**Annex-II**

 **As on 28.2.2023**

**Hydro Electric Schemes concurred/ appraised by Central Electricity Authority**

**and yet to be taken up for construction**

| **S. No** | **Name of Scheme** | **State/UT** | **Sector** | **Developer** | **Installed Capacity (MW)** | **Date of CEA concurrence/ appraisal** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **CATEGORY-I: Pending due to Environment and Forest Clearance issues** |
| 1. **Environment Clearance received and Forest Clearance yet to be obtained**
 |
|  | Teesta St-IV | Sikkim | Central | NHPC | 520 | 13.05.10 | EC accorded on 09.01.14. FC-I accorded on 26.02.13. FC-II yet to be obtained.  |
|  | Tawang St-I  | Arunachal Pradesh | Central | NHPC | 600 | 10.10.11 | EC accorded on 10.6.11. FC-I & FC-II yet to be obtained. MOP vide letter dated 22.12.2021 indicated that Tawang-I HEP to be pursued by NEEPCO. |
|  | Tawang St-II | Arunachal Pradesh | Central | NHPC | 800 | 22.09.11 | EC accorded on 10.06.11. 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 8.01.14. FC-II yet to be obtained.MOP vide letter dated 22.12.2021 indicated that Tawang-II HEP to be pursued by NEEPCO. |
|  | Wah-Umiam Stage-III | Meghalaya | Central | NEEPCO | 85 | 26.07.21 | EC recommended by EAC on 26.02.2018.FC-I and FC-II yet to be obtained |
|  | Thana Plaun  | Himachal Pradesh | State | HPPCL | 191 | 07.09.21 | EC recommended by EAC subject to condition of Stage-I FC.FC-I and FC-II yet to be obtained |
|  | Kirthai-II | J&K | JV | CVPPL | 930 | 14.06.19 | EC recommended by MoEF&CC on 15.04.2021 and FC yet to be obtained by developer. 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 and 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. |
|  | Sawalkot | J&K | Central | NHPC | 1856 | 18.04.18 | EC recommended by EAC in its meeting dated 31.01.2017. Formal letter will be issued after FC-I. FC yet to be obtained. The project was handed over to NHPC vide MoU signed on 03.01.21.Transfer of Appraisal of Sawalkot HE Project from JKSPDC to NHPC and Extension of validity of Appraisal for further 3 years (i.e.beyond 18.04.2021 to 17.04.2024) was granted vide CEA letter dated 25.03.2022.  |
|  | Dugar | H.P. | Central | NHPC | 500 | 26.04.22 | EC recommended by EAC on 06.09.2022. FC yet to be obtained |
|  | Tato-II | Arunachal Pradesh | Central | NEEPCO | 700 | 22.05.2012 | 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. MOP vide letter dated 22.12.2021 indicated that Tato-II HEP will be pursued by NEEPCO. |
|  | **Sub Total** | **6182** |  |  |
| 1. **Both Environment and Forest Clearance yet to be obtained**
 |
|  | Hirong  | Arunachal Pradesh | -- | -- | 500 | 10.04.13 |  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 has been withdrawn/ cancelled vide GoAP letter dated 21.04.2021. Further, validity of Concurrence to project expired on 10.04.2016.MOP vide letter dated 22.12.2021 indicated that Hirong HEP to be pursued by NEEPCO. Govt. of Arunachal Pradesh has approved the allotment of Hirong HEP to NEEPCO Ltd. on 13.01.2023. MoA is yet to be signed |
|  | Naying  | Arunachal Pradesh | -- | -- | 1000 | 11.09.13 | EC & FC yet to be obtained by developer. Government of Arunachal Pradesh vide letter dated 09.07.201 informed CEA that alottment of Naying HEP to M/s. NDSCPL has been withdrawn/ cancelled vide GoAP letter dated 27.04.2021. Further, validity of Concurrence to project expired on 11.09.2019.MOP vide letter dated 22.12.2021 indicated that Naying HEP to be pursued by NEEPCO. Govt. of Arunachal Pradesh has approved the allotment of Naying HEP to NEEPCO Ltd. on 13.01.2023. MoA is yet to be signed. |
|  | Uri-I Stage-II HE Project | Jammu & Kashmir | Central | NHPC | 240 | 16.02.2023 | EC & FC yet to be obtained by developer. |
|  | **Sub Total** | **1740** |  |  |
| **(c) Environment and Forest Clearance Subjudice** |
|  | Kotlibhel Stage -IA | Uttarakhand | Central | NHPC | 195 | 03.10.06 | EC accorded on 09.05.2007. However, NHPC vide email dated 02.04.2021 informed that EC expired in May'2012.FC-I accorded on 13.10.2011 & for FC-II, Compliance Report is awaited from State Govt. However, NHPC vide email dated 02.04.2021 informed that FC-I expired in Oct'2016. NHPC vide Office Order dated 12.04.2021 has closed the Project w.e.f. 01.04.2021 The project is included in the list of 24 projects under review by Hon’ble Supreme Court. |
|  | Kotlibhel Stage-IB | Uttarakhand | Central | NHPC | 320 | 31.10.06 | EC accorded earlier on 14.08.07 is withdrawn on 15.09.2010. MoEF&CC declined FC-I on 07.07.11.The project is included in the list of 24 projects under review by Hon’ble Supreme Court.  |
|  | Alaknanda | Uttarakhand | Private | GMRL | 300 | 08.08.08 | EC accorded on 12.3.2008, FC-I accorded on 08.11.2011. FC-II accorded on 09.11.2012. The project is included in the list of 24 projects under review by Hon’ble Supreme Court. |
