity of the projects, addition of the projects, etc.

1. Identified Projects during Reassessment study

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

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)	Year of commissioning
	NHDC							
1.	INDIRA SAGAR (NARMADA SAGAR)	1	(8X125)	NARMADA	CIR	KHANDWA	1000	2004-2005
2.	OMKARESHWAR	1	(8X65)	NARMADA	CIR	KHANDWA	520	2007
	SUB-TOTAL NHDC	2					1520	
	TOTAL CENTRAL	2					1520	
	MPPGCL							
3.	BANSAGAR TONS-I (TONS)	1	(3X105)	TONS	GANGA	SATNA	315	1991-1992
4.	BANSAGAR-II (BEEHAR)	1	(2X15)	TONS	GANGA	REWA	30	2002
5.	BANSAGAR-III (BANSAGAR)	1	(3X20)	SONE	GANGA	SATNA	60	2000-2002
6.	BARGI	1	(2X45)	NARMADA	CIR	JABALPUR	90	1988
7.	GANDHI SAGAR	1	(5X23)	CHAMBAL	GANGA	MANDSAUR	115	1960-1966
8.	MADHIKHERA	1	(3X20)	KALI SINDH	GANGA	SHIVPURI	60	2006-2007
9.	RAJGHAT	1	(3X15)	BETWA	GANGA	ASHOK NAGAR	45	1999
	SUB-TOTAL MPPGCL	7					715	
	TOTAL MP	9					2235	

3. H.E. Projects Under Construction:

Sl. No.	Name of Project	I. C. (MW)	District	River	Basin	Agency	Likely Commissioning
1	Maheshwar (Pvt.) #	400	Khargone & Khandwa	Narmada	CIR	SMHPCL	2020-22*
	Total	400					

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

* Subject to restart of works

4. H.E. Projects held up due to Inter-State aspects:

Sl. No.	Name of Project	I.C. (MW)	Location (State)	States Involved	Status
1	Orcha MPP (2x30+2x15 = 90 MW)	90	M.P.	U.P./M.P.	· DPR with estimated cost of Rs. 89.01 crores (3/1980 PL) returned in 07/1985. · Inter-state aspects mainly relate to submergence under the reservoir as well as sharing of water below Orcha.
2	Ken (2x15+2x10 =50 MW)	50	M.P.	U.P./M.P.	· DPR with estimated cost of Rs 202.06 crores returned in 2/1987. · The yield at the project site and sharing of water u/s & d/s of the project has been agreed between U.P. & M.P. Both the States have also agreed for preparation of DPR for the Ken MPP and NWDA proposal for transfer of surplus water of Ken to Betwa u/s of Rajghat Dam. · DPR for Ken-Betwa River Linking Project has been prepared by NWDA in Dec., 2008, copies of which were forwarded by them to Govt. of M.P. and Govt. of U.P. The status of the project was discussed by the respective Govts./NWDA/ MOWR in the meeting taken by Secretary (WR) on 04.08.2010 and it was decided that S&I works will be taken up by NWDA on priority.
Total		140			

5. Projects dropped due to Basin Studies/ Other reasons:

Sl. No.	Name of Project	Sector	I.C. (MW)	Month of Return	Remarks
1	Sone (Chorhat)	State	100	Apr-03	DPR 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.
	Total		100		

6. H. E. Projects yet to be allotted by the State for development:				
Sl.No.	Name of Project	River	Type	I.C. (MW)
1	Dhurwara	Betwa	R	28
2	Burhner	Burhner	S	28
3	Basania	Narmada	R	60
4	Hoshangabad (Jahanpur)	Narmada	S	75
	Total			191

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

Hydro Power Development in Andhra Pradesh

Identified Hydro Power Potential and its status of Development:			
		Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)		10	2341
I	Projects in operation	5	1610
II	Projects under construction	1	960
III	Projects held up due to Inter-State aspects	1	975
IV	Projects yet to be allotted by the State for development*	3	192

*The numbers and 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, etc.

1. Identified Projects during Reassessment study:

Sl.No.	Name of Project	River	I. C. (MW)
1	Machkund #	Machkund	205
2	Balimela	Sileru	65
3	Upper Sileru I&II (Upper Sileru)	Sileru	150
4	Lower Sileru	Sileru	385
5	Donkarayi Dam Canal ## (Donkarai Canal)	Sileru	44
6	Polavaram	Godavari	545
7	Pondugala	Krishna	95
8	Nagarjunasagar RBC & Ext. (Nagarjunasagar RBC)	Krishna	45
9	Srisailem	Krishna	775
10	Tungabhadra HLC (Tungbhadra HLC)	Bhadra	32
TOTAL		2341	

This project has been in operation in Odisha State for 114.75 MW

This project has been in operation but developed with capacity less than 25 MW

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)	Year of commissioning
APGENCO							
1	LOWER SILERU	1	(4X115)	SILERU	KHAMMAM	460	1976-1978
2	NAGARJUNA SGR RBC & EXT. (NAGARJUNA SGR RBC)	1	(3X30)	KRISHNA	SATRASALA	90	1983-90
3	SRISAILAM	1	(7X110)	KRISHNA	MAHABUBNAGAR	770	1982-1987
4	UPPER SILERU-I&II (UPPER SILERU)	1	(4X60)	SILERU	VISHAKAPATNAM	240	1967-1995
5	NJ SAGAR TPD	1	(2X25)	KRISHNA	GUNTUR	50	2017
	TOTAL APGENCO	5				1610	

* All projects are in EFR Basin

3. H.E. Projects under Construction:

Sl. No.	Name of Project	Agency	District	River/ Basin	I. C. (MW)	Likely Commissioning	Issues / Constraints
1	Polavaram	Polavaram Project Authority	East & West Godavari	Godavari/ EFR	960	2021-23 (Mar'23)	Public hearing for construction of protective embankment to be held in Odisha and Chhattisgarh as desired by MOEF at later stage.
	Total				960		

4. H.E. Projects held up due to Inter-State aspects:

Sl. No.	Name of Project	I.C. (MW)	Location (State)	States Involved	Status
1	Inchampalli MPP (13x75= 975MW)	975	A.P.	A.P./M.P./Chhattisgarh/Maharashtra	DPR with estimated cost of Rs.1110 crores (1987-88 PL) returned in 05/1989. Requires Resolution of inter-state aspects and submergence with MP, Chhattisgarh and Maharashtra.

5. Pump Stoarge Projects in Under S&I:

S. No.	Name of Project	No. of Stations	Capacity (MW)	River / Basin*	District	Agency
1	Pinnapuram		1200	Off the river / EFR	Kurnool	Greenko
	TOTAL		1200			

6. H. E. Projects yet to be allotted by the State for development:

Sl.No.	Name of Project	River	Type	I. C. (MW)
1	Balimela	Sileru	S	65
2	Pondugala	Krishna	S	95
3	Tungbhadra HLC	Bhadra	R	32
TOTAL				192

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

Hydro Power Development in Karnataka

Identified Hydro Power Potential and its status of Development:

			Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)			38	6459
I	Projects in operation		16	3644.2
II	Projects allotted by States for development			
	(i)	Projects returned to project authorities	2	665
III	Projects held up due to Inter-State aspects		1	400
IV	Projects dropped due to Basin studies/ Other reasons		1	200
V	Projects yet to be allotted by the State for development*		18	2848

*The numbers and 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, etc.

1. Identified Projects during Reassessment study

Sl.No.	Name of Project	River	I. C. (MW)
1	Mahadayi [Krishnapur]	Mandavi	210
2	Kalinadi Supa [Kalinadi I (Supa)]	Kalinadi	140
3	Kalinadi II (Dandeli) [Kalinadi I (Dandeli II)]	Kalinadi	60
4	Kalinadi (Nagjhari) [Kalinadi I (Nagjhari)]	Kalinadi	855
5	Kodassali [Kalinadi I (Kadassali)]	Kalinadi	95
6	Kadra [Kalinadi I (Kadra)]	Kalinadi	100
7	Kalinadi III [Kalinadi I (Mardi)]	Kalinadi	175
8	Bedthi [Gangavali (Bedti) St.I]	Gangavali	380
9	Gangavali St.II [Gangavali (Sonda) St.II]	Gangavali	105
10	Aghnashini	Aghnashini	370
11	Bennehole [Bannehole]	Bannehole	55
12	Lingnamakki [Linganamakki]	Saravathi	125
13	Sharavathy [Saravathi]	Saravathi	1365
14	Sharavathy Tail Race [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	Tamankal [Narayanpur]	Krishna	70
23	Almatti	Krishna	160
24	Ghataprabha	Tungabhadra	41
25	Shivapur [Shivpur]	Tungabhadra	26
26	Munirabad	Tungabhadra	41
27	Hampi	Tungabhadra	34
28	T.B. Dam [Tungbhadra RBC]	Tungabhadra	27
29	Bhadra [Tungbhadra Dam PH]	Bhadra	36
30	Krishnarajasagar	Cauvery	55
31	Sivasamudram [Shivasamudram]	Cauvery	44

32	Shimsa [Shimsa PH-I]	Cauvery	31
33	Sivasamudram [Cauvery PH-I]	Cauvery	235
34	Shimsa [Shimsa PH-II]	Shimsa	42
35	Arkavathy [Arkavathi]	Arkavathi	42
36	Mekadatu [Cauvery PH-II]	Cuvery	165
37	Rasi Manal # [Cauvery PH-III]	Cauvery	90
38	Hogenekkal # [Cauvery PH-IV]	Cauvery	36
TOTAL			6459

Rasi Manal & Hogenekkal are in Inter-State issue in Tamil Nadu State

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)	Year of commissioning
KPCL								
1	ALMATTI	1	(5X55) +(1X15)	KRISHNA	EFR	BIJAPUR	290	2004-2005
2	GERUSOPPA (SHARAVATHY TAIL RACE) [SARAVATHY TAIL RACE]	1	(4X60)	SHARAVATHY	WFR	UTTARA KANNADA	240	2001-2002
3	GHAT PRABHA	1	(2X16)	GHATPRABHA	EFR	BELGAUM	32	1992
4	MAHATMA GANDHI JOG	1	(4X21.6) +(4X13.2)	SHARAVATHY	WFR	SHIMOGA	139.2	1949-1952
5	KADRA [Kalinadi I (Kadra)]	1	(3X50)	KALI	WFR	UTTARA KANNADA	150	1997-1999
6	KALINADI (NAGJHARI) [Kalinadi I (Nagjhari)]	1	(3X135) +(3X150)	KALI	WFR	UTTARA KANNADA	855	1979-1984
7	KALINADI SUPA [Kalinadi I (Supa)]	1	(2X50)	KALI	WFR	UTTARA KANNADA	100	1985
8	KODASALI [Kalinadi I (Kadassali)]	1	(3X40)	KALI	WFR	UTTARA KANNADA	120	1998-1999
9	LINGNAMAKKI [Linganamakki]	1	(2X27.5)	SHARAVATHY	WFR	SHIMOGA	55	1979-1980
10	MUNIRABAD	1	(2X9) +(1X10)	TUNGABHADRA	EFR	KOPPAL	28	1962-1965
11	SHARAVATHY [Saravathi]	1	(10X103.5)	SHARAVATHY	WFR	SHIMOGA	1035	1965-1977
12	SIVASAMUNDRUM [Shivasamudram]	1	(4X6)+(6X3)	CAUVERY	EFR	MANDYA	42	1922-1934
13	VARAHI	1	(4X115)	VARAHI	WFR	UDUPI	460	1989-2009
14	BHADRA [Tungbhadra Dam PH]	1	(2x12)+(1x2)	BHADRA	EFR	CHICKMAGALUR	26	1965
TOTAL KPCL		14					3572.2	
APGENCO								
15	T B DAM * [Tungbhadra RBC]	1	(4X9)	TUNGABHADRA		BELLARI	36	1957-1964
16	HAMPI *	1	(4X9)	TUNGABHADRA	EFR	BELLARI	36	1958-1964
SUB-TOTAL APGENCO		2					72	
TOTAL KARNATAKA		16					3644.2	

