



Government of India

भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

पूर्वी क्षेत्रीय विद्युत समिति

EASTERN REGIONAL POWER COMMITTEE

मासिक प्रगति रिपोर्ट

**PROGRESS REPORT FOR THE MONTH
OF**

जुलाई - 2018

JULY - 2018

पूर्वी क्षेत्रीय विद्युत समिति

Eastern Regional Power Committee

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Highlights of Eastern Regional Power System for July-2018

- The **Maximum Net Demand** met of **Eastern Region (ER)** during the month of **July, 2018** was **21790 MW** which is 14.03% more than the **July, 2017** (19110 MW). Individual **Peak Demand (MW)** of majority constituents **increased** compared to the corresponding period of last year.
- The **Average Net Energy Consumption** per day in ER for the month of **July, 2018** was **425.68 MU** excluding export, which is 11.71% more than the corresponding period of last year (381.05 MU).
- **The Average regional PLF of thermal units 62.85% during the month**, which is 6.46% more than the corresponding period of the last year (**56.39%**).
- **CESC (Budge- Budge)** registered the highest **PLF of 99.64 %**, followed by **WBPDC (Santalidih TPS) (90.47%)** & **NTPC (Barh STPS II) (90.00%)** during the month of **July, 2018**.
- **Maximum Net generation** of ER was **22690 MW** against total **Effective Capacity of 35443 MW** (including import from Bhutan). At the time of Regional peak (21790 MW on 12.07.18 at 21.00 hrs.) the generation was 22003 MW (including import from Bhutan) and import from CPPs was 894 MW.
- The system frequency in the recommended band (49.9 Hz to 50.05 Hz) remained for 78.48% of time during the month. **Average frequency** for the month was **49.97 Hz**. The instantaneous maximum and the minimum frequency touched were 50.24 Hz and 49.61 Hz respectively. The integrated (Fifteen minutes time block average) maximum and minimum frequency were **50.12 Hz** and **49.73 Hz** respectively (**refer Annexure-I**).
- The **Maximum Voltage** recorded **424 KV** at Jeypore 400 **KV S/s** whereas the minimum voltage recorded 375 KV at Jeerat 400 KV S/s of Power grid.
- **The Maximum Export from ER to outside region was 7039 MW (including Nepal and Bhutan) on 6th July, 2018 at 08.00 hrs.** Total net energy export during the month was **2316.72 MU** which corresponds to 15.57% of ex-bus total generation (14880.58 MU) of Eastern Region.
- **The import from CPPs/IPPs was 640.46 MU during the month.**

- **The Total Energy Exchange between Nepal and Bihar (ER) was:**

Export / Import by Bihar	July, 2018(In MU)	Cum. (Apr'18-July'18) in MU
Export to NEPAL by Bihar (NBPDC)	106.51	584.00
Export to NEPAL by NVVN	71.52	312.72

- **The total energy exchange between India & Bangladesh was:**

Export	During July,2018(In MU)	Cum. (Apr'18- July'18) in MU
Exchange between India & Bangladesh	345.94	1222.37

- **Export(+)/Import(-) Scenario:**

Region	Max. Export of Power ER (MW)	Max. Import of Power by ER (MW)	Net Export of Energy (MU)
NR	4293	0	2362.27
WR	0	3875	-1630.22
SR	2358	207	712.92
NER	1072	120	370.48

SALIENT FEATURES

(YEAR TO YEAR COMPARISON)

