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

| Sl. No. | Name of ProjectExecuting Agency Date of CEA clearance / Approval Capacity (MW)Broad FeaturesCost (original/latest)In Rs. Crores. | StateComm. Sch. (original/ Now Ant. | Broad Present Status / Critical Area | **Remarks/** **Critical issues** |
| --- | --- | --- | --- | --- |
| A | **Central Sector** |  |  |  |
| 1 | **Tehri PSS,** THDC, 18.7.06Nov-11 (Revised CCEA)4x250=1000 MW**Broad Features :**Surge Shaft: U/s – 2 nos. D/s – 2 nosPower House: U/GTRT: 2, Dia 9m and Lenghth 1070m & 1160mTurbine: VF reversible pump turbine**Cost:** Original: 1657.60 Latest**:**4835.60 (02/2019 PL)**Contractors**Turnkey : Alstom, France/ HCC | Uttara khand2010-112023-24(Dec’23) | Upstream (Tehri Dam) and Downstream (Koteshwar Dam), intake and Head Race Tunnels (2 Nos.) already completed alongwithTehri Stage-I works.**Widening of Upstream Surge Shaft-3&4 (Depth 140m each): ):** In USSS-3, shaft lining work is in progress. In USSS-4, ferrule erection in transition portion below surge shaft is in progress**Downstream Surge Shaft-3&4 (Depth 80.9 m each):**  Shaft lining work of 22.5 m completed in both surge shafts and further reinforcement & shuttering work is in progress. **Butterfly Valve Chamber (BVC 78X10X26m):** Excavation completed.**Penstock Assembly Chamber (PAC 95X12X19.30 m):** Excavation completed.**Upper Horizontal Penstocks (UHP):**  Excavation of UHP-5 to 8 has been completed .**Vertical Penstocks(4 Nos. each of Dia 6.1 m and 135 m depth):**  Widening of all Vertical Penstocks has been completed. Liner erection in Vertical Penstock-5, 6,7 & 8 is in progress .**Power House (203m x 28.20m x 56m size):** Excavation completed and erection of EM equipment is in progress in all 4 units. **Control Room:** All 9 slabs have been casted. Further, cleaning work is in progress and architectural works are being taken up.**Tail Race Tunnels- 3 & 4 (2406 m):**Excavation completed in both TRTs and concrete Invert & Overt lining also completed up to 2320 m and 2182 m respectively. Lining (invert 16 & overt) of all four limbs are completed. Concreting work in outlet structure is also in progress. **E&M Works:** Both EOT cranes have been commissioned in service bay .**Unit-5:** Rotor has been successfully lowered on 27.12.2022. Work of Installation of upper bracket is in progress.. •**Unit-6**: After lowering of Stator, turbine erection works are in progress..  **Unit-7** Draft tube cone lowered on 27.02.2023. Cleaning of stator and ventilation sheets of Rotor is in progress in service bay...**Unit-8:** Reinforcement/ shuttering of Slab at EL582.0m is in progress. |  |
| 2 | **Subansiri Lower**NHPC09.09.20038x250= 2000 MW(1000 MW in 12th Plan)**Broad Features :** Dam –116m High, concrete gravityHRT- 8 x 9.5m x 1145mPower House- SurfaceTurbine- FrancisSWYD- 16/400 kV**Cost:**Original: 6285.33 Latest**:19992.43** (01/20 PL)**Contractors**Civil : BGS-SGS-Soma JVHM : TexmacoE&M : Alstom | Arunachal PradeshAssam2009-11 2023-25(Jun’24) | ➢ Dam (116m high and 284m long):- Cumulative concreting of 1967560 cum has been done out of 20,56,804 cum (95.66 percent achieved).