* Utilities are in Andhra Pradesh

3. 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 [Cauvery PH-I]	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 [Krishnapur]	KPCL	320	Returned due to non-tie up of inputs/clearances, the project involves interstate aspects.
	Total		665	

4. Pumped Storage Projects under Survey & Investigation:

Sl. No.	Name of Project	Basin/River	I.C. (MW)	Agency	Target date of preparation of DPR
1	Sharavathy	WFR/ Sharavathy	2000	KPCL	18-Dec-18
2	Saundatti	WFR/ Malaprabha	1260	Greenko	
	Total		3260		

5. H.E. Projects held up due to Inter-State aspects:

Sl. No.	Name of Project	I.C. (MW)	Location (State)	States Involved	Status
1	Cauvery Power Projects- Mekadatu [Cauvery PH-II]	400	Karnataka	Kerala/TN/ Karnataka	• Preliminary report of Stage-I was returned in 10/1996. • Sharing of Cauvery water awarded by CWDIT. • With the consent of GOTN and GOK, NHPC took up S&I and preparation of DPR. • In the Core Group Meeting taken by secretary (Power) on 27.10.2004, it was agreed by GOK and GOTN that Shivasamudram (Karnataka) and Hogenekkal (T.N.) should be taken up simultaneously in the first phase and remaining two projects viz. Mekadatu and Rasimanal in the next phase. • In the Core Group Meeting taken by Secretary (Power) on 21.06.2006, it was agreed that execution of these four projects through NHPC would be most viable proposition. It was decided that representatives of both the Govts. would take up the matter with their respective Govts. and seek their approval and thereafter necessary agreement will be signed between NHPC and the two State Govts. Consent by both the State Govts. was to be communicated to MOP by 31.07.2006. The State of Karnataka in June, 2007 informed that Shivasamudram and Mekadatu will be executed by them in State sector. • KPCL informed in April, 2009 that the tribunal award is with Supreme Court. • Subsequently, a meeting was held on 08.07.2009 under the chairmanship of Secretary (Power) to discuss the pending issue of development of Hydroelectric Projects in Cauvery Basin. Secretary (Power) expressed that Shivasamudram being a Run of River Project with in the territory of Karnataka, Tamil Nadu should not have any objection to the development of the Project by the State Government. He further opined that there should not be any problem in taking up Shivasamudram Project by the State of Karnataka provided there is joint mechanism for monitoring the water level/releases of water to Tamil Nadu. He suggested that the CWC could act as an observer in this regard and directed that the GOK would provide/share all the technical details of the Project to/with Tamil Nadu. Both the States Government were advised to consult CEA and CWC before finalization of designing of the Project. • As regards other projects located in Tamil Nadu but whose submergence area partly falls in Karnataka, it was suggested the two Governments need to arrive at an arrangement for power sharing.
	Total	400			

6. Projects dropped due to Basin studies/ Other reasons:

Sl. No.	Name of Project	I.C. (MW)	River	Basin	Remarks
1	Gundia	200	Gundia	WFR	Due to implementation of Yethnabale Drinking water Project in same catchment area, the project is stalled.
	Total	200			

7. H. E. Projects yet to be allotted by the State for development:

Sl.No.	Name of Project	River	Type	I.C.(MW)
1	Bennehole (Bannehole)	Bannehole	S	55
2	Machchattu	Varahi	R	35
3	Netravathy	Netravathy	S	60
4	Sirpadi	Netravathy	R	38
5	Kumaradhari	Kumaradhari	S	49
6	Barapole I	Barapole	S	335
7	Kalinadi II (Dandeli [Kalinadi I (Dandeli II)])	Kalinadi	R	60
8	Kalinadi III [Kalinadi I (Mardi)]	Kalinadi	R	300
9	Bedthi [Gangavali (Bedti) St.I]	Gangavali	S	380
10	Gangavali St.II [Gangavali (Sonda) St.II]	Gangavali	S	400
11	Aghnashini	Aghnashini	S	600
12	Tamankal [Narayanpur]	Krishna	R	70
13	Shivapur [Shivpur]	Tungabhadra	R	26
14	Krishnarajasagar	Cauvery	S	55
15	Shimsa [Shimsa PH-I]	Cauvery	R	31
16	Shimsa [Shimsa PH-II]	Shimsha	R	42
17	Arkavathy [Arkavathi]	Arkavathi	R	42
18	Jaldurg	Krishna	R	270
	Total	18 Nos. of Projects		2848

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

Hydro Power Development in Kerala

Identified Conventional Hydro Power Potential and its status of Development:

		Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)		28	3378
I	Projects in operation	14	1856.5
II	Projects under construction	2	100
III	Projects cleared by CEA and yet to be taken up for construction	1	163
IV	Projects held up due to Inter-State aspects	4	520
V	Projects yet to be allotted by the State for development*	11	1004

*The numbers and 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.

1. Identified Projects during Reassessment study

Sl.No.	Name of Project	River	IC
1	Baraple II	Barapole	85
2	Kuttiyadi, Kuttityadi Ext & Kuttityadi Add. Ext. (Kuttiyadi)	Kuttiyadi	80
3	Chalipuzha	Baypore	50
4	Cholathipuzha #	Baypore	80
5	Pandiyar Punnapuzha Tail Race (Pandiyar Punnapuzha II)	Pandiyar	85
6	Silent Valley	Kundipuzha	130
7	Idukki (Idukki I & II)	Periyar	565
8	Idukki (Idukki III)	Periyar	130
9	Lower Periyar	Periyar	145
10	Pallivasal (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	Sholayar [Sholaiyar]	Sholaiyar	75
20	Kuriarkutty (Kuriakutty)	Kuriakutty	65
21	Poringalkuthu(R.B)	Chalakuddi	65
22	Poringalkutty (Poringalkuthu(L.B))	Chalakuddi	60
23	Athirappilly (Adirapally)	Chalakuddi	65
24	Sabarigiri	Pamba	410
25	Kakkad	Kakkad	75
26	Lower Sabarigiri	Kakkad	55
27	Twin-Kallar (Twin Kallar Multipurpose)	Achankovil	65
28	Mananthavady (Manthavadi)	Kabini	200
	Total		3378

This project is in Inter-State issue in Tamil Nadu State

2. Hydro Electric Projects in Operation:

S. No.	Utility/Stations	No. of Stns.	No. of units x Capacity (MW)	River / Basin*	District	I.C. (MW)	Year of commissioning
	KSEB						
1	IDAMALAYAR	1	(2X37.5)	IDAMALAYAR	ERNAKULAM	75	1987
2	IDUKKI [Idukki I & II + Idukki - III]	1	(6X130)	PERIYAR	IDUKKI	780	1976-1986
3	KAKKAD	1	(2X25)	PAMBA	PATHANAMTHI TTA	50	1999
4	KUTTIYADI [Kuttiyadi]	1	(3X25)	KUTTIYADI	KOZHIKODE	75	1972
5	KUTTIYADI EXTN . [Kuttiyadi]	1	(1X50)	KUTTIYADI	KOZHIKODE	50	2001
6	KUTTIYADI ADDN EXTN [Kuttiyadi]	1	(2X50)	KUTTIYADI	KOZHIKODE	100	2010
7	LOWER PERIYAR	1	(3X60)	PERIYAR	IDUKKI	180	1997
8	NERIAMANGLAM	1	(3X15)	MUTHIRAPUZH A	IDUKKI	45	1961-63
9	PALLIVASAL [Pallivasal Replacement]	1	(3X5) +(3X7.5)	MUTHIRAPUZH A	IDUKKI	37.5	1948-2001
10	PANNIAR	1	(2X15)	PANNIAR	IDUKKI	30	1963-2001
11	PORINGALKUTTU	1	(4X8)	CHALAKUDY	COIMBATORE	32	1957-1960
12	SABARIGIRI	1	(6X50)	PAMBA	PATHANAMTHI TTA	300	1960-1967
13	SENGULAM	1	(4X12)	MUTHIRAPUZH A	IDUKKI	48	1954-2001
14	SHOLAYAR [Sholaiyar]	1	(3X18)	SHOLAYAR	COIMBATORE	54	1956-1968
	TOTAL KSEB	14				1856.5	

* All projects are in WFR Basin

3. H.E. Schemes under Construction:

Sl. No.	Name of Project	Agency	District	River /Sub-Basin/ Basin	I.C.	Likely Commissioning
					(MW)	
1	Pallivasal Extn.	KSEB	Idukki	Mudirapuzha/ Baypore Periyar/ WFR	60	2021-22 (Dec.'21)
2	Thottiyar	KSEB	Idukki	Thottiyar/ Baypore Periyar / WFR	40	2020-21 (Dec.'20)
	Total				100	

4. H.E. Projects Cleared/Appraised 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	Status
1	Athirapally [Adirapally]	KSEB	Thrishur	Chalakkudy / WFR	163	31.03.05	EC restored on 9.10.15. FC accorded on 16.12.1999. Fresh tenders are under process.
	Total				163		

5. H.E. Projects held up due to Inter-State aspects:

Sl. No.	Name of Project/Installed Capacity	I.C. MW	Location (State)	States Involved	Status
1*	Kerala Bhavani (MPP) (3x50= 150 MW)	150	Kerala	Kerala/T.N. /Karnataka	- DPR with estimated cost of Rs 168.75 crores (1990-91 PL) returned in 01/1992. - Final award of CWDT stated that the Project involves trans- basin diversion of water of Bhavani, therefore it is not possible to allocate water for this project. - Since the tribunal has ruled out trans-basin transfer (from interstate rivers), this project remains a non-starter. - The final award of CWDT has been challenged by Kerala State before the Hon'ble Supreme Court of India.
2.*	Mananthvady MPP (Manthavadi) (5x45 =225MW)	225	Kerala	Kerala/T.N. /Karnataka	- Earlier DPR with estimated cost of Rs 69.17 crores (1980 PL) returned in 07/1980. - Final award of CWDT stated that the Project involves trans- basin diversion of water of Kabini, therefore it is not possible to allocate water for this project. - Since the tribunal has ruled out transbasin transfer (from interstate rivers), this project remains as a non-starter. - The final award of CWDT has been challenged by Kerala State before the Honourable Supreme Court of India.
3	Pandiar Punnapuzha Tail Race [Pandiyar Punnapuzha II]	105	Kerala	TN/Kerala	- Earlier DPR with estimated cost of Rs 22.00 crores (12/1972 PL) returned in 07/82 - Project envisages utilisation of tailrace waters of the proposed Pandiar Punnapuzha HEP of Tamil Nadu. - The project would be taken up if GOTN and Kerala come to a mutual agreement. - Inter-state issue is not resolved.

