

Summary of Hydro Power Development in Jammu and Kashmir

I. Conventional Projects

| | | Nos. | I.C. (MW) |
|--|--|------|-----------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 32 | 12264.5 |
| Breakup of Hydro Power Potential (2017-23 Study) | | | |
| A | Projects in operation | 10 | 3360 |
| B | Projects under construction | 5 | 3051.5 |
| C | Projects concurred by CEA and yet to be taken up for construction# | 4 | 3119 |
| D | Projects returned to project authorities | 1 | 390 |
| E | Projects under S&I | 2 | 1060 |
| F | Balance Capacity* | 9 | 1088 |

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

In addition to this ,DPR of one project namely Ujh Multipurpose Project (196 MW) is accepted by 148th meeting of Advisory Committee of DOWR, RD&GR on Irrigation, Flood Control & Multipurpose on 17.01.2022 but the PIB doesn't support proposal of Department of Water Resources, River Department and Ganga Rejuvenation in respect of Ujh Multipurpose project.

I. Conventional Projects**Details of Exploitable Hydro Power Projects**

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

A. H.E. Projects in Operation:

| Sl.No. | UTILITY/ STATIONS | NO. OF STATIONS | NO. OF UNITS X CAPACITY (MW) | RIVER/BASIN* | DISTRICT | I.C. (MW) | Type (R/S/R(P)) | Sector | YEAR OF COMMISSIONING |
|---------------|-----------------------|-----------------|------------------------------|--------------|-----------------|-------------|-----------------|---------|-----------------------|
| JKSPDC | | | | | | | | | |
| 1 | BAGLIHAR-I | 1 | (3X150) | CHENAB | RAMBAN | 450 | R(P) | State | 2008 |
| 2 | BAGLIHAR II | 1 | (3X150) | CHENAB | RAMBAN | 450 | R(P) | State | 2015 |
| 3 | LOWER JHELUM | 1 | (3X35) | JHELUM | BARAMULLAH | 105 | R(P) | State | 1978-1979 |
| 4 | UPPER SINDH-II | 1 | (3X35) | SINDH | GANDERBAL | 105 | R(P) | State | 2000 -2002 |
| | TOTAL JKSPDC | 4 | | | | 1110 | | | |
| NHPC | | | | | | | | | |
| 1 | DULHASTI | 1 | (3X130) | CHENAB | KISTWAR | 390 | R(P) | Central | 2007 |
| 2 | SALAL - I&II | 1 | (6X115) | CHENAB | REASI & UDAMPUR | 690 | R | Central | 1987-95 |
| 3 | URI-I | 1 | (4X120) | JHELUM | BARAMULA | 480 | R | Central | 1996-1997 |
| 4 | URI-II | 1 | (4X60) | JHELUM | BARAMULA | 240 | R | Central | 2013-14 |
| 5 | SEWA-II | 1 | (3X40) | SEWA | MAHKA | 120 | R(P) | Central | 2010 |
| 6 | KISHENGANGA | 1 | (3X110) | KISHENGANGA | BANDIPORA | 330 | R(P) | Central | 2018 |
| | SUB-TOTAL NHPC | 6 | | | | 2250 | | | |
| 10 | TOTAL J&K | 10 | | | | 3360 | | | |

* ALL PROJECTS ARE IN INDUS BASIN.

B. H.E. Projects Under Construction:

| Sl.No. | Name of Project | Agency | Basin | District | I.C. (MW) | Type (R/S/R(P)) | Sector | Likely Commissioning |
|----------|-----------------|---------------|-------|----------|---------------|-----------------|---------------------------------------|----------------------|
| 1 | Pakal Dul | CVPPPL | Indus | Kishtwar | 1000 | S | Joint venture between NHPC and JKPCDC | 2026-27 (Sept'26) |
| 2 | Parnai | JKSPDC | Indus | Poonch | 37.5 | R | State | 2027-28 (July'27) |
| 3 | Kiru | CVPPPL | Indus | Kishtwar | 624 | R | Joint venture between NHPC and JKPCDC | 2026-27 (Sept'26) |
| 4 | Ratle | RHEPPL / NHPC | Indus | Kishtwar | 850.00 | R(P) | Central | 2028-29 (Nov'28) |
| 5 | Kwar | CVPPPL | Indus | Kishtwar | 540.00 | R(P) | Joint venture between NHPC and JKPCDC | 2027-28 (Dec'27) |
| 5 | Total | | | | 3051.5 | | | |

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

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

| Sl No. | Name of Project | Agency | River | District | I.C. (MW) | Date of CEA Concurrence | Type (R/S/R(P)) | Sector | Status |
|----------|---------------------------|--------|--------------|------------------|-------------|-------------------------|-----------------|--------------------------------------|--|
| 1 | New Ganderwal | JKSPC | Sindh Nallah | Ganderwal | 93 | 10.06.14 | R(P) | State | EC accorded on 27.9.13 & FC accorded on 02.04.2012.. # |
| 2 | Kirthai-II | CVPPL | Chenab | Kishtwar | 930 | 14.06.2019 | R(P) | Joint Venture between NHPC and JKPDC | EC recommended by MoEF&CC on 15.04.2021. Application for FC (St-I) submitted on Parivesh Portal on 19.10.2022.. ### |
| 3 | Sawalkote | NHPC | Chenab | Ramban & Udampur | 1856 | 18.04.18 | R(P) | Central | EC recommended by EAC in its meeting dated 31.01.2017. Formal letter will be issued after FC-I. (MoEF&CC delisted EC for the project on 04.08.2017 and further relisted on 24.01.2022). #### |
| 4 | Uri-I Stage-II HE Project | NHPC | Jhelum | Baramula | 240 | 16.02.2023 | R | Central | EC & FC yet to be obtained by developer##### |
| 4 | Total | | | | 3119 | | | | |

Award of contract packages is under progress. PPA signed with State Government. Loan agreement to be signed with finances.

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

07.04.2024. State Govt. (UT of J&K) raised EDS (Essential Details Sought) with regard to CA land dated 06.04.2024 stating that the areas proposed for carrying out the Compensatory Afforestation have been identified as Degraded Forest Land (DFL) instead of Non-degraded Forest Land (NFL) as mandated under Rule 13 of Van (Sanrakshan Evam Samadhan) Rule's 2023. FC yet to be obtained.

NOC under Wildlife Conservation Act, 1972 accorded by State Forest Dept. vide letter dated 03.01.2024

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

#####EC proposal submitted to MOEF&CC on 27.02.2024. EDS dated 11.03.2024 was raised by MOEF&CC seeking NOC required from PCCF with respect to project components are outside the boundary as defined in ESZ notification, for consideration of Environment Clearance. PCCF/WLW vide letter dated 14.05.2024 issued the necessary NOC.

REC has recommended the FC-In its meeting held on 25.01.2024 and for forwarding to MoEF&CC for granting In-Principle approval . FC proposal was discussed by FAC on on 30.04.2024 and raised certain observations reg. basin study, CA land , etc. FC-I yet to be obtained.

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

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

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

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

| Sl. No. | Name of Project | Basin/River | Agency for DPR | District | I.C. (MW) | Type (R/S/R(P)) | Date of MoA | Sector | Target date of preparation of DPR |
|----------|-----------------|------------------|----------------|----------|-------------|-----------------|-------------|---------|-----------------------------------|
| 1 | Dulhasti St-II | Indus/ Chenab | NHPC | Kishtwar | 260 | R | 03.01.2021 | Central | 03/25 |
| 2 | Bursar | Indus/ Marusudar | NHPC | Kishtwar | 800 | S | | Central | |
| 2 | Total | | | | 1060 | | | | |

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

G. Balance Capacity

| Sl.No. | Name of Project | River | Type | I.C. (MW) | District | Remarks |
|----------|-------------------------|-------------|------|-------------|-----------|--|
| 1 | Bichlari | Bichlari | R | 64 | Doda | |
| 2 | Kishenganga-II (Wangam) | Kishanganga | R | 42 | Bandipora | |
| 3 | Barinium (Shaus) | Chenab | R | 180 | Doda | |
| 4 | Chandanwari Laripora | Chandanwari | R | 81 | Anantnang | |
| 5 | Gangbal | Kanknang | S | 48 | Ganderbal | |
| 6 | Wardwan Bursar | Wardwan | S | 255 | Kisthwar | |
| 7 | Ans-I | Ans | R | 40 | Reasi | |
| 8 | Shamnot | Chenab | R | 330 | Doda | <ul style="list-style-type: none"> •Initially allotted to NHPC •Project held up as the project will submerge National Highway. |
| 9 | Lower kalnai | Chenab | R | 48 | Kishtwar | <ul style="list-style-type: none"> •Initially allotted to JKSPDC •Works on all fronts at Dam and Power House site are stalled since the contract has been terminated by JK Govt. order no. 115-PDD of 2019 dated 08.06.2019. The Balance Work stands tendered out by JKSPDC in EPC mode vide E-NIT on 24.03.2022. Technical evaluation of the bids is completed and financial bids are slated to be opened .Project is likely to be commissioned 4 years after restart of works. |
| 9 | Total | | | 1088 | | |

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

Summary of Hydro Power Development in Ladakh

I. Conventional Projects

| | | Nos. | I.C. (MW) |
|--|-----------------------|------|-----------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 10 | 707 |
| Breakup of Hydro Power Potential (2017-23 Study) | | | |
| A | Projects in operation | 2 | 89 |
| B | Projects under S&I | 1 | 95 |
| C | Balance Capacity* | 8 | 618 |

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

I. Conventional Projects

Details of Exploitable Hydro Power Projects

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

A. H.E. Projects in Operation:

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

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

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

C. Balance Capacity

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

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

Summary of Hydro Power Development in Himachal Pradesh

I. Conventional Projects

| | | Nos. | I.C. (MW) |
|--|---|------|-----------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 72 | 18305 |
| Breakup of Hydro Power Potential (2017-23 Study) | | | |
| A | Projects in operation | 29 | 10281.02 |
| B | Projects under construction | 9 | 2446 |
| C | Projects concurred by CEA and yet to be taken up for construction | 4 | 937 |
| D | Projects returned to project authorities | 1 | 400 |
| E | Balance Capacity* | 29 | 4259 |

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

II. Pumped Storage Projects

| | | Nos. | I.C. (MW) |
|--|------------------|------|-----------|
| Exploitable Hydro Power Potential from Pump Storage Projects | | 6 | 7260 |
| Breakup of Hydro Power Potential from Pumped Storage Projects | | | |
| a | Balance Capacity | 6 | 7260 |

I. Conventional Projects**Details of Exploitable Hydro Power Projects**

| S.no | Name | River | Type | I.C. (MW) |
|------|--|-------------------|-------|-----------|
| 1 | Budhil | Budhil | R (P) | 70 |
| 2 | Bairasiul | Siul | R (P) | 180 |
| 3 | Chamera-I (Chamera) | Ravi | S | 540 |
| 4 | Chamera-II (Gwar) | Ravi | R(P) | 300 |
| 5 | Chamera-III (Hibra) | Ravi | R (P) | 231 |
| 6 | Chanju-I | Chanju nallah | R (P) | 36 |
| 7 | Bajoli Holi | Ravi | R | 180 |
| 8 | Allain Duhangan (Allain Nallah +Duhangan) | Allain | R (P) | 192 |
| 9 | Malana | Mallana Nallah | R (P) | 86 |
| 10 | Dehar (Pandoh Diversion Dam) | Beas | R (P) | 990 |
| 11 | Pong (Pong Dam) | Beas | S | 396 |
| 12 | Malana-II | Malana | R (P) | 100 |
| 13 | Parbati-III (Sainj-IV) | Sainj | R (P) | 520 |
| 14 | Sainj (Sainj Kartha-II+Sainj) | Sainj | R (P) | 100 |
| 15 | Larji | Beas | R (P) | 126 |
| 16 | Bassi & Extn. | Uhl | R (P) | 66 |
| 17 | Shanan Ext. (Uhl at Joginder Nagar) | Uhl | R(P) | 110 |
| 18 | Baspa(Baspa-II) | Baspa | R (P) | 300 |
| 19 | Karcham Wangtoo | Satluj | R (P) | 1045 |
| 20 | Sanjay (Bhabha (Sanjay)) | Bhabha Khad | R(P) | 120 |
| 21 | Integrated Kashang | Kashang/Kirankhar | R (P) | 195 |
| 22 | Nathpa Jhakri | Satluj | R (P) | 1500 |
| 23 | Rampur (Rampur Nanjah) | Satluj | R | 412 |
| 24 | Kol Dam | Satluj | S | 800 |
| 25 | Bhakra Left (Bhakra Nangal) | Satluj | S | 612 |

| | | | | |
|----|---|-----------------|---------|-----|
| 26 | Bahkra right (Bhakra Nangal) | Satluj | S | 785 |
| 27 | Sorang | Sorang khar | R | 100 |
| 28 | Giri& Bata | Giri | R(P) | 60 |
| 29 | Sawara kudu | Pabar | R | 111 |
| 30 | Kutehr (Machhetri) | Ravi | R | 240 |
| 31 | Uhl III (Rana Khad) | Rana & Nerikhar | R | 100 |
| 32 | Parbati-II | Parbati | R | 800 |
| 33 | Dhaulasidh | Beas | R | 66 |
| 34 | Tindong-I | Tidong | R | 150 |
| 35 | Shongtong Kharcham | Satluj | R | 450 |
| 36 | Luhri St-I (Luhri) | satluj | R | 210 |
| 37 | Chhatru | Chandra | R (P) | 126 |
| 38 | Miyar (Udaipur) | Miyar Nallah | R (P) | 120 |
| 39 | Dugar | Chenab | R (P) | 500 |
| 40 | Thana Plaun | Beas | R cum S | 191 |
| 41 | Baggi | Beas | R | 42 |
| 42 | Chango Yangthang | Spiti | R | 180 |
| 43 | Sunni (Sunni Chaba Dam) | Satluj | R(P) | 382 |
| 44 | Reoli Dugli (Raoli) | Chenab | R | 456 |
| 45 | Seli | Chenab | R (P) | 400 |
| 46 | Purthi | Chenab | R | 232 |
| 47 | Bardang | Chenab | R | 175 |
| 48 | Sach Khas | Sarchu | R | 288 |
| 49 | Gyspa | Bhaga | S | 350 |
| 50 | Kulu | Beas | R | 52 |
| 51 | Sainj-I | Sainj | R | 68 |
| 52 | Triveni Mahadev | Beas | R | 50 |
| 53 | Jangi thopan Powari (Jangi Thopan+Thopan Powari) | Satluj | R | 804 |
| 54 | Luhri St.-II (Luhri-II) | Satluj | R | 172 |
| 55 | Sumte Kothang (Thibda) | Spiti | R | 50 |

| | | | | |
|-----------|-------------------------------|------------------|---|--------------|
| 56 | Lara Sumte (kyurik) | Spiti | R | 40 |
| 57 | Yangthang khab | Spiti | R | 158 |
| 58 | Khab-I | Satluj | R | 310 |
| 59 | Khab-II | Satluj | R | 150 |
| 60 | Kashang Stage IV (Taiti-I) | Kashang & kerang | R | 48 |
| 61 | Shangling (Khoskar) | Chandra | R | 35 |
| 62 | Telling (Railing) | Chandra | S | 65 |
| 63 | Tandi Rashil (Jhalma) | Chenab | R | 166 |
| 64 | Chota Dara | Chandra | R | 52 |
| 65 | Lujai | Lujai Nallah | R | 49 |
| 66 | Tandi Rashil (Rashil) | Chenab | R | 75 |
| 67 | Chanju-III | Chanju nallah | R | 48 |
| 68 | Deothal Chanju | Chanju nallah | R | 30 |
| 69 | Surgani Sundla | Suil | R | 48 |
| 70 | Tangnu Romai-I | Pabar | R | 44 |
| 71 | Renukaji Dam | Giri | S | 40 |
| 72 | Baroti | Suil | S | 30 |
| 72 | TOTAL | | | 18305 |

A. H.E. Projects in Operation:

| S. NO. | UTILITY/STATIONS | NO. OF STNS. | NO. OF UNITS | NO. OF UNITS X CAPACITY (MW) | RIVER/ /BASIN* | DISTRICT | I.C. (MW) | Type (R/S/R(P)) | Sector | YEAR OF COMMISSIONING |
|--------|-----------------------------|--------------|--------------|------------------------------|--------------------|-----------|----------------|-----------------|---------|-----------------------|
| | CENTRAL SECTOR | | | | | | | | | |
| | BBMB | | | | | | | | | |
| 1 | BHAKRA LEFT | 1 | 5 | (5x126) | SUTLEJ | BILASPUR | 630 | S | Central | 1960-1961 |
| 2 | BHAKRA RIGHT | 1 | 5 | (5X157) | SUTLEJ | BILASPUR | 785 | S | Central | 1966-1968 |
| 3 | DEHAR | 1 | 6 | (6X165) | BEAS | MANDI | 990 | R(P) | Central | 1977-1983 |
| 4 | PONG | 1 | 6 | (6X66) | BEAS | KANGRA | 396 | S | Central | 1978-1983 |
| | SUB-TOTAL BBMB | 4 | 22 | | | | 2801 | | | |
| | NHPC | | | | | | | | | |
| 5 | BAIRA SIUL | 1 | 3 | (3X60) | SIUL | CHAMBA | 180 | R(P) | Central | 1980-1981 |
| 6 | CHAMERA- I | 1 | 3 | (3X180) | RAVI | DALHOUSIE | 540 | S | Central | 1994 |
| 7 | CHAMERA- II | 1 | 3 | (3X100) | RAVI | CHAMBA | 300 | R(P) | Central | 2003-2004 |
| 8 | CHAMERA- III | 1 | 3 | (3X77) | RAVI | CHAMBA | 231 | R(P) | Central | 2012 |
| 9 | PARBATI-III | 1 | 4 | (4X130) | SAINJ | KULLU | 520 | R(P) | Central | 2014 |
| | SUB-TOTAL NHPC | 5 | 16 | | | | 1771 | | | |
| | SJVNL | | | | | | | | | |
| 10 | NATHPA JHAKRI | 1 | 6 | (6X250) | SATLUJ | SHIMLA | 1500 | R(P) | Central | 2003-2004 |
| 11 | RAMPUR | 1 | 6 | (6X68.67) | SATLUJ | SHIMLA | 412.02 | R | Central | 2014 |
| | SUB-TOTAL SJVNL | 2 | 12 | | | | 1912.02 | | | |
| | NTPC LTD. | | | | | | | | | |
| 12 | KOLDAM | 1 | 4 | (4X200) | SATLUJ | BILASPUR | 800 | S | Central | 2015 |
| | SUB-TOTAL NTPC LTD. | 1 | 4 | | | | 800 | | | |
| | TOTAL CENTRAL SECTOR | 12 | 54 | | | | 7284.02 | | | |
| | STATE SECTOR | | | | | | | | | |
| | HPSEBL | | | | | | | | | |
| 13 | BASSI | 1 | 4 | (4X16.5) | UHL | MANDI | 66 | R(P) | State | 1970-1981 |
| 14 | GIRI BATA * | 1 | 2 | (2X30) | GIRI | SIRMAUR | 60 | R(P) | State | 1978 |
| 15 | LARJI | 1 | 3 | (3X42) | BEAS | KULLU | 126 | R(P) | State | 2006 |
| 16 | SANJAY | 1 | 3 | (3X40) | Bhabha Khad | KINNAUR | 120 | R(P) | State | 1989 |
| | TOTAL HPSEBL | 4 | 12 | | | | 372 | | | |
| | HPPCL | | | | | | | | | |
| 17 | INTEGRATED KASHANG | 1 | 3 | (3X65) | Kashang/Kiran khar | KINNAUR | 195 | R (P) | State | 2016-17 |
| 18 | SAINJ | 1 | 2 | (2X50) | SAINJ | KULLU | 100 | R(P) | State | 2017 |

| | | | | | | | | | | |
|-----------|--|-----------|------------|-------------------|--------------------------|---------|-----------------|------|---------|----------------|
| 19 | SWARA KUDDU | 1 | 3 | (3X37) | Pabbar/Tons/ Yamuna | SHIMLA | 111 | R | State | 2020 |
| | TOTAL HPPCL | 3 | 8 | | | | 406 | | | |
| | PSPCL | | | | | | | | | |
| 20 | SHANAN (Uhl at Joginder Nagar) | 1 | 5 | (1X50)+ (4X15) | UHL & Lamba Dug River | MANDI | 110 | R(P) | State | 1932-1982 |
| | TOTAL PSPCL | 1 | 5 | | | | 110 | | | |
| | TOTAL STATE | 8 | 25 | | | | 888 | | | |
| | PRIVATE SECTOR | | | | | | | | | |
| | MPCL | | | | | | | | | |
| 21 | MALANA | 1 | 2 | (2X43) | MALANA | KULLU | 86 | R(P) | Private | 2001 |
| | TOTAL MPCL | 1 | 2 | | | | 86 | | | |
| | GBHPPL | | | | | | | | | |
| 22 | BUDHIL | 1 | 2 | (2X35) | BUDHIL | CHAMBA | 70 | R(P) | Private | 2012 |
| | TOTAL GBHPPL | 1 | 2 | | | | 70 | | | |
| | EPPL | | | | | | | | | |
| 23 | MALANA-II | 1 | 2 | (2X50) | MALANA | KULLU | 100 | R(P) | Private | 2011-12 |
| | TOTAL EPPL | 1 | 2 | | | | 100 | | | |
| | IA ENERGY | | | | | | | | | |
| 24 | CHANJU-I | 1 | 3 | (3X12) | Chanju nallah | CHAMBA | 36 | R(P) | Private | 2017 |
| | TOTAL IA ENERGY | 1 | 3 | | | | 36 | | | |
| 25 | ALLAIN DUHANGAN | 1 | 2 | (2X96) | ALLAIN NALLAH | MANALI | 192 | R(P) | Private | 2010 |
| | TOTAL ADHPL | 1 | 2 | | | | 192 | | | |
| | HBPCL | | | | | | | | | |
| 26 | BASPA | 1 | 3 | (3X100) | BASPA | KINNAUR | 300 | R(P) | Private | 2003 |
| 27 | KARCHAM WANGTOO | 1 | 4 | (4X261.25) | SATLAJ | KINNAUR | 1045 | R(P) | Private | 2011 (1000 MW) |
| | TOTAL JSWHEL | 2 | 7 | | | | 1345 | | | |
| | HSPPL | | | | | | | | | |
| 28 | Sorang | 1 | 2 | 2x50 | Sorang | Kinnaur | 100 | R | Private | 2021 (100 MW) |
| | GMR BAJOLI HOLI HYDRO POWER PVT. LTD. | | | | | | | | | |
| 29 | Bajoli Holi | 1 | 3 | 3x60 | Ravi | CHAMBA | 180 | R | Private | 2022 |
| | TOTAL PVT | 9 | 23 | | | | 2109 | | | |
| 29 | TOTAL HP | 29 | 102 | | | | 10281.02 | | | |

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

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

B H.E. Projects Under Construction:

| Sl. No. | Name of Project | Agency | District | River | Basin | I.C. (MW) | Type (R/S/R(P)) | Sector | Likely Commissioning |
|----------|------------------|---|-----------------|---------------|-------|-------------|-----------------|---------|-----------------------|
| 1 | Parbati St--II | NHPC | Kullu | Parbati/Beas | Indus | 800 | R | Central | 2024-25 (Mar'25) |
| 2 | Uhl- III | Beas Valley Power Corp. Ltd. (BVPC) | Mandi | Uhl | Indus | 100 | R | Central | 2024-25 (Feb'25) |
| 3 | Tidong-I | Statkraft IPL | Kinnaur | Tidong | Indus | 150 | R | Private | 2025-26 (Oct'25) |
| 4 | Shontong Karcham | HPPCL | Kinnaur | Satluj | Indus | 450 | R | State | 2026-27 (Feb'27) |
| 5 | Kutehr | JSW Energy (Kutehr) Power Ltd. (JSWEPL) | Chamba | Ravi | Indus | 240 | R | Private | 2025-26 (July'25) |
| 6 | Luhri St.I | SJVNL | Shimla/Kullu | Satluj | Indus | 210 | R | Central | 2028-29 (Dec'28) |
| 7 | Dhaulasidh | SJVNL | Hamirpur/Kangra | Beas | Indus | 66 | R | Central | 2026-27 (March'27) |
| 8 | Sunni Dam | SJVNL | Shimla/Mandi | Satluj | Indus | 382 | R(P) | Central | 2028-29 (Dec'28) |
| 9 | Chanju-III | HPPCL | Chamba | Chanju Nallah | Indus | 48.00 | R | Central | 2027-28 (July'27) |
| 9 | Total | | | | | 2446 | | | |

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

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

| Sl. No. | Name of Project | Agency | River | District | I.C. (MW) | Date of CEA Concurrence | Type (R/S/R(P)) | Sector | Status |
|----------|-----------------|--------|--------------|---------------|------------|-------------------------|-----------------|---------|--|
| 1 | Miyar | NTPC | Miyar Nallah | Lahul & Spiti | 120 | 07.02.2013 | R(P) | Central | EC accorded on 30.07.12. FC-I accorded on 27.07.12. FC-II yet to be obtained. FRA compliance under process # |
| 2 | Chhatru | DSIL | Chandra | Lahaul-Spiti | 126 | 15.01.15 | R(P) | Private | EC recommended by EAC on 24.02.15, Letter will be issued after FC-I. FC-I & FC-II yet to be obtained. .### |
| 3 | Thana Plaun | HPPCL | Beas | Mandi | 191 | 07.09.2021 | R cum S | State | EAC in its meeting dated 27.11.2018 has recommended Environmental Clearance (EC) to MoEF&CC subject to condition of Stage-I FC and adherence to the condition of Cumulative EIA study of Beas Basin. FC Stage-I accorded by MoEF&CC on 11.01.2024 . FC-II yet to be obtained.#### |
| 4 | Dugar | NHPC | Chenab | Chamba | 500 | 26.04.22 | R(P) | central | EC recommended by EAC on 06.09.2022. Application for diversion of 211.84 ha of forest land was submitted by NHPC in the Parivesh Portal of MoEF&CC on 20.02.2021. State Govt. had forwarded the proposal to MoEF&CC, New Delhi on 04.07.2022. The proposal has been discussed in the FAC meeting held on 29.11.2023. FC yet to be obtained |
| 4 | Total | | | | 937 | | | | |

Note: All projects are in Indus basin

#MoU was signed between Government of Himachal Pradesh and NTPC Ltd. on 25.10.2019 to set-up the hydro project. Validity of Concurrence to the project expired on 07.02.2016. GoHP vide letter dated 25.07.2022 cancelled allotment of the project to NTPC.

