

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.4263
TO BE ANSWERED ON 19.03.2020**

POWER GENERATION

4263. ADV. ADOOR PRAKASH:

**Will the Minister of POWER
be pleased to state:**

- (a) the share of hydro-electric projects in the total power generation of the country;**
- (b) the details of major hydro power projects alongwith the capacity and actual power generation during the last three years, State-wise;**
- (c) whether any study has been conducted on the capacity and utilization of hydro-electric projects and if so, the details thereof, State-wise;**
- (d) the number of proposals for new hydro-electric projects pending for approval and the details of the same, State-wise; and**
- (e) the details of hydro-electric power projects to be commissioned along with the present status, State-wise?**

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) : The share (%) of generation from hydro-electric projects (above 25 MW) in the total power generation of the country during the current year up to February 2020 is 11.49%.

(b) : State-wise details of hydro power projects and generation of 25 MW & above capacity during the last three years & the current year (Up to Feb.2020) is enclosed at Annexure- I.

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(c) : **No, Sir. However, Capacity Utilization Factor (CUF) of hydroelectric projects depends on factors like rainfall and snowfall during the year, operational constraints due to silt, planned and forced outages etc. CUF in the case of run-of-the-river hydroelectric projects with pondage is around 45%, while for storage based hydroelectric projects, it is around 32-35%. The overall CUF of hydroelectric projects (above 25 MW) for the year 2018-19 was around 34%. State-wise details of CUF for the year 2018-19 is enclosed at Annexure-II.**

(d) : **5 Detailed Project Reports (DPRs) of hydroelectric projects with an aggregate installed capacity of 1116 MW are presently under examination in Central Electricity Authority / Central Water Commission/ Geological Survey of India / Central Soil and Materials Research Station and Ministry of Jal Shakti (erstwhile MoWR, RD & GR) for concurrence. State-wise details of these projects are as under:**

Sl. No.	Scheme	Executing Agency	Installed Capacity (MW)
Uttarakhand			
1.	Bowala Nand Prayag	Uttarakhand Jal Vidyut Nigam Limited	300
2.	Goriganga-IIIA	National Hydro-electric Power Corporation	150
Jammu & Kashmir			
3.	Kirthai-I	Jammu & Kashmir State Power Development Corporation	390
Himachal Pradesh			
4.	Thana Plaun	Himachal Pradesh Power Corporation Ltd.	191
Meghalaya			
5.	Wah-Umiam Stage-III	North Eastern Electric Power Corporation Limited	85
TOTAL (MW)			1116

(e) : **Presently, 38 Hydro Electric Projects (above 25 MW) aggregating to 12973.5 MW are under construction in the Country. The State-wise details of these Projects are given at Annexure-III.**

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 4263 TO BE ANSWERED IN THE LOK SABHA ON 19.03.2020.

State-wise / Station-wise Generation for last three years and current year

Name of the Station	Monitored Capacity as on 29.02.2020 (MW)	Generation (Mus)			
		2019-20 (upto-Feb. 20) *	2018-19	2017-18	2016-17
NORTHERN REGION					
HIMACHAL PRADESH					
ALLAIN DUHANGAN HPS	192.00	745.46	582.23	683.01	679.12
BAIRA SIUL HPS	180.00	284.03	366.67	641.73	669.33
BASPA HPS	300.00	1324.14	1275.58	1336.65	1342.75
BASSI HPS	66.00	312.15	251.56	315.17	297.76
BHAKRA HPS				5134.02	5168.27
BHAKRA LEFT HPS	594.00	2566.37	2248.69		
BHAKRA RIGHT HPS	785.00	3256.92	1989.50		
BUDHIL HPS	70.00	275.27	288.08	317.63	261.25
CHAMERA- I HPS	540.00	2485.03	2484.56	2344.08	2224.39
CHAMERA- II HPS	300.00	1173.83	1508.02	1487.11	1443.93
CHAMERA-III HPS	231.00	1010.14	1043.42	1068.05	917.09
CHANJU-I HPS	36.00	161.55	137.44	79.42	11.29
DEHAR H P S	990.00	3217.13	3226.30	3086.24	3184.68
GIRI BATA HPS	60.00	205.78	214.45	169.94	140.60
KARCHAM WANGTOO HPS	1000.00	4524.56	3968.69	4569.93	4372.29
KASHANG INTEGRATED HEP	195.00	189.16	118.24	197.13	56.09
KOLDAM	800.00	3338.93	3013.93	3313.62	3225.16
LARJI HPS	126.00	640.67	593.86	612.36	611.66
MALANA HPS	86.00	360.56	320.55	346.29	353.79
MALANA-II HPS	100.00	396.75	349.39	368.89	366.54
NATHPA JHAKRI HPS	1500.00	7217.71	6507.15	7207.73	7050.64
PARBATI-II HPS	0.00	0.00	0.00	0.00	
PARBATI-III HPS	520.00	674.96	608.30	710.53	682.48
PONG H P S	396.00	1290.77	1512.56	1641.57	1369.93
RAMPUR HPS	412.02	2030.99	1828.76	2015.00	1960.42
SAINJ HPS	100.00	329.82	408.81	134.99	0.00
SANJAY HPS	120.00	575.89	589.42	493.39	187.40
SAWRA KUDDU HPS	0.00	0.00			
SHANAN HPS	110.00	535.03	472.39	508.52	472.88
SORANG HPS	0.00	0.00	0.00	0.00	0.00
TIDONG HPS	0.00	0.00	0.00	0.00	0.00
UHL-III HPS	0.00	0.00	0.00	0.00	0.00
HIMACHAL PRADESH Total	9809.02	39123.60	35908.55	38783.00	37049.74
JAMMU AND KASHMIR					
BAGLIHAR HPS	450.00	2394.62	2291.15	2506.71	2184.56
BAGLIHAR II HPS	450.00	1909.97	1857.91	1821.95	1758.98
CHUTAK HPS **	44.00	94.48	48.96	45.72	44.12
DULHASTI HPS	390.00	1962.96	2273.38	2343.86	2280.02
KISHANGANGA HPS	330.00	820.38	529.25	1.68	0.00
LOWER JHELUM HPS	105.00	501.27	589.33	480.99	483.15
NIMMO BAZGO HPS **	45.00	156.96	105.55	98.83	95.21
SALAL HPS	690.00	3755.90	3412.55	3247.09	3423.09
SEWA-II HPS	120.00	560.43	498.32	506.39	470.61
UPPER SINDH-II HPS	105.00	216.45	305.97	327.24	362.91
URI-I HPS	480.00	3049.52	3048.29	2349.66	2803.10
URI-II HPS	240.00	1613.77	1580.92	1207.44	1471.94
JAMMU AND KASHMIR Total	3449.00	17036.71	16541.58	14937.56	15377.69
PUNJAB					
ANANDPUR SAHIB HPS				647.81	673.87
ANANDPUR SAHIB-I HPS	67.00	297.90	390.79		
ANANDPUR SAHIB-II HPS	67.00	294.00	36.99		
GANGUWAL HPS	77.65	563.75	599.37	494.09	416.54
KOTLA HPS	77.65	570.61	609.60	508.22	430.58
MUKERIAN HPS				1270.76	1083.51
MUKERIAN-I HPS	45.00	921.02	1175.44		