➢ HRT (Total length-7102 m, 9.5m diameter):-100% heading excavation, 100% benching excavation, 98.70 % concrete overt lining and 93.14 % Invert lining completed. ➢ Surge Tunnel (8 nos., 9.5 M dia, Horse Shoe):-Heading excavation 95.01% & benching excavation 74.95% completed. ➢ Pressure Shaft (8 nos. 9.5/8/7 dia.):- PS liner 74.64% completed. ➢ Power House (285m x 61m x 64m size):- Cumulative Power house concrete qty. achieved is 676904 cum out of 9,71,614 cum (69.67 percent achieved).➢ E&M Works are in progress.➢ HM Works: Erection of Diversion Tunnel Gates: Erected.Radial Gate: Erection of all 04 nos. Trunnion assemblies completed in 08 nos Spillway bays out of total 09 bays except S-4 bay. Erection of Sill Beam completed in S-1, S-2, S-3, S-5, S-7, S-8 and S-9 bays. Erection of wall plates, Skin plates and Arms of radial gates are under progress. Erection of Embedded parts of Spillway Bulkhead gate is in progress. Assembly of gate segments of Spillway Bulkhead gate is in progress. |  |
| 3 | **Naitwar Mori**SJVN Limited16.10.20172x30=60 MWBroad Features :Barrage: 30.5m heightHRT: 5.6m horse shoe, 4330m longPressure shaft: 4m dia, 109m longSurge shaft: 18m dia, 51.65m height**Cost :** Original: 648.33 (10/2016 PL) Latest : 947.89 including Transmission line (12/2020 PL) under approval**Contractors**Civil : JP AssociatesHM : GMWE&M : Voith | Uttara khand2021-222023-24(May’-23) | * **Barrage (30.5m high above deepest foundation, Length at top 48.9m ):-** Barrage excavation completed. Concreting:41123 cum (91%) out of 44950 cum completed. Desilting tank excavation & concreting completed..
* **HRT- (5.6m modified Horse Shoe Shape, 4329 m long):-** Excavation of HRT completed, Overt Lining:4288 m (99%) completed and invert Lining: 2875 (67%) completed.
* **Surge Shaft (18m dia, 50.28m height):**- Excavation and lining completed.
* **Pressure shaft (4.0m dia, 97.50 m long):**- Excavation completed and HM works in progress.
* **Power House (Underground 57.70m x 18.60m x 33.07m size):-** Civil works completed.
* **Tail Race Tunnel (D-shaped, 8.0m (W) x 8m(H), 235.62m long, TRC-6.0m(W)x5.75m(H), 60.39m long):**- Outfall structure completed. Tail race channel work is in progress.

**E&M works:** Erection of both units are in progress. Boxing up of unit-1 already done. Switchyard works in progress. Transmission line almost completed. | -Intake works & pressure shaft lines  |
| B | **State Sector** |  |  |  |
| 4 | VyasiUJVNL25.10.2011 (TEC)2x60= 120 MW**Broad Features:**Dam: Conc. GravityH- 86m L-207.2mHRT- Circular, 7m dia, 2.7Km long.Power House- SurfaceTurbine- VF.Switchyard: 220 Kv.**Cost:** Original: 936.23  Latest**:**1581.01**Contractors**Civil : Gammon / MPCCE&M : BHEL | Uttarakhand2014-152022-23(May,22) | Unit-2 and unit-1 have been commissioned w.e.f. 22.04.2022 and 24.05.2022 respectively. | -  |
| 5 | **Pallivasal**KSEB2x30= 60 MW31.01.2007**Broad Features:**HRT: 3.50m X 3396mSurge Shaft: 7.0m X 49mPressure Shaft: 2.50m X 1019.20mPenstock: 2.nos., 1161.20m each.Power House: SurfaceTurbine: PeltonS. Yard: 220kV – Single bus**Cost:** Original: 222.00  Latest: 550.00**Contractors**Single Package (Except Intake & balance Tunneling works)ESSAR – DEC – CPPL JV-M/s Bumi-Zillion JV(for Intake works & balance Tunneling works)-M/s Anchor structure-PSE-SSIPCJV, M/s. Shri Sarvasana Industries Pvt. Ltd. | Kerala2010-112023-24(Jun’23) | Contract for Civil &HM works has been terminated w.e.f. 13.09.18. Balance work has been re-tendered on the risk & cost of Contract, Subsequently balance works have been awarded to M/s. Sri Sarvasna Industries Pvt. Ltd. and M/s. DSE Anchor Structure.