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

CAT Plan has been approved by Government of Himachal Pradesh on 03.01.2019. Social Impact Assessment (SIA) study for acquisition of Private land has been completed and approved from GoHP vide notification dated 16.12.2020.

D. Projects returned to project authorities

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

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

E. Balance Capacity

| Sl.No. | Name of Project | River | Type | I.C. (MW) | Reamrks |
|--------|----------------------------|---------------|------|-----------|---|
| 1 | Kashang Stage-IV (Taiti-I) | Chenab | R | 48 | |
| 2 | Baroti | Siul | S | 30 | |
| 3 | Chhota Dara | Chandra | R | 52 | |
| 4 | Shangling (Khoskar) | Chandra | R | 35 | |
| 5 | Telling (Railing) | Chandra | S | 65 | |
| 6 | Kulu | Beas | R | 52 | |
| 7 | Sainj-I | Sainj | R | 68 | |
| 8 | Yangthang Khab | Spiti | R | 158 | |
| 9 | Lujai | Lujai Nallah | R | 49 | |
| 10 | Renukaji Dam | Giri | S | 40 | |
| 11 | Triveni Mahadev | Beas | R | 50 | |
| 12 | Baggi | Beas | R | 42 | |
| 13 | Deothal Chanju | Chanju Nallah | R | 30 | |
| 14 | Sugani Sundla | Suil | R | 48 | |
| 15 | Chango Yangthang | Spiti | R | 180 | |
| 16 | Sumte Khotang | Spiti | R | 50 | <ul style="list-style-type: none"> •Initially allotted to Reliance Power Ltd. (M/s Sumte Kothang HPPL) •Project was in S&I held up due to opposition from locals and NGOs. •Project stands terminated on 28.07.2017. |
| 17 | Lara Sumte | Spiti | R | 40 | <ul style="list-style-type: none"> •Initially allotted to Reliance Power Ltd. (M/s Sumte Kothang HPPL) •Project was in S&I held up due to opposition from locals and NGOs. •Project stands terminated on 28.07.2017. |
| 18 | Purthi | Chenab | R | 232 | Pre-DPR Chapters returned after there is no progress in the S&I activities by the developer |
| 19 | Bardang | Chenab | R | 175 | Pre-DPR Chapters returned after there is no progress in the S&I activities by the developer |
| 20 | Sach khas | Sarchu | R | 288 | Pre-DPR Chapters returned after there is no progress in the S&I activities by the developer |
| 21 | Reoli Dugli HEP | Chenab | R | 456 | Pre-DPR Chapters returned after there is no progress in the S&I activities by the developer |

| | | | | | |
|-----------|---------------------|--------|---|-------------|---|
| 22 | Khab-I | Satluj | R | 310 | Govt. of HP has confirmed the TWL of Upstream project i.e. Yangthang Khab and FRL of Downstream project Jhangi Thopan vide letter dated 15.06.2017. Accordingly a revised PFR for Khab HEP is being prepared considering the scheme to be single stage RoR and considering the virgin stretch of river as per MoEF&CC guidelines. |
| 23 | Khab-II | Satluj | R | 150 | |
| 24 | Jangi Thopan Powari | Satluj | R | 804 | Pre-DPR Chapters returned after there is no progress in the S&I activities by the developer |
| 25 | Luhri St.-II | Satluj | R | 172 | SJVN vide letter dt. 01.09.23 informed that domain allotment is pending with GoHP and layout of the project could not be finalized. |
| 26 | Gyspa Dam | Bhaga | S | 350 | Project held up due to sustained opposition from local people. |
| 27 | Jhalma | Chenab | R | 166 | Developer vide letter dt. 01.09.23 has informed that no significant progress has been made in S&I work as locals have been resisting entry into project area since March,2022 |
| 28 | Rashil | Chenab | R | 75 | |
| 29 | Tangu Romai | Pabar | R | 44 | Works on hold since Aug 2016. Funds constraints with the developer. Project is likely to be commissioned 4 years after restart of works. |
| 29 | Total | | | 4259 | |

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

II. Pumped Storage Projects

Exploitable Hydro Power Potential from Pumped Storage Projects

| S.No. | Name | District | I.C. (MW) |
|----------|---------------------|----------|-------------|
| 1 | Majra | Kangra | 700 |
| 2 | Renukaji (Renuka) | Sirmaur | 1630 |
| 3 | Dhulasidh(Sadda) | Hamirpur | 180 |
| 4 | Koldam PSP-I &II | | 2400 |
| 5 | Lehri | Bilaspur | 850 |
| 6 | Raipur/Dobar Uparla | Una | 1500 |
| 6 | TOTAL | | 7260 |

a. Balance Capacity

| S.No. | SCHEMES | Agency | District | River | | I.C. (MW) | Remarks |
|----------|---------------------|--|----------|--------------------------------|---|-------------|--|
| | | | | Upper Reservoir | Lower Reservoir | | |
| 1 | Majra | • Indicated by MoP to BBMB | Kangra | Sarhyali Khad | Govind Sagar | 700 | Yet to be allotted by the State for development |
| 2 | Renukaji (Renuka) | •HPPCL (Himachal Pradesh Power Corporation Ltd.) | Sirmaur | Jogar ka Khala | Dadahu Storage | 1630 | Preliminary Report Prepared |
| 3 | Dhulasidh(Sadda) | •Indicated by MoP to SJVNL | Hamirpur | at Sadda (in a Depression) | Dhulasidh HEP Reservoir (for both the alternatives) | 180 | •Yet to be allotted by the State for development • PFR Prepared |
| 4 | Koldam PSP-I &II | •Indicated by MoP to NTPC(self identified) | Bilaspur | to be constructed (off Stream) | Koldam reservoir | 2400 | •Yet to be allotted by the State for development •PFR Prepared |
| 5 | Lehri | Indicated by MoP to BBMB(self identified) | Bilaspur | | Bhakra reservoir | 850 | Yet to be allotted by the State for development |
| 6 | Raipur/Dobar Uparla | •Indicated by MoP to BBMB(self identified) | Una | To be constructed | Bhakra reservoir | 1500 | •Yet to be allotted by the State for development •PFR Prepared |
| 6 | Total | | | | | 7260 | |

Summary of Hydro Power Development in Punjab

I. Conventional Projects

| | | Nos. | I.C. (MW) |
|--|-----------------------------|------|-----------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 10 | 1300.73 |
| Breakup of Hydro Power Potential (2017-23 Study) | | | |
| A | Projects in operation | 9 | 1096.3 |
| B | Projects under construction | 1 | 206 |

I. Conventional Projects

| Details of Exploitable Hydro Power Projects | | | | |
|--|-----------------------------|---------------------------|-------------|------------------|
| S.no | Name | River | Type | I.C. (MW) |
| 1 | Ranjit Sagar Dam (Thein) | Ravi | S | 600 |
| 2 | Shahpurkhandi (Shahpur) | Ravi | R | 206 |
| 3 | Mukerian Phase I | Tail water of pong dam | R | 45 |
| 4 | Mukerian Phase II | Tail water of pong dam | R | 45 |
| 5 | Mukerian Phase III | Tail water of pong dam | R | 58.5 |
| 6 | Mukerian Phase IV | Tail water of pong dam | R | 58.5 |
| 7 | Anandpur Sahib-I | AHC (Canala) | R | 67 |
| 8 | Anandpur Sahib-II | AHC (Canala) | R | 67 |
| 9 | Kotla | Satluj | R | 77.34 |
| 10 | Ganguwal | Satluj | R | 76.39 |
| 10 | TOTAL | | | 1300.73 |

A. H.E. Projects in Operation:

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

* ALL PROJECTS ARE IN INDUS BASIN

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

B. H.E. Projects under Construction:

| Sl. No. | Name of Project | Implementing Agency | River /Basin | District | I. C. (MW) | Type (R/S/R(P)) | Sector | Likely Commissioning |
|----------|-----------------|---------------------|-----------------|-----------|---------------|--------------------|--------|-------------------------|
| 1 | Shahpurkandi | Irr. Deptt. & PSPCL | Ravi /Indus | Gurdaspur | 206 | R | State | 2026-27 (April 26) |
| 1 | Total | | | | 206 | | | |

Summary of Hydro Power Development in Haryana

I. Conventional Projects

| | Nos. | I.C. (MW) |
|--|-------------|------------------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | - | - |

Summary of Hydro Power Development in Rajasthan

I. Conventional Projects

| | | Nos. | I.C. (MW) |
|--|-----------------------|------|-----------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 4 | 411 |
| Breakup of Hydro Power Potential (2017-23 study) | | | |
| A | Projects in operation | 4 | 411 |

II. Pumped Storage Projects

| | | Nos. | I.C. (MW) |
|--|---------------------------------------|----------|-------------|
| Exploitable Hydro Power Potential from Pump Storage Projects | | 7 | 9200 |
| Breakup of Hydro Power Potential from Pumped Storage Projects | | | |
| a | Projects Under Survey & Investigation | 4 | 6160 |
| b | Balance capacity | 3 | 3040 |

I. Conventional Projects**Details of Exploitable Hydro Power Projects**

| S.No. | Name | River | Type | I.C. (MW) |
|--------------|-------------------|--------------|-------------|------------------|
| 1 | Rana Pratap Sagar | Chambal | S | 172 |
| 2 | Jawahar Sagar | Chambal | R(P) | 99 |
| 3 | Mahi Bajaj-I | Mahi | S | 50 |
| 4 | Mahi Bajaj-II | Mahi | R (P) | 90 |
| 4 | Total | | | 411 |

A. H.E. Projects in Operation:

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

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

II. Pumped Storage Projects

Exploitable Hydro Power Potential from Pumped Storage Projects

| S.No. | Name | District | I.C. (MW) |
|-------|---------------------|-------------|-------------|
| 1 | Sukhpura Off-Stream | Chittorgarh | 2560 |
| 2 | Shahpur | Baran | 1800 |
| 3 | Sirohi | Sirohi | 1200 |
| 4 | Rana Pratap Sagar | chittorgarh | 1200 |
| 5 | Semaliya-II | chittorgarh | 1200 |
| 6 | Brahmani | Chittorgarh | 600 |
| 7 | Sirohi | Kolhapur | 640 |
| 7 | TOTAL | | 9200 |

a. PSP under Survey & Investigation

| S.No. | SCHEMES | Agency | Sector | District | River | INSTALLED CAPACITY | | Remarks | |
|-------|---------------------|-----------------------|---------|-------------|---|------------------------------|-----------|---|--|
| | | | | | | No. of units x Unit size(MW) | I.C. (MW) | | |
| 1 | Sukhpura Off-Stream | Greenco | Private | Chittorgarh | UR &LR-Off stream, Both Upper Reservoir & Lower Reservoirs are to be constructed | 7x320 + 2x160 | 2560 | <ul style="list-style-type: none"> •Target date for preparation of DPR – 04/25 •Date of MOA-24.01.2023 | |
| 2 | Shahpur | Greenco | Private | Baran | Upper Reservoir &Lower Reservoir -off stream | 5x300 +2x150 | 1800 | <ul style="list-style-type: none"> •Target date of preparation of DPR- 04/25 •Date of MOA-18.12.2021 | |
| 3 | Sirohi | JSW Energy | Private | Sirohi | Upper Reservoir-off stream Lower Reservoir-located across a minor rivulet draining into Sili Nallah, a tributary of Sipu river in West Banas river basin | 3x400 | 1200 | <ul style="list-style-type: none"> •Target date of preparation of DPR- 04/25 •Date of MOA-24.01.2022 (acknowledgment letter to LOI) | |
| 4 | Brahmani | ACME Urja Two Pvt Ltd | Private | Chittorgarh | Upper reservoir & Lower Reservoir - Off Stream | | 600 | <ul style="list-style-type: none"> •Target date of preparation of DPR- 09/25 •Date of MOA-23.01.2023 | |
| 4 | Total | | | | | | | 6160 | |

b. Balance Capacity

| S.No. | SCHEMES | Agency | River | | District | I.C. (MW) | Remarks |
|----------|-------------------|---------------------------------|-----------------|-----------------|-------------|--------------|--|
| | | | Upper Reservoir | Lower Reservoir | | | |
| 1 | Rana Pratap Sagar | Semaliya Energy Private Limited | | | chittorgarh | 1200 | <ul style="list-style-type: none">•Proposal not yet received in CEA• Agency- Semaliya Energy Private Limited•Date of grant of TOR-24.01.2022 |
| 2 | Semaliya-II | Semaliya Energy Private Limited | | | chittorgarh | 1200 | <ul style="list-style-type: none">•Proposal not yet received in CEA• Agency- Semaliya Energy Private Limited•Date of grant of TOR-07.06.2023 |
| 3 | Sirohi | Sasa Stone Private Limited | | | Kolhapur | 640 | <ul style="list-style-type: none">•Proposal not yet received in CEA• Agency- Sasa Stone Private limited•Date of grant of TOR-13.06.2023 |
| 3 | Total | | | | | 3040 | |

Summary of Hydro Power Development in Uttarakhand

I. Conventional Projects

| | | Nos. | I.C.(MW) |
|--|--|------|----------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 55 | 13481.35 |
| Breakup of Hydro Power Potential (2017-23 Study) | | | |
| A | Projects in operation | 19 | 4035.35 |
| B | Projects under construction | 3 | 1264 |
| C | Projects concurred by CEA/State Govt. # | 3 | 815 |
| D | Projects returned to project authorities | 7 | 939 |
| E | Projects under S&I | 1 | 660 |
| F | Balance Capacity* | 22 | 3988 |

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

#In addition to above,for one project namely Sirkari Bhyol Rupsiabagar,it has been initmated by UJVNL that total cost has been estimated at Rs. 964.12crore at price level of March 2023 and as per Section 8(1) of Electricity Act ,M/S UJVNL is required to submit the DPR to State Government

II. Pumped Storage Projects

| | | Nos. | I.C. (MW) |
|--|--------------------|------|-----------|
| Exploitable Hydro Power Potential from Pump Storage Projects | | 1 | 1000 |
| Breakup of Hydro Power Potential from Pumped Storage Projects | | | |
| a | Under Construction | 1 | 1000 |

I. Conventional Projects

| Details of Exploitable Hydro Power Projects | | | | |
|--|---|--------------|-------------|------------------|
| S No. | Name of the Project | River | Type | I.C. (MW) |
| 1 | Chibro | Tons | R (P) | 240 |
| 2 | Khodri | Tons | R (P) | 120 |
| 3 | Vyasi (Lakhwar Vyasi-II) | Yamuna | R (P) | 120 |
| 4 | Dhakrani | Yamuna | R | 33.75 |
| 5 | Dhalipur | Yamuna | R | 51 |
| 6 | Kulhal | Tons | R | 30 |
| 7 | Maneri Bhalli-I | Bagirathi | R (P) | 90 |
| 8 | Maneri Bhalli-II | Bagirathi | R (P) | 304 |
| 9 | Tehri | Bagirathi | S | 1000 |
| 10 | Koteswar | Bagirathi | R(P) | 400 |
| 11 | Chilla (Rishikesh Hardwar) | Ganga | R | 144 |
| 12 | Vishnu Prayag | Alaknanda | R | 400 |
| 13 | Singoli Bhatwari (Mandakini) | Mandakini | R | 99 |
| 14 | Srinagar | Alaknanda | R (P) | 330 |
| 15 | Ramganga | Ramganga | S | 198 |
| 16 | Tanakpur | Sarda | R | 94.2 |
| 17 | Khatima | Sarda | R | 41.4 |
| 18 | Dhauliganga (Khet Tawaghat) | Dhauliganga | R (P) | 280 |
| 19 | Naitwar Mori | Tons | R (P) | 60 |
| 20 | Lata Tapovan | Dhauliganga | R | 171 |
| 21 | Tapovan Vishnugad (Tapoban Chunar) | Dhauliganga | R | 520 |
| 22 | Vishnu Gad Pipalkoti | Alaknanda | R | 444 |
| 23 | Phata Byung | Mandakini | R | 76 |
| 24 | Jakhol Sankari | Supin | R | 44 |
| 25 | Goriganga IIIA (Devibagar Khartoli) | Goriganga | R | 150 |
| 26 | Bowala Nand Prayag | Alaknanda | R | 300 |
| 27 | Pancheswar MPP (Pancheshwar-I) | Sarda | S | 2400 |
| 28 | Rupaligad Regulating Dam (Pancheshwar-II) | Sarda | S | 120 |
| 29 | Kishau Dam | Tons | S | 660 |
| 30 | Lakhwar MPP (Lakhwar Vyasi-I) | Yamuna | S | 300 |

| | | | | |
|----|-----------------------------------|--------------|-------|-----------------|
| 31 | Kuwa ford | Yamuna | R | 106 |
| 32 | Arakot Tiuni (Nakot Patlasu) | Tons | R | 100 |
| 33 | Tiuni Plasu (Tuini) | Tons | R | 62 |
| 34 | Mori Hanol (Ugmir) | Tons | R | 26 |
| 35 | Hanol Tiuni | Tons | R | 62 |
| 36 | Nand Prayag Langasu | Alaknanda | R | 106 |
| 37 | Uttyasu Dam | Alaknanda | S | 720 |
| 38 | Bampa Kurkuti | Dhauli Ganga | R | 31 |
| 39 | Jhelum Tamak | Dhauliganga | R (P) | 135 |
| 40 | Tamak Lata | Dhauliganga | R | 130 |
| 41 | Tikh Kunwargarh (Tikh Gurupha) | Pindar | R | 82 |
| 42 | Bagoli Dam | Pindar | R | 126 |
| 43 | Devasari Dam | Pindar | R | 164 |
| 44 | Garba Tawaghat | Sarda | R | 398 |
| 45 | Tawaghat Dharchula | Sarda | R | 470 |
| 46 | Kalika Dantu | Sarda | R | 190 |
| 47 | Bokang Bailing | Dhauliganga | R | 192 |
| 48 | Chunger Chal | Dhauliganga | R | 130 |
| 49 | Sela Urthing | Dhauliganga | R | 126 |
| 50 | Urthing Sobla | Dhauli Ganga | R | 228 |
| 51 | Sobala Jhimirigaon | Dhauli Ganga | R | 118 |
| 52 | Mapang Bogidiyar | Goriganga | R | 280 |
| 53 | Bogidiyar Sirkaribhyol | Goriganga | R | 100 |
| 54 | Sirkari Bhyol Rupsiyabagar | Goriganga | R | 135 |
| 55 | Ramganga Dam | Ram Ganga | S | 44 |
| 55 | TOTAL | | | 13481.35 |

A. H.E. Projects in Operation:

| S. NO. | UTILITY/ STATIONS | NO. OF STNS. | NO. OF UNITS X CAPACITY (MW) | RIVER | DISTRICT | I.C. (MW) | Type (R/S/R(P)) | Sector | YEAR OF COMMISSIONING |
|-----------|---|-----------------|---------------------------------------|---|----------------------|----------------|--------------------|---------|---------------------------------------|
| | CENTRAL SECTOR | | | | | | | | |
| | NHPC | | | | | | | | |
| 1 | DHAULI GANGA | 1 | (4X70) | DHAULIGANGA | PITHORAGARH | 280 | R(P) | Central | 2005 |
| 2 | TANAKPUR | 1 | (3X31.4) | SARDA | CHAMPAVAT | 94.2 | R | Central | 1992 |
| | SUB-TOTAL NHPC | 2 | | | | 374.2 | | | |
| | THDC | | | | | | | | |
| 3 | TEHRI ST-I | 1 | (4X250) | BHAGIRATHI | TEHRI GARHWAL | 1000 | S | Central | 2006-2007 |
| 4 | KOTESHWAR | 1 | (4X100) | BHAGIRATHI | TEHRI GARHWAL | 400 | R(P) | Central | 2010-12 |
| | TOTAL THDC | 2 | | | | 1400 | | | |
| | SJVNL | | | | | | | | |
| 5 | Naitwar Mori | 1 | 2X30 | Tons/ Yamuna | Uttarkashi | 60 | R | Central | 2023 |
| | SUB-TOTAL | 1 | | | | 60 | | | |
| | SUB TOTAL CENTRAL | 4 | | | | 1834.2 | | | |
| | STATE SECTOR | | | | | | | | |
| | UJVNL | | | | | | | | |
| 6 | CHIBRO (YAMUNA) | 1 | (4X60) | Tons River at Ichari Dam | DEHRADUN | 240 | R(P) | State | 1975-1976 |
| 7 | CHILLA | 1 | (4X36) | GANGA | HARIDWAR | 144 | R | State | 1980-1981 |
| 8 | DHAKRANI | 1 | (3X11.25) | Tons & Yamuna Rivers at Dakpathar Barrage | DEHRADUN | 33.75 | R | State | 1965-1970 |
| 9 | DHALIPUR | 1 | (3X17) | Tons & Yamuna Rivers at Dakpathar Barrage | DEHRADUN | 51 | R | State | 1965-1970 |
| 10 | KHATIMA | 1 | (3X13.8) | SHARDA | UDHAM SINGH NAGAR | 41.4 | R | State | 1955-1956 |
| 11 | KHODRI | 1 | (4X30) | TONS | DAK PATHAR | 120 | R(P) | State | 1984 |
| 12 | KULHAL | 1 | (3X10) | TONS | DEHRADUN | 30 | R | State | 1975 |
| 13 | MANERI BHALI- I | 1 | (3X30) | BHAGIRATHI | UTTARKASHI | 90 | R(P) | State | 1984 |
| 14 | MANERI BHALI- II | 1 | (4X76) | BHAGIRATHI | UTTARKASHI | 304 | R(P) | State | 2008 |
| 15 | RAMGANGA [RAMGANGA DAM (KALAGARH)] | 1 | (3X66) | RAMGANGA | PAURI GARHWAL | 198 | S | State | 1975-1977 |
| 16 | VYASI | 1 | (2x60) | YAMUNA/GANGA | DEHRADUN | 120 | R(P) | State | 22.04.2022 (U#2) 24.05.2022 (U#1) |
| | TOTAL UJVNL | 11 | | | | 1372.15 | | | |
| | PRIVATE | | | | | | | | |
| | AHPC | | | | | | | | |
| 17 | SHRINAGAR | 1 | (4X82.50) | ALAKNANDA | PAURI GARHWAL | 330 | R(P) | Private | 2015 |
| | JPPVL | | | | | | | | |
| 18 | VISHNU PRAYAG | 1 | (4X100) | ALAKNANDA | CHAMOLI | 400 | R | Private | 2006 |
| | ReNew Power | | | | | | | | |
| 19 | SINGOLI BHATWARI | 1 | (3X33) | Mandakini | RUDRAPRAYAG | 99 | R | Private | 2020 |
| | SUB TOTAL | 3 | | | | 829 | | | |
| 19 | TOTAL UTTARAKHAND | 18 | | | | 4035.35 | | | |

Note: ALL PROJECTS ARE IN GANGA BASIN

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

B. H.E. Projects under Construction:

| Sl. No. | Name of Project | Agency | District | I.C. (MW) | River | Basin | Type (R/S/R(P)) | Sector | Likely Commissioning |
|----------|---------------------|--------|--------------------------|-------------|-------------|-------|-----------------|---------|----------------------|
| 1 | Vishnugad Pipalkoti | THDC | Chamoli | 444 | Alaknanda | Ganga | R | Central | 2026-27 (Dec'26) |
| 2 | Tapovan Vishnugad | NTPC | Chamoli | 520 | Dhauliganga | Ganga | R | Central | 2028-29 (Mar'29) |
| 3 | Lakhwar MPP | UJVNL | Dehradun & Tehri Garhwal | 300 | Yamuna | Ganga | S | Central | 2028-29 (Oct'28) |
| 3 | Total | | | 1264 | | | | | |

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

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

| Sl. No. | Name of Project | River | Agency | District | I.C. (MW) | Type (R/S/R(P)) | Sector | Status |
|----------|------------------------|------------|--------|-----------------------|------------|-----------------|---------|--|
| 1 | Kotlibhel St-IA | Bhagirathi | NHPC | Tehri Garhwal | 195 | R | Central | EC accorded on 9.05.07. However, NHPC vide email dated 02.04.2021 furnished that EC expired in May'2012 FC-I accorded on 13.10.11 & for FC-II, Compliance Report is awaited from State Govt. However, NHPC vide email dated 02.04.2021 furnished that FC-I expired in Oct'2016. .# |
| 2 | Kotlibhel St-IB | Alaknanda | NHPC | Pauri & Tehri Garhwal | 320 | R | Central | EC accorded earlier by MoEF&CC on 14.08.07 was quashed by NEEA on 15.09.2010. Thereupon MoEF&CC withdrew the EC on 22.11.2010. MoEF&CC declined FC-I on 7.07.11.## |
| 3 | Alaknanda (Badri Nath) | Alaknanda | GMR | Chamoli | 300 | R | Private | EC accorded on 12.3.08. FC-I accorded on 8.11.11. FC-II accorded on 09.11.2012. The project is included in the list of 24 projects under review by Hon'ble Supreme Court. Validity of Concurrence expired on 07.08.2019. |
| 3 | Total | | | | 815 | | | |

The project is included in the list of 24 projects under review by Hon'ble Supreme Court. Hon'ble Supreme Court vide order dated 13.08.2013 directed the MoEF&CC as well as State of 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 recommended, in its report to MoEF&CC issued in Sept, 2017, that the project should operate to run one turbine continuously during lean season to minimize peaking impact at Devprayag. Hon'ble Supreme Court vide order dated 24.11.2015 directed MoP, MoEF&CC and MoWR to arrive at a common policy framework amongst three ministries which is yet to be formulated.