MUKERIAN-II HPS	45.00	43.75	19.20		
MUKERIAN-III HPS	58.50	55.21	24.66		
MUKERIAN-IV HPS	58.50	54.44	24.83		
RANJIT SAGAR HPS	600.00	1993.71	1454.52	1803.42	1306.08
PUNJAB Total	1096.30	4794.39	4335.40	4724.30	3910.58
RAJASTHAN					
JAWAHAR SAGAR HPS	99.00	278.75	247.00	261.10	307.55
MAHI BAJAJ HPS				180.17	209.66
MAHI BAJAJ-I HPS	50.00	153.40	99.76		
MAHI BAJAJ-II HPS	90.00	54.38	17.32		
R P SAGAR HPS	172.00	54.53	334.32	378.26	448.78
RAJASTHAN Total	411.00	541.06	698.40	819.53	965.99
UTTAR PRADESH					
KHARA HPS	72.00	320.33	286.14	259.14	268.93
MATATILA HPS	30.60	63.00	97.48	93.81	122.68
OBRA HPS	99.00	173.12	231.03	299.96	216.71
RIHAND HPS	300.00	414.45	561.71	833.78	567.24
UTTAR PRADESH Total	501.60	970.90	1176.36	1486.69	1175.56
UTTARAKHAND					
CHIBRO (YAMUNA) HPS	240.00	897.34	809.53	783.57	714.00
CHILLA HPS	144.00	725.06	632.41	811.66	769.35
DHAKRANI HPS	33.75	157.75	147.48	129.68	120.19
DHALIPUR HPS	51.00	204.95	219.99	186.71	180.40
DHAULI GANGA HPS	280.00	1286.80	1106.21	1153.16	956.13
KHATIMA HPS	41.40	218.59	232.25	212.60	180.14
KHODRI HPS	120.00	399.34	369.68	355.75	333.29
KOTESHWAR HPS	400.00	1105.46	1223.84	1220.33	1224.55
KULHAL HPS	30.00	140.77	146.55	123.97	122.20
MANERI BHALI - I HPS	90.00	335.47	430.40	394.77	349.22
MANERI BHALI - II HPS	304.00	1317.40	1302.34	1276.65	1251.71
RAMGANGA HPS	198.00	142.93	188.14	250.64	180.94
SHRINAGAR HPS	330.00	1480.70	1375.31	1382.54	1280.75
TANAKPUR HPS	94.20	527.10	452.89	459.74	430.29
TEHRI ST-1 HPS	1000.00	2809.49	3172.08	3080.94	3146.32
VISHNU PRAYAG HPS	400.00	1954.52	1932.02	2160.90	2042.05
UTTARAKHAND Total	3756.35	13703.67	13741.12	13983.61	13281.53
NORTHER REGION Total	19023.27	76170.33	72401.41	74734.69	71761.09
WESTERN REGION					
CHHATTISGARH					
HASDEOBANGO HPS	120.00	226.14	243.08	178.07	153.76
CHHATTISGARH Total	120.00	226.14	243.08	178.07	153.76
GUJARAT					
KADANA HPS	240.00	447.20	237.39	308.92	339.01
S SAROVAR CHPH HPS	250.00	839.80	594.84	562.86	876.34
S SAROVAR RBPH HPS	1200.00	3093.16	0.00	376.61	2332.87
UKAI HPS	300.00	715.82	210.58	303.53	395.66
GUJARAT Total	1990.00	5095.98	1042.81	1551.92	3943.88
MADHYA PRADESH					
BANSAGAR TONS-I HPS	315.00	1160.33	578.35	545.37	1239.02
BANSAGAR-II HPS	30.00	84.55	37.09	56.12	109.73
BANSAGAR-III HPS	60.00	138.90	85.32	68.80	53.48
BARGI HPS	90.00	345.02	356.19	159.05	445.47
GANDHI SAGAR HPS	115.00	33.81	249.88	351.38	351.00
INDIRA SAGAR HPS	1000.00	2643.92	1308.79	881.76	3320.79
MADHIKHERA HPS	60.00	128.79	88.99	22.52	147.21
MAHESHWAR HPS	0.00	0.00	0.00	0.00	0.00
OMKARESHWAR HPS	520.00	1177.54	612.04	443.60	1427.70
RAJGHAT HPS	45.00	82.72	80.02	58.21	62.26
MADHYA PRADESH Total	2235.00	5795.58	3396.67	2586.81	7156.66
MAHARASHTRA					
BHANDARDHARA HPS ST-II	34.00	15.85	56.44	42.55	47.12
BHIRA HPS	150.00	328.79	351.02	341.17	379.14
BHIRA PSS HPS	150.00	467.26	558.77	551.13	572.49
BHIRA TAIL RACE HPS	80.00	90.06	94.57	97.15	101.58
BHIVPURI HPS	75.00	298.45	315.90	307.20	206.59
GHATGHAR PSS HPS	250.00	135.33	192.98	152.83	383.87
KHOPOLI HPS	72.00	310.43	342.49	316.38	307.24
KOYNA DPH HPS	36.00	130.43	196.18	135.15	156.02
KOYNA-I HPS				517.92	640.51

