BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 02.11.2017)

1. ALL INDIA STATUS

Central Water Commission is monitoring live storage status of 91 reservoirs of the country on weekly basis and is issuing weekly bulletin on every Thursday. Out of these reservoirs, 37 reservoirs have hydropower benefit with installed capacity of more than 60 MW. The total live storage capacity of these 91 reservoirs is 157.799 BCM which is about 62% of the live storage capacity of 253.388 BCM which is estimated to have been created in the country. As per reservoir storage bulletin dated 02.11.2017, live storage available in these reservoirs is 108.373 BCM, which is 69% of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was 112.854 BCM and the average of last 10 years live storage was 113.059 BCM. Thus, the live storage available in 91 reservoirs as per 02.11.2017 Bulletin is 96% of the live storage of corresponding period of last year and 96% of storage of average of last ten years.

The overall storage position is **less than the** corresponding period of last year in the country as a whole and is also **less than the** average storage of last ten years during the corresponding period.

2. REGION WISE STORAGE STATUS:

a) NORTHERN REGION

The northern region includes States of Himachal Pradesh, Punjab and Rajasthan. There are 6 reservoirs under CWC monitoring having total live storage capacity of 18.01 BCM. As per Reservoir Storage Bulletin dated 02.11.2017, the total live storage available in these reservoirs is 13.14 BCM which is 73% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 67% and average storage of last ten years during corresponding period was 75% of live storage capacity of these reservoirs. Thus, storage during current year is better than the corresponding period of last year but is less than the average storage of last ten years during the corresponding period.

b) EASTERN REGION

The Eastern region includes States of Jharkhand, Odisha, West Bengal and Tripura. There are 15 reservoirsunder CWC monitoring having total live storage capacity of 18.83 BCM. As per Reservoir Storage Bulletin dated **02.11.2017**, the total live storage available in these reservoirs is **14.81 BCM** which is **79%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **84%** and average storage of last ten years during corresponding period was **74%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the corresponding period of last year but is better than the average storage of last ten years during the corresponding period.

c) WESTERN REGION

The Western region includes States of Gujarat and Maharashtra. There are 27 reservoirs under CWC monitoring having total live storage capacity of 27.07 BCM. As per Reservoir Storage Bulletin dated **02.11.2017**, the total live storage available in these reservoirs is **20.57 BCM** which is **76%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **84%** and average storage of last ten years during corresponding period was **77%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the storage of last year and is also less than the average storage of last ten years during the corresponding period.

d) CENTRAL REGION

The Central region includes States of Uttar Pradesh, Uttarakhand, Madhya Pradesh and Chhattisgarh. There are 12 reservoirs under CWC monitoring having total live storage capacity of 42.30 BCM. As per Reservoir Storage Bulletin dated **02.11.2017**, the total live storage available in these reservoirs is **26.11 BCM** which is **62%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **89%** and average storage of last ten years during corresponding period was **70%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the storage of last year and is also less than the average storage of last ten years during the corresponding period.

e) SOUTHERN REGION

The Southern region includes States of Andhra Pradesh, Telangana, AP&TG(2combined projects in both states) Karnataka, Kerala and Tamil Nadu. There are 31 reservoirs under CWC monitoring having total live storage capacity of 51.59 BCM. As per Reservoir Storage Bulletin dated **02.11.2017**, the total live storage available in these reservoirs is **33.75 BCM** which is **65%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **47%** and average storage of last ten years during corresponding period was **68%** of live storage capacity of these reservoirs. Thus, storage during current year is better than the corresponding period of last year but is less than the average storage of last ten years during the corresponding period.

The region wise and reservoir wise details are given in the following pages of the Bulletin.