|  | **Sub total** | **815** |  |  |
|  | **Total (pending for E&F clearance)** | **8737** |  |  |
| **CATEGORY-II: Environment and Forest Clearance accorded and pending due to other reasons** |
|  | Nafra | Arunachal Pradesh | Central | NHPC | 120 | 11.02.11 | EC accorded on 19.08.2013. FC-I accorded on 12.07.2011 & FC-II accorded on 26.06.2012. MOP vide letter dated 22.12.2021 indicated that Nafre HEP will be pursued by NEEPCO. NEEPCO vide letter dated 10.01.2022 submitted updated hydrology chapter for vetting by CWC. NEEPCO vide letter dated 02.06.2022 (received on 03.06.2022) submitted PPS of Nafra HEP based on updated hydrology with incorporation of e-flow based on BSR for examination and vetting of CEA.Recommendation of HPA division on PPS chapter issued vide HPA letter dated 24.06.2022 for installed capacity of 95 MW. Developer vide letter dated 06.07.2022 has requested CEA to maintain installed capacity of 120 MW citing various reasons. HPA division vide letter dated 07.07.2022 requested developer to carry out commercial viability at 120 MW and submit proposal to CEA  |
|  | New Ganderwal | J&K | State | JKSPDC | 93 | 10.06.14 | EC restored on 9.10.15. FC accorded on 02.04.2012.Award of contract packages is under progress. PPA signed with State Government. Loan agreement to be signed with finances. |
|  | Turga PSP  | West Bengal | State | WBSEDCL | 1000 | 05.10.16 | EC accorded on 02.07.2018.FC-I accorded on 12.04.2018. FC-II accorded on 13.10.2022. Award of contract packages is under progress. Concurrence to Turga PSP has been extended for further 2 years i.e. up to 04.10.2024 vide HPA letter dated 04.11.2022 |
|  | **Total (pending for other reasons)** |  | **1213** |  |  |
| **CATEGORY-III: MoU/ MoA/ Implementation agreement cancelled/ terminated** |
|  | Chhatru | Himachal Pradesh | -- | -- | 126 | 15.01.15 | EC recommended by EAC on 24.02.15, Letter will be issued after FC-I. FC-I & FC-II yet to be obtained. Govt of Himachal Pradesh vide its letter dated 3.10.2019 has 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 |
|  | **Subtotal (MoU cancelled)** | **126** |  |  |
| **CATEGORY- IV: Validity of concurrence expired** |
|  | Lower Siang | Arunachal Pradesh | Private | JAVL | 2700 | 16.02.10 | EC & FC yet to be obtained by developer. 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  |
|  | Dikhu  | Nagaland | Private | NMPPL | 186 | 31.03.14 | EC yet to be obtained by developer. FC not applicable as forest land is not involved. |
|  | Demwe Lower  | Arunachal Pradesh | Private | ADPL | 1750 | 20.11.09 | EC accorded on 12.02.10. EC extended till 11.02.2023. FC-I accorded on 01.03.2012 and FC-II accorded on 03.05.2013. As per NGT order dated 24.10.17, NBWL issue to be reconsidered by MoEF&CC. 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. |
|  | Kalai-II | Arunachal Pradesh | Private | Kalai PPL | 1200 | 27.03.15 | EC accorded 20.5.15. Final order will be issued after obtaining FC-I.FC-I and FC-II yet to be obtained.Validity of Concurrence to the project expired on 27.03.2018. MOP vide letter dated 22.12.2021 indicated Kalai-II HEP to be pursued by THDC. |
|  | Heo  | Arunachal Pradesh | Private | HHPPL | 240 | 28.07.15 | EC accorded on 10.11.15. FC-I accorded on 27.10.15. FC-II yet to be obtained. Validity of Concurrence to the project expired on 29.07.2020. MOP vide letter dated 22.12.2021 indicated that Heo HEP to be pursued by NEEPCO. |
|  | Tato-I  | Arunachal Pradesh | Private | SHPPL | 186 | 28.10.15 | EC accorded on 10.11.15. FC-I accorded on 27.10.15. FC-II yet to be obtained. Validity of Concurrence to the project expired on 29.10.2020. MOP vide letter dated 22.12.2021 indicated that Tato-I HEP to be pursued by NEEPCO. |
|  | Miyar | Himachal Pradesh | Central | NTPC | 120 | 07.02.13 | EC accorded on 30.07.12. FC-I accorded on 27.07.12. FC-II yet to be obtained. An 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.  |
|  | Talong Londa  | Arunachal Pradesh | Private | GMR | 225 | 16.08.13 | EC accorded on 07.08.15. FC-I & FC-II yet to be obtained.MOP vide letter dated 22.12.2021 indicated that Talong Londa HEP to be pursued by NEEPCO. |
|  | Etalin | Arunachal Pradesh | Private | EHEPCL | 3097 | 12.07.13 | EC recommended by EAC on 31.01.17. Formal letter will be issued after FC-I. FC-I & FC-II yet to be obtained.MOP vide letter dated 22.12.2021 indicated that Etalin HEP to be pursued by SJVNL. |
|  | Attunli | Arunachal Pradesh | Private | AHEPCL | 680 | 02.07.18 | Both EC and FC are yet to be obtained.MOP vide letter dated 22.12.2021 indicated that Attunli HEP to be pursued by SJVNL. Validity of Concurrence to the project expired on 02.07.2021.  |
|  | **Subtotal (Concurrence expired)** | **10384** |  |  |
|  | **Grand Total** | **20460** |  |  |