		Jul-18	JULY-2017	CHANGE	% CHANGE
1) Effective Capacity (end of the Month)					
THERMAL	(MW)	27205	28855	-1650	-5.72
HYDRO	(MW)	5876	\$ 5754	122	2
DIESEL	(MW)	0	7	-7	0
RES	(MW)	886	10	0	0
TOTAL	(MW)	33967	34626	-659	-1.90
2) Peak Demand (MW)		21849	19200	2649	13.80
3) Peak Demand Met (MW)		21790	19110	2680	14.03
4) Shortage (MW)		59	91	-32	-35.19
5) % Shortage		0.27	0.47	-0.20	-42.57
6) Average Energy Requirement Per Day (MU)		427.31	383.05	44.26	11.55
7) Average Energy Availability Per Day (MU)		425.68	381.05	44.63	11.71
8) Average Shortage Per Day (MU)		1.63	2.00	-0.37	-18.75
9) % Shortage		0.38	0.52	-0.14	-26.86
10) Net Generation for the Month					
Thermal (MU)		11724.52	11053.02	671.50	6.08
Hydro (MU)		3100.09	* 3339.43	-239.34	-7.17
RES (MU)		55.98	0.00	0.00	-
Total (MU)		14880.58	14392.45	488.13	3.39
11) Generation at the Time of Max. Regional Demand Met (12-07-18 at 21.00 Hrs.)					
Thermal (MW)		16571	16435	137	0.83
Hydro (MW)		5432	* 5128	305	5.94
Diesel (MW)		0	0	0	-
Total (MW)		22003	21562	441	2.05
12) Inter-Regional Energy Transfer					
Export (MU)		3946.94	3909.60	37.34	0.96
Import (MU)		1630.22	1067.97	562.25	52.65
Net Exp.(+)/Net Imp.(-) (MU)		2316.72	2841.63	-524.91	-18.47
13) Import From Captive(MU)		640.46	600.8	39.66	6.60
14) Peak Inter Regional Power Transfer					
Max Export (MW) on 06-07-18 at 08.00Hrs		7039	6360	679	10.68
Max Import (MW) on 20-07-18 at 04.00Hrs		3875	3092	783	25.31
Max Net Export(+)/Import (-) (MW)		6202	5307	895	16.86
15) Maximum voltage recorded		424	JEYPORE	400 kv s/s	
16) Minimum voltage recorded		375	JEERAT	400 kv s/s	

\$ Excludes 1566 MW contribution from HEPs of Bhutan

* Includes contribution from HEP of Bhutan (Chukha, Kurichhu & Tala)

POWER SUPPLY POSITION FOR THE MONTH OF JULY-2018

A) Net Average Energy Per Day

System	Demand Met (MU/Day)	Requirement (MU/Day)	Shortage (MU/Day)	% Shortage
BSPHCL	90.99	91.67	0.68	0.74
JUVNL	23.28	23.40	0.12	0.50
DVC	62.30	62.43	0.13	0.21
ODISHA	84.98	85.07	0.09	0.10
WBSEDCL	122.65	123.22	0.57	0.46
CESC	34.04	34.07	0.04	0.10
DPL	6.18	6.19	0.01	0.10
SIKKIM	1.24	1.25	0.00	0.10
REGION	425.68	427.31	1.63	0.38

B) Peak Demand in MW:

System	Demand Met (MW)	Requirement (MW)	Shortage (MW)	% Shortage
BSPHCL	4931	4960	29	0.59
JUVNL	1245	1250	5	0.38
DVC	2874	2877	3	0.10
ODISHA	4526	4532	6	0.13
WBSEDCL	7009	7014	5	0.08
CESC	1943	1946	3	0.1
DPL	288	289	1	0.19
SIKKIM	81	81	0	0.00
REGION	21790	21849	59	0

➤ **DIVERSITY FACTOR** **1.05**

➤ **Regional Peak Demand Met on 12-7-2018 at 21.00 hrs. at 49.97 Hz.**

CONSTITUENT-WISE PERFORMANCE DATA JULY-18

ALL FIGS IN MU.