Sl. No.	Name of Project/Installed Capacity	I.C. MW	Location (State)	States Involved	Status
4.*	Pambar (40 MW)	40	Kerala	T.N./Kerala /Karnataka	• Earlier DPR for 30 MW with estimated cost of Rs.65.46 crores (1989 PL) returned in 03/1990. • The project is also entangled with Cauvery Waters Disputes Tribunal (CWDT). • KSEB revised the Project from earlier proposal of storage Project to run-of-river Project. • Non-Consumptive use of 5.6 TMC was proposed for power generation, which has been allowed by Tribunal subject to agreement with Tamil Nadu for schedule of water release. • DPR is yet to be finalized.
Total		520			
(*) Projects located in Cauvery basin.					

6. H. E. Projects yet to be allotted by the State for development

Sl. No.	Name of Project	River	Type	Probable I.C.(MW)
1	Chalipuzha	Baypore	S	50
2	Silent Valley	Kundipuzha	S	130
3	Manali	Idamlayar	S	36
4	Kudal	Idamlayar	S	47
5	Puyanukutty	Puyanukutty	S	285
6	Kuriarkutty (Kuriakutty)	Kuriakutty	S	66
7	Lower Sabarigiri	Kakkad	S	55
8	Twin-Kallar (Twin Kallar Multipurpose)	Achankovil	S	65
9	Baraple II	Barapole	R	85
10	Perinjankutty	Perinjankutty	S	120
11	Poringalkuthu(R.B)	Chalakuddi	S	65
	Total	11 Nos. of Projects		1004

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

Hydro Power Development in Tamil Nadu

Identified Hydro Power Development and its status of Development:

		Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)		23	1693
I	Projects in operation	26	1778.2
II	Projects held up due to Inter-State aspects	4	690
III	Projects yet to be allotted by the State for development*	4	132

*The numbers and 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 of the projects, etc.

1. Identified Projects during Reassessment study:

Sl.No.	Name of Project	River	I. C. (MW)
1	Pandiyar Punnapuzha (Pandiyar-Punnapuzha I)	Pandiyar	125
2	Aliyar (Upper Aliyar)	Bharatpuzha	90
3	Periyar (Periyar Lake)	Periyar	145
4	Nirar	Idamalayar	26
5	Sholayar- I [Sholaiyar- I]	Sholaiyar	75
6	Sarkarpathy [Sarkarpathi]	Periyar	33
7	Kodayar I	Kodayar	65
8	Kodayar II	Kodayar	30
9	Paraliyar	Paraliyar	39
10	Mettur Dam (Mettur Dam PH)	Cauvery	32

11	Mettur Tunnel (Mettur Tunnel PH)	Cauvery	100
12	Lower Mettur I, II, III & IV (Lower Mettur)	Cauvery	115
13	Bhavani Kattalai Barrage I, II & III (Bhawani Kattalai)	Cauvery	115
14	Lower Bhavani (Lower Bhawani)	Bhavani	34
15	Lower Moyar	Moyar	33
16	Moyar	Moyar	75
17	Pykara (Pykara (Singara))	Moyar	115
18	Pykara Ultimate (Pykara (Ultimate))	Moyar	60
19	Kundah I (Avalanche Em'ld (Kundah-I))	Kundah	70
20	Kundah II (Kundapallam (Kundah-II))	Kundah	160
21	Kundah III (Pengumbahalla (Kundah-III))	Kundah	95
22	Suruliyar (Surullar)	Suruliar	30
23	Papanasam	Tambraparni	31
TOTAL			1693

2. H.E. Projects in Operation:

S. No.	Utility/ Stations	No. Of stns.	No. of units x Capacity (mw)	River	Basin	District	Capacity (MW)	Year of commissioning
TANGEDCO								
1.	ALIYAR [Upper Aliyar]	1	(1X60)	MASONARY DAM	WFR	COIMBATORE	60	1970
2.	BHAVANI KATTALAI BARRAGE-I [Bhawani Kattalai]	1	(2X15)	CAUVERY	EFR	ERODE	30	2006
3	BHAVANI KATTALAI BARRAGE-II [Bhawani Kattalai]	1	(2X15)	CAUVERY	EFR	ERODE	30	2013
4	BHAVANI KATTALAI BARRAGE-III [Bhawani Kattalai]	1	(2X15)	CAUVERY	EFR	ERODE	30	2012
5	KODAYAR-I	1	(1X60)	KODAYAR	WFR	KANYAKUMARI	60	1970
6	KODAYAR-II	1	(1X40)	KODAYAR	WFR	KANYAKUMARI	40	1971
7	KUNDAH-I [Avalanche Em'd (Kundah-I)]	1	(3X20)	AVLANCHE STREAM	EFR	NILGRIS	60	1960-1964
8	KUNDAH-II [Kundapallam (Kundah- II)]	1	(5X35)	KUNDAH	EFR	NILGRIS	175	1960-1965
9	KUNDAH-III [Pengumbahalla (Kundah- III)]	1	(3X60)	PENGUNBA HALLAH	EFR	COIMBATORE	180	1965-1978
10	KUNDAH-IV	1	(2X50)	BHAVANI	EFR	COIMBATORE	100	1966-1978
11	KUNDAH-V	1	(2X20)	BHAVANI	EFR	NILGRIS	40	1964-1988
12	LOWER METTUR-I [Lower Mettur]	1	(2X15)	CAUVERY	EFR	SALEM	30	1988
13	LOWER METTUR-II [Lower Mettur]	1	(2X15)	CAUVERY	EFR	SALEM	30	1988
14	LOWER METTUR-III [Lower Mettur]	1	(2X15)	CAUVERY	EFR	SALEM	30	1987-1988
15	LOWER METTUR-IV [Lower Mettur]	1	(2X15)	CAUVERY	EFR	SALEM	30	1988-1999
16	METTUR DAM [Mettur Dam PH]	1	(4X12.5)	CAUVERY	EFR	SALEM	50	1937-1946
17	METTUR TUNNEL [Mettur Tunnel PH]	1	(4X50)	CAUVERY	EFR	SALEM	200	1965-1966
18	MOYAR	1	(3X12)	MOYAR	EFR	NILGRIS	36	1952-1953
19	PAPANASAM	1	(4X8)	THAMBRAP ARANI	EFR	TIRUNELVELI	32	1944-1951
20	PARSON'S VALLEY	1	(1X30)	BHAVANI	EFR	NILGIRIS	30	2000
21	PERIYAR [Periyar Lake]	1	(3X42)+ (1X35)	PERIYAR	WFR	IDUKKI	161	1958-1965
22	PYKARA [Pykara (Singara)]	1	(3X7)+ (2X13.6)+ (1X11)	Glenmorgan Forebay dam	EFR	NILGRIS	59.2	1932-2005
23	PYKARA ULTMATE [Pykara (Ultimate)]	1	(3X50)	PYKARA	EFR	NILGRIS	150	2005
24	SARKARPATHY [Sarkarpathi]	1	(1X30)	PARABIKUL AM	WFR	KOZHICODE	30	1966
25	SHOLAYAR I [Sholaiyar- I]	1	(2X35)	SHOLAYAR	WFR	COIMBATORE	70	1971
26	SURULIYAR [Surullar]	1	(1X35)	ERAVANGA LAR	EFR	TIRUNELVELI	35	1978
	TOTAL TANGEDCO	26					1778.2	

3. Pumped Storage Projects in Operation:

Sl. No.	Name of Project	I. C. (MW)	Remarks
1	Kadamparai PSS	400	Pumping Mode- Working
	Total	400	

4. Pumped Storage Projects Under construction:

Sl. No.	Name of Project	I. C. (MW)	Remarks
1	Kundah Pumped Storage (Stage I,II,III&IV)	500	Under Construction
	Total	500	

5. Pumped Storage H.E. Projects Under S&I:

S.No.	Name of Project	River	I.C. (MW)	District
1	Sillahalla St-1	Sillahalla	1000	
2	Kodayar	Kodayar	500	
	Sub Total		1500	

6. H.E. Projects held up due to Inter-State aspects:

Sl. No.	Name of Project	I.C. (MW)	Location (Site)	States Involved	Status
1	Nellithorai	50	T.N.	TN/ Kerala	- Sanctioned by Planning Commission in 1974 at an estimated cost of Rs.10.04 crores. - Concurrence not issued by CEA due to objections received from Govt. of Kerala.
2	Cauvery Power Projects [Rasimanal(90 MW) & Hogenekkal (36 MW) (from Karnataka)]	480	T.N.	Kerala/ TN/ Karnataka	- Returned in 2/1997. - In the Core Group Meeting taken by Secretary (Power) on 27.10.2004, it was agreed by GOK and GOTT that Shivasamudram (in Karnataka) and Hogenekkal (in TN) should be taken up simultaneously in the first phase and remaining two projects viz. Mekadatu (in Karnataka) and Rasimanal (in TN) in the next phase. - In the Core Group Meeting taken by Secretary (Power) on 21.06.2006, it was agreed that execution of these four projects through NHPC would be most viable proposition. It was decided that representatives of both the Govts. would take up the matter with their respective Govts. and seek their approval and thereafter necessary agreement will be signed between NHPC and the two State Govts. Consent by both the State Govts. was to be communicated to MOP by 31.07.2006. Tripartite agreement between Govt. of Tamil Nadu, Govt. of Karnataka and NHPC was to be signed. However, in June, 2007 the State of Karnataka informed that Shivasamudram and Mekadatu will be executed by Karnataka in State Sector. - TNEB informed in April, 2009 that Tamil Nadu has given its concurrence to MOP's draft tripartite agreement and sent it to MOP, GOI on 15.12.2008. Tamil Nadu insists the execution of the projects by neutral agency under Govt. of India. Final award of CWDI is yet to be notified in the Gazette of Govt. of India, as the case has been filed in the Supreme Court of India. - Subsequently, a meeting was held on 08.07.2009 under the chairmanship of Secretary (Power) to discuss the pending issue of development of Hydroelectric Projects in Cauvery Basin. Secretary (Power) expressed that Shivasamudram being a Run of River Project with in the territory of Karnataka, Tamil Nadu should not have any objection to the development of the Project by the State Government. He further opined that there should not be any problem in taking up Shivasamudram Project by the State of Karnataka provided there is joint mechanism for monitoring the water level/releases of water to Tamil Nadu. He suggested that the CWC could act as an observer in this regard and directed that the GOK would provide/share all the technical details of the Project to/with Tamil Nadu. Both the States Governments were advised to consult CEA and CWC before finalization of designing of the Project. - As regards other projects located in Tamil Nadu but whose submergence area partly falls in Karnataka, it was suggested that the two Governments need to arrive at an arrangement for power sharing.
3	Pandiyar Punnappuzha [Pandiyar-Punnappuzha I]	100	T.N.	TN/ Kerala	- DPR with estimated cost of Rs 73.90 crores (11/1976 PL) returned in 07/1982. - Project is located in TN on West flowing Pandiar Punnappuzha river (Chaliyar river). - Concurrence of Govt. of Kerala is required, as per agreement in 1965, for revised project proposal, which is yet to be communicated by Govt. of Kerala. - Based on Ministerial level meeting between Kerala and Tamil Nadu on 10.06.2002, modified proposal was evolved by TNEB and has been sent to Govt. of Kerala on 10.04.2007 for its consideration. - Concurrence of Govt. of Kerala is yet to be received.
4	Cholatipuzha (from Kerala)	60	T.N.	TN/ Kerala	- DPR with estimated cost of Rs7.39 crores (1976 PL) returned in 07/1982 - As per agreement between Tamil Nadu & Kerala reached in Oct., 1965, cost and benefits from the project located on their border are to be shared equally by the two States. - Kerala has not communicated its concurrence to the project investigated by TNEB. - This Project will be finalized while finalizing the Project of Pandiar- Punnappuzha with Kerala.
	Total	690			