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

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

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

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

| Sl. No. | Name of Project | River | Agency | Sector | Type (R/S/R(P)) | I.C. (MW) | Month of Return |
|----------|-------------------------|-------------|--------|---------|-----------------|------------|-----------------|
| 1 | Nand Prayag Langasu | Alaknanda | UJVNL | State | R | 100 | Apr-11 |
| 2 | Mori Hanol | Tons | KKHPL | Private | | 63 | Feb-10 |
| 3 | Bogudiyar Sirkari Bhyol | Gori Ganga | GGHPL | Private | R | 146 | Sep-10 |
| 4 | Tiuni Plasu | Tons | UID | State | R | 72 | Oct-10 |
| 5 | Jhelum Tamak | Dhauliganga | THDCIL | Central | R(P) | 108 | Aug-19 |
| 6 | Bowala Nand Prayag | Alaknanda | UJVNL | State | R | 300 | Sep-22 |
| 7 | Goriganga-III A | Goriganga | NHPC | Central | R | 150 | Jan-21 |
| 7 | Total | | | | | 939 | |

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

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

| Sl. No. | Name of Project | River | I.C. (MW) | Agency | District | Type (R/S/R(P)) | Date of MOA | Sector |
|----------|-----------------|-------|------------|--------|----------|-----------------|-------------|--------|
| 1 | Kishau MPP | Tone | 660 | UJVNL | Dehradun | S | | State |
| 1 | Total | | 660 | | | | | |

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

F. Balance Capacity

| Sl.No. | Name of Project | River | Type | LC.(MW) | District | Remarks |
|--------|------------------------------------|-------------|------|-------------|-------------|--|
| 1 | Ram Ganga Dam | Ram Ganga | S | 44 | Pithoragarh | |
| 2 | Kuwa ford | Yamuna | R | 106 | Uttarkashi | |
| 3 | Bampa Kurkuti | Dhauliganga | R | 31 | Chamoli | |
| 4 | Tikh Kunwargarh (Tikh Gurupha) | Pindar | R | 82 | Bageshwar | |
| 5 | Uttyasu Dam | Alaknanda | S | 720 | Rudraprayag | |
| 6 | Sobla Jhimirigaon | Dhauliganga | R | 118 | Pithoragarh | |
| 7 | Tawaghat Dharchula | Sarda | R | 470 | Pithoragarh | |
| 8 | Kalika Dantu | Sarda | R | 190 | Pithoragarh | |
| 9 | Hanol tiuni | tons | R | 62 | Uttarkashi | |
| 10 | Bagoli Dam | Pindar | R | 126 | chamoli | |
| 11 | Jakhol sankari | Supin | R | 44 | Uttarkashi | |
| 12 | Urthing Sobla | Dhauliganga | R | 228 | Pithoragarh | |
| 13 | Mapang Bogidiyar | Goriganga | R | 280 | Pithoragarh | |
| 14 | Garba Tawaghat | MahaKali | R | 398 | Pithoragarh | <ul style="list-style-type: none"> Initially allotted to NHPC MoEF&CC has issued draft notification on 29.01.2019 regarding proposed ESZ of Askot Wildlife Sanctuary. Publication of final notification of boundaries is still awaited. Being located on Mahakali River, the project would need to be developed jointly with Nepal under the provision of Mahakali Treaty. |
| 15 | Tamak Lata | Dhauliganga | R | 130 | Chamoli | <ul style="list-style-type: none"> Initially allotted to UJVNL Project included in the list of 24 HE project named in PIL under consideration by Hon'ble Supreme Court. |
| 16 | Chhunger - Chal | Dhauliganga | R | 130 | Pithoragarh | <ul style="list-style-type: none"> Initially allotted to NHPC Project was held up due to MoEF Clearance. Project in Askot wild life Sanctuary. PCCF (Wildlife) and Chief Warden Wildlife, Dehradun has since granted permission for S&I on 17.05.2016. NHPC vide letter dated 09.04.2018 intimated GoUK that it is not presently prudent to proceed further with implementation of Chungar Chal HE Project. State Govt. has requested NHPC to inform about their final decision on the project. |
| 17 | Devsari | Pindar | R | 126 | Chamoli | <ul style="list-style-type: none"> Initially allotted to SJVN Pre-DPR Chapters returned after there is no progress in the S&I activities by the developer |
| 18 | Sela Urthing | Dhauliganga | R | 192 | Pithoragarh | <ul style="list-style-type: none"> Initially allotted to UJVNL Project held up due to MOJS is not in favour of construction of any other HEP in Ganga Basin |
| 19 | Bokang Bailing | Dhauliganga | R | 164 | Pithoragarh | <ul style="list-style-type: none"> Initially allotted to THDC Project held up due to MOJS is not in favour of construction of any other HEP in Ganga Basin |
| 20 | Arakot -Tiuni HEP | Tons | R | 100 | Uttarkashi | <ul style="list-style-type: none"> Initially allotted to UJVNL Pre-DPR Chapters returned after there is no progress in the S&I activities by the developer |
| 21 | Lata Tapovan | Dhauliganga | R | 171 | Chamoli | <ul style="list-style-type: none"> Initially allotted to NTPC Matter is sub-judice. Infrastructure works almost completed. Hon'ble SC stayed construction of 24 HE projects in Uttarakhand including Lata Tapovan. Project is likely to be commissioned 4 years after restart of works. Work stalled since May, 2014. |
| 22 | Phata Byung | Mandakini | R | 76 | Rudraprayag | <ul style="list-style-type: none"> Initially allotted to MJUPL (Starkraft) Works stalled since July, 2017 due to Financial crunch. The project stands allotted to M/s Statkraft IH through NCLT on 23.03.2023. The revival of Environmental clearance is under process. Project is likely to be commissioned 2 years after restart of works. |
| 22 | Total | | | 3988 | | |

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

II. Pumped Storage Projects

Exploitable Hydro Power Potential from Pumped Storage Projects

| S.No. | Name | River | I.C. (MW) |
|----------|--------------|------------------|-------------|
| 1 | Tehri | Bhagirathi river | 1000 |
| 1 | Total | | 1000 |

a. PSP under Active Construction

| S.No. | Name | Agency | District | River | No. of units x Unit size(MW) | I.C. (MW) | Sector | Remarks |
|----------|--------------|--------|---------------|------------------|------------------------------|-------------|---------|---|
| 1 | Tehri | THDC | Tehri Garhwal | Bhagirathi river | 4x250 | 1000 | Private | Likely to be Commissioned by 2025-26 (Oct.'25)* |
| 1 | Total | | | | | 1000 | | |

* One Unit of Tehri PSP(250 MW) is likely to be commissioned in FY 24-25 and three units(750 MW) are likely in FY 2025-

Summary of Hydro Power Development in Uttar Pradesh

I. Conventional Projects

| | | Nos. | I.C. (MW) |
|--|-----------------------|------|-----------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 4 | 501.6 |
| Breakup of Hydro Power Potential (2017-23 Study) | | | |
| A | Projects in operation | 4 | 501.6 |

II. Pumped Storage Projects

| | | Nos. | I.C. (MW) |
|--|------------------------------|------|-----------|
| Exploitable Hydro Power Potential from Pump Storage Projects | | 10 | 16620 |
| Breakup of Hydro Power Potential from Pumped Storage Projects | | | |
| a | Under Survey & Investigation | 7 | 13020 |
| b | Balance capacity | 3 | 3600 |

I. Conventional Projects**Details of Exploitable Hydro Power Projects**

| S.No | Name | River | Type | I.C. (MW) |
|----------|--------------|--------|-------|--------------|
| 1 | Khara | Yamuna | R (P) | 72 |
| 2 | Matatila | Betwa | S | 30.6 |
| 3 | Obra | Rihand | S | 99 |
| 4 | Rihand | Rihand | S | 300 |
| 4 | Total | | | 501.6 |

A. Projects in operation

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

II. Pumped Storage Projects

Exploitable Hydro Power Potential from Pumped Storage Projects

| S.No. | Name | District | I.C. (MW) |
|-----------|--------------|------------------------|--------------|
| 1 | Kandhaura | Sonbhadra | 1680 |
| 2 | Musakhand | Chandauli | 600 |
| 3 | UP01 | Sonbhadra | 3660 |
| 4 | Shoma | Sonbhadra | 2400 |
| 5 | Sonbhadra | Sonbhadra | 1200 |
| 6 | Sashnai | Sonbhadra | 1760 |
| 7 | Astha UP | Mirzapur and Prayagraj | 640 |
| 8 | Panaura | Sonbhadra | 1500 |
| 9 | Jhariya | Sonbhadra | 1620 |
| 10 | Chichlik | Sonbhadra | 1560 |
| 10 | Total | | 16620 |

a. PSP under Survey & Investigation

| S.No. | SCHEMES | Agency | Sector | District | River | INSTALLED CAPACITY | | Remarks |
|----------|--------------|-------------------------------|---------|-----------|------------|------------------------------|--------------|---|
| | | | | | | No. of units x Unit size(MW) | I.C. (MW) | |
| 1 | Kandhaura | JSW Energy | Private | Sonbhadra | Off Stream | 5x280+2x140 | 1680 | <ul style="list-style-type: none"> •Target date of preparation of DPR-04/25 •Date of MOA-25.11.2022 |
| 2 | Musakhand | ACME Urja Two Private Limited | Private | Chandauli | Off Stream | (2x 200 MW + 2 x 100 MW) | 600 | <ul style="list-style-type: none"> •Target date of preparation of DPR-04/25 •Date of MOA-03.04.2023 |
| 3 | UP01 | Greenko | Private | Sonbhadra | Off Stream | 11x305+2x152.5 | 3660 | <ul style="list-style-type: none"> •Target date of preparation of DPR-03/25 •Date of MOA-01.02.2023 |
| 4 | Shoma | Torrent Power | Private | Sonbhadra | Off Stream | | 2400 | <ul style="list-style-type: none"> •Target date of preparation of DPR-06/25 •Date of MOA-20.01.2023 |
| 5 | Jhariya | Jhariya Anant Urja | Private | Sonbhadra | Off stream | | 1620 | <ul style="list-style-type: none"> •Target date of DPR preparation -08/25 • Date of MoA- 19.08.2023 |
| 6 | Chichlik | Avaada | Private | Sonbhadra | Off Stream | | 1560 | <ul style="list-style-type: none"> •Target date of DPR preparation -08/25 • Date of MoU- 03.04.2024 |
| 7 | Panaura | Adani green | Private | Sonbhadra | Off Stream | | 1500 | <ul style="list-style-type: none"> •Target date of DPR preparation -09/25 • Date of MoA- 16.05.2024 |
| 7 | Total | | | | | | 13020 | |

b. Balance Capacity

| S.No. | SCHEMES | Agency | River | | District | I.C. (MW) | Remarks | |
|----------|--------------|--|-----------------|-----------------|------------------------|-----------|--|--|
| | | | Upper Reservoir | Lower Reservoir | | | | |
| 1 | Sonbhadra | Sri Siddharth Infratech & Services (I) Private Limited | | | Sonbhadra | 1200 | <ul style="list-style-type: none"> •Proposal not yet received in CEA • Agency-Sri Siddharth Infratech & Services (I) Private Limited •Date of grant of TOR-07.06.2023 | |
| 2 | Sashmai | Torrent Power Limited | | | Sonbhadra | 1760 | <ul style="list-style-type: none"> •Proposal not yet received in CEA • Agency-Torrent Power limited •Date of grant of TOR-14.12.2023 | |
| 3 | Astha UP | Astha Green Energy Ventures India Private Limited | | | Mirzapur and Prayagraj | 640 | <ul style="list-style-type: none"> •Proposal not yet received in CEA • Agency-Astha Green Energy Ventures India Private Limited •Date of grant of TOR-13.06.2023 | |
| 3 | Total | | | | | | 3600 | |

Summary of Hydro Power Development in Madhya Pradesh

I. Conventional Projects

| | | Nos. | I.C. (MW) |
|--|-----------------------|------|-----------|
| Exploitable Large Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 14 | 2819 |
| Breakup of Hydro Power Potential (2017-23 Study) | | | |
| A | Projects in operation | 9 | 2235 |
| B | Balance Capacity | 5 | 584 |

II. Pumped Storage Projects

| | | Nos. | I.C. (MW) |
|--|--------------------|------|-----------|
| Exploitable Hydro Power Potential from Pump Storage Projects | | 8 | 8560 |
| Breakup of Hydro Power Potential from Pumped Storage Projects | | | |
| a | Under S&I | 1 | 640 |
| b | Under Construction | 1 | 1920 |
| c | Balance Capacity | 6 | 6000 |

I. Conventional Projects

Details of Exploitable Hydro Power Projects

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

A. H.E. Projects in Operation:

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

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

B. Balance Capacity

| S.No. | Name of Project | I.C. (MW) | District | River | Type | Remarks |
|----------|---------------------------|--------------|--------------------|---------|------|---|
| 1 | Burhner | 26 | Mandla | Burhner | S | |
| 2 | Basania | 56 | Mandla | Narmada | S | |
| 3 | Hoshangabad (Jahanpur) | 58 | Hoshangabad | Narmada | R | |
| 4 | Bauras | 44 | Raisen | Narmada | R | |
| 5 | Maheshwar (Pvt.) | 400 | Khargone & Khandwa | Narmada | R | <ul style="list-style-type: none"> •Initially allotted to SMHPCL •Matter is sub-judice. Works suspended since Nov-11 due to cash flow problem with developer. M.P. Power Management Company Ltd. has terminated the Power Purchase Agreement with SMHPCL on 18.04.2020. The application of PFC has been admitted in NCLT on 27.09.2022 under IBC. CIRP has been put on hold by NCLT vide order dated 17.03.2023 in an application filed by Entegra Ltd. PFC has filed an Appeal before the NCLAT against the NCLT Order dated 17.03.2023 for recommencement of CIRP. Project is likely to be commissioned 2 years after restart of works. |
| 5 | Total | 584 | | | | |

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

II. Pumped Storage Projects

Exploitable Hydro Power Potential from Pumped Storage Projects

| S.No. | Name | District | I.C. (MW) |
|----------|------------------------------|------------|-------------|
| 1 | Indira Sagar-Omkareshwar PSP | Khandwa | 640 |
| 2 | MP30 Gandhi Sagar | Neemach | 1920 |
| 3 | Tekwa-2 | Khargone | 800 |
| 4 | Satpura-2 | Chhindwara | 1000 |
| 5 | Panari | Satna | 1800 |
| 6 | Astha MP | Khargone | 1200 |
| 7 | MP Pumped Storage Project | Panna | 600 |
| 8 | Rewa | Rewa | 600 |
| 8 | Total | | 8560 |

a. PSP under Survey & Investigation

| S.No. | SCHEMES | Agency | Sector | District | River | | I.C. (MW) | | Remarks |
|----------|------------------------------|--------|---------|----------|-----------------|-----------------------|------------------------------|------------|--|
| | | | | | Upper Reservoir | Lower Reservoir | No. of units x Unit size(MW) | MW | |
| 1 | Indira Sagar-Omkareshwar PSP | NHDC | Central | Khandwa | ISP Reservoir | Omkareshwar reservoir | 8x80 | 640 | •Target date of DPR preparation-12/25 •Date of MOA-07.06.2023 |
| 1 | Total | | | | | | | 640 | |

b. Hydro Electric Schemes Under Construction

| S.No. | SCHEMES | Agency | Sector | District | River | | I.C. (MW) | | Remarks |
|----------|-------------------|-----------------------------------|---------|----------|-----------------|-----------------|------------------------------|-------------|---|
| | | | | | Upper Reservoir | Lower Reservoir | No. of units x Unit size(MW) | MW | |
| 1 | MP30 Gandhi Sagar | Greenko MP01 IREP Private Limited | Private | Neemach | Off Stream | Chambal | 7x240+2x120 | 1920 | •Date of Commissioning-2028-29(June'28) |
| 1 | Total | | | | | | | 1920 | |

b. Balance Capacity

| S.No. | SCHEMES | Agency | District | River | | I.C. (MW) | Remarks |
|----------|---------------------------|--|------------|---|---|-------------|---|
| | | | | Upper Reservoir | Lower Reservoir | | |
| 1 | Satpura-2 | •Indicated by MoP to NHPC | Chhindwara | Latitude - 22.4043° Longitude - 78.8169° | Latitude - 22.4283° Longitude - 78.7933° | 1000 | •Yet to be allotted by the State for development •PFR Prepared |
| 2 | Panari | Sri Siddharth Infratech & Services (I) Private Limited | Satna | | | 1800 | •Proposal not yet received in CEA • Agency- Sri Siddharth Infratech & Services (I) Private Limited •Date of grant of TOR-13.03.2020 |
| 3 | Astha MP | Astha Green Energy Ventures India Private Limited | Khargone | | | 1200 | •Proposal not yet received in CEA • Agency- Astha Green Energy Ventures India Private Limited •Date of grant of TOR-17.04.2023 |
| 4 | MP Pumped Storage Project | Rithwik Projects Private Limited | Panna | | | 600 | •Proposal not yet received in CEA • Agency- Rithwik Projects Private Limited •Date of grant of TOR-13.06.2023 |
| 5 | Rewa | Sasa Stone Private Limited | Rewa | | | 600 | •Proposal not yet received in CEA • Agency- Sasa Stone Private Limited •Date of grant of TOR-13.06.2023 |
| 6 | Tekwa-2 | NHDC | Khargone | Off Stream | Off Stream | 800 | •Initially allotted to NHDC •Project held up as allotment was pending |
| 6 | Total | | | | | 6000 | |

Summary of Hydro Power Development in Chhattisgarh

I. Conventional Projects

| | | Nos. | I.C.(MW) |
|--|-----------------------|------|----------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 11 | 1311 |
| Breakup of Hydro Power Potential (2017-23 Study) | | | |
| A | Projects in operation | 1 | 120 |
| B | Balance Capacity | 10 | 1191 |

II. Pumped Storage Projects

| | | Nos. | I.C. (MW) |
|--|------------------|------|-----------|
| Exploitable Hydro Power Potential from Pump Storage Projects | | 9 | 9725 |
| Breakup of Hydro Power Potential from Pumped Storage Projects | | | |
| a | Under S&I | 2 | 1800 |
| b | Balance Capacity | 7 | 7925 |

I. Conventional Projects**Details of Exploitable Hydro Power Projects**

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

A. H.E. Projects in Operation:

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

B. Balance Capacity

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

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

II. Pumped Storage Projects

Exploitable Hydro Power Potential from Pumped Storage Projects

| S.No. | Name | District | I.C. (MW) |
|----------|--------------|-----------|-------------|
| 1 | Dangari | Jashpur | 1400 |
| 2 | Rouni | Raigarh | 2100 |
| 3 | Chikni | Surajpur | 325 |
| 4 | Kharauli | Surajpur | 500 |
| 5 | Hasdeo Bango | Korba | 800 |
| 6 | CHH-09 | Surguja | 1200 |
| 7 | Gandhwani | Surguja | 1200 |
| 8 | Bilaspur | Bilaspur | 1000 |
| 9 | Sikaser | Gariaband | 1200 |
| 9 | Total | | 9725 |

a. PSP under S&I

| S. No. | Name of project | IC | Agency | Sector | River | | District | Remarks |
|----------|-----------------|-------------|-------------------|---------|-----------------|--|----------|--|
| | | | | | Upper Reservoir | Lower Reservoir | | |
| 1 | Hasdeo Bango | 800 | CSPGCL | State | Offstream | Exisiting Hasdeo bango reservoir on hasdeo river | Korba | <ul style="list-style-type: none"> •Target date of DPR Preparation-08/25 •Date of MoA-06.10.2023 |
| 2 | Bilaspur | 1000 | Jindal renewables | Private | Offstream | Offstream | Bilaspur | <ul style="list-style-type: none"> •Target date of DPR Preparation-08/25 •Date of MoA-08.09.2023 |
| 2 | Total | 1800 | | | | | | |

b. Balance Capacity

| S.No. | SCHEMES | Agency | River | | District | I.C. (MW) | Remarks |
|-------|-----------|----------------------------------|-----------------|----------------------------|----------|-----------|--|
| | | | Upper Reservoir | Lower Reservoir | | | |
| 1 | Dangari | CSPGCL | Bichri Nala | Goer river | Jashpur | 1400 | <ul style="list-style-type: none"> •Yet to be allotted by the State for development •Techno Commerical Feasibility Report (TCFR) has been prepared for IC of 1400 MW |
| 2 | Rouni | CSPGCL | Off Stream | Dorki Nadi (seasonal nala) | Jashpur | 2100 | <ul style="list-style-type: none"> •Balance •Allotment Pending |
| 3 | Chikni | Chikini Energy Private Limited | | | Surajpur | 325 | <ul style="list-style-type: none"> •Proposal not yet received in CEA • Agency- Chikni Energy Private Limited •Date of grant of TOR-07.08.2023 |
| 4 | Kharauli | Kharauli Energy Private Limited | | | Surajpur | 500 | <ul style="list-style-type: none"> •Proposal not yet received in CEA • Agency- Kharauli Energy Private Limited •Date of grant of TOR-10.09.2023 |
| 5 | CHH-09 | Sterlite Grid 36 Limited | | | Surguja | 1200 | <ul style="list-style-type: none"> •Proposal not yet received in CEA • Agency- Sterlite Grid 36 Limited •Date of grant of TOR-22.01.2024 |
| 6 | Gandhwani | Gandhwani Energy Private Limited | | | Surguja | 1200 | <ul style="list-style-type: none"> •Proposal not yet received in CEA • Agency- Gandhwani Energy Private Limited •Date of grant of TOR-05.02.2024 |

| | | | |
|---|---|-------------|--|
| 7 | Sikaser CSPGCL Off Stream (proposed) existing Gariaband | 1200 | <ul style="list-style-type: none"> •Proposal not yet received in CEA • Agency- CSPGCL •Date of grant of TOR- 26.12.2024 |
| 7 | TOTAL | 7925 | |