KOYNA-I&II HPS	600.00	1137.46	1024.61		
KOYNA-II HPS				533.30	649.70
KOYNA-III HPS	320.00	671.49	480.65	498.91	614.14
KOYNA-IV HPS	1000.00	1573.64	1066.51	945.47	1245.48
PENCH HPS	160.00	213.13	131.61	159.53	360.14
TILLARI HPS	60.00	101.43	110.96	57.81	106.16
VAITARNA HPS	60.00	73.49	154.17	204.62	153.52
MAHARASHTRA Total	3047.00	5547.24	5076.86	4861.12	5923.70
WESTERN REGION Total	7392.00	16664.94	9759.42	9177.92	17178.00
SOUTHERN REGION					
ANDHRA PRADESH					
LOWER SILERU HPS	460.00	756.38	1094.06	1109.77	831.90
NAGARJUN SGR TPD	50.00	78.26	49.92	42.13	7.35
NAGARJUN SGR RBC HPS	90.00	102.83	101.55	59.73	4.15
SRISAILAM HPS	770.00	1293.54	551.07	574.95	640.61
UPPER SILERU HPS	240.00	561.09	476.34	482.22	340.41
ANDHRA PRADESH Total	1610.00	2792.10	2272.94	2268.80	1824.42
KARNATAKA					
ALMATTI DPH HPS	290.00	618.69	408.42	441.58	404.05
BHADRA HPS	26.00	67.02	55.21	15.69	27.06
GERUSUPPA HPS	240.00	520.86	525.67	280.89	276.60
GHAT PRABHA HPS	32.00	40.06	80.67	48.37	48.74
HAMPI HPS	36.00	53.86	19.21	36.26	0.10
JOG HPS	139.20	267.64	194.44	191.48	288.25
KADRA HPS	150.00	430.91	375.85	192.91	176.42
KALINADI HPS	855.00	3157.84	2777.85	1537.28	1344.82
KALINADI SUPA HPS	100.00	538.89	596.16	290.98	239.20
KODASALI HPS	120.00	419.17	345.56	170.94	154.16
LIGANAMAKKI HPS	55.00	267.89	252.53	125.55	105.64
MUNIRABAD HPS	28.00	78.10	89.42	51.38	31.49
SHARAVATHI HPS	1035.00	4593.04	4786.18	2722.35	2708.77
SIVASAMUNDRUM HPS	42.00	251.84	284.19	176.81	145.14
T B DAM HPS	36.00	140.39	152.54	97.71	81.16
VARAHI HPS	460.00	1094.00	1243.79	762.44	740.75
KARNATAKA Total	3644.20	12540.20	12187.69	7142.62	6772.35
KERALA					
IDAMALAYAR HPS.	75.00	231.27	345.50	256.26	171.72
IDUKKI HPS.	780.00	1664.11	2920.43	1611.06	1380.06
KAKKAD HPS.	50.00	162.66	221.66	159.88	131.68
KUTTIYADI HPS.	75.00	191.10	233.75	430.12	327.24
KUTTIYADI ADDL. EXTN.	100.00	285.08	332.21	170.94	151.48
KUTTIYADI EXTN. HPS.	50.00	74.88	127.42		
LOWER PERIYAR HPS.	180.00	407.43	525.18	507.74	307.23
NARIAMANGLAM HPS	45.00	294.59	377.85	310.60	197.30
PALLIVASAL HPS.	37.50	130.43	185.25	188.39	166.05
PANNIAR HPS.	30.00	120.27	114.59	129.47	62.33
PORINGALKUTTU HPS.	32.00	97.03	94.60	116.74	91.10
SABARIGIRI HPS.	300.00	1015.50	1516.40	968.46	798.79
SENGULAM HPS.	48.00	142.46	122.98	144.91	115.66
SHOLAYAR HPS.	54.00	190.17	202.39	204.69	166.85
KERALA Total	1856.50	5006.98	7320.21	5199.26	4067.49
TAMIL NADU					
ALIYAR HPS.	60.00	62.77	48.57	90.08	61.73
BHAWANI BARRAGE-II HPS	30.00	57.76	77.16	37.62	19.83
BHAWANI BARRAGE-III HPS	30.00	35.87	34.06	0.00	17.47
BHAWANI KATTAL	30.00	62.64	70.21	16.96	20.59
KADAMPARI HPS.	400.00	326.67	434.75	384.36	289.39
KODAYAR HPS.				123.98	169.43
KODAYAR-I HPS.	60.00	113.78	144.11		
KODAYAR-II HPS.	40.00	45.07	49.97		
KUNDAH HPS.				806.23	815.61
KUNDAH-I HPS.	60.00	219.29	270.77		
KUNDAH-II HPS.	175.00	608.24	678.67		
KUNDAH-III HPS.	180.00	367.13	397.66		
KUNDAH-IV HPS.	100.00	158.08	172.05		
KUNDAH-V HPS.	40.00	70.55	89.84		
LOWER METTUR HPS.				131.95	92.27
LOWER METTUR-I HPS.	30.00	65.72	69.66		

LOWER METTUR-II HPS.	30.00	63.69	31.68		
LOWER METTUR-III HPS.	30.00	61.69	65.27		
LOWER METTUR-IV HPS.	30.00	48.58	53.70		
METTUR DAM HPS.	50.00	136.13	147.96	52.24	44.75
METTUR TUNNEL HPS.	200.00	372.03	440.59	163.32	80.73
MOYAR HPS	36.00	115.86	161.99	94.40	61.52
PAPANASAM HPS.	32.00	98.08	120.91	115.28	66.54
PARSON'S VALLEY HPS.	30.00	18.70	45.94	27.11	23.95
PERIYAR HPS.	161.00	502.07	703.00	287.10	93.91
PYKARA HPS.	59.20	17.90	22.05	0.98	12.74
PYKARA ULTMATE HPS.	150.00	338.04	507.96	274.11	192.55
SARKARPATHY HPS.	30.00	101.16	129.65	85.46	63.29
SHOLAYAR HPS (TN)	70.00	290.40	220.86	157.73	228.11
SURULIYAR HPS.	35.00	113.59	92.55	70.69	42.71
TAMIL NADU Total	2178.20	4471.49	5281.59	2919.60	2397.12
TELANGANA					
LOWER JURALA HPS	240.00	317.97	153.31	205.90	176.34
NAGARJUN SGR HPS	815.60	1511.36	338.82	184.49	186.15
NAGARJUN SGR LBC HPS	60.00	97.93	53.30	12.80	0.00
POCHAMPAD HPS	36.00	39.04	31.70	35.69	75.29
PRIYADARSHNI JURALA HPS	234.00	321.74	165.00	217.40	211.99
PULICHINTALA HPS	120.00	202.50	17.30	6.60	13.00
SRISAILAM LB HPS	900.00	1928.61	985.18	829.10	617.22
TELANGANA Total	2405.60	4419.15	1744.61	1491.98	1279.99
SOUTHERN REGION Total	11694.50	29229.92	28807.04	19022.26	16341.37
EASTERN REGION					
JHARKHAND					
PANCHET HPS.	80.00	106.40	79.79	141.94	133.51
SUBERNREKHA HPS.				190.38	30.13
SUBERNREKHA-I HPS.	65.00	0.38	51.47		
SUBERNREKHA-II HPS.	65.00	35.74	49.72		
JHARKHAND Total	210.00	142.52	180.98	332.32	163.64
ORISSA					
BALIMELA HPS.	510.00	1447.12	1732.21	1477.19	1001.38
CHIJLIMA HPS	72.00	229.95	168.31		
HIRAKUD HPS	275.50	525.43	380.27	863.05	716.97
MACHKUND HPS	114.75	610.55	593.68	467.70	700.31
RENGALI HPS.	250.00	611.04	837.89	762.61	553.56
UPPER INDRAVATI HPS.	600.00	2084.15	2141.84	1745.57	1521.64
UPPER KOLAB HPS.	320.00	747.32	923.25	706.87	619.34
ORISSA Total	2142.25	6255.56	6777.45	6022.99	5113.20
SIKKIM					
CHUZACHEN HPS	110.00	461.53	417.40	444.79	494.75
DIKCHU HPS	96.00	476.73	462.24	370.10	
JORETHANG LOOP	96.00	398.51	409.75	406.01	405.63
RANGIT HPS	60.00	339.87	349.09	345.91	347.14
TASHIDING HPS	97.00	435.15	423.73	73.07	0.00
TEESTA V HPS	510.00	2719.73	2701.46	2818.78	2773.46
TEESTA-III HPS	1200.00	5883.06	4258.40	4429.33	309.42
SIKKIM Total	2169.00	10714.58	9022.07	8887.99	4330.40
WEST BENGAL					
JALDHAKA HPS ST-I	36.00	180.28	197.04	145.18	205.46
MAITHON HPS.	63.20	78.00	101.36	114.41	122.03
PURULIA PSS HPS.	900.00	1047.59	1103.97	1014.37	1106.97
RAMMAM HPS.	50.00	238.11	236.93	122.47	248.42
TEESTA LOW DAM-III HPS	132.00	564.44	572.06	386.87	553.87
TEESTA LOW DAM-IV HPS	160.00	716.49	708.45	495.15	602.53
WEST BENGAL Total	1341.20	2824.91	2919.81	2278.45	2839.28
EASTERN REGTION Total	5862.45	19937.57	18900.31	17521.75	12446.52
NORTH EASTERN REGION					
ARUNACHAL PRADESH					
KAMENG HPS	300.00	8.12	0.00	0.00	
PARE	110.00	453.70	347.16	0.00	0.00
RANGANADI HPS.	405.00	1236.34	1051.86	1416.74	1249.01
ARUNACHAL PRADESH Total	815.00	1698.16	1399.02	1416.74	1249.01
ASSAM					
KARBI LANGPI HPS.	100.00	384.11	372.72	484.98	396.59
KHONDONG HPS.	50.00	190.52	203.82	260.77	197.10
KOPILI HPS.	200.00	716.90	1117.82	1172.83	1088.27
ASSAM Total	350.00	1291.53	1694.36	1918.58	1681.96