BROAD ANALYSIS OF OTHER TABLES IN THE BULLETIN

- Normal storage means average storage of last ten years, Close to normal storage means where shortfall is upto 20% of normal, deficient storage is where shortfall is more than 20% of the normal and upto 60% of the normal, highly deficient means where shortfall is more than 60% of normal.
- In the table on page 4 better than normal storage is available in Ganga, Mahi, Indus, Sabarmati, Rivers of Kutch, Krishna, Mahanadi & neighbouring East Flowing Rivers and Cauvery & neighbouring EFRs. Close to Normal in Godavari and West Flowing Rivers of South. Deficient in Narmada and Tapi basin and NIL in Highly Deficient.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are **52** and reservoirs having storage more than average of last ten years are **47**. The numbers of reservoirs having storage less than 20% with respect to last year is **0** and having storage less than 20% with reference to average of last ten years is **1**. The number of reservoirs having storage less than or equal to 50% with respect to last year are **6** and having storage less than or equal to 50% with reference to average of last ten years are **7**.

Disclaimer: The Data contained in this Bulletin is as received from the State Government/Project Authorities.

STORAGE STATUS OF IMPORTANT RESERVOIRS IN THE COUNTRY

AS ON 02.11.2017

- 1 Central Water Commission is monitoring storage status of 91 important reservoirs spread all over the country, in which 37 reservoirs have hydropower benefit each with installed capacity of more than 60 MW. These reservoirs are identified thus(*) in the enclosed weekly report.
- 2 The total live storage in 91 important reservoirs in different parts of the country, monitored by CWC as on
 02.11.2017 is 108.373 BCM (69 percent of the live storage capacity at FRL). The current year's storage is nearly 96 percent of last year's storage and 96 percent of the average of last ten years.

3 Region wise storage status:-

Region wise storage status:									1		
DEGIGN (St. t.)		Filling	positio	n of 91	reserv	oirs w	.r.t. FR	L			
REGION (States), (Monitoring No. of Reservoirs)	100%	91%- 99%	81%- 90%	71%- 80%	61%- 70%	51%- 60%	41%- 50%	40% & below	Departure fr stor		
NORTH (HP,Punjab & Rajasthan), (6 Resv.)	2	1	1	1	-	1	-	1	H.P. PUNJAB RAJASTHAN	0 % 3 % -13 %	
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	3	3	3	-	2	2	2	-	JHARKHAND ODISHA W. BENGAL TRIPURA	8 % 0 % 100 % 70 %	
WEST (Guj.& Mah.), (27 Resv.)	10	6	2	4	-	2	-	3	GUJARAT MAH.	-12 % 8 %	
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	-	2	1	5	1	1	2	U.P. UTTARAKHAND M.P. CHHATISGARH	14 % -3 % -18 % -10 %	
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	1	2	2	8	6	3	5	4	AP&TG A,P TG KARNATAKA KERALA T.N.	-1 % 20 % -2 % -7 % -2 % -6 %	
Status of 91 reservoirs	16	11	10	14	13	9	8	10		177	

4 Basin wise storage position:

Better than normal: Ganga, Mahi, Indus, Sabarmati, Krishna, , Mahanadi & Neighbouring EFRS, Rivers of Kutch and Cauvery &

neighbouring EFRS.

Close to normal: Godavari and West Flowing Rivers of South .

Deficient: Narmada and Tapi. .

Highly deficient: NIL

5 Out of 91 reservoirs, 71 reservoirs reported more than 80% of normal storage & 20 reservoirs reported 80% or below of normal storage. Out of these 20 reservoirs 7 having storage upto 50% of normal

storage.