Summary of Hydro Power Development in Gujarat

I. Conventional Projects

| | | Nos. | I.C. (MW) |
|--|-----------------------|------|-----------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 2 | 550 |
| Breakup of Hydro Power Potential (2017-23 Study) | | | |
| A | Capacity in operation | 2 | 550 |

II. Pumped Storage Projects

| | | Nos. | I.C. (MW) |
|--|------------------|------|-----------|
| Exploitable Hydro Power Potential from Pump Storage Projects | | 10 | 7680 |
| Breakup of Hydro Power Potential from Pumped Storage Projects | | | |
| a | In Operation | 2 | 1440 |
| b | Under S&I | 6 | 3940 |
| c | Balance Capacity | 2 | 2300 |

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

I. Conventional Projects**Details of Exploitable Hydro Power Projects**

| S.no | Name | River | I.C. (MW) | Type |
|------|---------------------|---------|------------|------|
| 1 | Ukai | Tapti | 300 | S |
| 2 | Sardar Sarovar CHPH | Narmada | 250 | R(P) |
| 2 | TOTAL | | 550 | |

A. H.E. Projects in Operation:

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

* All projects are in CIR Basin

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

II. Pumped Storage Projects

Exploitable Hydro Power Potential from Pumped Storage Projects

| S.No. | Name | District | I.C. (MW) |
|-----------|----------------|------------|-------------|
| 1 | Kadana | Panchmahal | 240 |
| 2 | Sardar Sarover | Baharuch | 1200 |
| 3 | Ukai | Tapi | 1600 |
| 4 | Pindval | Vaisad | 1000 |
| 5 | Tokarpada | Vaisad | 1300 |
| 6 | Serula | Tapi | 960 |
| 7 | Juni kayaliwel | Tapi | 300 |
| 8 | Amalpada | Tapi | 300 |
| 9 | Juni Bavli | Tapi | 450 |
| 10 | Satkashi | Tapi | 330 |
| 10 | Total | | 7680 |

a. PSP In Operation

| S.No. | SCHEMES | Agency | River | | District | I.C. (MW) | Sector | Remarks |
|----------|----------------|--------|-----------------|-----------------|------------|-------------|--------|-----------------------------|
| | | | Upper Reservoir | Lower Reservoir | | | | |
| 1 | Kadana | GSECL | Mahi | Mahi | Panchmahal | 240 | State | Not Working in Pumping Mode |
| 2 | Sardar Sarover | SSNNL | Narmada | Narmada | Baharuch | 1200 | State | Not Working in Pumping Mode |
| 2 | TOTAL | | | | | 1440 | | |

b. PSP Under S&i

| S.No. | SCHEMES | Agency | River | | District | I.C. (MW) | Sector | Remarks |
|----------|----------------|---------|-----------------|-------------------------|----------|-------------|---------|--|
| | | | Upper Reservoir | Lower Reservoir | | | | |
| 1 | Serula | GSECL | Off Stream | Off Stream | Tapi | 960 | State | • Target date of DPR preparation-09/25 • Date of MoU-17.09.2024 |
| 2 | Juni Kayaliwel | GSECL | Off Stream | Off Stream | Tapi | 300 | State | • Target date of DPR preparation-09/25 • Date of MoU-17.09.2024 |
| 3 | Amalpada | GSECL | Off Stream | Off Stream | Tapi | 300 | State | • Target date of DPR preparation-09/25 • Date of MoU-17.09.2024 |
| 4 | Juni Bavli | GSECL | Off Stream | existing Ukai Reservoir | Tapi | 450 | State | • Target date of DPR preparation-09/25 • Date of MoU-17.09.2024 |
| 5 | Satkashi | GSECL | Off Stream | Off Stream | Tapi | 330 | State | • Target date of DPR preparation-09/25 • Date of MoU-17.09.2024 |
| 6 | Ukai | Greenko | Off Stream | Off Stream | Tapi | 1600 | Private | • Target date of DPR preparation-09/25 |
| 6 | TOTAL | | | | | 3940 | | |

c. Balance Capacity

| S.No. | SCHEMES | Agency | River | | District | I.C. (MW) | Remarks |
|----------|--------------|-----------------------|-----------------|-----------------|----------|-------------|--|
| | | | Upper Reservoir | Lower Reservoir | | | |
| 1 | Pindval | Torrent Power Limited | | | Vaisad | 1000 | • Proposal not yet received in CEA • Agency- Torrent Power • Date of grant of TOR-23.09.2023 |
| 2 | Tokarpada | Torrent Power Limited | | | Vaisad | 1300 | • Proposal not yet received in CEA • Agency- Torrent Power • Date of grant of TOR-23.09.2024 |
| 2 | TOTAL | | | | | 2300 | |

Summary of Hydro Power Development in Maharashtra

I. Conventional Projects

| | | Nos. | I.C. (MW) |
|--|-----------------------|------|-----------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 16 | 3144.0 |
| Breakup of Hydro Power Potential (2017-23) | | | |
| A | Projects in operation | 12 | 2647 |
| B | Balance Capacity | 4 | 497 |

II. Pumped Storage Projects

| | | Nos. | I.C. (MW) |
|--|------------------|------|-----------|
| Exploitable Hydro Power Potential from Pump Storage Projects | | 37 | 46905 |
| Breakup of Hydro Power Potential from Pumped Storage Projects | | | |
| a | In Operation | 2 | 400 |
| b | Concurred | 2 | 2500 |
| c | Under S&I | 10 | 18700 |
| d | Balance Capacity | 23 | 25305 |

I. Conventional Projects

| Details of Exploitable Hydro Power Projects | | | | |
|--|--------------------------|--|-------------|------------------|
| S.no | Name | River | Type | I.C. (MW) |
| 1 | Vaitarna (Vaitarna I) | Vaitarna | S | 60 |
| 2 | Bhira Tail Race | Kundalika | R (P) | 80 |
| 3 | Tillari | Tillari | R (P) | 60 |
| 4 | Bhandardara St-II | Pravara | R (P) | 34 |
| 5 | Pench | Pench | S | 160 |
| 6 | Wainganga | Wainganga | S | 138 |
| 7 | Samda | Wainganga | R | 45 |
| 8 | Kunghara | Wainganga | R | 100 |
| 9 | Pranhita | Pranhita | S | 214 |
| 10 | Bhivpuri | Andhra | S | 75 |
| 11 | Khopoli | Indrayani | S | 72 |
| 12 | Bhira | Neela& Mula | S | 150 |
| 13 | Koyna Dam P/H | Koyna | S | 36 |
| 14 | Koyna St. I & II | Koyna | S | 600 |
| 15 | Koyna St. III | water discharge d from units(St-I, II & IV | R (P) | 320 |
| 16 | Koyna St. IV | Koyna | S | 1000 |
| 16 | TOTAL | | | 3144 |

A. H.E. Projects in Operation:

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

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

B. Balance Capacity

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

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

II. Pumped Storage Projects

Exploitable Hydro Power Potential from Pumped Storage Projects

| S.No. | Name | District | I.C. (MW) |
|-------|-------------------|-------------------|-----------|
| 1 | Ghatghar Stage-II | Ahmednagar | 125 |
| 2 | Malshej Ghat | Ahmednagar/ Thane | 700 |
| 3 | Mutkhel | Ahmednagar | 110 |
| 4 | Warasgaon | Pune/Raigad | 1200 |
| 5 | Bhira | Raigad | 150 |
| 6 | Ghatgar | Thana | 250 |
| 7 | Kengadi | Thane | 1550 |
| 8 | Jalond | Thane | 2400 |
| 9 | Amba | Pune | 800 |
| 10 | Jalvara | Ratnagiri/Belgaum | 2220 |
| 11 | Koyna Left Bank | Satara | 80 |
| 12 | Varandhghat | Pune | 800 |
| 13 | Panshet | Satara | 1600 |
| 14 | Nive | Pune | 1200 |
| 15 | Kodali | Kolhapur | 220 |
| 16 | Bhavali | Nashik/ Thane | 1500 |
| 17 | Atvan | Pune/raigad | 500 |
| 18 | Koyna St-VI | Satara | 400 |

| | | | |
|-----------|-----------------------|---------------------------|--------------|
| 19 | Patgaon | Sindhudurg and Kolhapur | 2100 |
| 20 | Kundi | Ratnagiri | 600 |
| 21 | Pane | Raigad | 1500 |
| 22 | Tarali | Satara | 1500 |
| 23 | Malshej Ghat Bhorande | Pune & Thane | 1500 |
| 24 | Aruna | Kolhapur | 1950 |
| 25 | Humbarli Birmani | Satara/ Ratnagiri | 1000 |
| 26 | Shirwata | Pune | 1800 |
| 27 | Bhivpuri | Raigad | 1000 |
| 28 | Warasgaon Warangi | Pune-Raigad | 1500 |
| 29 | Savitri | Raigad and Satara | 2250 |
| 30 | Koyna Nivakane | Satara | 2700 |
| 31 | Nayagaon | Chhatrapati Sambhajinagar | 2000 |
| 32 | Mhaismal | Aurangabad | 800 |
| 33 | Kolhapur | Kolhapur | 1200 |
| 34 | Maval (Saidongar-2) | Pune and Raigarh | 1200 |
| 35 | Saidongar-1 | Pune and Raigarh | 3000 |
| 36 | Kamod | Nandurbar | 2000 |
| 37 | Pawana Falyan | Pune & Raigad | 1500 |
| 37 | Total | | 46905 |

a. PSP in Operation

| S.No. | SCHEMES | Agency | District | River | | Sector | I.C. (MW) |
|----------|--------------|------------|----------|-----------------|-----------------|---------|------------|
| | | | | Upper Reservoir | Lower Reservoir | | |
| 1 | Bhira | TATA power | Raigad | Mulla & Neela | | Private | 150 |
| 2 | Ghatgar | MAHAGENCO | Thana | Pravara | | State | 250 |
| 2 | Total | | | | | | 400 |

b. PSP concurred and yet to be taken up for construction

| S. No. | Scheme | Agency | Sector | River | | IC (MW) | Remarks |
|----------|--------------|----------------------------|---------|-------------------------------|-----------------|-------------|----------------------------------|
| | | | | Upper Reservoir | Lower Reservoir | | |
| 1 | Bhivpuri | Tata Power Corporation Ltd | Private | Existing Thokerwadi reservoir | Off Stream | 1000 | Date of concurrence - 30.09.2024 |
| 2 | Bhawali | JSW Energy | Private | Downstream of Bhawali dam | Ulhas river | 1500 | Date of concurrence - 24.09.2024 |
| 2 | Total | | | | | 2500 | |

c. PSP under S&I

| S.No. | SCHEMES | Agency | District | River | | I.C. (MW) | Sector | Remarks |
|-----------|----------------------|-------------------------|--------------------------|---|---|--------------|---------|---|
| | | | | Upper Reservoir | Lower Reservoir | | | |
| 1 | Pane | JSW Energy | Raigad | Off Stream | connected to a small stream which joins the downstream Kal river | 1500 | Private | •Target date of DPR preparation-07/24 •Date of MOA-29.09.2022 |
| 2 | Tarali | Adani Green Energy Ltd. | Satara | Off Stream | existing Tarali reservoir | 1500 | Private | •Target date of DPR preparation-03/25 •Date of MOA-28.06.2022 |
| 3 | Malshej Ghat Borande | Adani Green Energy Ltd. | Pune & Thane | on Minor nallah draining into Kukadi river | on Minor nallah draining Into Kalu rive | 1500 | Private | •Target date of DPR preparation-03/25 •Date of MOA-28.06.2022 |
| 4 | Shirwata | TATA power | Pune | offstream | existing Shirawata reservoir | 1800 | Private | • Target date ofDPR preparation-04/25 •Date of MOA- 08.08.2023 |
| 5 | Warasgaon Warangi | Adani Green | Pune-Raigad | on minor nallah draining into Ambi river | on minor nallah draining into Kal river | 1500 | Private | • Target date ofDPR preparation-04/25 •Date of MOA- 28.06.2022 |
| 6 | Koyna Nivakane | Adani Green | Satara | minor rivulet draining into Kera River/ Koyna river | minor rivulet draining into Kera River/ Koyna river | 2700 | Private | • Target date ofDPR preparation-06/25 •Date of MOA- 28.06.2022 |
| 7 | Nayagaon | Greenko | Chhatrapati Sambhajnagar | offstream | minor nallah draining into Hivra River | 2000 | Private | • Target date ofDPR preparation-06/25 •Date of MOA- 16.01.2023 |
| 8 | Karjat(Saidongar-D) | Torrent ower | Raigad | Off Stream | Initially filling by rainfall yield of self catchment of lower reservoir only | 3000 | Private | • Target date ofDPR preparation-08/25 •Date of MOA- 06.06.2023 |
| 9 | Maval (Saidongar -2) | Torrent Power | Pune & Raigad | offstream | Initial filling by rainfall yield of self-catchment of the lower reservoir only | 1200 | Private | • Target date ofDPR preparation-08/25 •Date of MOA- 06.06.2023 |
| 10 | Kamod | Megha engineering | nandurbar | Off Stream | Off Stream | 2000 | Private | • Target date ofDPR preparation-12/25 •Date of MOA- 26.09.2024 |
| 10 | Total | | | | | 18700 | | |

c. Balance Capacity

| S.No. | SCHEMES | Agency | District | River | | I.C. (MW) | Remarks |
|-------|-------------------|----------------------------------|--------------------|---|---|-----------|--|
| | | | | Upper Reservoir | Lower Reservoir | | |
| 1 | Ghatghar Stage-II | WRD, Maharashtra | Ahmednagar | Pravara river | Shahi Nalla | 125 | PFR Prepared in March-21. Use of both reservoirs of Ghatghar PSP St.I |
| 2 | Malshej Ghat | Indicated by MoP to THDCIL | Ahmednagar/ Thane | Kalu river | | 700 | Yet to be allotted by the State for development. Implementation agreement yet to be signed with Govt. of Maharashtra. DPR Prepared in May-2010. |
| 3 | Mutkhel | WRD, Maharashtra | Ahmednagar | Pravara | | 110 | PFR Prepared in May-15 |
| 4 | Kengadi | Indicated by MoP to NHPC | Thane | Thane | Kengadi river | 1550 | Yet to be allotted by the State for development |
| 5 | Jalond | Indicated by MoP to NHPC | Thane | Thane | Mula river | 2400 | Yet to be allotted by the State for development |
| 6 | Amba | Indicated by MoP to NTPC | Pune | Pune | Lonauli Lake | 800 | Yet to be allotted by the State for development |
| 7 | Jalvara | Indicated by MoP to SJVNL | Ratnagiri/ Belgaum | Ratnagiri/ Belgaum | Hajatar river | 2220 | Yet to be allotted by the State for development |
| 8 | Varandghat | WRD, Maharashtra | Pune | Welvandi River | Kharak River | 800 | Preliminary Investigation Report prepared in Dec 16 |
| 9 | Panshet | WRD, Maharashtra | Satara | Mose River | Kal River | 1600 | Preliminary Investigation Report Prepared in March-17 |
| 10 | Nive | WRD, Maharashtra | Pune | Kundalika River | Kundalika River | 1200 | PFR Prepared in August-2015 |
| 11 | Kodali | WRD, Maharashtra | Kolhapur | Kodali River | Kharal River | 220 | PFR Prepared in April-2014 |
| 12 | Atvan | WRD, Maharashtra | Pune/raigad | pawana | uttara | 500 | PFR prepared |
| 13 | Koyna St-VI | WRD, Maharashtra | Satara | Koyna | Koyna | 400 | Yet to be allotted by the State for development |
| 14 | Kundi | Indicated by MoP to NTPC | Ratnagiri | Varna river | Nibera Vahal river | 600 | Yet to be allotted by the State for development |
| 15 | Aruna | Indicated by MoP to THDCIL | Kolhapur | Kumbli river | Aruna river | 1950 | Yet to be allotted by the State for development PFR Prepared |
| 16 | Humbarli Birmani | Indicated by MoP to THDCIL | Satara/ Ratnagiri | minor nallah flowing to koyna river basin | On initial reaches of a nallah flowing to suk river | 1000 | Yet to be allotted by the State for development PFR Prepared |
| 17 | Mhaismal | Greenko Energies Private Limited | Aurangabad | | | 800 | •Proposal not yet received in CEA • Agency- Greenko Energy Private Limited •Date of grant of TOR-28.02.2020 |
| 18 | Kolhapur | Rithwik Projects Private Limited | Kolhapur | | | 1200 | •Proposal not yet received in CEA • Agency- Rithwik Projects Privatd Limited •Date of grant of TOR-13.06.2023 |
| 19 | Koyna Left Bank | WRD, Maharashtra | Satara | Koyna | | 80 | Project stalled since July, 2015. The current expenditure on the project has already reached to almost original administrative approved cost level. The proposal for execution with various options (By WRD/ Through BOT/ By MSPGCL in collaboration with WRD) is under process. Project is likely to be commissioned 4 years after restart of works |
| 20 | Warasgaon | WRD, Maharashtra | Pune/Raigad | Mose river | Kal river | 1200 | no progress on S&I activities from more than 6 months |

| | | | | | | | |
|-----------|---------------|-------------------------------------|-------------------------|--|---|--------------|---|
| 21 | Patgaon | Adani Green Energy Ltd. | Sindhudurg and Kolhapur | existing Patgaon reservoir | to be constructed on tributary of Karli river | 2100 | Adani letter dated 19.01.2024 vide which it was informed that the project elements such as powerhouse and lower reservoir are located in the area marked as Tiger Corridor by National Tiger Corridor Authority. Developer is identifying a new PSP site outside the National Tiger Corridor. |
| 22 | Savitri | NHDC | Raigad and Satara | proposed on the Koyna River (Tributary of Krishna River) | Proposed on the Savitri River near | 2250 | Project returned due to non submission of all pre DPR chapters required for finalization of general layout as per checklist |
| 23 | Pawana Falyan | Avaada Hydropower Battery Pvt. Ltd. | Pune and Raigad | Off Stream Open loop | | 1500 | Proposal yet to be received in CEA. Date of Grant of ToR: 21.10.2024 |
| 23 | Total | | | | | 25305 | |

Summary of Hydro Power Development in Goa

I. Conventional Projects

| | No. | I.C. (MW) |
|--|-----|-----------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | * | * |

Summary of Hydro Power Development in Andhra Pradesh

I. Conventional Projects

| | | Nos. | I.C. (MW) |
|--|-----------------------------|------|-----------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 8 | 2826 |
| Breakup of Hydro Power Potential (2017-23) | | | |
| A | Projects in operation | 5 | 1610 |
| B | Projects under construction | 2 | 1190 |
| C | Balance Capacity | 1 | 26 |

II. Pumped Storage Projects

| | | Nos. | Capacity (MW) |
|--|--------------------|------|---------------|
| Exploitable Hydro Power Potential from Pump Storage Projects | | 23 | 26420 |
| Breakup of Hydro Power Potential from Pumped Storage Projects | | | |
| a | Under Construction | 2 | 2550 |
| b | Under S&I | 14 | 15850 |
| c | Balance Capacity | 7 | 8020 |

I. Conventional Projects

Details of Exploitable Hydro Power Projects

| Sl.No. | Name of Project | River | Type | I.C. (MW) |
|----------|--|----------|-------|--------------|
| 1 | Upper Sileru-I&II (Upper Sileru) | Sileru | S | 240 |
| 2 | Lower Sileru | Sileru | S | 460 |
| 3 | Polavaram | Godavari | S | 960 |
| 4 | Balimela Dam Toe | Sileru | S | 26 |
| 5 | Srisailem | Krishna | S | 770 |
| 6 | Nagarjunasagar RBC & Ext (Nagarjunasagar RBC) | Krishna | S | 90 |
| 7 | Nagarjunasagar TPD | Krishna | R (P) | 50 |
| 8 | Lower sileru extension | Sileru | R (P) | 230 |
| 8 | Total | | | 2826 |

A. H.E. Projects in Operation:

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

* All projects are in EFR Basin

B. H.E. Projects under construction:

| Sl. No. | Name of Project | Agency | River/ Basin | District | I. C. (MW) | Type (R/S/R(P)) | Sector | Likely Commissioning |
|---------|------------------------|-----------------------------------|------------------|-------------------------|---------------|--------------------|--------|-------------------------|
| 1 | Polavaram | APGENCO/ Irrigation Dept., A.P | Godavari/ EFR | East & West Godavari | 960 | S | State | 2027-28 (Sept'27) |
| 2 | Lower sileru extension | APGENCO | Sileru/EFR | Alluri Sitharamaraju | 230 | R(P) | State | 2025-26 (Oct'25) |
| 2 | Total | | | | 1190 | | | |

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

C. Balance Capacity

| Sl.No. | Name of Project | River | Type | I. C. (MW) | District | Remarks |
|----------|------------------|--------|------|------------|-----------|--|
| 1 | Balimela Dam Toe | Sileru | S | 26 | Malkangri | <ul style="list-style-type: none"> • The Government of Orissa and Government of Andhra Pradesh agreed in year 1962 that AP will construct a 60 MW Power House at Balimela toe for its own use at its cost, using AP's 50% share of water. Though the Dam is situated in orissa, 100% cost and benefits go to State of A.P. as per the agreement • This project could not be taken up due to non-issue of NOC by Govt of Odisha for blasting material for power House excavation in spite of lot of correspondence from Govt of AP. • The Govt. of Odisha had informed the Govt. of AP on 08-09-2010 to take up the construction of this project jointly by both APGENCO & OHPC on 50:50 basis. • The correspondence has been done with Govt. of Odisha from year 2013 to till date on the finalization of the clauses of draft modified agreement to be entered by both Govt. of AP & Govt. of Odisha as the implementation of Balimela Dam Toe HE Project would be taken up jointly by both APGENCO & OHPC duly sharing the costs and benefits in 50:50 ratio as per the decisions of Project Administrative committee (PAC) and after signing of modified agreement. • At present, the draft modified agreement is submitted to the Govt. of AP vide dt:07-07-18 for approval. After receiving approval from Govt. of AP, the draft modified agreement will be sent to M/s OHPC for arranging consent of Govt. of Odisha. |
| 1 | Total | | | 26 | | |

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

II. Pumped Storage

Exploitable Hydro Power Potential from Pumped Storage Projects

| S.No. | Name | District | I.C. (MW) |
|-----------|-----------------------|------------------------|--------------|
| 1 | Upper Sileru | Alluri Sitharamaraju | 1350 |
| 2 | Kurukutti | Vizianagaram | 1200 |
| 3 | Karrivalasa | Vizianagaram | 1000 |
| 4 | Yerravaram PSP | Vishakhapatnam | 1200 |
| 5 | Pinnapuram | Kurnool | 1200 |
| 6 | Gandikota | Kadapa | 1000 |
| 7 | Chitravathi | Ananthapuramu | 500 |
| 8 | Somasila | Kadapa | 900 |
| 9 | Owk | Kurnool | 800 |
| 10 | Paidipalem East | YSR | 1200 |
| 11 | Singanamala | Ananthapuramu | 800 |
| 12 | Paidipalem North | YSR | 1000 |
| 13 | Veeraballi Off-Stream | Annamayya | 1800 |
| 14 | Vempalli | YSR Kadapa | 1500 |
| 15 | Gujjili | Alluri Sitharama Raju | 1500 |
| 16 | Raiwada | Anakapalle | 900 |
| 17 | Chittamvalasa | Alluri Sitarama Raju | 800 |
| 18 | Yaganti | Nandyal | 1000 |
| 19 | Kamalapadu | Ananthapuramu | 950 |
| 20 | Aravetipalli | YSR | 1320 |
| 21 | Rayavaram | Annamayya | 1500 |
| 22 | Gadikota | Annamayya | 1200 |
| 23 | Pedakota | Alluri Seetharama Raju | 1800 |
| 23 | Total | | 26420 |

a. PSP Under Construction

| S.No. | SCHEMES | Agency | District | River | | I.C. (MW) | Sector | Remarks |
|-------|--------------|---------|---------------------|---|--|-------------|---------|--|
| | | | | Upper Reservoir | Lower Reservoir | | | |
| 1 | Pinnapuram | Greenko | Kurnool | Near Gorakallu reservoir in Pannapuram Village Lat 15°36'26" N Long 78°15'13" E | In Pannapuram Village Lat 15°37'26" N Long 78°15'30" E | 1200 | Private | Likely to be Commissioned by 2025-26(July'25)* |
| 2 | Upper Sileru | APGENCO | Alluri Sitharamraju | Guntawada reservoir | Donkarayi reservoir | 1350 | State | Likely to be Commissioned by 2028-2029(Feb'29) |
| 2 | Total | | | | | 2550 | | |