MANIPUR					
LOKTAK HPS.	105.00	343.86	602.61	837.74	741.07
MANIPUR Total	105.00	343.86	602.61	837.74	741.07
MEGHALAYA					
KYRDEMKULAI HPS.	60.00	133.09	134.84	132.18	65.29
MYNTDU(LESHKA) St-1 HPS	126.00	419.69	362.95	502.47	391.65
NEW UMTRU HPS	40.00	174.31	180.03	159.52	0.00
UMIAM HPS ST-I	36.00	101.26	85.11	128.65	96.65
UMIAM HPS ST-IV	60.00	157.35	166.60	217.44	166.01
MEGHALAYA Total	322.00	985.70	929.53	1140.26	719.60
MIZORAM					
TUIRIAL HPS	60.00	169.90	168.44	78.37	
MIZORAM Total	60.00	169.90	168.44	78.37	
NAGALAND					
DOYANG HPS.	75.00	176.39	231.47	274.39	258.94
NAGALAND Total	75.00	176.39	231.47	274.39	258.94
NORTH EASTERN REGION Total	1727.00	4665.54	5025.43	5666.08	4650.58
GRAND TOTAL	45699.22	146668.30	134893.61	126122.70	122377.56

**** Under Ladakh since August 2019**

*** PROVISIONAL BASED ON ACTUAL-CUM-ASSESSMENT**

Note: 1. Gross Generation from fuel sources (Hydro) stations of 25 MW and above only.

2. Figures given above indicate gross generation of all power stations (Central, State & Private Sector) located geographically in the respective State/UT.

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 4263 TO BE ANSWERED IN THE LOK SABHA ON 19.03.2020.

STATE-WISE DETAILS OF CAPACITY UTILIZATION FACTOR (CUF) FOR THE YEAR 2018-19

STATES	2018-19	
	Installed Capacity (in MW)	Capacity Utilization Factor (CUF)
HIMACHAL PRADESH	9809	41.79
UT OF J & K AND UT OF LADAKH	3360	55.67
PUNJAB	1096.3	45.14
RAJASTHAN	411	19.40
UTTAR PRADESH	501.6	26.77
UTTRAKHAND	3756.35	41.76
LADHAK	89	19.82
Northern Region	19023.25	43.45
CHHATISGARH	120	23.12
GUJRAT	1990	5.98
MADHYA PRADESH	2235	17.35
MAHARASTRA	3047	19.02
Western Region	7392	15.07
ANDHRA PRADESH	1610	16.12
KARNATAKA	3644.2	38.18
KERELA	1856.5	45.01
TAMIL NADU	2178.2	27.68
TELENGANGA	2405.6	8.28
Southern Region	11694.5	28.12
JHARKAND	210	9.84
ODISHA	2142.25	36.12
SIKKIM	2169	47.48
WEST BENGAL	1341.2	24.85
Eastern Region	5862.45	36.80
ARUNACHAL PRADESH	815	31.01
ASSAM	350	55.26
NAGALAND	75	35.23
MANIPUR	105	65.52
MEGHALAYA	322	32.95
MIZORAM	60	32.05
North Eastern Region	1427	40.20
TOTAL INDIA	45699	33.92

ANNEXURE-III

ANNEXURE REFERRED TO IN REPLY TO PART (e) OF UNSTARRED QUESTION NO. 4263 TO BE ANSWERED IN THE LOK SABHA ON 19.03.2020.