Name of reservoir	%	Name of reservoir	%
VANIVILAS SAGAR	17		
ISAPUR	23		
YELDARI	29		
RANA PRATAP SAGAR	42		
HEMAVATHY	42		
PENCH (TOTALADOH)	45		
ALIYAR	47]	

13 reservors								
having storage 51%								
to 80% of normal								
storage.								
51%	61%	71%						
to	to	to						
60%	70%	80%						
4	3	6						

WEEKLY REPORT - BASINWISE

GOVERNMENT OF INDIA

WEEK ENDING :- 02.11.2017

CENTRAL WATER COMMISSION

NAME OF BASIN	LIVE CAP. AT FRL	_	THIS YEAR'S STORAGE		LAST YEAR'S STORAGE		YEARS' ORAGE	% DEPARTURE W.R.T. AVE. OF 10 YEARS'
GANGA	28.096	19.000	67.63%	23.536	83.77%	17.697	62.99%	7.36
INDUS	14.730	10.870	73.79%	9.124	61.94%	10.863	73.75%	0.06
NARMADA	17.414	10.205	58.60%	16.722	96.03%	14.283	82.02%	-28.55
TAPI	7.394	4.127	55.82%	6.895	93.25%	5.881	79.54%	-29.82
MAHI	4.012	3.456	86.14%	3.413	85.07%	3.071	76.55%	12.54
SABARMATI	0.735	0.666	90.61%	0.722	98.23%	0.527	71.70%	26.38
RIVERS OF KUTCH	0.887	0.716	80.72%	0.340	38.33%	0.518	58.40%	38.22
GODAVARI	15.394	9.636	62.60%	12.365	80.32%	10.004	64.99%	-3.68
KRISHNA	32.831	24.201	73.71%	17.916	54.57%	23.696	72.18%	2.13
MAHANADI & NEIGHBOURING EFRS	13.181	10.551	80.05%	11.225	85.16%	10.460	79.36%	0.87
CAUVERY& NEIGHBOURING EFRS	8.359	4.917	58.82%	2.152	25.74%	4.796	57.38%	2.52
WEST FLOWING RIVERS OF SOUTH	14.766	10.028	67.91%	8.444	57.19%	11.263	76.28%	-10.97
TOTAL	157.799	108.373		112.854		113.059		
PERCENTAGE								-4.14