#Two units of Pinnapuram PSP(480 MW) are likely to be commissioned in FY 24-25 and Four units(720 MW) are likely in FY 2025-26

b. PSP Under S&I

| S.No. | SCHEMES | Agency | District | River | | I.C. (MW) | Sector | Remarks |
|-------|-----------------------|---|---------------|--|---|-----------|---------|--|
| | | | | Upper Reservoir | Lower Reservoir | | | |
| 1 | Gandikota | Adani Green Energy Ltd. | Kadapa | Off Stream | Gandikota reservoir on Penna River | 1000 | Private | •Target date of DPR preparation-03/25 |
| 2 | Chitravathi | Adani Green Energy Ltd. | Ananthapuramu | Off Stream | Chitravathi | 500 | Private | •Target date of DPR preparation-02/25 •Date of MOA-29.06.2022 |
| 3 | Somasila | Shirdi Sai Electricals Ltd. | Kadapa | Off Stream | Off Stream, | 900 | Private | •Target date of DPR preparation-04/25 •Date of MOA-19.01.2023 |
| 4 | Owk | Aurobindo Realty & Infrastructure Pvt. Ltd. | Kurnool | Off Stream | Owk reservoir on Penna River | 800 | Private | •Target date of DPR preparation-04/25 •Date of MOA-12.09.2022 |
| 5 | Paidipalem East | Indosol Solar Power Pvt. Ltd. | YSR | new proposed Off Stream | new proposed draws water Paidipalem Balancing reservoir | 1200 | Private | •Target date of DPR preparation-04/25 •Date of MOA-12.09.2022 |
| 6 | Singanamala | Aurobindo Realty & Infrastructure Pvt. Ltd. | Ananthapuramu | Off Stream | Off Stream | 800 | Private | •Target date of DPR preparation-04/25 •Date of MOA-12.09.2022 |
| 7 | Paidipalem North | Indosol Solar Power Pvt. Ltd. | YSR | new proposed Off Stream | new proposed draws water Paidipalem Balancing reservoir | 1000 | Private | •Target date of DPR preparation-04/25 •Date of MOA-12.09.2022 |
| 8 | Veeraballi Off-Stream | Astha Green Energy Ventures India PVT. LTD. | Annamayya | Off Stream | Off Stream | 1800 | Private | •Target date of DPR preparation-04/25 •Date of MOA-12.09.2022 |
| 9 | Vempalli | JSW Energy | YSR Kadapa | Off Stream | Off Stream | 1500 | Private | •Target date of DPR preparation-04/25 •Date of MOA-25.01.2022 |
| 10 | Raiwada | Adani Green Energy Ltd. | Anakapalle | on a tabletop hill across a minor rivulet draining into a nallah | across Sarada river | 900 | Private | •Target date of DPR preparation-04/25 •Date of MOA-23.05.2022 |

| | | | | | | | | |
|-----------|--------------|-------------|------------------------|--|--|--------------|---------|---|
| 11 | Kamalapadu | APGENCO | Ananthapuramu | Off Stream | Off Stream | 950 | State | •Target date of DPR preparation-04/25 •Date of MOA- 23.08.2023 |
| 12 | Rayavaram | NREDCAP | Annamayya | On minor Stream | On minor Stream | 1500 | | •Target date of DPR preparation-06/25 |
| 13 | Gadikota | APGENCO | Annamayya | Off Stream | Off Stream | 1200 | State | •Target date of DPR preparation-06/24 •Date of MoA-29.06.2022 |
| 14 | Pedakota | Adani Green | Alluri Seetharama Raju | on minor stream draining into the Sarada River | on minor stream draining into the Sarada River | 1800 | Private | •Target date of DPR preparation-06/25 •Date of MoA-23.05.2022 |
| 14 | Total | | | | | 15850 | | |

c. Balance Capacity

| S.No. | SCHEMES | Agency | District | River | | I.C. (MW) | Remarks |
|----------|----------------|-----------------------------|-----------------------|--|--|-------------|---|
| | | | | Upper Reservoir | Lower Reservoir | | |
| 1 | Kurukutti | Adani Green Energy Ltd. | Vizianagaram | Minor nallah draining into Boduru Gedda river | Boduru Gedda river | 1200 | •Project site (partly) falls within the disputed boundary between Govt. of Andhra Pradesh and Govt. of Odisha. Drilling Held up. |
| 2 | Karrivalasa | Adani Green Energy Ltd. | Vizianagaram | Minor nallah draining into Boduru Gedda river | Boduru Gedda river | 1000 | •Project site (partly) falls within the disputed boundary between Govt. of Andhra Pradesh and Govt. of Odisha. Drilling Held up. |
| 3 | Yerravaram PSP | Shirdi Sai Electricals Ltd. | Vishakhapatnam | Nallah/Stream flowing into the Thandava reservoir, | Nallah/Stream flowing into the Thandava reservoir, | 1200 | Drilling activity will be commenced upon resolving local issues |
| 4 | Gujjili | NREDCAP | Alluri Sitharama Raju | Off Stream | Off Stream | 1500 | Project is not allotted to any developer, Pre-DPR Chapters returned after there is no progress in the S&I activities by the developer |
| 5 | Chittamvalasa | NREDCAP | Alluri Sitarama Raju | Off Stream | Off Stream | 800 | Project is not allotted to any developer, Pre-DPR Chapters returned after there is no progress in the S&I activities by the developer |
| 6 | Yaganti | APGENCO | Nandyal | Minor rivulet | Minor rivulet | 1000 | Pre-DPR Chapters returned after there is no progress in the S&I activities by the developer |
| 7 | Aravetipalli | APSPCL | YSR | Off Stream | Off Stream | 1320 | Pre-DPR Chapters returned after there is no progress in the S&I activities by the developer |
| 7 | Total | | | | | 8020 | |

Summary of Hydro Power Development in Telangana

I. Conventional Projects

| | | Nos. | Capacity (MW) |
|--|--|------|------------------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 8 | 1302.00 |
| Breakup of Hydro Power Potential (2017-23 Study) | | | |
| A | Projects in operation | 6 | 800 |
| B | Projects returned to project authorities | 1 | 320 |
| C | Balance Capacity* | 1 | 240 |

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

II. Pumped Storage Projects

| | | Nos. | Capacity (MW) |
|--|------------------|------|---------------|
| Exploitable Hydro Power Potential from Pump Storage Projects | | 7 | 8755.6 |
| Breakup of Hydro Power Potential from Pumped Storage Projects | | | |
| a | In Operation | 2 | 1605.6 |
| b | Balance Capacity | 5 | 7150.00 |

I. Conventional Projects

Details of Exploitable Hydro Power Projects

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

A. H.E. Projects in Operation:

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

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

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

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

C. Balance Capacity

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

II. Pumped Storage Projects

Exploitable Hydro Power Potential from Pumped Storage Projects

| S.No. | Name | District | I.C. (MW) |
|----------|-----------------|--------------|---------------|
| 1 | Nagarjuna Sagar | Karnool | 705.60 |
| 2 | Srisaillam LBPH | Nalgonda | 900 |
| 3 | Ippagudem | Mulugu | 3960 |
| 4 | Ranapur | Adilabad | 1200 |
| 5 | Greenko TS01 | Adilabad | 750 |
| 6 | Astha Telangana | Nizamabad | 600 |
| 7 | Cerulean-II | Komarambheem | 640 |
| 7 | Total | | 8755.6 |

a. PSP in Operation

| S.No. | SCHEMES | Agency | District | River | I.C. (MW) | Sector |
|----------|-----------------|---------|----------|---------|---------------|--------|
| 1 | Nagarjuna Sagar | TSGENCO | Karnool | Krishna | 705.60 | State |
| 2 | Srisaillam LBPH | TSGENCO | Nalgonda | Krishna | 900 | State |
| 2 | Total | | | | 1605.6 | |

b. Balance Capacity

| Sl. No | Name of Project | District | Agency | River | | I.C. (MW) | Remarks |
|----------|-----------------|--------------|--|-----------------|-----------------|----------------|--|
| | | | | Upper reservoir | Lower Reservoir | | |
| 1 | Ippagudem | Mulugu | Greenko Energies Private Limited | | | 3960.00 | <ul style="list-style-type: none"> •Proposal not yet received in CEA • Agency- Greenko energie Private Limited •Date of grant of TOR- 13.07.2020 |
| 2 | Ranapur | Adilabad | Sri Siddharth Infratech & Services (I) Private Limited | | | 1200 | <ul style="list-style-type: none"> •Proposal not yet received in CEA • Agency- Sri Siddharth Infratech & Services (I) Private Limited •Date of grant of TOR- 08.12.2022 |
| 3 | Greenko TS01 | Adilabad | Greenko Energies Private Limited | | | 750 | <ul style="list-style-type: none"> •Proposal not yet received in CEA • Agency- Greenko Energies Private Limited •Date of grant of TOR- 17.04.2023 |
| 4 | Astha Telangana | Nizamabad | Astha Green Energy Ventures India Private Limited | | | 600 | <ul style="list-style-type: none"> •Proposal not yet received in CEA • Agency- Astha Green Energy Ventures India Private Limited •Date of grant of TOR- 07.06.2023 |
| 5 | Cerulean-II | Komarambheem | Cerulean Energy Solutions Private Limited | | | 640 | <ul style="list-style-type: none"> •Proposal not yet received in CEA • Agency- Cerulean Energy Solutions Privated Limited •Date of grant of TOR- 07.06.2023 |
| 5 | TOTAL | | | | | 7150.00 | |

Summary of Hydro Power Development in Karnataka

I. Conventional Projects

| | | Nos. | I.C. (MW) |
|--|--|------|-----------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 20 | 4414.4 |
| Breakup of Hydro Power Potential (2017-23 Study) | | | |
| A | Projects in operation | 16 | 3689.2 |
| B | Projects returned to project authorities | 2 | 665 |
| C | Balance Capacity* | 4 | 747 |

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

II. Pumped Storage Projects

| | | Nos. | I.C. (MW) |
|--|--------------------|----------|----------------|
| Exploitable Hydro Power Potential from Pumped Storage Projects | | 8 | 7600 |
| Breakup of Hydro Power Potential from Pumped Storage Projects | | | |
| a | Under S&I | 2 | 1900 |
| b | Under Construction | 1 | 2000 |
| c | Balance | 5 | 3700.00 |

I. Conventional Projects

Details of Exploitable Hydro Power Projects

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

A. H.E. Projects in Operation:

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

* Utilities are in Andhra Pradesh

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

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

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

C. Balance Capacity

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

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

II. Pumped Storage

Exploitable Hydro Power Potential from Pumped Storage Projets

| Sl. No. | Name of project | District | I.C. (MW) |
|----------|--------------------|--------------------------|-------------|
| 1 | Varahi | Dakshina Kannada | 1500 |
| 2 | Sharavathy | Shimoga & Uttara Kannada | 2000 |
| 3 | Saundatti | Belgavi | 1600 |
| 4 | Netravathy Stage I | Hasan | 1500 |
| 5 | Narihalla | Bellary | 300 |
| 6 | Shanti sagar | Davanagere | 270 |
| 7 | Vijayanagar | Bellary | 130 |
| 8 | Sankanoor | Kalaburagi | 300 |
| 8 | TOTAL | | 7600 |

a. PSP Under S&I

| Sl. No | Name of Project | District | Agency | River | | I.C. (MW) | Sector | Remarks |
|----------|-----------------|----------|------------|--|---|----------------|---------|--|
| | | | | Upper reservoir | Lower Reservoir | | | |
| 1 | Narihalla | Bellary | JSW Energy | Upper Reservoir is proposed on minor rivulet draining into Narihalla Reservoir | Lower Reservoir- Narihalla Reservoir existing on Narihalla River | 300 | Private | • Target date of DPR preparation- 06/25 • Date of MOA-28.11.2022 |
| 2 | Saundatti | Belgavi | Greenko | Upper Reservoir is proposed Off Stream | Lower Reservoir is on RenukaSagar which is existing on Malaprabha river | 1600 | Private | • Target date for preparation of DPR – 03/25 • Date of MOA-12.03.18. Revised approval on 27.02.19 |
| 2 | TOTAL | | | | | 1900.00 | | |

b. PSP Under Construction

| Sl. No | Name of Project | District | Agency | River | | I.C. (MW) | Sector | Remarks |
|----------|-----------------|------------|--------|---|--|----------------|--------|------------------------------|
| | | | | Upper reservoir | Lower Reservoir | | | |
| 1 | Sharavathy | Shivamonga | KPCL | Upper Reservoir is on Existing Talakalale reservoir | Lower Reservoir is on Existing Gerusappa reservoir | 2000.00 | State | Likely Commissioning- Dec'29 |
| 1 | TOTAL | | | | | 2000.00 | | |

c. Balance Capacity

| Sl. No | Name of Project | District | Agency | River | | I.C. (MW) | Remarks |
|----------|--------------------|------------------|---|-----------------|-----------------|----------------|--|
| | | | | Upper reservoir | Lower Reservoir | | |
| 1 | Varahi | Dakshina Kannada | Govt. of Karnataka allotted to KPCL | Varahi | | 1500.00 | • Indicated by MoP and allotted by Govt. of Karnataka to KPCL. • Existing Varahi pick-up Dam as upstream reservoir. • Lower reservoir to be constructed. |
| 2 | Netravathy Stage I | Hasan | Yet to be allotted by the State for development | Kaginahare | Kempohle | 1500 | • Indicated by MoP to NTPC • PFR prepared |
| 3 | Shanti Sagar | Davanagere | Cerulean Energy Solutions Private Limited | | | 270 | • Proposal not yet received in CEA • Agency- Cerulean Energy Solutions Privated Limited • Date of grant of TOR-17.01.2020 |
| 4 | Vijayanagar | Bellary | JSW Renewable Energy (Vijayanagar) Limited | | | 130 | • Proposal not yet received in CEA • Agency- JSW Renewable Energy (Vijayanagar) Limited • Date of grant of TOR-03.06.2022 |
| 5 | Sankanoor | Kalaburagi | Cerulean Energy Solutions Private Limited | | | 300 | • Proposal not yet received in CEA • Agency- Cerulean Energy Solutions Privated Limited • Date of grant of TOR-07.08.2023 |
| 5 | TOTAL | | | | | 3700.00 | |

Summary of Hydro Power Development in Kerala

I. Conventional Projects

| | | Nos. | I.C. (MW) |
|--|-----------------------------|------|--------------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 23 | 2472.75 |
| Breakup of Hydro Power Potential (2017-23 Study) | | | |
| A | Projects in operation | 15 | 2088.5 |
| B | Projects under construction | 2 | 100 |
| C | Projects under S&I | 1 | 800 |
| D | Balance Capacity* | 7 | 1219 |

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

II. Pumped Storage Projects

| | | Nos. | I.C. (MW) |
|--|---------|------|--------------|
| Exploitable Hydro Power Potential from Pumped Storage Projects | | 2 | 1200 |
| Breakup of Hydro Power Potential from Pumped Storage Projects | | | |
| a | Balance | 2 | 1200 |

I. Conventional Projects

Details of Exploitable Hydro Power Projects

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

A. Hydro Electric Projects in Operation:

| S. No. | Utility/Stations | I.C. (MW) | No. of units x Capacity (MW) | River | District | Type (R/S/R(P)) | Sector | Year of commissioning |
|-------------|---------------------|---------------|------------------------------|--------------|----------------|-----------------|--------|-----------------------|
| KSEB | | | | | | | | |
| 1 | IDAMALAYAR | 75 | (2X37.5) | IDAMALAYAR | ERNAKULAM | S | State | 1987 |
| 2 | IDUKKI | 780 | (6X130) | PERIYAR | IDUKKI | S | State | 1976-1986 |
| 3 | KAKKAD | 50 | (2X25) | PAMBA | PATHANAMTHITTA | R(P) | State | 1999 |
| 4 | KUTTIYADI | 75 | (3X25) | KUTTIYADI | KOZHIKODE | S | State | 1972 |
| 5 | KUTTIYADI EXTN. | 50 | (1X50) | KUTTIYADI | KOZHIKODE | S | State | 2001 |
| 6 | KUTTIYADI ADDN EXTN | 100 | (2X50) | KUTTIYADI | KOZHIKODE | S | State | 2010 |
| 7 | LOWER PERIYAR | 180 | (3X60) | PERIYAR | IDUKKI | R(P) | State | 1997 |
| 8 | NERIAMANGLAM | 237 | (3X17.55) | MUTHIRAPUZHA | IDUKKI | S | State | 1961-63 |
| 9 | PALLIVASAL | 37.5 | (3X5) +(3X7.5) | MUTHIRAPUZHA | IDUKKI | S | State | 1948-2001 |
| 10 | PANNIAR | 30 | (2X15) | PANNIAR | IDUKKI | S | State | 1963-2001 |
| 11 | PORINGALKUTTU | 32 | (4X8) | CHALAKUDY | COIMBATORE | S | State | 1957-1960 |
| 12 | SABARIGIRI | 300 | (6X50) | PAMBA | PATHANAMTHITTA | S | State | 1960-1967 |
| 13 | SENGULAM | 48 | (4X12) | MUTHIRAPUZHA | IDUKKI | S | State | 1954-2001 |
| 14 | SHOLAYAR | 54 | (3X18) | SHOLAYAR | COIMBATORE | S | State | 1956-1968 |
| 15 | THOTTIYAR | 40 | 3x10+1x10 | THOTTIYAR | IDUKKI | R(P) | State | 2024 |
| 15 | TOTAL | 2088.5 | | | | | | |

B. H.E. Schemes under Construction:

| Sl. No. | Name of Project | I.C. (MW) | Type (R/S/R(P)) | River | District | Agency | Sector | Likely Commissioning |
|----------|----------------------|------------|-----------------|-----------------|----------|--------|--------|----------------------|
| 1 | Pallivasal Extension | 60 | R | Mudirapuzha/WFR | Idukki | KSEB | State | 2024-25 (Jan'25) |
| 2 | Mankulam | 40 | S | Melachery | Idukki | KSEB | State | 2026-27 (Dec'26) |
| 2 | Total | 100 | | | | | | |

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

D. Projects Under S&I

| Sl. No. | Name of Project | River | I.C. (MW) | District | Type | Remarks |
|---------|-------------------------|---------|------------|----------|------|--|
| 1 | Idukki Extension Scheme | Periyar | 800 | Idukki | S | Target Date of DPR preparation - 08/25 |
| 1 | TOTAL | | 800 | | | |

E. Balance Capacity

| Sl. No. | Name of Project | River | I.C. (MW) | District | Type | Remarks |
|---------|-------------------------|-------------------|-------------|----------------|------|---|
| 1 | Chalipuzha | Baypore | 80 | Wayanad | S | |
| 2 | Manali | Idamlayar | 26 | Idukki | S | |
| 3 | Kudal | Idamlayar | 56 | Ernakulam | S | |
| 4 | Lower Sabarigiri | Pamba | 68 | Pathanamthitta | S | |
| 5 | Twin-Kallar | Achankovil/Kallar | 26 | Pathanamthitta | S | |
| 6 | Athirapilly | Chalakydy | 163 | Thrissur | R | |
| 7 | Idukki Extension Scheme | Periyar | 800 | Idukki | S | <ul style="list-style-type: none"> •Initially allotted to KSEB •Pre-DPR Chapters returned after there is no progress in the S&I activities by the developer |
| 7 | Total | | 1219 | | | |

II. Pumped Storage**Exploitable Hydro Power Potential from Pumped Storage Projects**

| Sl. No. | Name of project | District | I.C. (MW) |
|----------|-----------------|----------|--------------|
| 1 | Idukki | Idukki | 600 |
| 2 | Pallivasal | Idukki | 600 |
| 2 | TOTAL | | 1200 |

a. Balance Capacity

| Sl. No | Name of Project | River | I.C. (MW) | Agency | District | Remarks |
|----------|-----------------|--|----------------|--|----------|--|
| 1 | Idukki | Periyar/cheruthoni/Ki lli Valli Thodu | 600 | Yet to be allotted by the State for development | Idukki | Indicated by MoP to THDCIL Existing Idukki reservoir. |
| 2 | Pallivasal | Mudirapuzha | 600 | Yet to be allotted by the State for development | Idukki | Indicated by MoP to THDCIL Existing Palliavsal reservoir. |
| 2 | TOTAL | | 1200.00 | | | |

Summary of Hydro Power Development in Tamil Nadu

I. Conventional Projects

| | | Nos. | I.C. (MW) |
|--|-----------------------|------|-----------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 26 | 1785.20 |
| Breakup of Hydro Power Potential (2017-23 Study) | | | |
| A | Projects In Operation | 26 | 1778.2 |

II. Pumped Storage Projects

| | | Nos. | I.C. (MW) |
|--|--------------------|------|--------------|
| Exploitable Hydro Power Potential from Pumped Storage Projects | | 21 | 19500 |
| Breakup of Hydro Power Potential from Pumped Storage Projects | | | |
| a | In Operation | 1 | 400 |
| c | Under Construction | 1 | 500 |
| d | Balance Capacity | 19 | 18600 |

I. Conventional Projects**Details of Exploitable Hydro Power Projects**

| S.no | Name | River | Type | I.C. (MW) |
|-----------|---|---------------------|-------|---------------|
| 1 | Aliyar (Upper Aliyar) | Bharatapuzha/Aliyar | S | 60 |
| 2 | Sarkarpathy (Sarkarpathi) | Parabikulam | R (P) | 30 |
| 3 | Sholayar I | Sholayar | S | 70 |
| 4 | Periyar (Periyar Lake) | Periyar | S | 168 |
| 5 | Kodayar I | Kodayar | S | 60 |
| 6 | Kodayar II | Kodayar | S | 40 |
| 7 | Kundah-I (Avalanche Em'ld(Kundah-I)) | Avalanche Stream | S | 60 |
| 8 | Bhavani Kattalai Barrage -I | Cauvery | R (P) | 30 |
| 9 | Bhavani Kattalai Barrage -II | Cauvery | R (P) | 30 |
| 10 | Bhavani Kattalai Barrage -III | Cauvery | R (P) | 30 |
| 11 | Kundah-II (Kundapallam (Kundah-II)) | Kundah | S | 175 |
| 12 | Lower Mettur-I (Lower Mettur) | Cauvery | R (P) | 30 |
| 13 | Lower Mettur-II (Lower Mettur) | Cauvery | R (P) | 30 |
| 14 | Lower Mettur-III (Lower Mettur) | Cauvery | R (P) | 30 |
| 15 | Lower Mettur-IV (Lower Mettur) | Cauvery | R (P) | 30 |
| 16 | Mettur Dam | Cauvery | S | 50 |
| 17 | Mettur Tunnel | Cauvery | S | 200 |
| 18 | Moyar | Moyar | S | 36 |
| 19 | Parson's valley | Bhavani | S | 30 |
| 20 | Kundah-III (Pengumbahalla (Kundah-III)) | Pegumbahallah | S | 180 |
| 21 | Kundah-IV | Bhavani | S | 100 |
| 22 | Pykara (Pykara (Singara)) | Pykara | S | 59.2 |
| 23 | Pykara Ultimate | Pykara | S | 150 |
| 24 | Kundah-V | Bhavani | S | 40 |
| 25 | Papanasam | Thamirabarani | S | 32 |
| 26 | Suruliyar | Ervalangar | S | 35 |
| 26 | Total | | | 1785.2 |