SYSTEM	Gross Generation(MU)				Auxiliary power Consumption(MU)				Net Generation (MU)				Import from Captive (MU)	Exchange Net Import(+) Net Export(-)	Energy Consumption(MU)	Per Day Cons.(MU)
	Hydro	Thermal	RES (Hy+Solar)	Total	Hydro	Thermal	RES (Hy+Solar)	Total	Hydro	Thermal	RES (Hy+Solar)	Total				
BSPHCL	0.0	48.1	42.9	91.0	0.0	6.4	0.0	6.4	0.0	41.7	42.9	84.6	0	2736.2	2820.8	91
JUVNL	2.6	105.6	0.0	108.2	0.0	14.6	0.0	14.6	2.6	91.0	0.0	93.6	48.3	579.9	721.7	23
DVC	17.2	3057.8	0.0	3075.0	0.1	218.7	0.0	218.8	17.1	2839.2	0.0	2856.2	15.9	-940.6	1931.4	62
ODISHA(OPGC+ OHPC+TTPS)	395.9	486.1	8.8	890.8	2.5	54.3	0.0	56.8	393.4	431.8	8.8	834.0	459.4	1341.1	2634.5	85
WBPDCCL+	186.1	2012.6	0.0	2198.8	0.0	200.4	0.0	200.4	186.1	1812.3	0.0	1998.4	116.9	1686.9	3802.2	123
WBSEDCL																
DPL	0.0	156.0	0.4	156.4	0.0	15.9	0.0	15.9	0.0	140.0	0.4	140.5	0	51.7	192.1	6
CESC	0.0	576.0	0.0	576.0	0.0	44.8	0.0	44.8	0.0	531.2	0.0	531.2	0	524.0	1055.2	34
HEL	0.0	424.7	0.0	424.7	0.0	31.9	0.0	31.9	0.0	392.8	0.0	392.8	0	-392.8		
SIKKIM	0.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0	38.6	41.6	1
NTPC	0.0	4170.3	0.0	4170.3	0.0	292.2	0.0	292.2	0.0	3878.2	0.0	3878.2	0	-3878.2		
BRBCL	0.0	128.1	0.0	128.1	0.0	12.0	0.0	12.0	0.0	116.1	0.0	116.1	0	-116.1		
MPL	0.0	532.6	0.0	532.6	0.0	32.6	0.0	32.6	0.0	500.0	0.0	500.0	0	-500.0		
APNRL	0.0	327.5	0.0	327.3	0.0	27.6	0.0	27.6	0.0	299.6	0.0	299.6	0	-299.6		
GMR	0.0	346.4	0.0	346.4	0.0	19.9	0.0	19.9	0.0	326.5	0.0	326.5	0	-326.5		
JITPL	0.0	348.9	0.0	348.9	0.0	24.4	0.0	24.4	0.0	324.5	0.0	324.5	0	-324.5		
NHPC (Inc TLDP= 207.11 MU)	620.2	0.0	0.0	620.2	0.0	0.0	0.0	0.0	620.2	0.0	0.0	620.2	0	-620.2		
CHPC(Birpara Receipt)	291.9	0.0	0.0	291.9	0.0	0.0	0.0	0.0	291.9	0.0	0.0	291.9	0	-291.9		
KHPS	71.3	0.0	0.0	71.3	0.0	0.0	0.0	0.0	71.3	0.0	0.0	71.3	0	-71.3		
THPS	605.0	0.0	0.0	605.0	0.0	0.0	0.0	0.0	605.0	0.0	0.0	605.0	0	-605.0		
DAGACHU HPS	59.0	0.0	0.0	59.0	0.0	0.0	0.0	0.0	59.0	0.0	0.0	59.0	0	-59.0		
CHUZACHEN HPS	74.5	0.0	0.0	74.5	0.6	0.0	0.0	0.6	73.8	0.0	0.0	73.8	0	-73.8		
JORTHANG HPS	71.3	0.0	0.0	71.3	0.0	0.0	0.0	0.0	71.3	0.0	0.0	71.3	0	-71.3		
TEESTA-III HPS	562.3	0.0	0.0	562.3	0.0	0.0	0.0	0.0	562.3	0.0	0.0	562.3	0	-562.3		
DIKCHU HPS	71.7	0.0	0.0	71.7	0.0	0.0	0.0	0.0	71.7	0.0	0.0	71.7	0	-71.7		
TASHIDING HPS	74.3	0.0	0.0	74.3	0.0	0.0	0.0	0.0	74.3	0.0	0.0	74.3	0	-74.3		
TALCHER SOLAR	0.0	0.0	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0	-0.8		
Total Drawal by HVDC Sahsaram,Alipurduar,BRBCL,Indbharat and OPGC														4.8	4.8	
TOTAL	3103.4	12720.7	56.0	15880.07	3.3	995.7	0	999.1	3100.1	11724.8	56.0	14880.8	640.5	-2316.8	13204.5	426