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			WEE	K ENDING :-	02.11.2017		CENTRALV	VATER CON	/IIVII33IU	IN
							STORAGE A	S % OF LIVE C FRL	APACITY AT	BENE	FITS
S. NO	NAME OF RESERVOIR	FRL (m)	CURRENT RESERVOIR LEVEL (m)	LIVE CAPACITY AT FRL (BCM)	CURRENT LIVE STORAGE (BCM)	DATE	CURRENT YEAR	LAST YEAR	LAST 10 YEARS AVERAGE	IRR. (CCA) IN TH. HA	HYDEL IN MW
1	2	4	6	5	7	8	9	10	11	3A	3B
	NORTHERN REGION			•							
	HIMACHAL PRADESH	-									
*1	GOBIND SAGAR(BHAKRA)	512.06	506.96	6.229	5.160	02-11-2017	83	64	82	676	1200
*2	PONG DAM	423.67	416.81	6.157	4.350	02-11-2017	71	63	72	-	360
	PUNJAB										
*3	THEIN	527.91	513.97	2.344	1.360	02-11-2017	58	55	57	348	600
	RAJASTHAN										
*4	MAHI BAJAJ SAGAR	280.75	281.45	1.711	1.711	02-11-2017	100	100	87	63	140
5	JHAKAM	359.50	359.50	0.132	0.132	02-11-2017	100	100	85	28	-
*6	RANA PRATAP SAGAR	352.81	346.93	1.436	0.430	01-11-2017	30	79	72	229	172
	EASTERN REGION	•									
	<u>JHARKHAND</u>										
7	TENUGHAT	269.14	260.51	0.821	0.438	02-11-2017	53	51	45	-	-
8	MAITHON	146.3	149.69	0.471	0.471	02-11-2017	100	100	89	342	-
*9	PANCHET HILL	124.97	128.17		0.184	02-11-2017	100	100	84	\$	80
	KONAR	425.81	423.89		0.142	02-11-2017	81	100	88	\$	-
11	TILAIYA	368.81	367.15	0.142	0.086	02-11-2017	61	100	88	\$	4
	<u>ODISHA</u>										
	HIRAKUD	192.02	191.80	5.378		01-11-2017	86	90	90	153	307
	BALIMELA	462.08	453.09			02-11-2017	49	81	59	-	360
	SALANADI	82.30	71.30		0.244	01-11-2017	44	42	39	42	-
	RENGALI	123.50	123.28			02-11-2017	98	96	82	3	200
	MACHKUND(JALPUT)	838.16	837.86		0.861	02-11-2017	96	92	87	-	115
	UPPER KOLAB	858.00	854.06			02-11-2017	62	86	63	89	320
*18	UPPER INDRAVATI	642.00	636.38	1.456	0.880	02-11-2017	60	80	75	128	600
	WEST BENGAL	101.01	400 =0		0.475						
	MAYURAKSHI	121.31	120.76		0.475	02-11-2017	99	47	45	227	-
20	KANGSABATI	134.14	132.56	0.914	0.808	02-11-2017	88	63	47	341	-
24	TRIPURA GUMTI	02.55	02.80	0.212	0.242	24 40 2047	100	83	50		15
	WESTERN REGION	93.55	93.80	0.312	0.312	31-10-2017	100	03	59	-	15
_	GUJARAT										
*22	UKAI	105.16	98.73	6.615	3.497	02-11-2017	53	93	81	348	300
	SABARMATI(DHAROI)	189.59	188.82			02-11-2017	91	98	72		1
	KADANA	127.7	126.80			02-11-2017	75	76	67	200	120
	SHETRUNJI	55.53	53.67			02-11-2017	58	61	75	36	-
	BHADAR	107.89	107.41	0.188		02-11-2017	89	12		27	_
	DAMANAGANGA	79.86	79.95			02-11-2017	96	96	99	51	1
	DANTIWADA	184.1	183.73			02-11-2017	94	34	42	45	-
	PANAM	127.41	126.85			02-11-2017	74	65	69	36	2
	SARDAR SAROVAR	121.92	128.46			02-11-2017	100	87	90	2120	1450
	KARJAN	115.25	113.56			02-11-2017	91	68	89	51	3