A. H.E. Projects in Operation:

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

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

II. Pumped Storage

Exploitable Hydro Power Potential from Pumped Storage Projeets

| Sl. No. | Name of project | I.C. (MW) | District |
|-----------|---|--------------|--------------------------------|
| 1 | Sillahalla St.-I | 1000 | Nilgiri |
| 2 | Kundah Pumped Storage (Stage I,II,III&IV) | 500 | Nilgiri |
| 3 | Kadamparai | 400 | Coimbatore |
| 4 | Kodayar | 500 | Kanyakumari |
| 5 | Sandynalla | 1200 | Nilgiris |
| 6 | Upper Bhavani | 1000 | Nilgiris |
| 7 | Sigur | 800 | Nilgiris |
| 8 | Manalar | 1200 | Theni |
| 9 | Chattar | 1100 | kanyakumari |
| 10 | Karayar | 1000 | Tirunelveli District |
| 11 | Aliyar | 700 | Coimbatore |
| 12 | Palar-Porathalar | 1100 | Dindigul |
| 13 | Athur | 300 | Dindigul |
| 14 | Manjalar | 500 | Theni |
| 15 | Mettur | 1000 | Erode |
| 16 | Velimalai | 1100 | Kanyakumari |
| 17 | Sillahalla Stage-II | 1000 | Nilgiris & Coimbtore |
| 18 | Greenko TN01 | 1200 | Tirupathur |
| 19 | Arunachalam | 900 | Dharamapuri and Tiruvannamalai |
| 20 | Tiruvannamalai | 2000 | Tiruvannamalai |
| 21 | Greenko TN-11 | 1000 | Salem |
| 21 | TOTAL | 19500 | |

a. PSP In Operation

| Sl. No | Name of Project | River | I.C. (MW) | Agency | District | Sector | Remarks |
|----------|-----------------|------------|--------------|----------|------------|--------|----------------------|
| 1 | Kadamparai | Kadamapari | 400 | TANGEDCO | Coimbatore | State | •Status-In Operation |
| 1 | TOTAL | | 400 | | | | |

b. PSP Under Construction

| Sl. No | Name of Project | River | I.C. (MW) | Agency | Sector | District | Remarks |
|----------|---|---------|------------|----------|--------|----------|--|
| 1 | Kundah Pumped Storage (Stage I,II,III&IV) | Bhawani | 500 | TANGEDCO | State | Nilgiri | Likely to be Commissioned by 2025-26(Dec'25) |
| 1 | TOTAL | | 500 | | | | |

c. Balance Capacity

| Sl. No | Name of Project | River | | I.C. (MW) | Agency | District | Remarks |
|-----------|---------------------|--|-------------------------------------|--------------|---|--------------------------------|---|
| | | Upper Reservoir | Lower Reservoir | | | | |
| 1 | Sandynalla | Kundah | Kundah | 1200 | Indicated by MoP to NTPC | Nilgiris | Yet to be allotted by the State for development |
| 2 | Upper Bhavani | Bhavani | Kundah | 1000 | Indicated by MoP to NTPC | Nilgiris | Yet to be allotted by the State for development |
| 3 | Sigur | Sigur | Sigur | 800 | Indicated by MoP to NTPC | Nilgiris | Yet to be allotted by the State for development |
| 4 | Manalar | Existing Manalar Reservoir | Proposed | 1200 | TANGEDCO along with Tractbel Pvt Ltd | Theni | Feasibility report prepared |
| 5 | Chattar | Chattar Nallah | Kodayar | 1100 | TANGEDCO along with TATA Consultancy energy Pvt Ltd | Kanyakumari | PFR prepared |
| 6 | Karayar | Manpidi Ar | Thamirabarani | 1000 | TANGEDCO along with TATA Consultancy energy Pvt Ltd | Tirunelveli District | PFR prepared |
| 7 | Aliyar | Aliyar River | | 700 | PFR prepared by TANGEDCO | Coimbatore | PFR prepared |
| 8 | Palar-Porathalar | Poranthalar | Palar & Poranthalar | 1100 | TANGEDCO along with TATA Consultancy energy Pvt Ltd | Dindigul | PFR prepared |
| 9 | Athur | Kodaganar | Kodaganar | 300 | TANGEDCO along with TATA Consultancy energy Pvt Ltd | Dindigul | PFR prepared |
| 10 | Manjalar | Iruttar River | Manjalar | 500 | TANGEDCO along with TATA Consultancy energy Pvt Ltd | Theni | PFR prepared |
| 11 | Mettur | Palar | Periya Pallam | 1000 | TANGEDCO along with TATA Consultancy energy Pvt Ltd | Erode | PFR prepared |
| 12 | Velimalai | Palayar / Pazhayar | Valliyar | 1100 | TANGEDCO along with TATA Consultancy energy Pvt Ltd | Kanyakumari | PFR Prepared |
| 13 | Sillahalla Stage-II | New Reservoir Lat 11°16'47.79" N Long 76°47'51.85" E | Bhavani | 1000 | Indicated by MoP to NTPC | Nilgiris & Coimbtore | Yet to be allotted by the State for development |
| 14 | Greenko TN01 | | | 1200 | Greenko Energies Private Limited | Tirupathar | •Proposal not yet received in CEA • Agency- Greenko Energy Private Limited •Date of grant of TOR-07.06.2023 |
| 15 | Arunachalam | | | 900 | Volthills Private Limited | Dharamapuri and tiruvannamalai | •Proposal not yet received in CEA • Agency- Volthills Private Limited •Date of grant of TOR-07.08.2023 |
| 16 | Kodayar | Kodayar reservoir-existing | PWD's Pechiparai reservoir-existing | 500 | TANGEDCO | Kanyakumari | Pre-DPR Chapters returned after there is no progress in the S&I activities by the developer |
| 17 | Sillahalla St.-I | on Sillahalla river | on Kundha river | 1000 | TANGEDCO | Nilgiris | Pre-DPR Chapters returned after there is no progress in the S&I activities by the developer |
| 18 | Tiruvannamalai | Off Stream Close Loop | | 2000 | Eco Leap Technologies India Pvt Ltd | Tiruvannamalai | Proposal yet to be received in CEA. Date of grant of ToR: 21.10.2024 |
| 19 | Greenko TN-11 | Off Stream Close Loop | | 1000 | Greenko Energies Private Limited | Salem | Proposal yet to be received in CEA. Date of grant of ToR: 21.10.2024 |
| 19 | TOTAL | | | 18600 | | | |

Summary of Hydro Power Development in Jharkhand

I. Conventional Projects

| | | Nos. | I.C. (MW) |
|--|-----------------------|------|--------------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 4 | 300 |
| Breakup of Hydro Power Potential (2017-23 Study) | | | |
| A | Projects in operation | 3 | 210 |
| B | Balance Capacity | 1 | 90 |

II. Pumped Storage Projects

| | | Nos. | I.C. (MW) |
|--|------------------|------|-----------|
| Exploitable Hydro Power Potential from Pumped Storage Projects | | 1 | 1500 |
| Breakup of Hydro Power Potential from Pumped Storage Projects | | | |
| a | Balance Capacity | 1 | 1500 |

I. Conventional Projects

Details of Exploitable Hydro Power Projects

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

A. H.E. Projects in Operation:

| S. NO. | UTILITY / STATIONS | RIVER | Type (R/S/R(P)) | I.C. (MW) | DISTRICT | Sector | YEAR OF COMMISSIONING |
|----------------------|------------------------|--------------|-----------------|-----------|----------|---------|-----------------------|
| DVC | | | | | | | |
| 1 | PANCHET | DAMODAR | S | 80 | DHANBAD | Central | 1990 |
| SUB-TOTAL DVC | | | | 80 | | | |
| JUUNL | | | | | | | |
| 1 | SUBERNREKHA -I | SUBERNAREKHA | S | 65 | RANCHI | State | 1977 |
| 2 | SUBERNREKHA -II | SUBERNAREKHA | R(P) | 65 | RANCHI | State | 1980 |
| TOTAL JUUNL | | | | 130 | | | |
| 3 | TOTAL JHARKHAND | | | 210 | | | |

B. Balance Capacity

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

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

II. Pumped Storage**Exploitable Hydro Power Potential from Pumped Storage Projets**

| Sl. No. | Name of project | I.C. (MW) | District |
|---------|-----------------|-----------|----------|
| 1 | Lugupahar | 1500 | Bokaro |
| 1 | TOTAL | 1500 | |

a. Balance capacity

| Sl. No | Name of Project | River | | I.C. (MW) | District | Remarks |
|--------|-----------------|-------------------|---------------------|-----------|----------|---|
| | | Upper Reservoir | Lower Reservoir | | | |
| 1 | Lugupahar | Kairo Jharna Nala | across Bokaro River | 1500 | Bokaro | •Initially allotted to DVC •DVC letter dated 17.11.23 infromed that S&I activity on stalled since 10.09.23 due to local resistance at site |
| 1 | TOTAL | | | 1500 | | |

Summary of Hydro Power Development in Bihar

I. Conventional Projects

| | | Nos. | I.C. (MW) |
|--|--|------|--------------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 1 | 130.1 |
| Breakup of Hydro Power Potential (2017-23 Study) | | | |
| A | Projects returned to project authorities | 1 | 130.1 |

I. Conventional Projects

Details of Exploitable Hydro Power Projects

| S.No. | Name | River | IC | Type |
|-------|--------------|-------|--------------|------|
| 1 | Dagmara | Kosi | 130.1 | R |
| 1 | Total | | 130.1 | |

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

| Sl.No | Name of Project | River | I.C. (MW) | Date of returned |
|-------|-----------------|-------|--------------|------------------|
| 1 | Dagmara | Kosi | 130.1 | 22-Jan |
| | Total | | 130.1 | |

Summary of Hydro Power Development in Odisha

I. Conventional Projects

| | | Nos. | I.C. (MW) |
|--|-----------------------|------|--------------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 13 | 2824.50 |
| Breakup of Hydro Power Potential (2017-23 Study) | | | |
| A | Projects In Operation | 7 | 2154.55 |
| B | Balance Capacity* | 6 | 677 |
| *Balance Capacity is different from arithmetic calculation from the potential accessed due to change in capacity of the Projects, addition/deletion of the projects and merger of two projects into one etc. | | | |

II. Pumped Storage Projects

| | | Nos. | I.C. (MW) |
|--|---|------|--------------|
| Exploitable Hydro Power Potential from Pumped Storage Projects | | 6 | 5075 |
| Breakup of Hydro Power Potential from Pumped Storage Projects | | | |
| a | Concurred and yet to be taken up for construction | 1 | 600 |
| b | Under S&I | 1 | 500 |
| c | Balance Capacity | 4 | 3975 |

I. Conventional Projects**Details of Exploitable Hydro Power Projects**

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

A. H.E. Projects in Operation:

| S. NO. | UTILITY/ STATIONS | NO. OF STNS. | NO. OF UNITS X CAPACITY (MW) | RIVER | DISTRICT | I.C. (MW) | Type (R/S/R(P)) | Sector | YEAR OF COMMISSIONING |
|--------------------------|---------------------|--------------|--|-----------|------------|----------------|-----------------|--------|-----------------------|
| OHPC | | | | | | | | | |
| 1 | BALIMELA | 1 | (6X60)+ (2X75) | SILERU | MALKANGIRI | 510 | S | State | 1973-1977, 2008 |
| 2 | HIRAKUD (BURLA) | 1 | (2X43.65)+ (1X37.5)+(2X49.5) +(2X32) | MAHANADI | SAMBALPUR | 287.8 | S | State | 1956-1990 |
| 3 | HIRAKUD (CHIPLIMA) | 1 | (3X24) | MAHANADI | SAMBALPUR | 72 | R(P) | State | 1962-1964 |
| 4 | RENGALI | 1 | (5X50) | BRAHMANI | ANGUL | 250 | S | State | 1985-1992 |
| 5 | UPPER INDRAVATI | 1 | (4X150) | INDRAVATI | KALAHANDI | 600 | S | State | 1999-2001 |
| 6 | UPPER KOLAB | 1 | (4X80) | KOLAB | KORAPUT | 320 | S | State | 1988-1993 |
| TOTAL OHPC | | 6 | | | | 2039.8 | | | |
| APGENCO | | | | | | | | | |
| 1 | MACHKUND | 1 | (3X17)+ (3X21.25) | MACHKUND | KORAPUT | 114.75 | S | State | 1959 |
| SUB-TOTAL APGENCO | | 1 | | | | | | | |
| 7 | TOTAL ODISHA | 7 | | | | 2154.55 | | | |

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

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

B. Balance Capacity

| Sl.No. | Name of Project | River | Type | I.C. (MW) | District | Remarks |
|--------|-----------------|----------|------|------------|------------|---|
| 1 | Bhinkund | Baitarni | S | 30 | Keonjhar | |
| 2 | Baljori | Baitarni | S | 230 | Keonjhar | |
| 3 | Lodani | Brahmani | S | 64 | Sundergarh | |
| 4 | Tikkarpara | Mahanadi | S | 220 | Angul | |
| 5 | Salki | Salki | S | 70 | Boudh | •Initially allotted to OHPCL • Project was shifted to S&I held up as no progress in the S&I activities of project reported by developer. |
| 6 | Kharag | Kharag | R | 63 | Kandhmal | •Initially allotted to OHPCL • Project was shifted to S&I held up as no progress in the S&I activities of project reported by developer. |
| 6 | Total | | | 677 | | |

II. Pumped Storage**Exploitable Hydro Power Potential from Pumped Storage Projets**

| Sl. No. | Name of project | I.C. (MW) | District |
|---------|-----------------|-------------|------------|
| 1 | Upper Indravati | 600 | Kalahandi |
| 2 | Balimela | 500 | Malkangiri |
| 3 | Upper Kolab | 600 | Malkangiri |
| 4 | Greenko OD01 | 1200 | Kalahandi |
| 5 | Ramial Left | 1500 | Keonjhar |
| 6 | Tainsar | 675 | Deogarh |
| 6 | TOTAL | 5075 | |

a. PSP Concurred by CEA and yet to be taken for construction

| Sl. No | Name of Project | River | | I.C. (MW) | Agency | District | Sector |
|--------|-----------------|-------------------------------|-------------------|------------|--------|-----------|--------|
| | | Upper Reservoir | Lower Reservoir | | | | |
| 1 | Upper Indravati | Upper Indravati HEP reservoir | To be constructed | 600 | OHPCL | Kalahandi | State |
| 1 | TOTAL | | | 600 | | | |

b. PSP under S&I

| Sl. No. | Name of Project | Agency | River | | I.C. (MW) | Sector | Remarks |
|---------|-----------------|--------|--------------------------|---|------------|--------|--|
| | | | Upper Reservoir | Lower Reservoir | | | |
| 1 | Balimela | OHPCL | Balimela upper reservoir | To be constructed on Kharika Johra Stream | 500 | State | • Target date of DPR Preparation-09/25 |
| 1 | TOTAL | | | | 500 | | |

b. Balance Capacity

| S.No. | SCHEMES | Agency | River | | District | I.C. (MW) | Remarks |
|-------|--------------|--|--|--------------------|-----------|-------------|---|
| | | | Upper Reservoir | Lower Reservoir | | | |
| 1 | Greenko OD01 | Greenko Energies Private Limited | | | Kalahandi | 1200 | •Proposal not yet received in CEA • Agency- Greenko Energies Private Limited •Date of grant of TOR-17.04.2023 |
| 2 | Ramial Left | Renew Solar Power Private Limited | | | Keonjhar | 1500 | •Proposal not yet received in CEA • Agency- Renew Solar Power Private Limited •Date of grant of TOR-15.01.2024 |
| 3 | Tainsar | Jindal Renewable Power Private Limited | | | Deogarh | 675 | •Proposal not yet received in CEA • Agency- Jindal Renewable Power Private limited •Date of grant of TOR-22.01.2024 |
| 4 | Upper Kolab | OHPCL | Upper Reservoir is existing on Balimela HEP reservoir (Existing Hydro Project) | To be constructed. | Koraput | 600 | Pre-DPR Chapters returned after there is no progress in the S&I activities by the developer |
| 4 | Total | | | | | 3975 | |

Summary of Hydro Power Development in West Bengal

I. Conventional Projects

| | | Nos. | I.C. (MW) |
|--|-----------------------------|------|--------------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 10 | 809.2 |
| Breakup of Hydro Power Potential (2017-23 Study) | | | |
| A | Projects in operation | 5 | 441.2 |
| B | Projects under construction | 1 | 120 |
| C | Projects under S&I | 1 | 90 |
| D | Balance Capacity* | 3 | 196 |

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

II. Pumped Storage Projects

| | | Nos. | I.C. (MW) |
|--|--------------|------|--------------|
| Exploitable Hydro Power Potential from Pumped Storage Projects | | 6 | 5500 |
| Breakup of Hydro Power Potential from Pumped Storage Projects | | | |
| a | In Operation | 1 | 900 |
| b | Concurred | 1 | 1000 |
| c | Balance | 4 | 3600 |

I. Conventional Projects**Details of Exploitable Hydro Power Projects**

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

A. H.E. Projects in Operation:

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

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

B. H.E. Projects under Construction:

| Sl. No. | Name of Project | Agency | District | River | I. C. (MW) | Type (R/S/R(P)) | Sector | Likely Commissioning |
|----------|-----------------|--------|------------|--------|------------|-----------------|---------|----------------------|
| 1 | Rammam-III | NTPC | Darjeeling | Ramman | 120 | R | Central | 2028-29 (Mar'29) |
| 1 | | | | | 120 | | | |

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

| Sl. No. | Name of Project | Basin/River | Agency for DPR | I.C. (MW) | District | Type (R/S/R(P)) | Sector | Target date of Preparation of DPR |
|----------|---------------------|-------------|----------------|-----------|------------|-----------------|--------|-----------------------------------|
| 1 | Teesta Intermediate | Teesta | WBSEDCL | 90 | Darjeeling | ROR | State | 04/25 |
| 1 | | | | 90 | | | | |

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

D. Balance Capacity

| Sl.No. | Name of Project | River | Type | I.C.(MW) | District | Remarks |
|----------|--------------------------|-------------|------|------------|------------|--|
| 1 | Rammam-I | Rammam | RoR | 60 | Darjeeling | |
| 2 | Teesta Low Dam Project V | Teesta | RoR | 80 | Darjeeling | |
| 3 | TLDP-I&II | Badi rangit | RoR | 56 | Darjeeling | • The project was allotted to NHPC. However, withdrawal of consent for the project by Govt. of Sikkim on 30.01.2017. |
| 3 | Total | | | 196 | | |

Note: R –Run of the River

II. Pumped Storage**Exploitable Hydro Power Potential from Pumped Storage Projets**

| Sl. No. | Name of project | I.C. (MW) | District |
|----------|-----------------|-------------|----------|
| 1 | Kulbera | 800 | Purulia |
| 2 | Bandhu | 900 | Purulia |
| 3 | Panchet Hill | 1000 | Purulia |
| 4 | Purulia | 900 | Purulia |
| 5 | Turga PSS | 1000 | Purulia |
| 6 | Kathlajal | 900 | Purulia |
| 6 | TOTAL | 5500 | |

a. PSP In Operation

| Sl. No | Name of Project | River | I.C. (MW) | Agency | District | Sector |
|----------|-----------------|-------------------|------------|---------|----------|--------|
| 1 | Purulia | Kisto Bazar Nalla | 900 | WBSEDCL | Purulia | State |
| 1 | TOTAL | | 900 | | | |

b. PSP Concurred by CEA

| Sl. No | Name of Project | River | | I.C. (MW) | Agency | District | Sector | Remarks |
|----------|-----------------|------------|-------------|-----------|---------|----------|--------|---|
| 1 | Turga | Turga Nala | | 1000 | WBSEDCL | Purulia | State | <ul style="list-style-type: none"> •Date of concurrence- 05.10.2016 •EC accorded on 02.07.2018. FC-I accorded on 12.04.18 and FC-II accorded on 13.10.2022. |
| 1 | TOTAL | | 1000 | | | | | |

c. Balance Capacity

| Sl. No | Name of Project | River | | I.C. (MW) | Agency | District | Remarks |
|----------|-----------------|-------------------|-------------------|-----------|-------------------------|----------|---|
| 1 | Kulbera | Rupai Nala | Kulbera Nala | 800 | Indicated by MoP to DVC | Purulia | Yet to be allotted by the State for development |
| 2 | Bandhu | Bandhu Nala | Bandhu Nala | 900 | WBSEDCL | Purulia | PFR under preparation |
| 3 | Panchet Hill | Panchet Reservoir | Panchet Reservoir | 1000 | Indicated by MoP to DVC | Purulia | Yet to be allotted by the State for development |
| 4 | Kathlajal | Kathlajal nala | Kathlajal nala | 900 | WBSEDCL | Purulia | Yet to be taken up under S&I |
| 4 | TOTAL | | 3600 | | | | |

Summary of Hydro Power Development in Sikkim

I. Conventional projects

| | | Nos. | I.C. (MW) |
|--|---|------|-----------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 34 | 6051 |
| Breakup of Hydro power Potential (2017-23) | | | |
| A | Projects in operation | 8 | 2282 |
| B | Projects under construction | 2 | 620 |
| C | Projects concurred by CEA and yet to be taken up for construction | 1 | 520 |
| D | Balance Capacity | 23 | 2629 |

I. Conventional projects

Details of Exploitable Hydro Power Projects

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

A. H.E. Projects in Operation:

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

* All projects are in Brahmaputra Basin

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

B. H.E. Projects under Construction:

| Sl. No. | Name of Project | Agency | District | I.C. (MW) | River/ Basin | Type (R/S/R(P)) | Sector | Likely commissioning |
|---------|-----------------|--------|--------------|------------|------------------------|-----------------|---------|----------------------|
| 1 | Teesta St. VI | NHPC | South Sikkim | 500 | Teesta/ Brahmaputra | R | Central | 2027-28 (Dec'27) |
| 2 | Rangit-IV | NHPC | West Sikkim | 120 | Rangit/ Brahmaputra | R | Central | 2025-26 (Dec'25) |
| 2 | Total | | | 620 | | | | |

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

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

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

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

• NHPC vide letter dt. 15.03.2021 has again requested DC (North), Sikkim to intervene into the matter of pending Gram Sabha meetings at remaining 3 GPU's and completion of settlement of rights under FRA, 2006 • CMD, NHPC along with Senior Officers of NHPC had a meeting with Chief Secretary & Addl. Chief Secretary of Sikkim on 02.03.2021 and with Hon'ble CM of Sikkim on 20.03.21. During the meetings, various pending issues related to the project were discussed and they assured all possible cooperation and assistance of the State Government to NHPC

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

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

• A meeting was chaired by Hon'ble Minister of Power and NRE and attended by Secretary (Power), CMD, NHPC and senior officials of MoP & NHPC on 16.02.23 wherein issues related to pending compliance of Forest Clearance Stage-I w.r.t consent under FRA-2006 in remaining 3 GPUs was discussed.

• NHPC vide letter dt. 05.12.2023 again requested the District Collector, Mangan to fix a timeline for conducting the Gram Sabha meetings in remaining 3 GPUs.

Rehabilitation and Resettlement Committee has been constituted by the Govt of Sikkim on 03.08.2023. Chief Secretary during meeting on 11.12.2023 , directed land revenue department to initiate a proposal for further extension of the period for declaration under Section 19of RFCTLARR Act'2013.