13204.5

POWER SUPPLY POSITION IN EASTERN REGION DURING THE YEAR AS COMPARED TO PREVIOUS YEAR

A) Net Average Energy

Month	2017-18					2018-19				
	Demand Met	Requirement	Shortage	Shortage	Avg. Freq.	Demand Met	Requirement	Shortage	Shortage	Avg. Freq.
	(MU/Day)	(MU/Day)	(MU/Day)	(%)	(HZ)	(MU/Day)	(MU/Day)	(MU/Day)	(%)	(HZ)
APRIL	394.05	397.91	3.86	0.97	49.98	393.59	396.98	3.39	0.85	49.96
MAY	389.99	394.80	4.81	1.22	49.98	420.52	425.36	4.84	1.14	49.94
JUNE	398.64	401.43	2.79	0.70	49.99	437.39	441.13	3.74	0.85	49.97
JULY	381.05	383.05	2.00	0.52	49.98	425.68	427.31	1.63	0.38	49.97
AUGUST	394.80	396.81	2.01	0.51	49.98	-	-	-	-	-
SEPTEMBER	418.67	420.99	2.32	0.55	49.97	-	-	-	-	-
OCTOBER	390.86	393.65	2.79	0.71	49.96	-	-	-	-	-
NOVEMBER	332.17	336.69	4.53	1.34	49.96	-	-	-	-	-
DECEMBER	329.55	331.98	2.43	0.73	49.98	-	-	-	-	-
JANUARY	353.94	356.68	2.74	0.77	49.98	-	-	-	-	-
FEBRUARY	361.36	364.11	2.75	0.76	49.98	-	-	-	-	-
MARCH	393.97	396.42	2.45	0.62	49.97	-	-	-	-	-

B) Peak in MW:

Month	2017-18					2018-19				
	Demand Met	Requirement	Shortage	Shortage	Avg. Freq.	Demand Met	Requirement	Shortage	Shortage	Avg. Freq.
	(MW)	(MW)	(MW)	(%)	(HZ)	(MW)	(MW)	(MW)	(%)	(HZ)
APRIL	19164	19387	224	1.15	49.98	21058	21128	70	0.33	49.96
MAY	19509	19664	155	0.79	49.98	21902	22012	111	0.50	49.94
JUNE	18994	19047	53	0.28	49.99	22080	22964	884	3.85	49.97
JULY	19110	19200	91	0.47	49.98	21790	21849	59	0.27	49.97
AUGUST	19221	19514	293	1.50	49.98	-	-	-	-	-
SEPTEMBER	20283	20670	387	1.87	49.97	-	-	-	-	-
OCTOBER	19882	19966	84	0.42	49.96	-	-	-	-	-
NOVEMBER	18377	18866	489	2.66	49.96	-	-	-	-	-
DECEMBER	17837	18195	358	2.01	49.98	-	-	-	-	-
JANUARY	18238	18508	270	1.48	49.98	-	-	-	-	-
FEBRUARY	18918	19196	278	1.47	49.98	-	-	-	-	-
MARCH	20567	20951	384	1.87	49.97	-	-	-	-	-

ENTITLEMENT, DRAWAL SCHEDULE (EX. BUS) AND ACTUAL DRAWAL FROM CENTRAL SECTOR GENERATION .