**Civil Works**: 95.52% completed. **HM Works**: 96.80% completed. **E&M Works**: 68.45% completed. **Intake structure**: intake structure completed except erection gate. Leading channel of Water conductor system replaced by cut & cover soil accordingly intake is shifted. **HRT**: Excavation 3347m/3347m completed. Overt conc. 3338.80m/3347m completed. **Invert conc**. 3338.80m/3347m completed. **Surge Tank/Forebay** : Excavation completed. Conc.843/843 cum. **Pressure Shaft**: Excavation - Completed. fabrication of steel Liner completed and crection of 1096/1906 m completed.**Surface penstock**: Excavation 122500/122600 cum. Concreting- 12850/12850 cum. **Fabrication of ferrule** completed, Erection completed. Power House: Excavation and Concreting completed. Tail race Channel (2 Nos.): Excavation & lining completed. **The overall progress achieved :- 90.60%.****The overall financial progress achieved :- 89.90%.** |  |
| 6 | **Thottiyar**KSEB1x30 + 1x10= 40 MW05.06.2008**Broad Features:**Weir: 222m Long 11 blocks 7.5m heightTunnel: Circular 2.6m dia 199m long.Power House: SurfaceTurbine : Vertical Pelton**Cost:** Original: 136.79  Latest**:**  280 **Contractors**Civil & HM : PRIL- Sri Sarvana Industries | Kerala2012-132023-24(Jun’23) | Original contract for Civil & HM works foreclosed without risk & cost of Contractor M/s. Coastal Project Ltd. -Civil & HM works re-awarded to M/s PRIL-Sri Sarvana Industries Pvt. Ltd. on 05.01.2018. KSEB decided to execute E&M works departmentally & tendering was awarded to M/s Fitwell.**Civil Works**:**Weir:** 80% works completed. All works expected to be completed by Feb’23.**Approach Channel & Intake**: 80% works completed.**Penstock, civil:** 89% overall works at penstock track completed.H&M: 100% fabrication and supply completed. 98% erection work completed **Power House:** 89% works completed.**Switchyard:** 97% works completed.**E&M Works:** 62% erection progress achieved.**Physical Progress 89%****Financial Progress 70%** |  |
| C | **Private Sector** |  |  |  |
| 7 | **Tidong-I**M/s Statkraft India Pvt. Ltd.3x50 = 150 MW28.07.2006**Broad Features:**HRT–D-3.5m L- 8461 m P.H. SurfaceTurbine –Vertical Pelton**Cost:** Original 543.15 Latest 1850**Contractors**Civil &HM : SCL Infratech / Himalaya E&M : Alstom | H.P.2013-142023-24(Dec-23) | **Barrage& River Diversion Works:** Common Excavation completed and 71700.84/73409.00 open cut rock excavation completed. 32144 cum out of 37159 cum concreting done.**Head Regulator & Desilting arrangement:** Common excavation completed. 9763 cum open cut rock excavation out of 10,000 cum completed. **HRT (8409m):** Excavation completed and 8164/8409 m lining concreting has been completed.**Surge Shaft:** Excavation completed. 10m out of 90m completed.**Pressure Shaft:** Excavation completed. 80% lining remaining.**Power house and Tail race channel**- 90% civil works completed. E&M works for unit –I & II about 90% completed. Unit-3 is initial stage of erection.The work of transmission line is critical due to forest land clearance for 17 towers out of 54 towers due to realignment of the transmission line. Overall about 60% works completed.Overall physical progress achieved is 85%.M/s Statkraft India Pvt Ltd has acquired the 100% equity of the project on 04.09.2018 | * Pressure shaft /Transmission Line critical.
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