**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(Oct’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):** Cumulative widening completed in a depth of 140 m in each.**Downstream Surge Shaft-3&4 (Depth 80.9 m each):** Widening of DSSS-3 & 4 has been completed. **Butterfly Valve Chamber (BVC 78X10X26m):** Excavation completed.**Penstock Assembly Chamber (PAC 95X12X19.30 m):** Excavation completed.**Upper Horizontal Penstocks (UHP):** Excavation is in progress.**Vertical Penstocks(4 Nos. each of Dia 6.1 m and 135 m depth):**  Liner erection in Vertical Penstock-5, 7 & 8 is in progress and after completing Step concreting in VP-6 liner erection of lower bend is being taken up.**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 1955 m and 1821 m respectively. Lining in all four TRT limbs from outlet side is also in progress. Concreting work in outlet structure is also in progress..**E&M Works:** Both EOT cranes have been commissioned in service bay .**Unit-5:** After lowering of Stator, Erection of Draft Tube Cone, Bottom ring, Runner and Upper labyrinth has been completed in the turbine pit. Both the segments of Head cover have been lowered in Turbine pit and assembly work is in progress. Rotor lowering is planned by 15.11.22. •**Unit-6**: Stator has been successfully lowered in generator pit on 20.08.22. Further, turbine assy. works are in progress.  **Unit-7**: Reinforcement of generator barrel wall is in progress.**Unit-8:** Reinforcement of Generator foundation 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** (04/17 PL)**Contractors**Civil : BGS-SGS-Soma JVHM : TexmacoE&M : Alstom | Arunachal PradeshAssam2009-11 2023-24 | ➢ Dam (116m high and 284m long):- Dam concreting 18.01 lac Cum (87.55%) out of 20.56 lac Cum & Intake concreting 276664 cum (99%) out of 279454 cum completed.➢ HRT (Total length-7102 m, 9.5m diameter):-100% heading excavation, 100% benching excavation, 96.75 % concrete overt lining and 69.84 % 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 63.26% completed. ➢ Power House (285m x 61m x 64m size):- Cumulative Power house concrete qty. achieved 343287 cum out of 512000 cum (67.05% achieved so far).➢ E&M Works are in progress.➢ HM Works: Erection of Diversion Tunnel Gates: Erected.Radial Gate: 23.53% work completed. |  |
| 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 (12/2020 PL) under apprroval**Contractors**Civil : JP AssociatesHM : GMWE&M : Voith | Uttara khand2021-222022-23(Jan’/Feb’-23) | * **Barrage (30.5m high above deepest foundation, Length at top 48.9m ):-** Barrage excavation completed. Concreting:39009 cum (87%) out of 44950 cum completed. Desilting tank excavation completed. Concreting: 57809 cum (92%) out of 63000 cum completed.
* **Diversion channel completed.**
* **HRT- (5.6m modified Horse Shoe Shape, 4329 m long):-** Excavation of HRT completed, Overt Lining:4171 m (96%) completed and invert Lining: 1925 (45%) completed.
* **Surge Shaft (18m dia, 50.28m height):**- Excavation completed and lining 50.10 m (99%) 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):-**100% excavation completed. Concrete/ lining & works in progress.
* **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 E&M components of both units are in progress. EOT crane is operational. | * Completion of Powerhouse/ Barrage

Completion of transmission line  |
| 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.**Intake structure:** Excavation completed.Leading channel of Water conductor system replaced by cut & cover/soil tunnel and accordingly intake is shifted.**HRT:** Excavation completed.Overt conc. 2941/3347 m completed.Invert Conc.. – 2400/3347 m completed.**SurgeTank / Forebay:** Excavation completed. Concreting.650/843 m3 completed.**Pressure Shaft:** Excavation completed. Fabrication of steel liner completed and erection of 1096/1096 m completed.**Surface penstock:** Excavation **–**12000/122600 m3. Concreting- 122800/12850 m3 and 1986m out of 2036m erection completed.**Power House:** Excavation & Concreting completed.Balance work from FACE II tunnel to Power House Contractor- M/s. Anchor Structurals**Tail race Channel (2 Nos.):** Excavation & lining completed. **E&M Works:** 75% supply completed, balance of E&M works –Tendering finalized.**The overall progress achieved :- 89%.** |  |
| 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 | Kerala2012-132022-23(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:** 70% completed 9 out of 11 block completed.**Approach Channel & Intake**: 4011 m3 excavation out of 9584 m3. done.**Power Tunnel**: Excavation & Concreting completed. Steel line fabrication and erection completed. **Penstock, Anchor, Rocker support:** - Excavation completed, Fabrication of penstock completed and erection is under progress. **Power House, switchyard & allied works**: 40283/43690 m3 excavation and 9670 /16209 m3 concreting completed.**E&M Works:** Tender for erection of supplied Electro/ Hydro Mechanical equipment for power house was awarded to M/s Fitwell. Work commenced on 10.07.2020 and at present 54% work have been completed.**Physical Progress 85%** |  |
| 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:** Original543.15 Latest 1472**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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