All figures are in MU

	FROM	Cumulative from 01-Apr-18 to 31/Jul/18		During July-18							
		ENTITLEMENT (EX-BUS)	DRAWAL SCHEDULE (EX-BUS)	BILATERAL [EXPORT(-) / IMPORT(+)] (EX-SELLER BUS)	NET DRAWAL SCHEDULE (AFTER LOSS)	ACTUAL DRAWAL FROM GRID	ENTITLEMENT (EX-BUS)	DRAWAL SCHEDULE (EX-BUS)	BILATERAL [EXPORT(-) / IMPORT(+)] (EX-SELLER BUS)	NET DRAWAL SCHEDULE (AFTER LOSS)	ACTUAL DRAWAL FROM GRID
BSPHCL	FARAKKA STPS I	1055.59	978.82				303.84	286.01			
	FARAKKA STPS III	325.98	295.68				82.81	76.10			
	KAHALGAON STPS I	835.37	717.72				178.17	174.18			
	KAHALGAON STPS II	169.38	176.76				43.01	47.04			
	TALCHER STPS I	1007.97	1001.44				234.14	233.38			
	MTPS-II	482.09	457.82				124.22	115.57			
	BRBCL	59.90	54.62				11.78	11.78			
	Riy BRBCL	44.15	38.13				16.06	15.38			
	BARH STPS II	2572.79	2372.12				703.68	617.19			
	RANGIT HEP	43.98	160.75				15.15	15.15			
	CHUKHA HEP	114.76	188.91				59.78	92.54			
	KIRUCHHU HEP	0.00	0.00				0.00	0.00			
	TALA HPS	344.37	281.74				191.31	166.03			
TEESTA HEP	235.99	235.99				77.58	77.58				
TOTAL	7292.33	6960.49	3498.93	10235.67	10162.38	2041.53	1927.93	800.35	2682.07	2678.08	
JUVNL	FARAKKA STPS I	288.24	251.17				82.96	68.03			
	FARAKKA STPS III	206.08	144.17				51.86	28.74			
	KAHALGAON STPS I	63.87	71.66				13.62	13.57			
	KAHALGAON STPS II	42.47	65.79				10.78	11.51			
	TALCHER STPS I	187.37	183.59				43.53	42.99			
	MTPS-II	22.07	23.33				5.69	5.66			
	BARH STPS II	239.56	201.99				65.52	54.32			
	RANGIT HEP	16.76	16.76				5.77	5.77			
	CHUKHA HEP	41.60	68.47				21.67	33.54			
	KIRUCHHU HEP	0.00	0.00				0.00	0.00			
	TALA HPS	154.77	116.62				85.98	74.62			
	TEESTA HEP	136.97	136.97				45.03	45.03			
	TOTAL	1399.76	1280.51	596.93	2110.83	2169.67	432.41	383.78	141.37	569.51	567.55
DVC	FARAKKA STPS I	16.79	0.00				0.00	0.00			
	FARAKKA STPS III	61.39	75.21				19.86	18.61			
	KAHALGAON STPS I	0.00	0.00				0.00	0.00			
	KAHALGAON STPS II	1.84	0.00				0.00	0.00			
	TALCHER STPS I	8.18	7.18				1.76	1.64			
	MTPS-II	45.37	16.19				4.31	4.02			
	BRBCL	121.19	130.62				24.09	24.09			
	RANGIT HEP	20.63	12.57				4.33	4.33			
	CHUKHA HEP	37.21	66.12				20.92	32.39			
	KIRUCHHU HEP	33.93	17.33				9.39	8.39			
	TALA HPS	83.95	61.21				41.56	36.07			
	TEESTA HEP	193.62	95.91				31.53	31.53			
	TOTAL	496.70	482.33	-5527.42	-5101.99	-5011.16	157.75	161.07	-1086.81	-950.19	-940.64
GRIDCO	FARAKKA STPS I	476.83	487.52				137.25	149.73			
	FARAKKA STPS III	210.82	206.13				53.56	55.51			
	KAHALGAON STPS I	314.83	312.04				67.15	77.61			
	KAHALGAON STPS II	89.13	147.51				22.63	58.04			
	TALCHER STPS (Stg-I)	794.80	787.73				183.61	183.66			
	TALCHER STPS (Stg-II)	0.00	0.00				0.00	0.00			
	MTPS-II	54.83	7.91				14.13	1.72			
	BARH STPS II	496.92	434.33				135.91	144.65			
	RANGIT HEP	0.00	0.00				0.00	0.00			
	CHUKHA HEP	98.13	96.84				30.65	47.44			
	KIRUCHHU HEP	0.00	0.00				0.00	0.00			
	TALA HPS	57.40	55.35				31.89	36.07			
	TEESTA HEP	228.55	228.55				75.14	75.14			
TOTAL	2822.25	2763.92	1612.74	4388.08	4768.93	751.92	829.57	283.62	1170.59	1312.59	
WBSIEDCL	FARAKKA STPS I	1057.62	1001.88				304.42	298.27			
	FARAKKA STPS III	395.80	354.88				100.55	95.46			
	KAHALGAON STPS I	18.34	20.26				3.91	5.33			
	KAHALGAON STPS II	31.27	44.88				7.94	12.49			
	TALCHER STPS I	244.86	234.51				56.88	56.43			