7. H. E. Projects yet to be allotted by the State for development

Sl. No.	Name of Project	River	Type	I.C.(MW)
1	Nirar	Idamalayar	R	26
2	Paraliyar	Paraliyar	R	39
3	Lower Bhavani (Lower Bhawani)	Bhavani	S	34
4	Lower Moyar	Moyar	S	33
	Total	4 Nos. of Projects		132

Note: R –Run of the River; S- Storage

Hydro Power Development in Telangana

Identified Hydro Power Potential and its status of Development:

			Nos.	Capacity (MW)
Identified Hydro Power Potential as per re-assessment Study from Major/Medium Projects (Projects having capacity above 25 MW)			8	2019
I	Projects in operation		6	800
II	Projects allotted by States for development			
	(i)	Projects returned to project authorities	1	320
III	Project yet to be allotted by the State for development*		1	250

*The numbers and 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 etc.

1. Identified Projects during Reassessment study:

Sl.No.	Name of Project	River	I. C. (MW)
1	Pochampad	Godavari	47
2	Inchampalli #	Godavari	920
3	Singareddi	Godavari	250
4	Dummugudem (Dummagudem)	Godavari	360
5	Pulichintala	Krishna	180
6	Nagarjunasagar LBC	Krishna	42
7	Nagarjunasagar (Nagarjunasagar Dam PH)	Krishna	115
8	Priyadarshini Jurala (Priyadarshini)	Krishna	105
TOTAL			2019

Inchampalli is under Inter-State issue in the State of Andhra Pradesh for 975 MW.

2. H.E. Projects in Operation:

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

* All projects are in EFR Basin

3. Pumped Storage Projects in Operation:

Sl. No.	Name of Project	I. C. (MW)	River/ Basin	District	Year of Commissioning
1	Srisailem LBPH	900	Krishna/ EFR	Nagarkurnool	2000-04
2	Nagarjuna Sagar	705.6	Krishna/ EFR	Nalgonda	1978-85
	Total	1605.6			

4. H.E. Projects Returned to project Authorities:

Sl. No.	Name of Project	I.C. (MW)	Agency	Month of Return	Reason for Return
1	Dummugudem (Dummagudem)	320	APGENCO	Mar-06	Returned due to non-replying of various comments such as hydro planning, cost of E&M works, hydel civil Engineering, geological aspects etc.
	Total	320			

5. H. E. Projects yet to be allotted by the State for development

Sl. No.	Name of Project	River	Type	I.C. (MW)
1	Singareddi	Godavari	R	250
	Total	1 No. of Project		250

Note: R –Run of the River

Hydro Power Development in Bihar

Identified Hydro Power Potential and its status of Development:

	Nos.	I.C. (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)	1	40
Hydro Projects Returned to Project Authorities for re-submission after compliance of observations	1	130

Note: Identified project namely East Gandak Canal has been developed with installed capacity below 25 MW

1. Identified Projects during Reassessment study:

Sl.No.	Name of Project	River	I. C. (MW)
1	Eastern Gandak Canal	Gandak	40
TOTAL		40	

2. Hydroelectric Projects in operation in Bihar (above 25 MW):

At present, no hydroelectric project (above 25 MW) is under operation in Bihar. Four H.E. Projects having installed capacity of 44.9MW, consisting of Kosi (20MW), Sone Western Canal (6.6MW), Sone Eastern Canal (3.3MW) and Eastern Gandak (15MW), are in operation in Bihar which are all below 25MW capacity each.

3. Projects under Construction:

At present no hydro scheme is under construction in Bihar.

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

Sl. No.	Name of Scheme	Agency	I.C. (MW)	Reason of Return
1	Dagmara	BSHPCL	130	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 appraising groups.
	Total		130	

Hydro Power Development in Jharkhand

Identified Hydro Power Potential and its status of Development:

		Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Schemes (Schemes having capacity above 25 MW)		8	582
I	Projects in operation	3	170
II	Projects dropped due to Basin studies/ Other reasons	1	710
III	Projects yet to be allotted by the State for development*	4	307
*The numbers and 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 schemes, addition/deletion of the schemes, etc.			

1. Identified Projects during Reassessment study:

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

Maithon is in operation in West Bengal State

Subernrekha MPP has been developed below 25 MW.

Koel Karo H.E. Project ($4 \times 172.5 + 1 \times 20 = 710$ MW), located in Ranchi, Gumla & Singhbhum Districts of Jharkhand (in the erstwhile unified State of Bihar), envisages utilization of waters of the South Koel and North Karo rivers. Koel Karo H.E. Project was entrusted to NHPC in August 1980 for execution under central sector. The project was sanctioned by Govt. of India as a NHPC project in June 1981 at an estimated cost of Rs. 444.67 crores (gross) including cost of associated transmission line and interest during construction (IDC).

Ministry of Power vide their letter dated 30-09-2005 informed the closure of project due to non-finalization of power purchase agreement.

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)	YEAR OF COMMISSIONING
	DVC						
1	PANCHET	1	(1X40)	DAMODAR	DHANBAD	40	1990
	SUB-TOTAL DVC	1				40	
	JUUNL						
1	SUBERNREKHA -I	1	(1X65)	SUBERNAR EKHA	RANCHI	65	1977
2	SUBERNREKHA -II	1	(1X65)	SUBERNAR EKHA	RANCHI	65	1980
	TOTAL JUUNL	2				130	
	TOTAL JHARKHAND	3				170	

* Panchet is in Ganga and Subernrekha-I & II are in CIR Basin.

3. Pumped storage Projects in Operation:

Sl. No.	Name of Project	I. C. (MW)	Remarks
1	Panchet Hill-DVC	40	Not Working in Pumping Mode -Tail Pool dam not constructed. Land acquisition issue involved.

4. Projects dropped due to Basin studies/ Other reasons:

Sl. No.	Name of Project	River	Type	I.C. (MW)	Remarks
1	Koel Karo	N. Koel & S. Karto	S	710	*
	Total			710	

* Koel Karo H.E. Project (4x172.5 + 1x20 = 710 MW), located in Ranchi, Gumla & Singhbhum Districts of Jharkhand (in the erstwhile unified State of Bihar), envisages utilization of waters of the South Koel and North Karo rivers. Koel Karo H.E. Project was entrusted to NHPC in August 1980 for execution under central sector. The project was sanctioned by Govt. of India as a NHPC project in June 1981 at an estimated cost of Rs. 444.67 crores (gross) including cost of associated transmission line and interest during construction (IDC).

Ministry of Power vide their letter dated 30-09-2005 informed the closure of project due to non-finalization of power purchase agreement.

5. H. E. Projects yet to be allotted by the State for development

Sl. No.	Name of Project	River	Type	I.C. (MW)
1	Serengada	N.Koel	R	37
2	Sankh-II (Upper Sankh St-II)	Sankh	R	55
3	Lower Sankh	Sankh	S	55
4	Indrapuri (Khadwan)	Sone	S	160
	Total	4 Nos. of Schemes		307

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

Hydro Power Development in Odisha

Identified Hydro Power Potential and its status of Development:

			Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)			13	2981
I	Projects in operation		7	2142.25
II	Projects allotted by States for development			
	(i)	Projects under S & I	2	128
	(ii)	Projects held up due to Inter-State aspects	1	320
III	H. E. Projects yet to be allotted by the State for development*		6	1096
*The numbers and 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 of the projects, etc.				

1. Identified Projects during Reassessment study:

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	Sindol [Hirakud St-III]	Mahanadi	175
8	Hirakud (Chiplima) [Hirakud St-II]	Mahanadi	155
9	Hirakud (Burla) [Hirakud St-I]	Mahanadi	150
10	Upper Indravati	Indravati	585
11	Upper Kolab	Sabari	280
12	Lower Kolab	Sabari	375
13	Balimela	Balimela	405
	Total		2981

2. H.E. Projects in Operation:

S. NO.	UTILITY/ STATIONS	NO. OF STNS.	NO. OF UNITS X CAPACITY (MW)	RIVER	DISTRICT	I.C. (MW)	YEAR OF COMMISSIONING
OHPC							
1	BALIMELA	1	(6X60)+ (2X75)	SILERU	MALKANGIRI	510	1973-1977, 2008
2	HIRAKUD (BURLA) [HIRAKUD ST- I]	1	(3X37.5) (2X49.5) +(2X32)	MAHANADI	SAMBALPUR	275.5	1956-1990
3	HIRAKUD (CHIPLIMA) [HIRAKUD ST- II]	1	(3X24)	MAHANADI	SAMBALPUR	72	1962-1964
4	RENGALI	1	(5X50)	BRAHMANI	ANGUL	250	1985-1992
5	UPPER INDRAVATI	1	(4X150)	INDRAVATI	KALAHANDI	600	1999-2001
6	UPPER KOLAB	1	(4X80)	KOLAB	KORAPUT	320	1988-1993
	TOTAL OHPC	6				2027.5	
APGENCO							
1	MACHKUND	1	(3X17)+ (3X21.25)	MACHKUND	KORAPUT	114.75	1959
	SUB-TOTAL APGENCO	1				114.75	
	TOTAL ODISHA	7				2142.25	

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

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

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

4. Pumped Storage Projects under Survey & Investigation:

Sl. No.	Name of Project	Basin/River	I.C. (MW)	Agency
1	Upper Indravati	Indravati	600	OHPCL
2	Balimela	Balimela	500	OHPCL
3	Upper Kolab	Kolab	320	OHPCL
	Total		1420	

5. H.E. Projects involving Inter-State aspects:

Sl. No.	Name of Project	I.C. (MW)	Location (State)	States Involved	Status
1	Sindol [HIRAKUD ST- III] 320 MW= (5x20+5x20+6x20)	320	Orissa	MP/Chhatisgarh/ Bihar/ Jharkhand/ Orissa / Maharashtra	DPR with estimated cost of Rs.2246.14 crores (1994 PL) returned in 07/96 due to non-resolution of interstate aspect. The consent of the upstream States viz. Jharkhand, Bihar, M.P, Chhatisgarh and Maharashtra is not available.DPR is being revised by reducing Installed Capacity. Revised DPR yet to be submitted to CEA. Revised hydrology of Sindol-I for 100 MW has been submitted to CWC for clearance.