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

D. Balance Capacity

| SL.No. | Name of Project | River | Type (R/S/R(P)) | I.C. (MW) | District | Reamrks |
|---|--------------------|-------------|-----------------|-------------|--------------|---|
| 1 | Kalep | Tista | R | 54 | North Sikkim | |
| 2 | Talem | Tista | R | 44 | North Sikkim | |
| 3 | Jedang | Lhonak | R | 160 | North Sikkim | |
| 4 | Teesta-I (zeema) | Tista | R | 320 | North Sikkim | |
| 5 | Serum | Sebokung | R | 115 | North Sikkim | |
| 6 | Lachung | Lachung | R | 75 | North Sikkim | |
| 7 | Ringpi | Ringpi | R | 120 | North Sikkim | |
| 8 | Rukel | Rongnichu | R | 26 | North Sikkim | |
| 9 | Rangyong | Rongnichu | R | 248 | North Sikkim | |
| 10 | Chhota Pathing | Rongpo | R | 55 | East Sikkim | |
| 11 | Mana | G.Ranjit | R | 44 | South Sikkim | |
| 12 | Namlum | G.Ranjit | R | 50 | North Sikkim | |
| 13 | Lower Lagyap | Rongpi | R | 26 | East Sikkim | |
| 14 | Teesta St-II | Lachen chu | R | 410 | North Sikkim | |
| 15 | Lachen (Chunthang) | Teesta | R | 160 | North Sikkim | |
| 16 | Bimkyong | Lachung Chu | R | 66 | North Sikkim | |
| 17 | BOP | Lachung Chu | R | 75 | North Sikkim | |
| 18 | Lethang (Yoksam) | Ranhang chu | R | 98 | West Sikkim | |
| 19 | Kalez khola | Kalez Khola | R | 34 | West Sikkim | •Project was in S&I held up due to objection raised by local people against Topographical Survey. |
| 20 | Suntaleytar | Rangpo Chu | R | 32 | East sikkim | •Initially allotted to Hindustan Electric Power Ltd. •Project was in S&I Held up as MOA was not finalised |
| 21 | Bhasmey | Rangpo | R | 51 | East Sikkim | •Initially allotted to Gati Infra pvt ltd • Matter is sub-judice. The Court appointed Resolution Professional for Bhasmey HEP stated that works stalled since Sept., 2016. CIRP has been initiated against Gati infra and NCLT has appointed Resolution Professional .The Resolution Professional has received 4 Resolution Plan in the matter of Gati Infrastructure Bhasmey Power Private Limited and are pending for approval from the Committee of Creditors. Project is likely to be commissioned 4 years after restart of works. |
| 22 | Rangit-II | Rangit | R | 66 | West Sikkim | •Initially allotted to Sikkim hydro Power Venture Ltd • Works stalled since Dec., 2017. Funds constraints with the developer. Project is likely to be commissioned 3 years after restart of works |
| 23 | Panan | Touling | R | 300 | North Sikkim | •Initially allotted to Himagiri Hydro Energy Pvt ltd •Accessibility to Project site. The permanent bridge over Mantam Lake for accessibility to Dam site is being constructed by Sikkim PWD which is likely to be completed by Nov' 2024. The Financial Institutes are awaiting for completion of bridge, thereafter the process of financing the project can start. .Project is likely to be commissioned 5 years after restart of works. |
| 23 | Total | | | 2629 | | |
| Note: R= Run of River, S=Storage & R(P)= Run of River with Pondage | | | | | | |
| | | | | | | |

Summary of Hydro Power Development in Meghalaya

I. Conventional Projects

| | | Nos. | I.C. (MW) |
|--|---|------|-----------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 22 | 2026 |
| Breakup of Hydro Power Potentia (2017-23 Study) | | | |
| A | Projects In Operation | 5 | 322 |
| B | Projects concurred by CEA and yet to be taken up for construction | 1 | 85 |
| C | Projects under S&I | 2 | 270 |
| D | Balance Capacity* | 14 | 1488 |

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

I. Conventional Projects

Details of Exploitable Hydro Power Projects

| S. No. | Name | River | Type | Installed Capacity |
|-----------|--|--------------------------------|------|--------------------|
| 1 | Kyrdamkulai (Umiam Umtru-III) | Umtru | R(P) | 60 |
| 2 | Umiam (Umtru) St IV | Tail Water of Umiam st. III | R(P) | 60 |
| 3 | Umium-Ummtru VI | Umtru | S | 39 |
| 4 | Umlamphang | Umiam | R | 28 |
| 5 | Umiam Stage -I | Umiam | S | 36 |
| 6 | New Umtru | Umtru | R(P) | 40 |
| 7 | Selim | Myntdu | R | 54 |
| 8 | Umanghot (Umngot Stor.) | Umngot | R | 220 |
| 9 | Umjaut | Umiew | R | 72 |
| 10 | Umduna (Umduma) | Umiam | R | 60 |
| 11 | Wah Umiam Stage-III (Mawhu+ Nonglyngkien) | Umiew | R | 85 |
| 12 | Umngi Stage-I (Umngi Storage+ Rangmaw) | Umngi | S | 30 |
| 13 | Nongam | Umngi | R | 165 |
| 14 | Mawpat | Umngi | R | 30 |
| 15 | Kynshi II (Mawthaba) | Kynshi | R | 278 |
| 16 | Kynshi I (Mawsyrpat+ Kynshi -I storage) | Kynshi | S | 270 |
| 17 | Nangmawlar (Nongmawlar) | Kynshi | R | 106 |
| 18 | Mawblei Storage | Wahblei | S | 110 |
| 19 | Simsang Dam P/H | Someshri | S | 66 |
| 20 | Amagam Storage | Rongdi | S | 26 |
| 21 | Myntdu Leshka stage I | Myntdu | R(P) | 126 |
| 22 | Myntdu Leshka St-II | Myntdu | R | 65 |
| 22 | TOTAL | | | 2026 |

A. H.E. Projects in Operation:

| S. No. | Utility/Stations | No. of Stns. | No. of units x Capacity (MW) | River / Basin* | District | I.C. (MW) | Type (R/S/R(P)) | Sector | Year of commissioning |
|---------------|---------------------|--------------|------------------------------------|--|---------------|------------|--------------------|--------|-----------------------|
| MePGCL | | | | | | | | | |
| 1 | KYRDEMKULAI | 1 | (2X30) | Umtru | RI-BHOI | 60 | R(P) | State | 1979 |
| 2 | UMIAM ST-I | 1 | (4X9) | UMIAM | RI-BHOI | 36 | S | State | 1965 |
| 3 | NEW UMTRU | 1 | (2X20) | UMTRU | RI-BHOI | 40 | R(P) | State | 2017 |
| 4 | UMIAM ST-IV | 1 | (2X30) | Tail water of Stage-III PH & own catchment | RI-BHOI | 60 | R(P) | State | 1992 |
| 5 | MYNTDU ST-I | 1 | (3X42) | MYNTDU | JAINTIA HILLS | 126 | R(P) | State | 2011 2013 |
| 5 | TOTAL MePGCL | 5 | | | | 322 | | | |

* All projects are in Brahmaputra Basin

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

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

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

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

| Sl. No. | Name of Project | River | Agency | I.C. (MW) | District | Type (R/S/R(P)) | Sector | Date of MOA | Target date of Preparation of DPR |
|---------|---------------------|-------------|-------------------|------------|--------------------|-----------------|---------|-------------|-----------------------------------|
| 1 | Myntdu Leshka st-II | Myntdu | MePGCL | 210 | West Jaintia Hills | R | State | 30.01.2017 | 04/25 |
| 2 | Simsang Dam Project | Somershwari | Brahmaputra Board | 60 | South Garo Hills | S | Central | | |
| 2 | Total | | | 270 | | | | | |

D. Balance Capacity

| Sl.No. | Name of Project | River | Type | I.C (MW) | District | Reamrks |
|--------|--|---------|------|-------------|--------------------------|--|
| 1 | Umium-Ummtru VI | Umtru | S | 39 | Ri-Bhoi | |
| 2 | Umlamphang | Umiam | R | 28 | Ri-Bhoi | |
| 3 | Nongam | Umngi | R | 165 | East Khasi Hills | |
| 4 | Mawpat | Umngi | R | 30 | West Khasi Hills | |
| 5 | Nangmawlar | Kynshi | R | 106 | West Khasi Hills | |
| 6 | Amagam Storage | Rongdi | S | 26 | East Garo hills | |
| 7 | Umjaut | Umiew | R | 72 | Umiew | |
| 8 | Umduna (Umduma) | Umiam | R | 60 | Umiam | |
| 9 | Umngi Stage-I (Umngi Storage+ Rangmaw) | Umngi | S | 30 | Umngi | |
| 10 | Kynshi I (Mawsrpat+ Kynshi -I storage) | Kynshi | S | 270 | Kynshi | |
| 11 | Mawblei Storage | Wahblei | S | 110 | Wahblei | |
| 12 | Umanghot (Umngot Stor.) | Umngot | R | 220 | Umngot | |
| 13 | Kynshi-II | Kynshi | R | 278 | West Khasi Hills | <ul style="list-style-type: none"> Initially allotted to GoMe & Jaiprakash Power Venture Ltd. (JV) Project was in 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. |
| 14 | Selim | Myntdu | R | 54 | East & West jantia Hills | <ul style="list-style-type: none"> Initially allotted to MePGCL Project 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. Report on Site Specific Design Earthquake Parameters submitted to CWC on 30.11.21 by developer. |
| 14 | Total | | | 1488 | | |

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

Summary of Hydro Power Development in Tripura

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

| Name of Project | Unit | Installed Capacity (MW) | Year of Installation | Phase | RIVER | TYPE |
|--------------------|----------|-------------------------|----------------------|----------|-------|------|
| Gumti H.E. Project | Unit-I | 5.00 MW | 1976 | Phase I | Gumti | S |
| | Unit-II | 5.00 MW | 1976 | | | |
| | Unit-III | 5.00 MW | 1984 | Phase II | | |

Summary of Hydro Power Development in Manipur

I. Conventional Projects

| | | Nos. | Capacity (MW) |
|--|-----------------------|------|------------------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 9 | 615 |
| Breakup of Hydro Power Potential (2017-23 Study) | | | |
| A | Projects in operation | 1 | 105 |
| B | Balance Capacity | 8 | 510 |

I. Conventional Projects**Details of Exploitable Hydro Power projects**

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

A. H.E. Projects in Operation:

| Sl.No. | Name of Project | Agency | I. C. (MW) | River/ Basin | District | Type (R/S/R(P)) | Sector | Year of Commissioning |
|-------------|-----------------|--------|------------|------------------------|----------|-----------------|---------|-----------------------|
| NHPC | | | | | | | | |
| 1 | Loktak | NHPC | 105 | Leimatak / Brahmaputra | Imphal | S | Central | 1983 |
| 1 | Total | | 105 | | | | | |

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

B. Balance Capacity

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

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

Summary of Hydro Power Development in Assam

I. Conventional Projects

| | | Nos. | Capacity (MW) |
|--|--|------|---------------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 8 | 643 |
| Breakup of Hydro Power Potential (2017-23 study) | | | |
| A | Projects in operation | 3 | 350 |
| B | Projects under construction | 1 | 120 |
| C | Projects returned to project authorities | 1 | 60 |
| D | Balance Capacity* | 3 | 143 |

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

II. Pumped Storage Projects

| | | Nos. | I.C. (MW) |
|--|------------------|------|--------------|
| Exploitable Hydro Power Potential from Pumped Storage Projects | | 1 | 320 |
| Breakup of Hydro Power Potential from Pumped Storage Projects | | | |
| a | Balance Capacity | 1 | 320 |

I. Conventional Projects

Details of Exploitable Hydro Power Projects

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

A. H.E. Projects in Operation:

| S.No | UTILITY/ STATIONS | NO. OF STATION S | No. of Units | NO. OF UNITS X CAPACITY (MW) | RIVER/ BASIN* | DISTRICT | I.C. (MW) | Type (R/S/R(P)) | Sector | YEAR OF COMMISSIONING |
|---------------|---------------------------------------|------------------------|--------------|---------------------------------------|------------------|------------------|------------|--------------------|---------|--------------------------|
| NEEPCO | | | | | | | | | | |
| 1 | KOPILI | 1 | 4 | (4X50) | Umrong | DIMA HASAO | 200 | S | Central | 1988 -1997 |
| 2 | KHONDONG | 1 | 2 | (2X25) | KOPILI | DIMA HASAO | 50 | S | Central | 1984 |
| | SUB-TOTAL NEEPCO | 2 | 6 | | | | 250 | | | |
| APGCL | | | | | | | | | | |
| 3 | KARBI LANGPI [Lower Borpani] | 1 | 2 | (2X50) | BORPANI | KARBI ANGLONG | 100 | R(P) | State | 2007 |
| | SUB-TOTAL APGCL | 1 | 2 | | | | 100 | | | |
| 3 | TOTAL ASSAM | 3 | 8 | | | | 350 | | | |

* All projects are in Brahmaputra Basin

B. H.E. Projects under construction:

| Sl No. | Name of Project | Agency | River / Basin | District | I.C.(MW) | Type (R/S/R(P)) | Sector | Likely Commissioning |
|----------|--------------------|--------|----------------------|-------------------------------|------------|--------------------|--------|----------------------|
| 1 | Lower Kopili | APGCL | Kopili / Brahmaputra | Karbi Anglong & Dima Hasao | 120 | R | State | 2025-26 (Jul'25) |
| 1 | Total | | | | 120 | | | |

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

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

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

D. Balance Capacity

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

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

II. Pumped Storage

Exploitable Hydro Power Potential from Pumped Storage Projets

| Sl. No. | Name of project | District | I.C.(MW) |
|----------|-----------------|------------|------------|
| 1 | Kopili | Dima Hasao | 320 |
| 1 | Total | | 320 |

a. Balance Capacity

| Sl. No | Name of Project | Agency | District | River | | I.C. (MW) | Remarks |
|----------|-----------------|----------------------------|------------|-----------------|-----------------|------------|---|
| | | | | Upper Reservoir | Lower Reservoir | | |
| 1 | Kopili | Indicated by MoP to NEEPCO | Dima Hasao | Khandong | Umrong | 320 | Yet to be allotted by the State for development |
| 1 | Total | | | | | 320 | |

Summary of Hydro Power Development in Nagaland

I. Conventional Projects

| | | Nos. | Capacity (MW) |
|--|---|------|---------------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 4 | 325 |
| Breakup of Hydro Power Potential (2017-23 Study) | | | |
| A | Projects in operation | 1 | 75 |
| B | Projects concurred by CEA and yet to be taken up for construction | 1 | 186 |
| C | Balance Capacity | 2 | 64 |

Details of Exploitable Hydro Power Projects

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

A. H.E. Projects in Operation:

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

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

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

EIA/EMP studies are in progress and are likely to be completed soon. Consent of PPA as per CERC Tariff is obtained. Govt. of Nagaland has forwarded PPA tariff calculations for the approval of Nagaland Regulatory Commission. CEA vide letter dated 21.09.2023 extended validity of Concurrence upto 31.03.2025

C. Balance Capacity

| Sl.No. | Name of Scheme | River | District | I.C.(MW) | Type |
|----------|-------------------------|---------|------------|-----------|------|
| 1 | Yangnyu (Yangnyu Stor.) | Yangnyu | Longleng | 36 | S |
| 2 | Jhanji storage | Jhanji | Mokokchung | 28 | S |
| 2 | Total | | | 64 | |

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

Summary of Hydro Power Development in Arunachal Pradesh

I. Conventional Projects

| | | Nos. | I.C. (MW) |
|--|---|------|-----------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 109 | 50394.00 |
| Breakup of Hydro Power Potential (2017-23 Study) | | | |
| A | Projects in operation | 3 | 1115 |
| B | Projects under construction | 2 | 4880 |
| C | Projects concurred by CEA and yet to be taken up for construction | 14 | 13798 |
| D | Projects Under Examination | 2 | 1990 |
| E | Projects returned to project authorities | 12 | 3523 |
| F | Projects under S&I | 7 | 17606 |
| G | Balance Capacity* | 68 | 9694 |

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

II. Pumped Storage Projects

| | | Nos. | I.C. (MW) |
|--|------------------|------|-----------|
| Exploitable Hydro Power Potential from Pumped Storage Projects | | 1 | 660 |
| Breakup of Hydro Power Potential from Pumped Storage Projects | | | |
| a | Balance Capacity | 1 | 660 |

I. Conventional Projects

Details of Exploitable Hydro Power Projects

| S.no | Name | River | Type | Installed Capacity |
|------|--------------------------|-------------|------|--------------------|
| 1 | Mihundon | Dri | R | 226 |
| 2 | Amulin | Matun | R | 212 |
| 3 | Emini | Matun | R | 326 |
| 4 | Agoline | Dri | R | 220 |
| 5 | Attunli | Tangon | R(P) | 680 |
| 6 | Etalin | Dri& Tangon | R | 3097 |
| 7 | Emra-I | Emra | R | 450 |
| 8 | Emra-II | Emra | R | 210 |
| 9 | Elango | Ahi | R | 128 |
| 10 | Dibang (Dibang Stor.) | Dibang | S | 2880 |
| 11 | Sissiri (Sesseri) | Sesseri | S | 60 |
| 12 | Ithun I | Ithun | R | 76 |
| 13 | Ithun II | Ithun | R | 48 |
| 14 | Etabue | Ange Pani | R | 122 |
| 15 | Jidu (Yangsang) | Yangsang | R | 90 |
| 16 | Rigong | Ringong | R | 85 |
| 17 | Mirak | Sigong | R | 78 |
| 18 | Pango (Minnying) | Sirapatang | R | 72 |
| 19 | Pauk | Yarjep | R | 128 |
| 20 | Heo | Yarjep | R | 240 |
| 21 | Hirong | Siyom | R | 500 |
| 22 | Tato-II | Siyom | R(P) | 700 |

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

| | | | | |
|----|--|-----------|------|------|
| 45 | Demwe Upper St-II (Demwe) | Lohit | R | 210 |
| 46 | Demwe Upper St-III (Demwe) | Lohit | R | 150 |
| 47 | Gimliang | Dau | R | 82 |
| 48 | Raigam | Delai | R | 180 |
| 49 | Tidding -I | Tidding | R | 82 |
| 50 | Tidding -II | Tidding | R | 70 |
| 51 | Kalai II (Kalai) | Lohit | R(P) | 1200 |
| 52 | Anjaw | Lohit | R | 230 |
| 53 | Oju (Oju-I + Oju-II) | Subansiri | R | 2060 |
| 54 | Niare | Subansiri | R | 860 |
| 55 | Naba | Subansiri | R | 905 |
| 56 | Milli | kurung | R | 138 |
| 57 | Sape | kurung | R | 65 |
| 58 | Chomi | Kurung | R | 165 |
| 59 | Chela | Kurung | R | 180 |
| 60 | Nyepin | Payam | R | 48 |
| 61 | Hiya | Payam | R | 65 |
| 62 | Kurung (Kurung Dam I + Kurung Dam II) | Kurung | S | 300 |
| 63 | Hegio | Kurung | R | 320 |
| 64 | Subansiri Lower (Subansiri Dam) | Subansiri | R(P) | 2000 |
| 65 | Tago I | Kale | R | 48 |
| 66 | Ranganadi St II (Yazali Storage) | Ranganadi | S | 100 |
| 67 | Nalo | Subansiri | S | 372 |
| 68 | Dengser | Subansiri | R | 545 |

| | | | | |
|----|--|---------------|------|------|
| 69 | Subansiri Upper | Subansiri | S | 1320 |
| 70 | Subansiri Middle (kamla) (Tamen) | Kamala | S | 1500 |
| 71 | Panyor | Panyor | R | 130 |
| 72 | Ranganadi St-I (Yazali Div. -II) | Ranganadi | R(P) | 405 |
| 73 | Turu | Dikrong | R | 100 |
| 74 | Par | Dikrong | R | 85 |
| 75 | Dardu | Dikrong | R | 85 |
| 76 | Doimukh [Dudmukh Storage] | Dikrong | R | 34 |
| 77 | Pare | Dikrong | R(P) | 110 |
| 78 | Tipang | Tirap | S | 26 |
| 79 | Chanda | Kameng | R | 115 |
| 80 | Badao | Kameng | R | 94 |
| 81 | Para | Para | R | 144 |
| 82 | Talong Londa (Talong) | Kameng | R(P) | 225 |
| 83 | Pachuk II (Satuk) | Pachuk | R | 54 |
| 84 | Pachuk II Lower (Kapak Leyak) | Pachuk | R | 62 |
| 85 | Phanchung | Pachi | R | 36 |
| 86 | Utung | Bichom | R | 76 |
| 87 | Dibbin | Bichom | R | 120 |
| 88 | Khuitam | Digen | R | 62 |
| 89 | Dinhang (But +Maithing) | Digo | R | 295 |
| 90 | Kameng HEP (Bichom storage-I + Bichom-II) | Bichom/ Tenga | R(P) | 600 |
| 91 | Papu | Papu | R | 100 |

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

A. H.E. Projects in Operation:

| S. No. | Name of Project | Agency | District | I.C. (MW) | River | Type (R/S/R(P)) | Sector | Year of commissioning |
|--------|-----------------|--------|-----------------|-------------|-------------------------|-----------------|---------|-----------------------|
| 1 | RANGANADI | NEEPCO | Lower Subansiri | 405 | RANGANADI | R(P) | Central | 2002 |
| 2 | PARE | NEEPCO | Papum Pare | 110 | Dikrong | R (P) | Central | 2018 |
| 3 | Kameng | NEEPCO | West Kameng | 600 | Bichom & Tenga / Kameng | R (P) | Central | 2020-21 |
| 3 | Total | | | 1115 | | | | |

Note: All projects are in Brahmaputra Basin

B. H.E. Projects Under Construction:

| Sl. No. | Name of Project | Agency | District | I.C. (MW) | River | Type (R/S/R(P)) | Sector | Likely Commissioning |
|---------|-----------------------------|--------|-----------------------|-------------|--------------------|-----------------|---------|----------------------|
| 1 | Subansiri Lower | NHPC | L.Subansiri/ Dhemajji | 2000 | Subansiri | R(P) | Central | 2025-27 # (May'26) |
| 2 | Dibang Multipurpose Project | NHPC | Lower Dibang valley | 2880 | Dibang/Brahmaputra | S | Central | 2031-32 (feb'32) |
| 2 | Total | | | 4880 | | | | |

Note: All projects are in Brahmaputra Basin

5 units (1250 MW) likely during 2025-26, 3 units (750 MW) likely during 2026-27.

