**Status of Under Execution Hydro Electric Projects (above 25 MW) programmed to be commissioned during the year 2021-22 in the Country**

| Sl. No. | Name of Project  Executing Agency  Date of CEA clearance / Approval  Capacity (MW)  Broad Features  Cost (original/latest)  In Rs. Crores. | State  Comm. Sch. (original/ Now Ant. | Broad Present Status / Critical Area | **Remarks/**  **Critical issues** |
| --- | --- | --- | --- | --- |
|  | **State Sector** |  |  |  |
| 1 | **Pallivasal**  KSEB  2x30= 60 MW  31.01.2007  **Broad Features:**  HRT: 3.50m X 3396m  Surge Shaft: 7.0m X 49m  Pressure Shaft: 2.50m X 1019.20m  Penstock: 2.nos., 1161.20m each.  Power House: Surface  Turbine: Pelton  S. 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. | Kerala 2010-11  2021-22  (Dec,21) | **Intake structure:** Excavationcompleted.  Leading channel of Water conductor system replaced by cut & cover/soil tunnel and accordingly intake is shifted.  **HRT:** Excavation **–**3347/3347 m completed.  Overt conc. 1808/3347 m completed.  Invert Conc.. – 1675/3347 m completed.  **SurgeTank / Forebay:** Excavationcompleted. Concreting.423/843 m3 completed.  **Pressure Shaft:** Excavation completed. Fabrication of steel liner completed and erection of 906/1096 m completed.  **Surface penstock:** Excavation **–**112800/122600 m3. Concreting- 123800/12850 m3 and 1923m out of 2036m erection completed.  **Power House:** Excavation & Concreting completed.  **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 :- 89.65%. | * Poor Geology * Contractual Issues   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. Tender for Erection of Supplied Electro Hydro Mechanical Equipment & Supply and Erection of BoP equipment is under progress. |
| 2 | **Thottiyar**  KSEB  1x30 + 1x10= 40 MW  05.06.2008  **Broad Features:**  Weir: 222m Long 11 blocks 7.5m height  Tunnel: Circular 2.6m dia 199m long.  Power House: Surface  Turbine : Vertical Pelton  **Cost:** Original: 136.79  Latest**:**  280  **Contractors**  Civil & HM : PRIL- Sri Sarvana Industries | Kerala2012-13 2021-22  (Dec,21) | **Civil Works**:  **Weir:** 4506 m3 excavation out of 10208 m3 & 6362.59 m3 concreting out of 10928 m3 completed.  **Approach Channel & Intake**: 3909.00 m3 excavation out of 9584 m3. done.  **Power Tunnel**: Excavation completed & Concreting 272.00 m3 Out of 615 m3 completed. Steel line fabrication 22.5 MT and erection 3 MT out of 27 MT completed.  **Penstock, Anchor, Rocker support:** - Excavation 32391 m3 out of 37839.37 m,3. concreting 4398 m3 out of 12082 m3 completed, Fabrication of penstock 1804 MT out of 2286.32MT completed and erection 401 out of 2341 MT completed.  **Power House, switchyard & allied works**: 39258/43690 m3 excavation and 7845 /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 28% work have been completed.  Over all Progress of the project is around 66% and it is expected that the project can be commissioned by Dec,21. | -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. |
|  | **Private Sector** |  |  |  |
| 3 | **Sorang**  Himachal Sorang Power corporation Ltd.  June, 2006/  2x50= 100 MW  **Broad Features:**  HRT- 1.5 km  Trench Weir-59 m  P.House- underground  Turbine- Pelton  Gross Head-626 m  SWYD- 11/400 kV (GIS)  **Cost:** Original: 586.00  Latest**:** 586.00  **Contractors**  Civil & HM : NCC – Maytas – SS JV  E&M : Voith Siemens | H.P.  2011-12  2021-22  (Aug-21) | All Civil Works completed.  Both the units are boxed up. During the filling of water conductor system in 1st week of Nov., 2013, leakage occurred in penstock due to cracks. Rectification work completed in April, 2015. Unit #1 synchronized with grid on 30.10.2015, however, could not be commissioned due to non-availability of rated discharge.  On 18-11-2015 when Unit # 2 was under trial run, there was rupture in the surface penstock pipe. The incidence caused loss of lives and property.  The rectification work is under progress. Land acquisition for new alignment of Penstock & other infrastructure is completed.  Fabrication of Ferrules under progress. | - Repair of penstock work  -Arrangement of funds to carry out repair works. |
| 4 | **Bajoli Holi**  M/s GMR Bajoli Holi Hydro Power Pvt. Limited  31.12.2011  3x60= 180 MW  **Broad Features**  Dam Height-66 M  Dam Length-178 M  Desilting Chamber- 2 Nos.  240 Mx14.5 MX 10.8 M  HRT- Length-15.538 Km., 5.6 M dia  P.H. –Surface  **Cost:** Original 1696.93  Latest 2689.00  **Contractors**  Civil & HM : Gammon  E&M : Alstom/ GE | H.P.  2018-19  2021-22  (Sept,21) | **Civil Works:** 99% works completed.  **Dam**: Excavation completed. Concreting 98.5% completed.  **HRT:** Excavation and lining completed.  **Surge Shaft:** Excavation and Lining completed.  **Pressure shaft**: Excavation completed. Lining-2070MT / 2440MT completed.  **Power house**: Excavation completed and concreting almost completed.  **HM Works:** 89% works completed.  **E&M Works:** 92% works completed. | -Slow progress of works  -Poor approach roads  -Power evacuation system is critical.  - Due to excessive snowfall on 6th & 7th Feb 2019, in the entire region up to Chamba, access roads got severely damaged. Power Supply remained completely cut off to the entire region during 6th ~25th Feb 2019. |