6. H. E. Projects yet to be allotted by the State for development

Sl.No.	Name of Project	River	Type	I.C. (MW)
1	Bhimkund	Baitarni	S	29
2	Baljori	Baitarni	S	230
3	Lodani	Brahmani	S	42
4	Naraj	Mahanadi	S	215
5	Tikkarpara	Mahanadi	S	205
6	Lower Kolab	Kolab (Sabri)	S	375
	Total	6 Nos. of Projects		1096

Note: S- Storage

Hydro Power Development in Sikkim

Identified Hydro Power Potential and its status of Development:

			Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)			24	4248
I	Projects in operation		7	2169
II	Projects under construction		6	1133
III	Projects allotted by States for development			
	(i)	Projects cleared by CEA and yet to be taken up for construction	1	520
	(ii)	Projects allotted for development on which S&I is held up/ yet to be taken up	2	92
	Total (i-ii)		3	612
IV	Projects dropped due to Basin studies/ Other reasons		1	96
V	Projects yet to be allotted by the State for development*		16	1914

*The numbers and capacity yet to be allotted by the State for development is different from arithmetic calculation from the potential assessed due to change in capacity of the projects, addition of the projects, etc.

1. Identified Projects during Reassessment study:				
Sl.No.	Name of Project	River	Type	IC
1	Kalep	Tista	R	41
2	Talem	Tista	R	65
3	Jedang	Lhonak	R	185
4	Teesta I (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	Rongnichu (Rongni Storage)	Rongni	R	95
14	Mana	G.Ranjit	R	37
15	Lethang (Yoksam)	Rathong	R	44
16	Mamium	G.Ranjit	R	175
17	Gompa	G.Ranjit	R	46
18	Rangit-III (Ligship)	G.Ranjit	R	115
19	Teesta St.II (Chunthang)	Tista	R	830
20	Teesta-III (Singhik)	Tista	R	685
21	Panan	Tolung	R	230
22	Teesta - IV (Mangan)	Tista	R	445
23	Teesta-V (Samdong)	Tista	R	280
24	Lower Lagyap	Rongpi	R	40
	Total			4248

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)	YEAR OF COMMISSIONING
	NHPC						
1	RANGIT-III (Ligship)	1	(3X20)	RANGIT	GANGTOK	60	2000
2	TEESTA-V (Samdong)	1	(3X170)	TEESTA	EAST SIKKIM	510	2008
	SUB-TOTAL NHPC	2				570	
	STATE						
	TEESTA URJA LTD. (TUL)						
3	TEESTA-III (Singhik)	1	(6X200)	TEESTA	NORTH SIKKIM	1200	2017
	SUB-TOTAL TUL	1				1200	
	PRIVATE						
	GIPL (GATI INFRA PRIVATE LTD.)						
4	CHUZACHEN	1	(2*55)	RONGLI & RANGPO	EAST SIKKIM	110	2013
	SNEHA KINETIC POWER PROJECTS PVT LTD (SKPPPL)						
5	DIKCHU	1	(2*48)		EAST & NORTH SIKKIM	96	2017
	SHIGA ENERGY PVT LTD (SEPL)						
6	TASHIDING	1	(2*48.50)	RATHANG CHU		97	2017
	DANS ENERGY PVT LTD. (DEPL)						
7	JORETHANG LOOP	1	(2*48)	RANGIT	SOUTH /WEST	96	2015
	SUB-TOTAL PRIVATE	4				399	
	TOTAL SIKKIM	7				2169	

* All projects are in Brahmaputra Basin

3. H.E. Projects under Construction:

Sl. No.	Name of Project	Agency	District	I.C. (MW)	River/ Basin	Likely Commissioning
1	Bhasmey	Gati Infrastructure	East Sikkim	51	Rangpo/ Teesta/	2022-23 *
					Brahmaputra	
2	Rangit-IV	JAL Power	West Sikkim	120	Rangit/ Teesta/	2022-23 *
					Brahmaputra	
3	Rangit-II	Sikkim Hydro	West Sikkim	66	Greater Rangit/ Teesta/	2022-23*
					Brahmaputra	
4	Rongnichu (Rongni Storage)	Madhya Bharat	East Sikkim	96	Rongnichu/ Teesta/	2020-21 (Sep.'20)
					Brahmaputra	
5	Teesta St. VI	NHPC	South Sikkim	500	Teesta/	2023-24 *
					Brahmaputra	
6	Panan	Himagiri	North Sikkim	300	Rangyongchu/ Teesta/	2023-24 *
					Brahmaputra	
	Total			1133		

* Subject to re-start of works

4. H.E. Projects Cleared/Appraised by CEA:

Sl. No	Name of Project	Agency	District	River/ Basin*	I.C. (MW)	Date of CEA Concurrence	Status
1	Teesta St-IV (Mangan)	NHPC	North Sikkim	Teesta/ Brahmaputra	520	13.05.10	EC accorded on 09.01.14. FC-I accorded on 26.02.13. FC-II is yet to be obtained. MoU with State Govt. to be amended by developer. State Forest Department on 31.01.2018 submitted compliance report of FC-I to MoEF&CC for issuance of FC-II. MoEF&CC, vide letter dated 05.02.2019, has furnished observations on the compliance report to State Govt. NHPC vide letter dated 23.07.2019, 14.09.2019, 24.09.2019 & 16.10.2019 has requested DC, North Sikkim to resolve the issue of pending consent from 3 GPUs required for obtaining FC-II and also nomination of members of concerned GPUs for constitution of expert group at the earliest. DFO (North) on 15.09.2019 submitted reply to observations of MoEF&CC wrt CA and KML files to CCF (FC), Govt. of Sikkim for further submission to MoEF&CC.
		Total			520		

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

Sl. No.	Name of Project	Basin/River	Agency	Original I.C. (MW)	Date of MOA
1	Kalez khola	Kalez khola/ Rangit	CWC	52	12.2.2007
2	Suntaley tar	Rangpo chu	Hindustan Electric Power Ltd.	40	LOI date 23.02.12
	Total			92	

6. Projects dropped due to Basin studies/ Other reasons:

Sl. No.	Name of Project	Agency	I.C. (MW)	Remarks
1	Lethang (Yoksam)	KHCHPL	96	DPR was not accepted for examination due to lacks of barrage v/s dam design, review of I.C. spillway capacity etc. The Government of Sikkim ordered the closure of Lethang HEP being undertaken in Yuksom, Tashiding constituency in West Sikkim in public interest.
	Total		96	

7. H.E. Projects yet to be allotted by the State for development:				
Sl.No.	Name of Project	River	Type	IC
1	Kalep	Tista	R	41
2	Talem	Tista	R	65
3	Jedang	Lhonak	R	185
4	Teesta-I (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	Chhota Pathing	Rongpo	R	55
12	Mana	G.Ranjit	R	37
13	Mamium	G.Ranjit	R	175
14	Gompa	G.Ranjit	R	46
15	Lower Lagyap	Rongpi	R	40
16	Teesta St-II	Teesta	R	480
	Total			1914

Note: R –Run of the River

Hydro Power Development in West Bengal

Identified Hydro Power Potential and its status of Development:

			Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)			6	2829
I	Projects in operation		5	441.2
II	Projects under construction		1	120
III	Projects allotted by States for development			
	(i)	Projects on which S&I held up	1	81
IV	Projects yet to be allotted by the State for development*		2	103

*The numbers and 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 of projects, etc.

1. Identified Projects during Reassessment study

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

2. H.E. Projects in Operation:

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

* Maithon is in Ganga and others are in Brahmaputra Basin.

3. Pumped Storage Projects in Operation:

Sl. No.	Name of Project	I. C. (MW)	Remarks
1	Purulia	900	Pumping Mode- Working
	Total	900	

4. H.E. Projects under Construction:

Sl. No.	Name of Project	Agency	District	River / Basin	I. C. (MW)	Likely Commissioning
1	Rammam-III	NTPC	Darjeeling	Rammam/ Rangit/	120	2022-23 (Nov'22)
					120	

5. Pumped Storage Projects concurred by CEA:

Sl. No.	Name of Project	I. C. (MW)	Remarks
1	Turga	1000	EC recommended by EAC in its meeting held on 02.07.2018. FRA compliance completed and In-Principle FC-I clearance accorded on 12.04.2018. However, in a Constitutional Writ Petition filed in Hon'ble High Court of Calcutta, the Hon'ble High Court of Calcutta (single bench) has passed a verdict on 02.07.2019 quashing the 'in-principle' stage-I forest clearance granted by MoEF&CC, Govt. of India. An appeal for stay challenging the judgement of single bench has already been filed before the Division bench of Hon'ble High Court, Calcutta by WBSEDCL and GoWB on 17.09.2019 and 1.10.2019 respectively. FC-II is awaited.
	Total	1000	

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

Sl.No.	Name of Project	Basin /River	Agency	I.C. (MW)	Date of MOA	Status
1	TLDP-I&II	Teesta/Badi (Great Rangit)	NHPC	81	30.07.15	S&I held up due to withdrawal of consent for the project by Govt. of Sikkim on 30.01.2017. NHPC handed over the TLDP I&II HEP back to Govt. of West Bengal due to Non-availability of the consent from Govt. of Sikkim and also due to commercial unviablity of the project. NHPC informed vide their letter dated 21.11.2019 that project handed over to WBSEDCL, GoWB.
	Total			81		

7. H. E. Projects yet to be allotted by the State for development:

Sl.No.	Name of Project	River	Type	I.C.(MW)
1	Balason	Balason	R	33
2	Rammam-I	Rammam	R	70
	Total	2 Projects		103

Note: R –Run of the River

Hydro Power Development in Arunachal Pradesh

Identified Hydro Power Potential and its status of Development:

			Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)			87	50064
I	Projects in operation		2	515
II	Projects under construction		2	2600
III	Projects allotted by States for development			
	(i)	Projects cleared by CEA and yet to be taken up for construction	18	18578
	(ii)	Projects returned to project authorities	14	6403
	(iii)	Projects under S&I	18	3165
	(iv)	Projects allotted for development on which S&I is held up/ yet to be taken up	19	7407
IV	Projects dropped due to basin studies		20	3998
V	Projects yet to be allotted by the State for development*		42	14999

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

1. H.E. Projects in Operation:

S. No.	Name of Project	No. Of units	No. of units x capacity (MW)	River	District	Capacity (MW)	Year of commissioning
	NEEPCO						
1	RANGANADI [Yazali Div.-II]	3	(3X135)	RANGANADI	LOWER SUBANSIRI	405	2002
2	PARE	2	(2X55)	BRAHAMPUTRA		110	2018
	Total	5				515	

Note: All projects are in Brahmaputra Basin

2. H.E. Projects Under Construction:

Sl. No.	Name of Project	Agency	District	I.C. (MW)	River	Likely Commissioning
1	Kameng	NEEPCO	West Kameng	600	Bichom & Tenga / Kameng	2019-21 (July 2020)
2	Subansiri [Subansiri Dam]	NHPC	L.Subansiri/ Dhemaji	2000	Subansiri	2023-24
	Total			2600		