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA		WEE	K ENDING .	00 44 0047	CENTRAL WATER COMMISSION					
				VVEE	K ENDING :-	02.11.2017	STORAGE A	S % OF LIVE C	APACITY AT	BENE	FITS
S. NO	NAME OF RESERVOIR	FRL (m)	CURRENT RESERVOIR LEVEL (m)	LIVE CAPACITY AT FRL (BCM)	CURRENT LIVE STORAGE (BCM)	DATE	CURRENT YEAR	LAST YEAR	LAST 10 YEARS AVERAGE	IRR. (CCA) IN TH. HA	HYDEL IN MW
1	2	4	6	5	7	8	9	10	11	3A	3B
	MAHARASHTRA										
32	JAYAKWADI(PAITHON)	463.91	463.91	2.171	2.171	26-10-2017	100	82	50	227	-
*33	KOYANA	657.90	659.21	2.652	2.652	01-11-2017	100	97	94	-	1920
34	BHIMA(UJJANI)	496.83	497.33	1.517	1.517	02-11-2017	100	100	82	125	12
35	ISAPUR	441.00	429.15	0.965	0.151	01-11-2017	16	50	68	104	-
36	MULA	552.30	552.26	0.609	0.607	02-11-2017	100	99	83	139	-
37	YELDARI	461.77	451.53	0.809	0.112	02-11-2017	14	31	48	78	-
38	GIRNA	398.07	395.13	0.524	0.375	01-11-2017	72	90	49	79	-
39	KHADAKVASLA	582.47	581.53	0.056	0.043	01-11-2017	77	77	59	78	8
*40	UPPER VAITARNA	603.50	603.50	0.331	0.331	01-11-2017	100	100	92	-	61
41	UPPER TAPI	214.00	214.00	0.255	0.255	01-11-2017	100	100	100	45	-
*42	PENCH (TOTALADOH)	490.00	478.03	1.091	0.330	01-11-2017	30	48	68	127	160
43	UPPER WARDHA	342.50	342.48	0.564	0.562	02-11-2017	100	99	91	70	-
44	BHATSA	142.07	140.85	0.942	0.909	01-11-2017	96	96	91	29.378	15
	DHOM	747.70	747.56	0.331	0.328	01-11-2017	99	96	86	36.2	2
	DUDHGANGA	646.00	646.00	0.664		01-11-2017	100	100	96		24
	MANIKDOH (KUKADI) BHANDARDARA	711.25 744.91	708.47 744.73	0.288 0.304	0.240 0.304	01-11-2017 01-11-2017	83 100	73 100	58 93	2.2 63.74	6 46
40	CENTRAL REGION	744.91	744.73	0.304	0.304	01-11-2017	100	100	93	03.74	40
	UTTAR PRADESH	•									
49	MATATILA	308.46	306.57	0.707	0.443	01-11-2017	63	59	71	_	30
	RIHAND	268.22	262.62		3.267	31-10-2017	58	76	49	_	300
	UTTRAKHAND										
*51	RAMGANGA	365.30	353.78	2.196	1.386	01-11-2017	63	56	73	1897	198
*52	TEHRI	830.00	822.90	2.615	2.324	02-11-2017	89	88	85	2351	1000
	MADHYA PRADESH										
*53	GANDHI SAGAR	399.90	396.38	6.827	4.596	02-11-2017	67	96	61	220	115
54	TAWA	355.40	352.20	1.944	1.480	02-11-2017	76	100	97	247	-
*55	BARGI	422.76	421.00	3.180	2.730	02-11-2017	86	95	88	157	90
*56	BANSAGAR	341.64	338.17	5.166	3.638	02-11-2017	70	100	66	488	425
*57	INDIRA SAGAR	262.13	253.93	9.745	3.725	02-11-2017	38	99	76	2380	1000
58	BARNA	348.55	344.88	0.456	0.228	02-11-2017	50	89	75	546	-
	CHHATTIS GARH										
*59	MINIMATA BANGOI	359.66	354.01	3.046	1.986	02-11-2017	65	70	65	-	120
60	MAHANADI	348.70	342.73	0.767	0.304	02-11-2017	40	99	75	319	10
;	SOUTHERN REGION	·									
	<u>A.P & TG</u>										
*61	SRISAILAM	269.75	268.74	8.288	5.482	02-11-2017	66	60	66	0	770
*62	NAGARJUNA SAGAR	179.83	175.84	6.841	4.033	02-11-2017	59	22	61	895	810
	ANDHRA PRADESH										
63	SOMASILA	100.58	96.38	1.994	1.426	02-11-2017	72	55	60	168	0
	<u>TELANGANA</u>										
	SRIRAMSAGAR	332.54	329.46	2.300		02-11-2017	68	100	61	411	27
65	LOWER MANAIR	280.42	272.34	0.621	0.208	02-11-2017	33	96	64	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