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

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

| Sl No. | Name of Project | Agency | Sector | District | River | I.C. (MW) | Date of CEA Concurrence | Type (R/S/R(P)) | Status |
|--------|-----------------|--------|---------|---------------|--------------|--------------|-------------------------|-----------------|--|
| 1 | Lower Siang | JAVL | Private | East Siang | Siang | 2700 | 16.02.10 | R(P) | 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. # |
| 2 | Tawang St-I | NHPC | Central | Tawang | Tawang Chu | 600 | 10.10.11 | R | EC accorded on 10.06.2011 (valid till June 2021). EAC in its 13th meeting held on 16.06.2021 has recommended an extension of validity of EC for 3 years. FC-I & FC-II are pending. ## |
| 3 | Tawang St-II | NHPC | Central | Tawang | Tawang Chu | 800 | 22.09.11 | R | EC accorded on 10.06.2011 (valid till June 2021). MoEF&CC vide letter dated 18.10.2021 accorded extension of validity of EC for 3 years till 09.06.2024. FC-I accorded on 08.01.2014. FC-II yet to be obtained. ### |
| 4 | Demwe Lower | ADPL | Private | Lohit | Lohit | 1750 | 20.11.09 | R(P) | EC accorded on 12.02.2010. EC extended till 11.02.2023. FC-I accorded on 01.03.2012. FC-II accorded on 03.05.2013. However, an appeal was filed against grant of FC before the NGT on 03.05.2014. #### |
| 5 | Hirong | NEEPCO | Central | West Siang | Siyom | 500 | 10.04.2013 | R | EC & FC yet to be obtained by developer. Government of Arunachal Pradesh vide letter dated 09.07.201 informed CEA that allotment of Hirong HEP to M/s. JAPL was withdrawn/ cancelled vide GoAP letter dated 21.04.2021. MOP vide letter dated 22.12.2021 indicated that Hirong HEP to be pursued by NEEPCO. Govt. of Arunachal Pradesh has approved the allotment of Hirong HEP to NEEPCO Ltd. on 13.01.2023. MoA signed on 12.08.2023. |
| 6 | Talonga Londa | GMR | Private | East Kameng | Kameng | 225 | 16.08.2013 | R(P) | EC accorded on 07.08.2015. FC-I & FC-II yet to be obtained. ##### |
| 7 | Etalim | SJVNL | Central | Dibang Valley | Dri & Tangon | 3097 | 12.07.2013 | R | EC recommended by EAC on 31.01.2017. Letter will be issued after FC-I. FC-I & FC-II yet to be obtained. ##### |
| 8 | Naying HEP | NEEPCO | Central | West Siang | Siyom | 1000 | 11.09.2013 | R | EC & FC yet to be obtained by developer. \$ |
| 9 | Kalai -II | THDCIL | Central | Anjaw | Lohit | 1200 | 27.3.2015 | R(P) | EC & FC yet to be obtained. MOP vide letter dated 22.12.2021 indicated Kalai-II HEP to be pursued by THDC. The Government of Arunachal Pradesh has entered into a Memorandum of Agreement (MoA) on 30th Dec'2023 with THDC INDIA Limited, to jointly undertake the development of the 1200 MW Kalai-II hydroelectric project. CEA vide letter dated 23.02.2024 accorded for transfer and revalidation of concurrence. Application for ToR for fresh EC was submitted on parivesh portal on 23.03.2024. Proposal was discussed by EAC in its meeting held on 29.04.2024, wherein some observations were raised. The reply to same was submitted by THDCIL on 25.05.2024. EAC Meeting held on 27.06.2024 and recommended for ToR. Fresh forest proposal submitted in Parivesh portal on 23.01.2024. It is yet to be accepted by PSC-I |
| 10 | Heo | NEEPCO | Central | West Siang | Yarjep | 240 | 28.07.2015 | R | EC accorded on 10.11.2015. FC-I accorded on 27.10.2015. EC transferred in favor of NEEPCO on 01.01.2024. FC-I transferred in favor of NEEPCO on 31.01.2024. FC-II accorded on 05.12.2024. Investment approval accorded on 11.12.2024 |
| 11 | Tato-I | NEEPCO | Central | West Siang | Yarjep | 186 | 28.10.2015 | R | EC accorded on 10.11.2015. FC-I accorded on 27.10.2015. EC transferred in favour of NEEPCO on 01.01.2024. FC-I transferred in favour of NEEPCO on 31.01.2024 FC-II accorded on 05.12.2024. Investment approval accorded on 11.12.2024 |
| 12 | Attunli | SJVN | Central | Dibang Valley | Tangon | 680 | 02.07.18 | R(P) | Both EC and FC are yet to be obtained. MoEF&CC stated that fresh ToR was issued in May'2019. However, the same has been expired. Application for TOR submitted by developer online on 16.12.2023. Forest survey under progress. DISCOMS are reluctant to sign long term PPA's for the Hydro Projects. Land Acquisition under process. MOP vide letter dated 22.12.2021 indicated that Attunli HEP to be pursued by SJVNL. MoA signed on 12.08.2023. CEA vide letter dated 09.11.2023 accorded for transfer and revalidation of concurrence. Application for ToR submitted on 16.12.2023 and agreed by EAC on 09.02.2024. ToR issued on 05.03.2024. EIA/ EMP studies is in progress. Application uploaded on 15.02.2024. Project Screening Committee (PSC) recommended the proposal on 11.03.2024. Proposal forwarded to DFO on 14.03.2024. Tree enumeration completed on 25.03.2024. FC is in process. |
| 13 | Nafra | NEEPCO | Central | West kameng | Bichom | 120 | 11.02.11 | R(P) | EC accorded on 19.08.2013. FC-I accorded on 12.07.2011 & FC-II accorded on 26.06.2012. \$\$ |
| 14 | Tato-II | NEEPCO | Central | West Siang | Siyom | 700 | 22.05.12 | R(P) | EC accorded on 27.6.2011. FC is linked to Cumulative Impact Assessment Study of Siang Basin which has been carried out and accepted by MoEF&CC. There is no need to change in IC but as per recommendations in BSR, FRL needs to be reduced for free flow stretch and hence there may be change in other parameters including shift in location of Dam/ Barrage etc. MOP vide letter dated 22.12.2021 indicated that Tato-II HEP will be pursued by NEEPCO. MoA signed on 12.08.2023 EC transferred in favour of NEEPCO on 01.01.2024. Application for grant of FC-I submitted through PARIVESH portal on 13.01.2024. The State Forest Deptt. recommended the proposal for diversion of forest land to MOEF&CC on 28.08.2024. The proposal has been uploaded in PARIVESH on 29.08.2024 for disposal by MOEF&CC. Observations raised by MoEF&CC on 27.09.2024. |
| 14 | Total | | | | | 13798 | | | |

Note: All projects are in Brahmaputra Basin

As per Cumulative Impact Assessment recommendations for Siang basin, parameter of Lower Siang HEP has been suggested to be altered and enhance the e-flows which has great impact on design and installation capacity of this project. The final decision on the parameters of the project and norms for e-flows needs to be taken by State Government and Government of India. Validity of Concurrence to the project expired on 16.02.2019. MoP vide letter dated 22.12.2021 indicated that Lower Siang HEP to be pursued by NHPC.

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

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

Hon'ble NGT vide its Order dated 24th October, 2017 dismissed the Forest Clearance appeal of the project and directed the Standing Committee of NBWL to reconsider the issue relating to Demwe Lower HEP and pass appropriate orders. Till such orders are passed, the forest clearance of the project stands suspended. Developer informed that the project is under NCLT since 2017 and fate of project will be decided after NCLT proceedings are over. Validity of Concurrence to the project expired on 19.05.2017. MOP vide letter dated 22.12.2021 indicated that Demwe lower HEP to be pursued by THDC.

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

The Biodiversity studies have been completed by Wild Life Institute of India (WII) in July 2019 after which FAC considered it in October 2019 wherein it recommended that a Sub-Committee shall be formed who shall visit the project site and submit its report on grant of forest Clearance for the project considering various aspects. Sub-Committee submitted its report to MOEF&CC and is available in their website. Sub-Committee recommended for the forest clearance of the project. FAC in its meeting held on 11.05.2022 has recommended to constitute two committees and will submit their reports within three weeks from their constitution. MoEF&CC vide letter dated 02.02.2023 conveyed that "FAC in its meeting held on 27.12.2022 opined that the instant proposal cannot be considered in the present form and the revised proposal may be submitted for further consideration by the State Government".

MOP vide letter dated 22.12.2021 indicated that Etalin HEP to be pursued by SJVNL. MoA signed on 12.08.2023. CEA vide letter dated 09.11.2023 accorded for transfer and revalidation of concurrence. Application for transfer of Project Proponent in EC submitted to MoEF&CC on 23.08.2023 and 29.09.2023.

Application for transfer of Project Proponent in FC proposal was submitted to MoEF&CC on 07.12.2023. MoEF&CC requested for fresh submission of the proposal through Parivesh portal vide letter dated 22.12.2023. SJVN Limited submitted fresh proposal for FC on 15.02.2024. Proposal recommended and the case forwarded to DFO on 14.03.2024.

S- ToR granted by MoEF&CC on 07.08.2024.

Government of Arunachal Pradesh vide letter dated 09.07.201 informed CEA that allotment of Naying HEP to M/s. NDSCL has been withdrawn/ cancelled vide GoAP letter dated 27.04.2021. MOP vide letter dated 22.12.2021 indicated that Naying HEP to be pursued by NEEPCO. Govt. of Arunachal Pradesh has approved the allotment of Naying HEP to NEEPCO Ltd. on 13.01.2023. MoA signed on 12.08.2023.

Application through PARIVESH portal for diversion of forest land submitted on 21.08.2024.

PSC-I meeting held on 25.09.2024. Reply to the observation of MoEF dtd. 02.10.2024 is being submitted shortly

\$\$Application for transfer of EC is under process.

Application for transfer of FC of the project was submitted to the Department of Environment and Forest, Govt. of Arunachal Pradesh on 05.06.2023.

CEA vide letter dated 12.06.2023 transferred the Concurrence of the project to NEEPCO along with revalidation of the Concurrence upto 31.05.2024.

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

D. H.E. Projects Under Examination

| Sl. No. | Name of Project | Agency | I.C. (MW) | Sector | Type (R/S/R(P)) | Month of Receipt |
|---------|-------------------------------|--------------------|-------------|---------|-----------------|------------------|
| 1 | Kamala Hydro Electric Project | NHPC | 1720 | Central | Storage | October, 2024 |
| 2 | Anjaw | Lohit Urja Pvt Ltd | 270 | Private | RoR | November,2024 |
| 2 | Total | | 1990 | | | |

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

| Sl. No. | Name of Project | Agency | I.C. (MW) | Sector | Type (R/S/R(P)) | Month of Return/Reason of Return |
|---------|-----------------|---------------------------|-------------|---------|-----------------|---|
| 1 | Ranganadi St-II | NEEPCO | 130 | Central | S | Returned on 04/06 and NEEPCO has been asked to review the Project and resubmit DPR after cost and tariff are brought down. MOU with State Govt. yet to be signed. |
| 2 | Yamne St-II | SSYEVPL | 84 | Private | R | DPR returned on 05/11 due to inadequate geological investigations at dam site, diversion tunnel, surge shaft & power house etc. |
| 3 | Hutong –II | MFIPL | 1200 | Private | R | The DPR was returned on 5.12 as the Project is now to be developed as storage Project. Hydrology & PPS cleared on 9.5.2011 & 27.3.2012. |
| 4 | Kalai-I | MFIPL | 1352 | Private | S | Returned on 05/12 and STC decided that M/S MFIPL should carry out the detailed investigation for the revised DPR as per CEA's letter dt 24.5.2012. |
| 5 | Pemashelphu HEP | MHPL | 90 | Private | R | Returned on 02/13 due to non-replying of the comments and likely change in location of Dams benefits from the project, DPR of project has been returned. |
| 6 | Sissiri HEP | SSHPL | 100 | Private | S | Returned on 02/13 reason being DPR could not be accepted to detailed examination as representation of State Govt. pointed out that irrigation and drinking water component should be internal part of two project and cost of same should be included in cost of project. DPR returned to developer for sort out the issue with State Govt. |
| 7 | Gimiliang | SKI Pvt. Ltd. | 80 | Private | R | DPR returned on 06/13 during presentation meeting held on 03.5.2013 due to inadequate geological investigation. Developer was told to submit revised DPR after carrying out necessary investigation and IC got fixed by CEA. |
| 8 | Raigam | SKI Pvt. Ltd. | 141 | Private | R | DPR returned on 06/13 during presentation meeting held on 03.5.2013 due to inadequate geological investigation. Developer was told to submit revised DPR after carrying out necessary investigation and IC got fixed by CEA. |
| 9 | Kangtangshiri | KHPPL | 80 | Private | R(P) | Returned on 29.07.2013 due to inadequate investigation and in proper layout etc. |
| 10 | Nyukcharong Chu | SNCPCL | 96 | Private | R | Returned on 04/15 due to non-submission of investigation suggested by GSI. |
| 11 | Magochu | MCPCCL | 96 | Private | R | Returned on Jan-18 |
| 12 | Tagurshit | L&T Power Development Ltd | 74 | Private | R | Returned in 06/19. |
| 12 | Total | | 3523 | | | |

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

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

| Sl. No. | Name of Project | River | Agency for DPR | I.C. (MW) | District | Type (R/S/R(P)) | Sector | Date of MOA | Target date of Preparation of DPR |
|---------|----------------------------|-----------|---|--------------|-----------------|-----------------|---------|-------------|-----------------------------------|
| 1 | Demwe UpperSt-I | Lohit | Lohit Urja Pvt Ltd | 270 | Anjaw | R | Private | 09.07.2007 | 04/25 |
| 2 | Niare | Subansiri | Andra Power Private Limited | 909 | Upper Subansiri | R | Private | 02.05.2011 | 04/25 |
| 3 | Upper Siang Project | Siang | NHPC | 11200 | Upper siang | S | Central | | |
| 4 | Naba | Subansiri | Naba Power Private Ltd. | 1082 | Upper Subansiri | R | Private | 21.06.2010 | 04/25 |
| 5 | Oju Hydro-Electric Project | Subansiri | Oju Subansiri Hydro Power Corporation Pvt. Ltd. | 2220 | Upper Subansiri | R | Private | | 04/25 |
| 6 | Subansiri Upper | Subansiri | NHPC | 1605 | Upper Subansiri | R | Central | 12.08.2023 | 06/25 |
| 7 | Kurung | Kurung | NEEPCO | 320 | Kra Daadi | R | Central | 27.01.2015 | 06/25 |
| 7 | Total | | | 17606 | | | | | |

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

G. Balance Capacity

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

| | | | | | | |
|----|---------------------------|------------|---|------|-----------------|--|
| 23 | Mihumdon | Dri | R | 226 | Dibang valley | |
| 24 | Lower Yamne St-II (Yapin) | Yamne | R | 74 | Upper Siang | |
| 25 | Nalo | Subansiri | R | 372 | Upper Subansiri | |
| 26 | New Melling | Magochu | R | 48 | Tawang | |
| 27 | Tsa Chu-I Lower | Nykrongchu | R | 145 | Tawang | |
| 28 | Demwe Upper St-II | Lohit | R | 210 | Anjaw | |
| 29 | Demwe Upper St-III | Lohit | R | 150 | Anjaw | |
| 30 | Etabue | Ange Pani | R | 122 | Dibang Valley | •Indicated to SJVN |
| 31 | Simang I | Simang | R | 32 | East Siang | |
| 32 | Ithun II | Ithun | R | 48 | Ithun | |
| 33 | Simang- II | Simang | R | 32 | Simang | |
| 34 | Turu | Dikrong | R | 100 | Dikrong | |
| 35 | Phanchung | Pachi | R | 36 | Pachi | |
| 36 | Khuitam | Digen | R | 62 | Digen | |
| 37 | Pachuk I | Pachuk | R | 95 | Pachuk | |
| 38 | Pakke Bung I | Pakke bung | R | 48 | Pakke bung | |
| 39 | Papu Valley | Pappu | R | 45 | Pappu | |
| 40 | Dibbin | Bichom | R | 120 | Bichom | |
| 41 | Siyom (Passighat) | Siyom | R | 1000 | West Siang | |
| 42 | Papu | Papu | R | 100 | East Kameng | <ul style="list-style-type: none"> •initially allotted to CESC Ltd. •issue of interference of levels with the upstream project of M/s Vensar Energy Ltd i.e papu valley HEP requires to be resolved. |

| | | | | | | |
|----|----------|------------|---|-----|-----------------|---|
| 43 | Emra-I | Emra | R | 450 | Dibang Valley | <ul style="list-style-type: none"> •Indicated to SJVN and earlier allotted to Athen Energy Ventures Pvt. Ltd . •No approach road the project site and intent to terminate by GoAP under since 25/07/2018 |
| 44 | Rho | Tawang Chu | R | 145 | Tawang | <ul style="list-style-type: none"> •Initially allotted to SEW energy. •No visible progress since 2015 . Drift work pending. •letter issued to the developer to resolve issue with CEA/CWC/GSI on 17/9/19 |
| 45 | Dardu | Dikrong | R | 85 | Papum pare | <ul style="list-style-type: none"> •Initially allotted to KVK energy & infrastructure Ltd. •No activity/progress in project. Local public demanding to hand over the project to CPSU. Dikrong study not yet finalised . Intention to terminated by GOAP is under process since 10/04/18. |
| 46 | Dengser | Subansiri | R | 545 | Upper Subansiri | <ul style="list-style-type: none"> •Indicated to NHPC and earlier allotted to Coastal Infrastructure Pvt. Ltd. •Unapproachable area/ difficult & inhospitable terrain and local law & order problem |
| 47 | Yamne-I | Yamne | R | 106 | Upper Siang | <ul style="list-style-type: none"> • Indicated to NEEPCO and earlier allotted to S. S. Yamne Power Pvt. Ltd. •Local law and order problem. Under process for termination since 18/05/18 |
| 48 | Dinchang | Digo | R | 295 | West Kameng | <ul style="list-style-type: none"> • Indicated to NEEPCO and earlier allotted to KSK Energy Ventures Ltd.. •Project under process for termination by GOAP since 13.03.2018 |

| | | | | | | |
|----|------------------|------------|---|-----|---------------------|---|
| 49 | Ithun-I | Ithun | R | 76 | Lower Dibang Valley | <ul style="list-style-type: none"> Initially allotted to JVKIL consortium. Non-operationalization of Hunli-Desali road. Very slow progress, hence under process for Intent to Terminate by GoAP since 19/07/2018 |
| 50 | Chomi | Kurung | R | 165 | Kurung Kumeey | <ul style="list-style-type: none"> initially allotted to Adveta Power. MoA to be renewed |
| 51 | Chela | Kurung | R | 180 | Kurung Kumeey | <ul style="list-style-type: none"> Initially allotted to Adveta Power. MoA to be renewed |
| 52 | Para | Para | R | 144 | East Kameng | <ul style="list-style-type: none"> Initially allotted to Coastal Projects Pvt. Ltd.. M/s Coastal projects Ltd (Developer of Para HE Project) are in the Resolution process under NCLT. DPR would be prepared after resolution Process is completed. |
| 53 | Tidding-I | Tidding | R | 82 | Anjaw | <ul style="list-style-type: none"> Initially allotted to Sai Krishnodaya Ind. (P) Ltd. There is no progress in the S&I activities of project. ToR has not been obtained and there is no progress in geotechnical investigations. |
| 54 | Tidding-II | Tidding | R | 70 | Anjaw | <ul style="list-style-type: none"> Initially allotted to Sai Krishnodaya Ind. (P) Ltd. There is no progress in the S&I activities of project. ToR has not been obtained and there is no progress in geotechnical investigations. |
| 55 | Pango (Minnying) | Sirapatang | R | 72 | Upper Siang | <ul style="list-style-type: none"> Initially allotted to Meenakshi Power Ltd. Held up due to lack of infrastructure, poor communication network and remoteness of site. |

| | | | | | | |
|----|-------------------------------|-------------|---|-----|----------------|---|
| 56 | Sippi | Ringong | R | 75 | Upper Siang | <ul style="list-style-type: none"> Initially allotted to Meenakshi Power Ltd. Held up due to lack of infrastructure, poor communication network and remoteness of site. |
| 57 | Jidu (Yangsang) | Yangsang | R | 90 | Upper Siang | <ul style="list-style-type: none"> Initially allotted to Meenakshi Power Ltd. Held up due to lack of infrastructure, poor communication network and remoteness of site. |
| 58 | Pachuk-II (Satuk) | Pachuk | R | 54 | Pachuk | <ul style="list-style-type: none"> Initially allotted to Energy Development Co. Ltd. No progress in the S&I activities of project reported by developer. |
| 59 | Tsa Chu -II | Nykrong Chu | R | 148 | Nykcharong chu | <ul style="list-style-type: none"> Initially allotted to Energy Development Co. Ltd. No progress in the S&I activities of project reported by developer. |
| 60 | Pachuk II Lower (kapak Leyak) | Pachuk | R | 62 | Pakke Bung | <ul style="list-style-type: none"> Initially allotted to Energy Development Co. Ltd. No progress in the S&I activities of project reported by developer. |
| 61 | Marijingla | Kameng | R | 38 | Kameng | <ul style="list-style-type: none"> Initially allotted to Energy Development Co. Ltd. No progress in the S&I activities of project reported by developer. |
| 62 | Marijingla Lower | Kameng | R | 44 | Kameng | <ul style="list-style-type: none"> Initially allotted to Energy Development Co. Ltd. No progress in the S&I activities of project reported by developer. |

| | | | | | | |
|-----------|-------------------------|--------|---|-------------|-----------------|---|
| 63 | Rego | Siyom | R | 63 | West Siang | <ul style="list-style-type: none"> Initially allotted to Greenko Energies Ltd. No progress in the S&I activities of project reported by developer. |
| 64 | Rapum | Siyom | R | 60 | West Siang | <ul style="list-style-type: none"> Initially allotted to Greenko Energies Ltd. No progress in the S&I activities of project reported by developer. |
| 65 | Panyor | Panyor | R | 130 | Lower Subansiri | <ul style="list-style-type: none"> Initially allotted to Rajratan Energy Holing Pvt . Ltd. No progress in the S&I activities of project reported by developer. |
| 66 | Lower Yamne St-I (Jaru) | Yamne | R | 66 | Upper Siang | <ul style="list-style-type: none"> Initially allotted to Yamne Power Pvt. Ltd. No progress in the S&I activities of project reported by developer. |
| 67 | Emra-II | Emra | R | 210 | Dibang valley | <ul style="list-style-type: none"> Initially allotted to Athena Emra power pvt ltd No road connectivity to project site.local issue , communication problem.Intent to terminate under process since 5/07/2018 |
| 68 | Pauk | Yarjep | R | 128 | West Siang | <ul style="list-style-type: none"> Initially allotted to Valcan energy Pvt ltd Project held up due to land disputes between clans and law & order problem. |
| 68 | Total | | | 9694 | | |

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

II. Pumped Storage**Exploitable Hydro Power Potential from Pumped Storage Projets**

| Sl. No. | Name of project | I.C. (MW) | District |
|---------|-----------------|------------|-----------------|
| 1 | Panyor | 660 | Lower Subansiri |
| 1 | TOTAL | 660 | |

a. Balance Capacity

| Sl. No | Name of Project | River | | I.C. (MW) | Agency | District | Remarks |
|--------|-----------------|-----------------|--------------------|------------|----------------------------|-----------------|---|
| | | Upper Reservoir | Lower Reservoir | | | | |
| 1 | Panyor | Pit Nalah | Panyor / Ranganadi | 660 | Indicated by MoP to NEEPCO | Lower Subansiri | Yet to be allotted by the State for development |
| 1 | TOTAL | | | 660 | | | |

Summary of Hydro Power Development in Mizoram

I. Conventional Projects

| | | Nos. | I.C. (MW) |
|--|-----------------------|------|-----------|
| Exploitable Hydro Power Potential from Hydroelectric Projects (Projects having capacity above 25 MW) (2017-23 Study) | | 11 | 1926.7 |
| Breakup of Hydro Power Potential (2017-23 study) | | | |
| A | Projects in operation | 1 | 60 |
| B | Balance Capacity | 10 | 1866.7 |

II. Pumped Storage Projects

| | | Nos. | I.C. (MW) |
|--|------------------|------|-----------|
| Exploitable Hydro Power Potential from Pumped Storage Projects | | 4 | 5550 |
| Breakup of Hydro Power Potential from Pumped Storage Projects | | | |
| a | Balance Capacity | 4 | 5550 |

I. Conventional Projects

Details of Exploitable Hydro Power Projects

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

A. H.E. Projects in Operation:

| S. No. | Utility/Stations | River | Type (R/S/R(P)) | District | No. of units x Capacity (MW) | I.C. (MW) | Year of commissioning | Sector |
|---------------|----------------------|---------|-----------------|----------|------------------------------|-----------|-----------------------|--------|
| NEEPCO | | | | | | | | |
| 1 | TUIRIAL | TUIRIAL | S | KOLASIB | (2X30) | 60 | 2017 | Center |
| 1 | TOTAL MIZORAM | | | | | 60 | | |

B. Balance Capacity

| Sl.No. | Name of Project | River | Type | I.C.(MW) |
|-----------|-----------------|-------------|------|---------------|
| 1 | Lunglang | Tyao | S | 474 |
| 2 | Boinu | Boinu | S | 498 |
| 3 | Kaldan | Kaldan | S | 159 |
| 4 | Bhairabi | Dhaleshwari | S | 50 |
| 5 | Mat | Mat | S | 41.7 |
| 6 | Tlawng | Tlawng | S | 37 |
| 7 | Tuivawl | Tuivawl | R | 50 |
| 8 | Tuichang | Tuichang | S | 57 |
| 9 | Tuivai | Tuival | R | 140 |
| 10 | Kolodyne St-II | Kaldan | S | 360 |
| 10 | Total | | | 1866.7 |

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

II. Pumped Storage**Exploitable Hydro Power Potential from Pumped Storage Projets**

| Sl. No. | Name of project | I.C. (MW) | District |
|---------|-----------------|-------------|----------|
| 1 | Leiva Lui | 1500 | Aizawl |
| 2 | Tuiphai Lui | 1650 | Aizawl |
| 3 | Nghasih | 400 | Lunglai |
| 4 | Daizo Lui | 2000 | Lunglai |
| 4 | TOTAL | 5550 | |

a. Balance Capacity

| Sl. No | Name of Project | River | | I.C. (MW) | Agency | District | Remarks |
|--------|-----------------|-------------------|-------------------|-------------|----------------------------|----------|---|
| | | Upper Reservoir | Lower Reservoir | | | | |
| 1 | Leiva Lui | Pharsih river | Leiva Lui river | 1500 | Indicated by MoP to NEEPCO | Aizawl | Yet to be allotted by the State for development |
| 2 | Tuiphai Lui | Tuiphai Lui river | Tuikual Lui river | 1650 | Indicated by MoP to NEEPCO | Aizawl | Yet to be allotted by the State for development |
| 3 | Nghasih | Khawiva Lui river | Nghasih Lui river | 400 | Indicated by MoP to NEEPCO | Lunglai | Yet to be allotted by the State for development |
| 4 | Daizo Lui | Koladyne river | Daizolui river | 2000 | Indicated by MoP to SJVNL | Lunglai | Yet to be allotted by the State for development |
| 4 | TOTAL | | | 5550 | | | |