Note: All projects are in Brahmaputra Basin

3. H.E. Projects Cleared/Appraised by CEA:

Sl No.	Name of Project	Agency	District	River	I.C. (MW)	Date of CEA Concurrence	Status
1	Dibbin	KSKDHPL	West Kameng	Bichomchhu	120	04.12.09	EC accorded on 23.7.2012. FC-I accorded on 07.02.2012. FC-II yet to be obtained. Project is under consideration for transferr to State Govt./ NEEPCO.
2	Lower Siang *	JAVL	East Siang	Siang	2700	16.02.10	EC & FC yet to be obtained by developer. MoEF&CC in Jan'2016 closed the proposal due to non-response of developer. Developer is required to carry out fresh EIA/EMP studies.
3	Nafra	SNEL	West Kameng	Bichom	120	11.02.11	EC accorded on 19.08.2013. FC-I accorded on 12.07.2011 & FC-II accorded on 26.06.2012. Financial closure yet to be achieved by the developer.
4	Nyamjang Chhu	NJCHPL	Tawang	Nyamjang Chhu	780	24.03.11	EC accorded on 19.04.2012. FC-I accorded on 09.04.2012. NGT vide judgement dated 07.04.2016, has suspended EC till the time the studies as directed are to be carried out. WII report on Black Necked Crane was submitted to MoEF&CC and is under its review.
5	Tawang St-I	NHPC	Tawang	Tawang Chu	600	10.10.11	EC accorded on 10.06.2011. FC-I & FC-II are pending. 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.
6	Tawang St-II	NHPC	Tawang	Tawang Chu	800	22.09.11	EC accorded on 10.06.2011. FC-I accorded on 08.01.2014. FC-II yet to be obtained. 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.
7	Demwe Lower **	ADPL	Lohit	Lohit	1750	20.11.09	EC accorded on 12.02.2010. FC-I accorded. FC-II accorded on 03.05.2013. As per NGT order dated 24.10.2017, NBWL issue to be reconsidered by MoEF&CC. Developer informed that the project is under NCLT since 2017 and fate of project will be decided after NCLT proceedings are over.

3. H.E. Projects Cleared/Appraised by CEA:

Sl No.	Name of Project	Agency	District	River	I.C. (MW)	Date of CEA Concurrence	Status
8	Hirong	JAPL	West Siang	Siang	500	10.04.2013	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.
9	Talanga Londa	GMR	East Kameng	Kameng	225	16.08.2013	EC accorded on 07.08.2015. FC-I & FC-II yet to be obtained.
10	Etalin	EHEPCL	Dibang Valley	Dri & Tangon	3097	12.07.2013	EC recommended by EAC on 31.01.2017. Letter will be issued after FC-I. FC-I & FC-II yet to be obtained. WII report on bio-diversity is awaited. MoEF&CC will consider for accord of FC-I after aforesaid report.
11	Naying HEP	NDSCPL	West Siang	Siang	1000	11.09.2013	EC & FC yet to be obtained by developer. 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.
12	Kalai –II ***	Kalai PPL	Anjaw	Lohit	1200	27.3.2015	EC accorded 20.05.2015. FC-I and FC-II yet to be obtained. Land acquisition under process.
13	Heo	HHPPL	West Siang	Yarjep	240	28.07.2015	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.
14	Tato-I	SHPPL	West Siang	Yarjep	186	28.10.2015	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.

3. H.E. Projects Cleared/Appraised by CEA:

Sl No.	Name of Project	Agency	District	River	I.C. (MW)	Date of CEA Concurrence	Status
15	Dibang [Dibang Storage]	NHPC	lower Dibang Valley	Dibang	2880	18.09.2017	EC accorded on 19.05.2015. FC-I accorded on 15.04.2015. FC-II: Pending. 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. Additional payment of Rs. 2.11 Cr. made in Adhoc CAMPA on 30.12.2019 towards avifauna conservation and Zonal Wildlife management plan. Approved R&R Plan submitted to PCCF (RE) & NO (FCA), Itanagar on 02.12.2019, for further submission to MoEF&CC.
16	Attunli	AHEPCL	Dibang Valley	Tangon	680	15.03.18	Both EC and FC are yet to be obtained. MoEF&CC stated that fresh ToR was issued in May 2019. Forest survey under progress.
17	Tato-II	THPPL			700	22.05.12	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. IC of the project will get revised due to change in e-flows recommended in BSR and hence fresh DPR to be prepared by developer.
18	Siyom (Middle Siang)*	SHPPL		Siang	1000	17.12.13	EC accorded 31.01.2008. FC is linked to Cumulative Impact Assessment Study of Siang Basin which has been carried out and accepted by MoEF&CC. IC of the project will get revised due to change in e-flows recommended in BSR and hence fresh DPR to be prepared by developer.
	Total				18578		

Note: All projects are in Brahmaputra Basin

* Part of Passighat (as per re-assessment)

** Part of Demwe (as per re-assessment)

*** Part of Kalai (as per re-assessment)

4. 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	Ranganadi St-II	NEEPCO	130	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	DPR returned on 05/11 due to inadequate geological investigations at dam site, diversion tunnel, surge shaft & power house etc.
3	Hutong –II *	MEIPL	1200	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 **	MFIPPL	1352	Returned on 05/12 and STC decided that M/S MFIPPL should carry out the detailed investigation for the revised DPR as per CEA's letter dt 24.5.2012.
5	Pemashelphu HEP	MHPL	90	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 [Sesseri]	SSHPL	100	Returned on 06/13 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	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	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	Returned on 29.07.2013 due to inadequate investigation and in proper layout etc.
10	Demwe Upper ***	LUPL	1080	Returned on 03/15 as developer informed that due to lack of confidence in constructability of Dam considering its deep foundation, they are not in a position to finalize the type of dam and are still in consultation with the contractors in this regard. Hence the project was returned vide secretary CEA ltr. Dtd.26/03/2015
11	Nyukcharong Chu	SNCPL	96	Returned on 04/15 due to non-submission of investigation suggested by GSI.
12	Subansiri Middle (Kamla)	KHEPCL	1800	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 appraising groups.
13	Magochu	SMCPCL	96	
14	Tagurshit		74	Returned in 06/19.
	Total		6403	

* Part of Hutong (as per re-assessment)

** Part of Kalai (as per re-assessment)

*** Part of Demwe (as per re-assessment)

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

Sl. No.	Name of Project	Basin/River	Agency for DPR	Original I.C. (MW)	Date of MOA	Target date of Preparation of DPR
1	Oju [Oju-I + Oju-II]	Subansiri	Navayuga Engg. Co. Ltd.	1878	June'2010 for Oju-I & Oju-II, Revised MoU for Single Project is received in April'13	Dec-20
2	Pauk	Siang	Velcan Energy Pvt Ltd	145	30.06.2007 (rev MOA-31.07.09)	Dec-20
3	Para	Kameng	Coastal Projects Pvt. Ltd.	45	19.11.2008	-
4	Pachuk-II	Kameng	Energy development Co. Ltd	61	27.08.2010	Sep-19
5	Tsa Chu - I Lower	Tawang	Energy development Co. Ltd	77	27.08.2010	Sep-19
6	Tsa Chu - II	Tawang	Energy development Co. Ltd	67	27.08.2010	Sep-19
7	Pachuk-II Lower [Kapak Leyak]	Kameng	Energy development Co. Ltd	51	27.8.2010	Sep-19
8	Marijingla	Kameng	Energy development Co. Ltd	39	12.1.2008 (Amended on 27.8.2010)	Sep-19
9	Marijingla Lower	Kameng	Energy development Co. Ltd	37	27.8.2010	Sep-19
10	Rego	Siang	Greenko Energies Ltd.	97	25.09.2012	-

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

Sl. No.	Name of Project	Basin/River	Agency for DPR	Original I.C. (MW)	Date of MOA	Target date of Preparation of DPR
11	Rapum	Siang	Greenko Energies Ltd.	66	27.12.2007	-
12	Pango (Minniying)	Siang	Meenakshi Power Ltd.	96	27.08.2010	Jan-20
13	Sippi	Siang	Meenakshi Power Ltd.	96	20.7.2011	Nov-19
14	Jidu (Yangsang)	Siang	Meenakshi Power Ltd.	96	20.7.2011	Dec-19
15	Panyor	Dikrong	Rajratna Energy Holding Pvt. Ltd.	80	25.02.2009	Oct-19
16	Tidding-I	Lohit	Sai Krishnodaya Ind. (P) Ltd.	84	26.02.2009	Sep-19
17	Tidding-II	Lohit	Sai Krishnodaya Ind. (P) Ltd.	75	26.02.2009	Sep-19
18	Lower Yamne -I [Jarú]	Siang	Yamne Power Pvt. Ltd	75	29.11.2009	-
	Total			3165		

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	Status
1	Papu	90	CESC Ltd.	16.05.2012	Issue of interference of levels with the Upstream project of M/s Vensar Energy Ltd, i.e Papu Valley HEP (45MW) requires to be resolved. Both Vensar constructions and CESC Ltd clarified that there is no overlapping at ground vide letter dtd 29/12/16. Re-survey and DPR submission was targetted to be completed in May 2019, which is still awaited.
2	Kameng Dam	420	KSK Energy Ventures Ltd.	25.01.2007	MoEF did not issue ToR due to proximity to Pakke Tiger Reserve. All possible alternative site(s), the said proximity of tiger reserve persists due to which the project has been dropped. The Developer had already written for refund of upfront premium for surrendering the project.
3	Emra-I	275	Athena Energy Ventures Pvt. Ltd.	02.02.2008	No proper approach road to the project site. No progress is shown till date. Intent to Terminate by GoAP under process since 25/07/2018.
4	Nalo	635	Indus Hydro Power	16.11.2010	First consultaion meeting held on 27.11.2013. Intent to terminate under proocess since 19.03/2018
5	Rho	93	SEW Energy	2.3.2009	First consultation meeting held on 30.10.2013. No visible progress since 2015. Drift Work pending. Letter issued to the developer to resolve issues with CEA/CWC/GSI on 17/9/19.
6	Dardu	60	KVK Energy & Infrastructure Ltd.	26.12.2007	No activity/progress in the project. Local public are demanding to hand over the project to CPSU. Dikrong basin study not yet finalised. Intention to terminate by GoAP is under process since 10/04/2018.

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	Status
7	Naba	1000	Abir Infrastructre Pvt. Ltd.	21.06.2010	S&I held up due to unapproachable area/difficult & inhospitable terrain & local law & order problem. There is no activity in the project. 2nd show cause notice was issued by GoAP on 26/06/2015.
8	Dengser	552	Coastal Infrastructre Pvt. Ltd.	26.04.2011	S&I held up due to unapproachable area/difficult & inhospitable terrain & local law & order problem. No activity in the project. 1st show cause notice was issued on 12/05/2015.
9	Niare	800	Coastal Infrastructre Pvt. Ltd.	26.04.2011	S&I held up due to unapproachable area/difficult & inhospitable terrain & local law & order problem. There is no Activity in the project. 5th Show cause notice was issued by GoAP on 12/05/2015.
10	Anjaw	270	Athena Energy Ventures Ltd.	09.07.2007	First consultaion meeting held on 30.07.2014. S&I held up. No progress is shown by the Developer. The project will be considered for issuing of Intent to terminate.
11	Emra-II	390	Athena Energy Ventures Ltd.	02.02.2009	S&I held up. No road connectivity to project site. Local issues, communication problem. Facing local problem. developer was asked to complete the drilling work by march 2014. Till now no progress in Submission of DPR. Intent to Terminate under process since 25/07/2018.
12	Yamne-I	111	S.S. Yamne Power Pvt Ltd	05.03.2009	First consultation meeting held on 30.07.2014. S&I held up. Local Problems in Siang Valley. Problems of law and order. Reply to final showcase notice not submitted. Hence under process for termination since 18/05/2018.