**STATE-WISE DETAILS OF UNDER CONSTRUCTION HYDRO-ELECTRIC PROJECTS
(ABOVE 25 MW)**

(AS ON 15.03.2020)

Sl. No.	Name of Scheme/ Executing Agency	Capacity Under Execution (MW)	Present Status
	Andhra Pradesh		
1	Polavaram (APGENCO/ Irrigation Dept., A.P.)	960.00	<p>Spillway, Earth cum Rockfill Dam, Power House Foundations Works awarded in March, 2013 to M/s. Transtroy- JSC EC UES JV.</p> <p>ECRF DAM: Earth work of 508.06 L.Cum /833.169L.Cum is completed.</p> <p>Diaphragm Wall concreting – completed.</p> <p>SPILLWAY: Excavation-838.80 L Cum out of 1115.59 L Cum completed. Concreting 9.60 L Cum out of 36.79 L cum completed.</p> <p>Gates: Radial Gate fabrication – 11010 MT completed out of 18000 MT (61.17%).</p> <p>Power House: Earth work of 112.20 L Cum / 114 L.Cum is completed & embankment of 9.79 L.Cum / 10 L.Cum is completed.</p> <p>B) The LoA for works of Power House on turnkey basis was issued to M/s Navayuga Engineering company Limited (NECL) on 06.12.2017.</p> <p>Contract was terminated by APGENCO on 14.08.2019. M/s. NECL challenged the termination order in Hon'ble High Court of A.P. on 19.08.2019. Hon'ble High Court granted interim stay on 22.08.2019.</p> <p>In the meanwhile, on retendering, LOI was issued to M/s Megha Engg. Infrastructure Limited. (MEIL) on 01.11.2019.</p> <p>Since stay order is in force. No further action could be initiated.</p>
	Arunachal Pradesh		
2	Kameng (NEEPCO) 2 units taken in operation	300.00	<p>All major works related to commissioning of project completed.</p> <p>All Units Boxed up.</p> <p>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.</p> <p>Progress of Rectification :-</p> <p>Penstock-1 :- Rectification / Repair works completed.</p> <p>Penstock -2 : Repair Welding of WELD DEFECT 2532 RM completed out of 5071 RM.</p> <p>Unit#1 & 2 taken as Capacity addition on 10.02.2020 & 03.02.2020 respectively.</p> <p>ii) Repair Welding of OFFSETS:- 786 RM completed out of 873.85 RM.</p>

3	Subansiri Lower (NHPC)	2000.00	<p>Dam :- Dam concreting 53.42% & Intake concreting 96% completed.</p> <p>HRT:- 98% heading excavation, 73.65% benching excavation & 56.80% concrete overt lining completed.</p> <p>Surge Tunnel :- Heading excavation 86.40% & benching excavation 12% completed.</p> <p>Pressure Shaft :- Vertical PS slashing 199m (51.82%) out of 384m.</p> <p>Power House :- Excavation almost completed & concreting 35% completed</p> <p>E&M Works:-</p> <p>Unit-1: Elbow Erection (1 to 6) and Turbine Stay Ring and Spiral Case erection completed.</p> <p>Unit-2: Elbow Erection (2 to 6) and Turbine Stay Ring and Spiral Case erection completed.</p> <p>HM Works:</p> <p>Erection of Diversion Tunnel Gates: 51.80% completed. Erection of Intake Gates: 8% completed.</p> <p>Out of total 1594m, 293m pressure shaft steel liner erected.</p> <p>All work except safety works were stalled from December, 2011 to September, 2019 due to agitation launched by various activists against construction of Subansiri Lower HE Project and as per directions of NGT. Works restarted w.e.f. 15.10.2019 after clearance from NGT.</p>
Himachal Pradesh			
4	Parbati St. II (NHPC)	800.00	<p>All major works related to commissioning of the project completed except HRT.</p> <p>Head Race Tunnel-Excavation: 28.82 km out of 31.5km completed</p> <p>Total Overt lining: 26.89 km lining out of 31.5km completed.</p> <p>E&M Works:</p> <p>All units have been synchronized with grid at part load using water from Jiwa Nallah.</p>
5	Uhl-III (BVPCL)	100.00	<p>All works completed. During Hydro Static pressure Test (HST) of Penstock some leakage was observed.</p> <p>Repair of penstock & HST completed and filling of water conductor system is in progress.</p>
6	Sawra Kuddu (HPPCL)	111.00	<p>All works related to commissioning of the project completed except cleaning of HRT.</p>
7	Shongtong Karcham (HPPCL)	450.00	<p>River Diversion achieved on 10.02.2017.</p> <p>Barrage: Drawings are to be submitted by contractor.</p> <p>HRT: Heading excavation of HRT 5.72 km out of 7.712km completed.</p> <p>Surge shaft: 95m out of 100m pilot hole completed.</p> <p>Power House: 98% excavation of Power House completed.</p> <p>Works hampered in some portion of HRT due to re-location of Army ammunition depot. Issue is under resolution between Army, GoHP & HPPCL.</p>
8	Bajoli Holi (GMR)	180.00	<p>Civil Works: 86% works completed.</p> <p>Dam: Excavation completed. Concreting 1,36,844 cum out of 2,10,000 cum completed.</p> <p>HRT: Excavation completed. 6.485 km lining out of 15.9 km completed.</p> <p>Surge Shaft: Excavation completed. Lining-4470/5200 cum completed.</p> <p>Pressure shaft: Excavation completed. Lining-664MT / 2440MT completed.</p> <p>Power house: Excavation completed and concreting almost completed.</p> <p>HM Works: 72% works completed.</p> <p>E&M Works: 82% works completed.</p>

9	Sorang (HSPCL)	100.00	<p>All Civil Works completed.</p> <p>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.</p> <p>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.</p> <p>The rectification work is under progress. Land acquisition for new alignment of Penstock & other infrastructure is completed. Fabrication of Ferrules under progress.</p>
10	Tangnu Romai (TRPG)	44.00	<p>Civil works awarded on 14.06.2010 to M/s Sai Urja Hydel Project (P) Ltd.</p> <p>Barrage and Diversion Cannel: 26211 cum out of 93800 cum excavation completed.</p> <p>Desilting Chambers & SFTPC: Excavation completed. SFT excavation 420 / 450.66 m completed.</p> <p>HRT: 2826m out of 6300m excavation completed.</p> <p>Power House, Switchyard & Misc.: 60275 m3 out of 72000 m3 excavation completed.</p> <p>In February-2015, due to land slide the steel bridge on Pabbar River, connecting Project components has been completely damaged. The restoration works are completed.</p>
11	Tidong-I (Statkraft IPL)	100.00	<p>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.</p> <p>Head Regulator & Desilting arrangement: Common excavation completed. 9763 cum open cut rock excavation out of 10,000 cum completed.</p> <p>HRT (8526m): Excavation 3054m completed and 10,299/83,800 cum Head works concreting has been completed.</p> <p>Surge Shaft: Excavation 63m/87m completed.</p> <p>Pressure Shaft: Excavation completed. 205m / 1310m lining completed.</p> <p>Power house and Tail race channel- 87709 cum out of 92500 cum excavation completed.</p> <p>11237 cum out of 16156 cum concreting completed.</p> <p>Overall 72 % of Powerhouse civil works completed.</p> <p>M/s Statkraft India Pvt Ltd has acquired the 100% equity of the project on 04.09.2018 and remobilization of manpower on the project is in progress.</p>
12	Kutehr (JSW Energy Ltd)	240.00	<p>Civil works awarded on 29.10.2019.</p>
	Jammu & Kashmir		
13	Pakal Dul (CVPPL)	1000.00	<p>Infrastructural works: Excavation of MAT and adit to Powerhouse completed.</p> <p>Dam: Letter of Acceptance issued to M/s Jaiprakash Associates on 21.06.18.</p> <p>Surge Shaft: Access road to Surge shaft top completed on 30.11.18.</p> <p>Power House(157mx20.20mx49m): Letter of Acceptance issued to M/s. AFCON-JP Associates JV on 21.02.18. Excavation of MAT completed on 20.12.18</p> <p>E&M Package: Letter of Award issued to M/s. Voith Hydro Ltd. On 02.01.2019.</p> <p>HM Works Package: Letter of Award issued to M/s. PES Engineers Pvt. Ltd. on 26.08.2019.</p>