				WEE	K ENDING :-	02.11.2017					
			CHDDENT	LIVE		STORAGE AS % OF LIV		STORAGE AS % OF LIVE CAPACITY		BENEFITS	
S. NO	NAME OF RESERVOIR	FRL (m)	CURRENT RESERVOIR LEVEL (m)	LIVE CAPACITY AT FRL (BCM)	CURRENT LIVE STORAGE (BCM)	DATE	CURRENT YEAR	LAST YEAR	LAST 10 YEARS AVERAGE	IRR. (CCA) IN TH. HA	HYDEL IN MW
1	2	4	6	5	7	8	9	10	11	3A	3B
	KARNATAKA			•		•			•		
66	KRISHNARAJA SAGRA	752.50	748.73	1.163	0.845	31-10-2017	73	12	79	79	
*67	TUNGABHADRA	497.74	496.14	3.276	2.319	02-11-2017	71	18	73	529	72
68	GHATAPRABHA	662.95	661.13	1.391	1.312	01-11-2017	94	87	84	317	
69	BHADRA	657.76	653.44	1.785	1.313	01-11-2017	74	42	84	106	39
70	LINGANAMAKKI	554.43	548.18	4.294	2.640	02-11-2017	61	56	80	-	55
71	NARAYANPUR	492.25	491.72	0.863	0.671	02-11-2017	78	72	83	425	
72	MALAPRABHA(RENUKA)	633.83	628.28	0.972	0.499	01-11-2017	51	34	65	215	
73	KABINI(Sancherla Tank)	696.16	695.53	0.444	0.406	31-10-2017	91	36	44	85	
74	HEMAVATHY	890.63	878.56	0.927	0.264	31-10-2017	28	14	68	265	
75	HARANGI	871.42	869.51	0.220	0.173	31-10-2017	79	39	58	53	
76	SUPA	564.00	549.09	4.120	2.505	02-11-2017	61	55	67	-	
77	VANIVILAS SAGAR	652.28	632.70	0.802	0.023	02-11-2017	3	5	16	123	
*78	ALMATTI	519.60	519.60	3.105	3.105	02-11-2017	100	84	85	@	290
*79	GERUSOPPA	55.00	52.04	0.130	0.113	02-11-2017	87	78	85	83	240
	KERALA										
80	KALLADA(PARAPPAR)	115.82	112.83	0.507	0.419	01-11-2017	83	36	79	62	
*81	IDAMALAYAR	169.00	160.97	1.018	0.787	01-11-2017	77	60	76	33	75
*82	IDUKKI	732.43	723.16	1.460	0.971	01-11-2017	67	44	68	-	780
*83	KAKKI	981.46	974.74	0.447	0.340	01-11-2017	76	60	80	23	300
*84	PERIYAR	867.41	862.76	0.173	0.072	01-11-2017	42	4	55	84	140
85	MALAPMUZHA	115.06	111.94	0.224	0.156	02-11-2017	70	42	84	21	3
	TAMIL NADU										
86	LOWER BHAWANI	278.89	271.63	0.792	0.389	01-11-2017	49	14	50	105	8
*87	METTUR(STANLEY)	240.79	230.12	2.647	1.334	01-11-2017	50	16	48	122	360
88	VAIGAI	279.20	274.52	0.172	0.080	01-11-2017	47	2	48	61	6
89	PARAMBIKULAM	556.26	546.32	0.380	0.185	01-11-2017	49	34	81	101	
90	ALIYAR	320.04	310.20	0.095	0.037	01-11-2017	39	9	82	#	60
*91	SHOLAYAR	1002.79	992.72	0.143	0.082	01-11-2017	57	3	78	-	95
	TOTAL FOR 91 RESERVOIRS			157.799	108.373						

Sd/-

72

69

\$ TOTAL CCA 342 TH. HA OF DVC SYSTEM

PERCENTAGE

Director W. M. , CWC

^{*} HYDEL POWER CAPACITY HAVING CAPACITY MORE THAN 60MW

[#] TOTAL CCA 101 TH. HA OF PARAMBIKULAM & ALIYAR

 $^{@^{\}scriptscriptstyle |}$ TOTAL CCA 425 TH. HA. OF NARAYANPUR AND ALMATTI

 $[\]dagger$ SABARMATI RESERVOIR IS SUPPLEMENTED WITH NARMADA WATER THROUGH PIPELINE.

SI. No. 30th The FRL of S.S.P. 138.38 M and Live capacity at FRL will be 5.760 BCM. However at present the lowest block of the dam is at the level of 121.92 M. and the live capacity at this level is 1.566 BCM