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	Status
13	Dinchang	252	KSK Energy Ventures Ltd	11.9.2007	DPR preparation is in advanced stage of completion but not completed due to various reasons. Project under process for termination by GoAP since 13.03.2018.
14	Ithun-I	84	JVKIL Consortium	29.8.2008	Non-operationalization of Hunli-Desali road. Very slow progress, hence under process for Intent to Terminate by GoAP since 19/07/2018
15	Subansiri Upper	1800	KSK Energy Ventures Ltd.	18.03.2010	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.
16	Kurung [Kurung Dam - I + Kurung Dam-II]	330	NEEPCO	27.01.2015	S&I held up as the proposal for sanction of Pre-Investment expenditure is on hold. Meeting of Delegated Investment Board(DIB) for pre-investment approval held on 18/01/2018 wherein Secy(Power), MoP expressed concern over some of the clauses of MoA between NEEPCO and GoAP
17	New Melling	90	SEW Energy	02.03.2009	S&I held up due to no activity/progress in the project. Due to poor progress an intent to terminate is under process since 03/07/18
18	Chomi	80	Adveta Power	14.2.2013	MoA to be renewed.
19	Chela	75	Adveta Power	14.2.2013	MoA to be renewed.
	Total	7407			

7. Projects dropped due to basin studies:

Sl. No.	Name of Project	I.C. (MW)	River	Basin	Remarks
1	Jarong	90	Siang	Brahmaputra	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.
2	Hirit Korong	42	Siang	Brahmaputra	Fish species like Mahseer(<i>Tor putitora</i>) migrates for spawning and breeding. <i>Labeo pangusia</i> is another fish which prefers waters of Hirit river for spawning.All the projects in Hirit basin are in eco-sensitive zone i.e. within 10 km radius of Yordi rabe Supse Wildlife sanctuary.
3	Soying Korong	48	Siang	Brahmaputra	
4	Siri Korong	58	Siang	Brahmaputra	
5	Sipit Upper	45	Siang	Brahmaputra	Dropped due to biodiversity richness of the basin.
6	Gameng	37	Siang	Brahmaputra	Sike flow is not sufficient to sustain a project and still have adequate environment flow through out the year.
7	Yemsing	38	Siang	Brahmaputra	This is in biodiversity rich area and would be affecting 8.8 Km of the river length for 38 MW.
8	Tammu	55	Subansiri	Brahmaputra	Doesn't meet the requirement of minimum e-flow.Dropping of this project will keep free flowing of Siu tributary of subansiri basin and provide lateral connectivity for aquatic fauna and conserve migratory fish species.
9	Nazong	60	Bichom	Brahmaputra	Dropped to ensure free flow of natural river .
10	Hutong Stage-I *	750	Lohit	Brahmaputra	Dropped as it is at the elevation where both <i>Mahaseer</i> and <i>Snow Trout</i> are observed.The dropping of the project will provide the free stretch of 19.1 km for migration of both these species.The site is also not geologically stable
11	Kameng-I [Bharela Lift Dam - I]	1120	Kameng	Brahmaputra	
12	Kameng-II [Bharela Lift Dam - II]	600	Kameng	Brahmaputra	The project has been deleted from S&I Held up list as the project has been dropped as per Kameng Basin study report.
13	Pakke	110	Kameng	Brahmaputra	
14	Seba	80	Kameng	Brahmaputra	
15	Pasar	32	Kameng	Brahmaputra	
16	Bichom St-I	190	Bichom/ Kameng	Brahmaputra	
17	Bichom-II	205	Bichom/ Kameng	Brahmaputra	
18	Malinye [Mulinye]	335	Dibang	Brahmaputra	Falls within Dibang Wildlife Sanctuary.
19	Tsa Chu-I	43	Tawang	Brahmaputra	
20	Thingbu Chu	60	Tawang	Brahmaputra	
	Total	3998			

* Part of Hutong (as per re-assessment)

8. H. E. Projects yet to be allotted by the State for development

Sl.No.	Name of Project	River	Type	I.C.(MW)	Remarks
1	Siang Upper St. I *	Siang	S	6000	
2	Siang Upper St. II *	Siang	S	3750	Issue of interference of levels with the Upstream project of M/s Vensar Energy Ltd, i.e Papu Valley HEP (45MW) requires to be resolved. Both Vensar constructions and CESC Ltd clarified that there is no overlapping at ground vide letter dtd 29/12/16. Re-survey and DPR submission was targetted to be completed in May 2019,which is still awaited.
3	Agoline	Dibang	R	235	
4	Elango	Ahi	R	180	
5	Rigong	Rigong	R	130	
6	Mirak	Sigong	R	160	
7	Hegio	Kurung	R	250	
8	Doimukh [Dudmukh Storage]	Dikrong	S	170	The project has been surrendered by developer to the State Govt.
9	Kimi	Bichom	R	535	
10	Chanda	Kameng	R	110	
11	Yapin	Yamne	R	95	
12	Pengging	Yamne	R	60	
13	Milli	Kurung	R	75	
14	Sape	Kurung	R	38	
15	Nyepin	Payam	R	32	
16	Hiya	Payam	R	41	
17	Kamla (Tamen)	Kamala	R	175	
18	Turu (Par)	Dikrong	R	65	
19	Yazali Storage	Ranga	S	95	
20	Tago-I	Yarjap	R	55	
21	Tenga	Tenga	S	275	

8. H. E. Projects yet to be allotted by the State for development

Sl.No.	Name of Project	River	Type	I.C.(MW)	Remarks
22	Rebby	Kameng	R	30	
23	Satuk	Pachuk	R	47	
24	Lachung	Pachi	R	41	
25	Phanchung	Pachi	R	90	
26	Utung	Bichom	R	110	
27	Khuitam	Digen	R	29	
28	But	Digen	R	26	
29	Mathithing	Digen	R	40	
30	Pichang	Kuru	S	31	
31	Tarang Warang	Pacha	R	65	
32	Sepla	Pacha	R	46	
33	Yangman Storage	Burhi Dihing	S	60	
34	Tirap (Tipang)	Tirap	S	80	
35	Jameri	Tenga	R	60	State Govt. terminated the agreement with developer for execution of the project which was earlier allotted to KSK Energy Ventures
36	Meyong	Timkong Rong	R	38	State Govt. terminated the agreement with developer for execution of the project which was earlier allotted to Patel Engineering Ltd.
37	Gongri	Gongri	R	144	State Govt. terminated the agreement with developer for execution of Gongri project which was earlier allotted to Patel Engineering Ltd. from under construction stage.
38	Talong	Kameng	S	150	
39	Badao	Kameng	R	66	State Govt. terminated the agreement with developer for execution of the project which was earlier allotted to Coastal Projects Pvt. Ltd.
40	Amulin	Mathun	R	420	State Govt. terminated the agreement with developer for execution of the project which was earlier allotted to Reliance Power Ltd.
41	Emini	Mathun	R	500	State Govt. terminated the agreement with developer for execution of the project which was earlier allotted to Reliance Power Ltd.
42	Mihumdon	Dri	R	400	State Govt. terminated the agreement with developer for execution of the project which was earlier allotted to Reliance Power Ltd.
42	Total	42 Nos. of Projects		14999	

* Part of Passighat (as per re-assessment)

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

Hydro Power Development in Assam

Identified Hydro Power Potential and its status of Development:

			Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)			9	650
I	Projects in operation		3	350
II	Projects allotted by States for development			
	(i)	Projects cleared by CEA and yet to be taken up for construction	1	120
	(ii)	Projects returned to project authorities	1	60
III	Projects yet to be allotted by the State for development *		5	185

*The numbers and 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, etc.

1. Identified Projects during Reassessment study:

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	Khondong [Kopili I]	Kopili	50
6	Kopili [Kopili II]	Kopili	265
7	Karbi Langpi [Lower Borpani]	Borpani	90
8	Amring	Amring	40
9	Karbi Langpi [Upper Borpani]	Borpani	60
TOTAL			650

2. 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)	YEAR OF COMMISSIONING
	NEEPCO							
1	KOPILI [Kopili-II]	1	4	(4X50)	KOPILI	DIMA HASAO	200	1988
2	KHONDONG [Kopili-I]	1	2	(2X25)	KOPILI	DIMA HASAO	50	1984
	SUB-TOTAL NEEPCO	2	6				250	
	APGCL							
3	KARBI LANGPI [Lower Borpani]	1	2	(2X50)	BORPANI	KARBI ANGLONG	100	2007
	SUB-TOTAL APGCL	1	2				100	
	TOTAL ASSAM	3	8				350	

* All projects are in Brahmaputra Basin

3. H.E. Projects Cleared/Appraised by CEA:

Sl No.	Name of Project	Agency	District	River / Basin*	I.C.(MW)	Date of CEA Concurrence	Status
1	Lower Kopili	APGCL	Karbi Anglong & Dima Hasao	Kopili / Brahmaputra	120	24.05.2016	EC accorded on 4.09.2019. FC-I accorded on: 05.02.2019. FC-II: Pending. Catchment Area Treatment Plan is yet to be finalized for FC-II.
	Total				120		

4. 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.