14	Parnai (JKSPDC)	37.50	<p>The implementation of the project has been undertaken by awarding the EPC contract in favour of M/s. Patel Engg. Ltd. in 2013.</p> <p>Barrage:- Excavation 32603 cum out of total 46364 cum completed. Concreting 19128 cum out of 34589 cum completed.</p> <p>HRT (D-shaped, 3.2m diameter, 9.236km long):- 4787m out of 9236m excavation completed.</p> <p>Pressure shaft (1no. 2mdia, 1733mlong): Excavation: 11254 cum out of 80,000 cum completed. Concreting: 454cum out of 7212 cum completed.</p> <p>Surge shaft (3.2m dia.): Excavation: 704cum out of 14000cum completed.</p>
15	Lower Kalnai (JKSPDC)	48.00	<p>EPC contract awarded to M/s. CPL in Sept., 2013.</p> <p>Diversion tunnel has been completed and river diversion made on 30.11.2016.</p> <p>Work on coffer dams has been started</p> <p>Dam:- Excavation work completed for right abutment of the dam bridge. Excavation of left abutment completed upto 50%.</p> <p>HRT:-Adit excavation is in progress.</p> <p>After suspending works in January, 2017, works resumed at site since 12th April, 2017. Due to poor progress of the Contractor, JKSPDC has revoked the advance payment and the performance bank guarantee aggregating to Rs.79.21 Crores.</p> <p>Now the contract with M/s. Coastal Project Ltd. has been terminated and the process of retendering is under progress.</p>
16	Kiru (CVPPL)	624.00	Civil, HM and E&M works awarded on 24.02.2020.
17	Ratle (RHEPPL / NHPC)	850.00	<p>EPC Contract for Civil & HM works awarded to M/s GVK Projects & Technical Services Limited on 04.07.2013.</p> <p>Excavation of DT1 (298m out of 472m) & DT2 (192m out of 552m) completed.</p> <p>-Works have been suspended at Project site due to frequent local disturbances since 11.07.2014.</p> <p>-Govt. of J&K, PDD have terminated PPA on 09.02.2017 and directed JKSPDC to take over the project and implement in JV mode with Gol. MoU for execution of project in JV mode was signed on 03.02.2019 between JKPDD, JKSPDC & NHPC. Cost estimate vetted by CEA on 7.5.2019. PIB meeting held on 09.03.2020</p>
	Kerala		
18	Pallivasal (KSEB)	60.00	<p>Intake structure: Excavation – 28398/33492 cum completed.</p> <p>Leading channel of Water conductor system replaced by cut & cover/soil tunnel and accordingly intake is shifted.</p> <p>HRT: Excavation –2858/3330 m completed.</p> <p>Overt conc. 1637/3330 m completed.</p> <p>Invert Conc.. – 1637/3330 m completed.</p> <p>Surge Tank/Forebay: Exc.-7640/13400 cum. Conc.423/843 cum.</p> <p>Pressure Shaft: Excavation completed. Fabrication of steel liner completed and erection of 96/1096 m completed.</p> <p>Surface penstock: Excavation –109354/122600 cum. Concreting-11641/12850 cum and 1701m out of 2036m erection completed.</p> <p>Power House: Excavation completed. Concreting 3980/11225cum.</p> <p>Tail race Channel (2 Nos.): Excavation & lining completed.</p> <p>E&M Works: 75% supply completed.</p>

19	Thottiyar (KSEB)	40.00	<p>Civil Works: Weir: 3590.17 cum excavation out of total 10208 cum and 5550 Cum concreting out of 10928 Cum completed. Approach Channel & Intake: Excavation-3184 cum out of 9584 cum done. Power Tunnel : Excavation completed. Power House, switchyard & allied works: 33785 cum excavation out of 43690 cum and 3676 cum concreting out of 16209 m done.</p>
	Madhya Pradesh		
20	Maheshwar (SMHPCL)	400.00	<p>Civil & HM Works: All major civil works completed. All 27 nos radial gates commissioned. Unit Erection: Unit-10: Initial spinning achieved on 14.10.2011. Unit-9 & 8: Ready for spinning. Unit-7: Guide apparatus trial assembly in progress. Unit-6: Erection of turbine embedded parts & foundation parts completed. Unit-5 to 1: Erection of units is in initial stages. Works suspended since Nov-11 due to cash flow problem with developer. Recently, the GoMP constituted a High-Level Task Force vide Energy Department Order dtd. 18.04.2019, under the Chairmanship of Dr. Rajan Katoch (IAS Retd.) and having Senior IAS Officers from GoMP among others as members to examine the difficulties in implementation of the project and suggest the way forward. In the first meeting of the Task Force held on 25.05.2019, the Chairman of the Task Force directed the Promoter and Lenders to engage in discussions to reach an understanding on the way forward. Pursuant to the directions of the Task Force, a Memorandum of Understanding (MoU) has been executed on 22.07.2019 between the Entegra Limited (Promoter), Power Finance Corporation (Lead Lender) and SMHPCL. As agreed in the MoU, new Management nominated by the Promoter has taken over charge of SMHPCL, in August 2019.</p>
	Maharashtra		
21	Koyna Left Bank (WRD,MAH)	80.00	<p>Civil Works: Excavation of intake structure 4781 cum out of 14105 cum and lining 2485 cum out of 3381 cum completed. Excavation of Switchyard completed. Excavation of Approach tunnel & Ventilation tunnel is in progress. Tail surge shaft : Excavation in soft strata completed. Excavation for inclined / vertical / lateral shafts in hard rock 6448 / 9223 cum completed. TRT : 364 / 24003 cum excavation completed. Machine Hall : Underground Excavation is under progress. 22600 cum excavation out of 55050 cum completed. E&M works: The contract for details engineering manufacturing supply, supervision erection, testing commissioning and putting into commercial use of pump turbine, generator motor and associated equipments is signed with M/s IVRCL Ltd., Pune on 16.12.2010. Further TG set has been ordered. EOT Crane :- Works awarded to M/s Pedvak Cranes Private Limited Hyderabad on 12.04.2013.</p>