**Note:** Ten projects namely **Tipaimukh** (1500 MW) in Manipur, **Kolodyne St-II** (460 MW) in Mizoram and **Gundia** (200 MW) in Karnataka, **Matnar** (60 MW) in Chhatisgarh, **Kotlibhel St-II** (530 MW) & **Pala Maneri** (480 MW) in Uttarakhand, **Chango Yangthang** (180 MW) in Himachal Pradesh **Rupsiyabagar Khasiyabara** (261 MW) in Uttarakhand , **Athirapilly HEP** (163 MW) in Kerala, **Nyamjangchu HEP** (780 MW) in Arunachal Pradesh and **Loktak Downstream** (66 MW) in Manipur are excluded from above list as schemes are dropped or likely to be dropped by Govt. of India. **Jalaput Dam Toe** (18 MW) of OPCL in Orissa is also excluded from the list as being small scheme.

Four projects namely **Tato-II HEP** (700 MW) in Arunachal Pradesh, **Siyom HEP** (1000 MW) in Arunachal Pradesh, **Dibbin HEP** (120 MW) in Arunachal Pradesh and **Devsari HEP** (252 MW) in Uttarakhand are excluded from above list as schemes are taken under survey and investigation.

One Project namely **Kynshi-I HEP** (270 MW) in Meghalaya is excluded from above list as schemes are to be revised.

Total capacity of these Hydro Electric Schemes is **7040 MW**.

 **Abbreviations**:

EC : Environment Clearance

FC : Forest Clearance

DPR : Detailed Project Report

BSR : Basin Study Report

EAC : Environment Appraisal Committee

NGT : National Green Tribunal

NBWL : National Board of Wildlife