5. H. E. Projects yet to be allotted by the State for development

Sl.No.	Name of Project	River	Type	I.C.(MW)
1	Dilli Stor.	Disang	S	33
2	Jamuna Dam P/H	Jamuna	S	28
3	Diyung Dam P/H	Diyung	S	47
4	Langey	Borpani	R	37
5	Amring	Amring	S	40
	Total	5 Nos. of Projects		185

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

Hydro Power Development in Manipur**Identified Hydro Power Potential and its status of Development:**

			Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)			15	1761
I	Projects in operation		1	105
II	Projects allotted by States for development			
	(i)	Projects cleared by CEA and yet to be taken up for construction	1	66
III	Projects dropped due to Basin studies/ Other reasons		1	1500
IV	Projects yet to be allotted by the State for development*		12	936

***The numbers and 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, etc.**

1. Identified Projects during Reassessment study:

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	Nungnag (Nungnang)	Irang	70
6	Nunglieban (Nungliban)	Leimatek	85
7	Khunou	Leimatek	115
8	Thinghat	Tuivai	41
9	Sinjal	Tuivai	39
10	Bungpui long	Tuivai	80
11	Tipaimukh	Barak	510
12	Irang	Irang	75
13	Pabaram (Pabaram Stor.)	Barak	232
14	Loktak	Loktak	105
15	Tuivai*	Tuivai	210
TOTAL			1761

*Tuivai is being developed in Mizoram

2. H.E. Projects in Operation:

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

3. H.E. Projects cleared by CEA:

Sl No	Name of Project	Agency	River/ Basin	District	I.C. (MW)	Date of concurrence	Status
1	Loktak D/S	LDHCL	Leimatak/ Brahmaputra	Tamenglong	66	4.11.2016 (concurrence meeting date)	EC accorded on 16.01.2013. FC-I accorded on 03.03.2011 & FC-II accorded on 22.12.2014. Due to no response from bidders, retendering of main packages are under process. PIB proposal returned by MoP on 11.07.17 seeking firm commitment regarding grant from State Government. Draft PIB memo with JICA financing Debt Equity ratio of 80:20 and Rs. 400 Crs. grant from DoNER submitted to MoP on 9.04.2018
	Total				66		

4. Projects dropped due to Basin studies/ Other reasons:

Sl. No.	Name of Project	I.C. (MW)	River	Basin	Remarks
1	Tipaimukh	1500	Barak	Brahmaputra	MoEF&CC vide 29.08.2013 has declined diversion of 22777.50 ha to forest land falling in Manipur and vide letter dated 26.09.2013 has rejected diversion of 1551.30 ha of forest land falling in Mizoram for the project. Project likely to be dropped.
	Total	1500			

5. H. E. Projects yet to be allotted by the State for development

Sl.No.	Name of Project	River	Type	I.C.(MW)
1	Laniye-II	Laniye	R	27
2	Laniye-I	Laniye	S	34
3	Khongnem Chakha-II	Barak	S	90
4	Khongnem Chakha-III	Barak	R	48
5	Nungnag (Nungnang)	Irang	S	70
6	Nunglieban (Nungliban)	Leimatek	S	85
7	Khunou	Leimatek	R	115
8	Thinghat	Tuivai	S	41
9	Sinjal	Tuivai	S	39
10	Bungpui long	Tuivai	S	80
11	Irang	Irang	S	75
12	Pabaram (Pabaram Stor.)	Barak	S	232
	Total	12 Nos. of Projects		936

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

Hydro Power Development in Meghalaya

Identified Hydro Power Potential as per reassessment Study:

			Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)			25	2298
I	Projects in operation		5	322
II	Projects allotted by States for development			
	(i)	Projects cleared by CEA and yet to be taken up for construction	1	270
	(ii)	Projects under Examination in CEA	1	85
	(iii)	Projects returned to project authorities	1	210
	(iv)	Projects under S&I	1	210
	(v)	Projects allotted for development on which S&I is held up/ yet to be taken up	2	620
III	Projects yet to be allotted by the State for development*		18	1312

*The numbers and 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, etc.

1. Identified Projects during Reassessment study

Sl.No.	Name of Project	River	I. C. (MW)
1	Umlamphang	Umiam	28
2	Kyrdamkulai (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-I Stor.)	Kynshi	295
8	Sushen	Myntdu	150
9	Selim	Myntdu	125
10	Umjaut	Umjaut	85
11	Umduna (Umduma)	Umtrew	95
12	Mawhu (Manhu)	Umtru	90
13	Umiew (Mawphu- II) [Nonglyngkien]	Umtru	47
14	Umngi Stage-I (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 (Nongmawlar)	Kynshi	29
21	Mawsyrpat	Kynshi	45
22	Mawthaba	Kynshi	70
23	Mawblei Storage	Kynshi	100
24	Amagam Storage	Rongdi	35
25	Umanghot (Umngot Stor.)	Umngot	265
	TOTAL		2298

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)	Year of commissioning
	MePGCL						
1.	KYRDEMKULAI [Uiam Umtru-III]	1	(2X30)	Tail water of Uiam stage-II & Umtru river	RI-BHOI	60	1979
2.	UMIAM ST-I	1	(4X9)	UMIAM	RI-BHOI	36	1965
3.	NEW UMTRU	1	(2X20)	UMTRU	RI-BHOI	40	2017
4.	UMIAM ST-IV	1	(2X30)	Tail water of Stage-III PH & own catchment	RI-BHOI	60	1992
5.	MYNTDU ST-I	1	(3X42)	MYNTDU	JAINTIA HILLS	126	2012
	TOTAL MePGCL	5				322	

* All projects are in Brahmaputra Basin

3. H.E. Projects Cleared/Appraised by CEA:

Sl No.	Name of Project	Agency	District	River / Basin	I.C. (MW)	Date of CEA Concurrence	Status
1	Kynshi-I [Kynshi-I Stor.]	AKPPL	West Kashi Hills	Kynshi / Brahmaputra	270	31.3.2015	EC: Pending. EIA/EMP studies are under process. FC-I & FC-II: Pending.
	Total				270		

4. H.E. Projects Under Examination/Scrutiny in CEA:

Sl. No.	Name of Project	Agency	I.C. (MW)	Month of receipt
1	Wah Uiam Satge-III (Mawphu Stage-II)	Umiew (Mawphu St.-II)	85	8/8/2017
	Total		85	

5. 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
1	Umangot HEP [Umngot Stor.]	MePGCL	210	Jan-18
	Total		210	

6. H.E. Projects Under Survey & Investigation:

Sl. No.	Name of Project	Basin /River	Agency	I.C. (MW)	Date of MOA	Target date of Preparation of DPR
1	Myntdu Leshka st-II	Myntdu	MePGCL	210	20.4.12	Dec-20
	Total			210		

7. 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	Status
1	Kynshi-II	450	GoMe & Jaiprakash Power Venture Ltd. (JV)	11.12.2007	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	First Consultation meeting held on 28.05.2014. STC has given clearance for conversion from Storage to Run-of-River Scheme in its 10th meeting held on 11.06.2015. The installed capacity is revised to 80 MW. CWC has furnished comments on Hydrologic Studies on 07.06.2019. 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.
	Total	620			

8. H. E. Projects yet to be allotted by the State for development

Sl.No.	Name of Project	River	Type	I.C. (MW)
1	Umlamphang	Umiam	R	28
2	Umiam Umtru-V	Umiam	R	27
3	Umiam Umtru-VI	Umiam	S	145
4	Simsang Dam P.H.	Someshri	S	65
5	Sushen	Myntdu	R	150
6	Umjaut	Umjaut	R	85
7	Umduna (Umduma)	Umtrew	R	95
8	Mawhu (Manhu)	Umtru	R	90
9	Umngi Stage-I (Umngi Storage)	Umngi	S	35
10	Rangmaw	Umngi	R	42
11	Nongkolait	Umngi	R	180
12	Nongnam	Umngi	R	36
13	Mawpat	Umngi	R	55
14	Nangmawlar (Nongmawlar)	Kynshi	R	29
15	Mawsyrpat	Kynshi	R	45
16	Mawthaba	Kynshi	S	70
17	Mawblei Storage	Kynshi	S	100
18	Amagam Storage	Rongdi	S	35
	Total	18 Nos. of Projects		1312

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

Hydro Power Development in Mizoram

Identified Hydro Power Potential and its status of Development:

S.No		Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)		7	2131
I	Projects in operation	1	60
II	Projects dropped due to Basin studies/ Other reasons	1	460
III	H. E. Projects yet to be allotted by the State for development*	6	2076

*The numbers and capacity yet to be allotted by the State for development is different from arithmetic calculation from the potential assessed due to change in capacity of the projects, addition, etc.

1. Identified Projects during reassessment study.

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

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)	Year of commissioning
NEEPCO							
1	TUIRIAL [Sonai]	1	(2X30)	TUIRIAL/ BRAHAMPUTRA	KOLASIB	60	2017
	TOTAL MIZORAM	1				60	

Note: Tuivai scheme (210 MW) was identified in Manipur during the reassessment study. The scheme was concurred by CEA during 1999. The scheme is yet to be taken up under construction.

2. H.E. Projects dropped due to Basin studies/ Other reasons

Sl. No.	Name of Scheme	I.C. (MW)	River	Basin	Remarks
1	Kolodyne St-II	460	Kolodyne	Brahmaputra	Forest proposal submitted to State Govt. on 20.12.2010. The project is likely to be drooped due to high tariff.
	Total	460			

3. H. E. Projects yet to be allotted by the State for development

Sl.No.	Name of Project	River	Type	I.C.(MW)
1	Lungleng (Lunglang Stor.)	Tyao	S	690
2	Boinu (Boinu Stor.)	Kaldan	S	635
3	Kaldan (Kaldan Stor.)	Kaldan	S	545
4	Bhairabi	Dhaleshwari	S	90
5	Mat	Mat	S	90
6	Deh	Deh	S	26
	Total	6 Nos. of Projects		2076

Note: S- Storage

Hydro Power Development in Nagaland

Identified Hydro Power Potential and its status of Development:

			Nos.	Capacity (MW)
Identified Hydro Power Potential as per reassessment Study from Major/Medium Projects (Projects having capacity above 25 MW)			11	1452
I	Capacity in operation		1	75
II	Projects allotted by States for development			
	(i)	Projects cleared by CEA and yet to be taken up for construction	1	186
III	H. E. Projects yet to be allotted by the State for development*		9	1272

***The capacity yet to be allotted by the State for development is different from arithmetic calculation from the potential assessed due to change in capacity of the projects.**

1. Identified Projects during Reassessment study:

Sl.No.	Name of Project	River	I. C. (MW)
1	Dikhu (Dikhu Lift Dam)	Dikhu	125
2	Yangnyu (Yangnyu Stor.)	Dikhu	135
3	Jhanji storage	Jhanji	75
4	Doyang (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
TOTAL			1452

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)	Year of commissioning
	NEEPCO						
1	DOYANG (Doyang-V)	1	(3X25)	DOYANG / Brahmaputra	WOKHA	75	2000
	TOTAL NAGALAND	1				75	

3. H.E. Projects Cleared/Appraised by CEA:

Sl No.	Name of Project	Agency	District	River / Basin	I.C. (MW)	Date of CEA Concurrence	Status
1	Dikhu (Dikhu Lift Dam)	NMPPL	Longleng	Dikhu and Yangnyu / Brahmaputra	186	31.03.2014	EC yet to be obtained by developer. FC not applicable as forest land is not involved. EIA/EMP studies are in progress and are likely to be completed soon.
	Total				186		

4. H. E. Projects yet to be allotted by the State for development

Sl.No.	Name of Scheme	River	Type	I.C.(MW)
1	Yangnyu (Yangnyu Stor.)	Dikhu	S	135
2	Jhanji storage	Jhanji	S	75
3	Sakhai-II	Tizu	R	31
4	Khuzami	Tizu	S	32
5	Rurrur	Zangki	S	36
6	Zungki	Zangki	S	48
7	Laruri	Tizu	R	80
8	Tizu	Tizu	S	365
9	Dikhu Dam P.H.	Dikhu	R	470
	Total	9 Nos. of Projects		1272

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

Hydro Power Development in Tripura

Identified Hydro Power Potential and its status of Development:

No major/medium 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	Installed Capacity (MW)	Year of Installation	Phase
Gumti H.E. Project	Unit-I	5.00 MW	1976	Phase I
	Unit-II	5.00 MW	1976	
	Unit-III	5.00 MW	1984	Phase II