Punjab			
22	Shahpurkandi (PSPCL/ Irrigation Deptt., Pb.)	206.00	<p>Main Dam: 13.55 lacs cum Excavation out of 18.40 lacs cum and 3.25 lacs cum concreting out of 11.05 lacs cum completed.</p> <p>Hydel Channel: Excavation / concreting is in advance stage of completion.</p> <p>Works of Dam stopped since 29.08.2014 due to inter-state dispute between states of J&K & Punjab on sharing of waters of river Ravi & tariff. An agreement was signed on 8.9.2018 between Chief Secretary, Govt. of Jammu & Kashmir and Chief Secretary, Govt. of Punjab. The Punjab Cabinet ratified the above agreement. Zero date of the project was 1st November, 2018.</p>
Sikkim			
23	Teesta St. VI NHPC	500.00	<p>Barrage and Desilting: Excavation completed & concreting 98% of 380003 cum completed.</p> <p>HRT: Heading excavation 10650m and benching excavation 4270 m out of total 27505 m completed. Overt lining 1550 m completed.</p> <p>Surge Tank: Excavation completed & concreting under progress.</p> <p>Pressure Shaft: Underground excavation of 4 no. pressure shaft completed, lining of one no. pressure shaft completed, balance lining under progress.</p> <p>HM works: 2 nos. radial gates erection in bay 1&2 completed. Erection of 1st stage embedded parts of radial gates in bay 3&4 under progress.</p> <p>Power House: Excavation completed & conc. 21945 / 44578 cum completed. Concreting to Draft Tube Liners for all the 4 nos. Units completed. Erection of spiral casing of Unit #1 completed.</p> <p>Transformer Cavern: Excavation completed & concreting 2539/7101 cum completed.</p> <p>TRT: Excavation & Lining almost completed.</p>
24	Bhasmey (Gati Infrastructure)	51.00	<p>Project is in initial stage of construction. River diversion achieved.</p> <p>Barrage: 61555cum/194600cum excavation completed.</p> <p>HRT: 1670m/4460m excavation completed.</p> <p>PH: 136105 cum/185937cum excavation completed.</p> <p>Surge Shaft : 8567cum / 22000cum Surface excavation completed.</p>
25	Rangit-IV (JAL Power)	120.00	<p>Dam & Intake works: Excavation 409184 / 492775 cum completed and concreting 61045 cum out of 173229 cum completed. Excavation of road diversion tunnel has been completed.</p> <p>HRT: Excavation in progress and 3794 m out of 6488 m completed.</p> <p>Surge Shaft: Excavation has been completed.</p> <p>Pressure Shaft: Excavation of Horizontal Pressure Shaft completed. Vertical Pressure Shaft 60.5 m out of 84.7m completed.</p> <p>Power House: Excavation in Power House completed. Concreting 8565 cum out of 19900 cum completed.</p> <p>Desilting chamber: Excavation 2143 m out of 3360 m completed.</p> <p>In the Joint Lenders Forum meet held in PFC on 5th April, 18, Lenders decided to file application in NCLAT and the same has been filed on 24th April, 18. Last hearing of NCLT held on 29.03.2019 and order pronounced on 9.04.2019. As per the order IRP has been appointed.</p> <p>NHPC Ltd. submitted EOI on dated 08.07.2019 and was shortlisted under final list of Prospective Resolution Applicants on dated 23.08.2019. The Resolution Plan submitted by NHPC on 04.12.2019.</p>

26	Rangit-II (Sikkim Hydro)	66.00	<p>EPC contract awarded to M/s Coastal in February, 2012. Diversion Tunnel: River diversion through diversion tunnel has been achieved.</p> <p>Dam : Excavation 53100cum out of 85000cum completed.</p> <p>HRT: Excavation 623m out of 4745m completed.</p> <p>Surge Shaft: Excavation completed. Concreting 37/1667 cum done.</p> <p>Pressure shaft: Excavation of pressure shaft I – 25m out of 128m and pressure shaft II – 154m out of 377m completed</p> <p>Power House: Excavation of surface power house is being taken up.</p>
27	Rongnichu (Madhya Bharat)	96.00	<p>The civil works have been re-awarded to M/s Moshvaraya Infrastructure Ltd. and E&M works to M/s Litosroj Power, Slovenia & CG Electric system, Hungary.</p> <p>Barrage: Excavation completed & 71300 out of 71700 cum concreting completed.</p> <p>HRT: Excavation completed and concreting 8217cum out of 12600cum completed.</p> <p>Surge shaft: Excavation & Concreting completed.</p> <p>Pressure Shaft: 175m out of 1426.50m of steel lining completed.</p> <p>Civil works of VPS completed.</p> <p>Power House: Excavation completed. 15482cum out of 24644 cum Concreting has been completed.</p> <p>E&M works: EOT Crane works completed</p> <p>Unit #1 & #2 : Erection works are in progress.</p>
28	Panan (Himagiri)	300.00	<p>Civil works awarded on 22.02.2014. Infrastructural works and geological investigations are in progress.</p> <p>NBWL clearance obtained in December, 2015. However, there is a case challenging the Eco-Sensitive zone notification of MoEF & Climate Change in NGT. The case is disposed on 21.8.2017. The developer applied for issuance of clearance from Forest, Environment & Wild Life Management Dept., Govt. of Sikkim.</p>
Tamil Nadu			
29	Kundah Pumped Storage Phase-I,II&III)	500.00	<p>Civil & HM Works: LOI issued to M/s Patel Engg. Ltd. for Package-I & M/s Kundah PSP Consortium for Package-II on 15-02-2018.</p> <p>Excavation of balance MAT, balance CCVT, Adits to TRT, TRSS, Power House top/bottom, Pressure Shaft bottom have been completed.</p> <p>HRT portal: Benching under progress.</p> <p>Power House: Slashing of PH & transformer cavern completed & benching is in progress.</p> <p>Pressure Shaft: Excavation in Horizontal & inclined position are under progress.</p> <p>TRT: Excavation under progress.</p> <p>Head Race Surge Shaft:- Excavation under progress.</p> <p>E&M works: works awarded to M/s. Megha Engg. & Infrastructure Ltd. on 28.11.2019.</p>

