Annexure-II

## Status of Under Execution Hydro Electric Projects (above 25 MW) in the Country as per Hydro Capacity Addition Programme for 2019-20

As on 31.10.2019

SI. No.	Name of Project Executing Agency Date of CEA clearance / Approval Capacity (MW) Broad Features Cost (original/latest) In Rs. Crores.	<u>State</u> <u>Comm.</u> <u>Sch.</u> (original/ Now Ant.	Broad Present Status / Critical Area	Remarks/ Critical issues
1.	Central Sector Kameng NEEPCO 02 12 2004 4x150 = 600 MW Broad Features: Dam :Bichom-69m High, 247.3m long. Tenga – 24.4 High, 103m long. HRT- 6.7m dia, 14.45 km. High Pressure Tunnel (HPT)Total length 3.64 km Surge Shaft: 25m dia, 70m Height P.House- semi-U/G Turbine- Francis Cost: Original: 2496.90 Latest: 7927.34 Contractors Civil : Patel HM : Om Metals & JSC JV	Arunachal <u>Pradesh</u> <u>2009-10</u> 2019-21 (Jun'20)	<ul> <li>All major works related to commissioning of project completed.</li> <li>All Units Boxed up.</li> <li>Leakage observed in penstocks during water filling in March, 2018. Thereafter, complete NDT of all joints of pressure shaft / penstock is in progress along with rectification of defects.</li> <li>Progress of Rectification :-</li> <li>Penstock-1 :- <ul> <li>Rectification / Repair works completed &amp; water filling is in progress.</li> </ul> </li> <li>Penstock -2 : <ul> <li>i) Repair Welding of WELD DEFECT 1134 RM completed out of 4298 RM.</li> <li>ii) Repair Welding of OFFSETS:- 783 RM completed out of 873.85 RM.</li> <li>Two units are scheduled to be commissioned in November/ December, 2019 &amp; two units in June, 2020.</li> </ul> </li> </ul>	Rectification / repair works of penstock 2 to be expedited by M/s. Om Metals / NEEPCO.
	E&M : BHEL State Sector			
2.	UhI-III Beas Valley Power Corporation Ltd. (HPSEB) 19.09.02 / (TEC -2x50 MW) 3x33.3 =100 MW (Revised vide HPSEB letter dt. 19.01.07. Broad Features: HRT-4.15m x 8.47 km S.Shaft- 13m x 57m Penstock- 3.4m x 1860m P.House- Surface Turbine- V. Francis Cost: <u>Original: 431.56</u> Latest: 1281.52 <u>Contractors</u> Civil : Continental / Abir HM : PES E&M : BHEL	<u>H.P.</u> 2006-07 2019-20 (Mar'20)	All works completed. During Hydro Static pressure Test of Penstock some leakage was observed. Repair work is in progress. Project is Programmed to be commissioned by March, 2020.	
3.	Sawra Kuddu H.P. Power Corpn. Ltd. Clearance: 10.11.2004 3x37= 111 MW Broad Features: Diversion Structure:	<u>H.P.</u> <u>2011-12</u> 2019-20 (Mar,20)	All works related to commissioning of the project completed except completion of HRT. In HRT, 2 Adit plugs are balance. The balance works is scheduled to be completed shortly and project is likely to be commissioned by March, 2020.	

	Name of Project	State	Broad Present Status / Critical Area	Remarks/
SI. No.	Executing Agency Date of CEA clearance / Approval Capacity (MW) Broad Features Cost (original/latest) In Rs. Crores.	<u>Comm.</u> <u>Sch.</u> (original/ Now Ant.		Critical issues
	10.45m high Piano Key Weir. HRT- D-Shaped, 5m dia, 11.145Km long. Power House- Under ground Turbine- 500 rpm VF. Switchyard: 220 Kv. <b>Cost:</b> <u>Original: 558.53</u> Latest: 1181.90 <u>Contractors</u> Civil & HM : HCC / Patel E&M : Andritz			
	Private Sector			
4.	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: <u>Original: 586.00</u> Latest: 586.00 Contractors Civil & HM : NCC – Maytas – SS JV E&M : Voith Siemens	<u>H.P.</u> <u>2011-12</u> 2019-20 (Mar-20) (Critical)	All Civil Works completed. Both the units are boxed up. During the filling of water conductor system in 1 <sup>st</sup> 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.	<ul> <li>Repair of penstock work</li> <li>Arrangement of funds to carry out repair works.</li> </ul>
5.	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: <u>Original 1696.93</u> Latest 2205.00 <u>Contractors</u> Civil & HM : Gammon E&M : Alstom/ GE	<u>H.P.</u> 2018-19 2019-20 (Mar,20) (Critical)	Civil Works: 86% works completed. Dam: Excavation completed. Concreting 1,36,844 cum out of 2,10,000 cum completed. HRT: 15.605 km excavation out of 16km completed. 6.485 km lining out of 15.9 km completed. Surge Shaft: Excavation completed. Lining-3300/5200 cum completed. Pressure shaft: Excavation completed. Lining-664MT / 2440MT completed. Power house: Excavation completed. 37926 cum out of 40265 cum concreting done. HM Works: 65% works completed. E&M Works: 73% works completed.	-Slow progress of works -Poor approach roads -Power evacuation system is critical. - Due to excessive snowfall on 6 <sup>th</sup> & 7 <sup>th</sup> 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 6 <sup>th</sup> ~25 <sup>th</sup> Feb 2019.
6.	Singoli Bhatwari M/s L&T 11.07.2008 3x33 MW = 99 MW Broad Features: Barrage-FRL 1017 m, MDDL 1009 m, Barrage Top 1020m	<u>Uttara</u> <u>khand</u> 2012-13 2019-20 (Mar,20) (Critical)	<ul> <li>Dam &amp; Dykes/Barrage: Excavation almost completed and concreting 66169 out of 70220 cum completed.</li> <li>HRT: Excavation completed</li> <li>Overt Concrete Lining 9697m out of 11257m completed.</li> <li>Invert Lining: 9697 m out of 11257m completed.</li> <li>Pressure Shaft:: Excavation completed.</li> <li>Power House: Excavation completed &amp; concreting 29365cum out of 29959cum completed.</li> </ul>	<ul> <li>Works severely affected due to flash floods in June, 2013.</li> <li>HRT Critical</li> </ul>

SI. No.	Name of Project Executing Agency Date of CEA clearance / Approval Capacity (MW) Broad Features Cost (original/latest) In Rs. Crores.	<u>State</u> <u>Comm.</u> Sch. (original/ Now Ant.	Broad Present Status / Critical Area	Remarks/ Critical issues
	HRT- 4.65m dia & 11.870m length Surge Shaft-10 m dia & 102.85 m length Pressure Shaft-One, 3.80m dia & 358m length Penstock- 3 Nos., 2.20 m dia & 34m, 42m, 48m long. P. House-Surface Turbine-Vertical Francis TRT- Open Channel, 650m length <b>Cost :</b> <u>Original : 666.47</u> Latest:1694.00(PL-2018) <u><b>Contractors</b></u> Civil : L&T HM : General Mechanical Works E&M : Voith		Surge Tank: Excavation completed. 4113.93cum out of 5349cum concreting completed. E&M Works: Boxing up of Unit#1 completed & Boxing up of Unit#2&3 is in progress.	