	Uttarakhand		
30	Lata Tapovan (NTPC)	171.00	<p>Infrastructure works are almost completed. Main works stalled due to stay by Hon'ble Supreme Court.</p> <p>EPC contract for Civil & HM works awarded to M/s L&T on 17-08-2012. E&M package awarded to M/s BHEL on 07.12.12.</p>
31	Tapovan Vishnugad (NTPC)	520.00	<p>Barrage: Excavation Completed and Concreting 126313 cum out of 129358 cum completed.</p> <p>HRT: Excavation of 3.52km out of 4.95km by DBM & 5.47km out of 8.27km by TBM completed. 7.10km concrete lining out of 12.09km completed</p> <p>PH Cavern: Excavation and concreting completed.</p> <p>Desilting Chamber & Intake: Excavation completed.</p> <p>TRT: Excavation completed.</p> <p>Surge shaft: Excavation & Lining completed.</p> <p>Penstock: Excavation and Lining completed.</p> <p>E&M works: Pit liner erection on all 4 units completed.</p> <p>Turbine housing erection of all 4 units completed. Erection of EOT crane in BVC & service bay completed.</p> <p>Unit #1 & #2: Boxed up.</p> <p>Unit #3: Turbine erection completed.</p> <p>Unit #4: Turbine erection in progress.</p> <p>Critical : HRT</p>
32	Tehri PSS (THDC)	1000.00	<p>Upstream (Tehri Dam) and Downstream (Koteshwar Dam), intake and Head Race Tunnels (2 Nos.) already completed alongwith Tehri Stage-I works.</p> <p>Surge Shafts Upstream (2 nos- 140m): Excavation, Mucking & Rock bolt, Lattice Girder Support work in Progress.</p> <p>Surge Shafts Downstream (2 Nos): Excavation, Mucking & Rock Bolt, Lattice Girder Support work in progress.</p> <p>Butterfly Valve Chamber (BVC 78x10x26m): Excavation of 7th & 8th bench is under progress. Cumulative benching excavation is 10541 cum (63%).</p> <p>Penstock Assembly Chamber (PAC): Crown slashing with steel ribs completed. Excavation of 3rd bench including stabilization work is in progress.</p> <p>Power House: Excavation completed.</p> <p>TRT-3(1151 RM): Excavation in Heading 1005 RM, Benching 624 RM, Invert Lining-150m, Overt Lining 130m completed</p> <p>TRT-4 (1255 RM): Excavation in Heading-967 RM, Benching- 920 RM, Invert Lining-354m & Overt Lining: 244m completed.</p> <p>E&M Works: Manufacturing & supplies are in progress.</p>
33	Vishnugad Pipalkoti (THDC)	444.00	<p>River diverted on 02.04.2018.</p> <p>Work on construction of coffer dam is in progress.</p> <p>Development for TBM platform excavation 95% has been completed.</p> <p>Main Access Tunnel (MAT) 413.50m: Excavation completed upto 397.50m.</p> <p>HRT (13400m): 686m completed by DBM.</p> <p>Construction of Adits and infrastructure works are in progress</p> <p>Desilting Chambers (3 No. X 390m) : Crown Slashing completed in DC #2 & DC #3 and Benching is under progress in DC #1, DC #2 and DC#3.</p> <p>Upstream Surge Shaft: 102 RM out of 325.5 RM excavation from bottom adit to Upstream Surge Shaft has been completed.</p> <p>Downstream Surge Shaft : 337.17 RM out of 352 RM excavation from adit to Downstream Surge Tank bottom has been completed.</p>

34	Naitwar Mori (SJVNL)	60.00	<p>River Diverted on 31.01.2019</p> <p>Desilting Tank: Excavation: 1,27,950cum out of 1,35,000cum completed.</p> <p>Barrage: 1,23,910 cum out of 1,28,000 cum excavation completed.</p> <p>HRT: Excavation 2604m out of 4317m completed.</p> <p>Power House & Transformer Hall: 15400cum out of 45,000 cum excavation completed.</p> <p>TRT: 49m out of 174m completed.</p> <p>HM works : LoA issued to M/s GMW Private Ltd. on 18.04.18.</p> <p>E&M works : Works awarded to M/s. Voith Hydro Pvt. Ltd. On 11.06.2018.</p>
35	Vyasi (UJVNL)	120.00	<p>Civil Works:</p> <p>Dam : Excavation completed. 3.22 Lakh cum out of 3.6 lakh cum of Concreting completed.</p> <p>Diversion Channel : Completed.</p> <p>Head Race Tunnel (2.7 Km): Excavation of HRT completed. 2632m Overt Lining and 2544m Invert Lining out of 2655m has been done.</p> <p>Pressure Shaft: 4939cum out of 5000cum Excavation completed.</p> <p>Surge Shaft : Excavation completed. Concreting-2118cum out of 6626cum completed.</p> <p>Power House: 2,58,500 cum out of 270,000cum Excavation completed. 14498 cum out of 17,800 cum Concreting of Sub structure completed. Erection of Draft Tube in both the units completed.</p>
36	Phata Byung (LANCO)	76.00	<p>Dam concreting: 17800/18000 cum concreting completed.</p> <p>P.H.: Excavation completed & Concreting in progress.</p> <p>HRT: Excavation almost completed. 1400 m Lining has been completed.</p> <p>Excavation and lining of Intake-I & Intake-II completed.</p> <p>Pressure shaft: Excavation completed & lining is in progress.</p> <p>TRT: Excavation 178/235m completed.</p> <p>E&M Works: Pit liner erection of units completed. EOT Crane installed and Commissioned.</p> <p>Ferrule Fabrication work is in progress.</p>
37	Singoli Bhatwari (L&T)	99.00	<p>Dam & Dykes/Barrage: Excavation almost completed and concreting 66169 out of 70220 cum completed.</p> <p>HRT: Excavation completed</p> <p>Overt Concrete Lining 11127m out of 11257m completed.</p> <p>Invert Lining: 11127 m out of 11257m completed.</p> <p>Pressure Shaft:: Excavation completed.</p> <p>Power House: Excavation completed & concreting 29365cum out of 29959cum completed.</p> <p>Surge Tank: Excavation completed. 4113.93cum out of 5349cum concreting completed.</p> <p>E&M Works: Boxing up of Unit#1 & Unit#3 completed & Boxing up of Unit#2 is in progress.</p>
	West Bengal		
38	Rammam-III (NTPC)	120.00	<p>First stage river diversion done on 23.03.2016. First phase Barrage excavation completed and Raft concreting in progress.</p> <p>Intake structure 1 & 2: Excavation completed, SFT excavation 20% completed.</p> <p>HRT excavation 11% completed.</p> <p>Excavation of Desilting chamber completed.</p> <p>Surge Shaft: Excavation 72% completed.</p> <p>Pressure Shaft: Excavation 32% completed</p> <p>Power House: Excavation 94% completed.</p> <p>TRC: Excavation 84% and concreting 95% completed</p> <p>Switchyard : Excavation and filling completed</p>
	Grand Total	12973.50	