	MTPS-II	61.95	49.90				15.96	14.43			
	RANGIT HEP	35.62	33.48				12.26	12.26			
	CHUKHA HEP	123.35	203.06				64.26	99.47			
	KIRUCHHU HEP	3.99	17.33				0.00	8.39			
	TALA HPS	516.56	201.23				286.97	27.67			
	TEESTA HEP	266.19	266.19				87.51	87.51			
	TOTAL	2755.54	2427.58	2796.43	5423.67	5679.74	940.66	717.71	599.15	1525.80	1627.39
	SIKKIM	FARAKKA STPS I	54.79	50.73				15.77	12.83		
FARAKKA STPS III		0.00	0.00				0.00	0.00			
KAHALGAON STPS I		30.93	30.40				6.60	6.22			
KAHALGAON STPS II		11.23	11.20				2.85	2.82			
TALCHER STPS I		58.65	58.65				13.62	13.62			
MTPS-II		3.57	3.53				0.92	0.92			
BARH STPS II		44.59	42.34				12.20	10.64			
RANGIT HEP		16.76	16.76				5.77	5.77			
CHUKHA HEP		8.60	14.15				4.48	6.93			
KIRUCHHU HEP		0.00	0.00				0.00	0.00			
TEESTA HEP		146.41	146.41				48.13	48.13			
TOTAL		375.53	374.16	-191.38	168.98	155.33	110.34	107.88	-60.90	42.20	37.77
WR		FARAKKA STPS I	0.00	0.00				0.00	0.00		
	KAHALGAON STPS I	0.00	0.00				0.00	0.00			
	KAHALGAON STPS II	-902.33	-806.73				-229.11	-185.38			
	TALCHER STPS I	0.00	0.00				0.00	0.00			
	BARH STPS II	0.00	0.00				0.00	0.00			
	BRBCL	-288.24	-224.17				-54.28	-49.78			
	TOTAL	-1190.57	-1030.90	1234.28	1063.03	4615.20	-283.39	-235.16	588.41	662.52	1630.22
SR	FARAKKA STPS I	-68.63	-56.23				-19.76	-19.13			
	FARAKKA STPS III	-9.02	-8.98				-2.29	-1.95			
	KAHALGAON STPS I	-27.58	-28.60				-5.88	-5.46			
	KAHALGAON STPS II	-25.96	-24.23				-6.59	-6.59			
	TALCHER STPS STG-I	-38.20	-37.81				-8.87	-8.87			
	MTPS-II	-1.79	-1.64				-0.46	-0.41			
	BARH STPS II	-22.84	-22.08				-6.25	-6.21			
TOTAL	-194.02	-174.41	-1159.15	-376.75	-3566.20	-50.10	-48.62	-288.68	-307.31	-712.92	
NR	FARAKKA STPS I	-238.36	-195.19				-68.61	-52.03			
	KAHALGAON STPS I	-619.07	-483.53				-132.04	-97.27			
	KAHALGAON STPS II	-1907.74	-1482.81				-484.40	-367.45			
	TALCHER STPS I	0.00	0.00				0.00	0.00			
	BRBCL	-52.01	-52.90				-11.24	-11.76			
	TALA HPS	-202.58	-165.73				-112.54	-97.67			
	TOTAL	-3019.76	-2380.15	-6389.63	-8910.58	-7708.37	-808.83	-626.18	-1990.34	-2487.44	-2362.27
WR+SR+NR (GRAND TOTAL)	-4404.34	-3585.46	-6314.51	-8224.30	-6659.37	-1142.32	-909.96	-1690.61	-2132.23	-1444.97	
NER	FARAKKA STPS I	-111.29	-81.72				-32.03	-20.74			
	FARAKKA STPS III	-1.13	-1.29				-0.29	-0.26			
	KAHALGAON STPS I	-58.97	-53.93				-12.58	-10.38			
	KAHALGAON STPS II	-176.36	-136.40				-44.78	-31.85			
	TALCHER STPS I	-72.12	-68.62				-16.75	-15.63			
TOTAL	-419.87	-341.97	184.83	-68.29	-959.94	-106.43	-78.86	84.30	44.78	-370.48	

PERFORMANCE OF GENERATING STATIONS IN THE EASTERN REGION DURING THE MONTH OF JULY-2018

ORGANI- SATION	TYPE	POWER STATION	INSTALLED CAPACITY (in MW)	EFFECTIVE CAPACITY (in MW)	Gross Energy Generation in MU	Net Energy Generation in MU	Cummulative Gross Energy Generation upto Current Month (2018-19) in MU	Cummulative Net Energy Generation upto Current Month (2018-19) in MU	
BIHAR	Thermal	Barauni (U# 6&7)	220.00	210.00	0.00	0.00	44.86	39.47	
		Muzaffarpur Stg-I	220.00	220.00	48.14	41.73	175.75	151.64	
		Thermal Total	440.00	430.00	48.14	41.73	220.61	191.11	
	RES	Total BIHAR	767.40	757.40	91.04	84.64	312.73	283.24	
JHARKHAND									
TVNL	Thermal	TVNL	420.00	420.00	105.60	90.98	525.50	449.32	
JSEB	Hydro	Subarnrekha (U#1,2)	130.00	130.00	2.63	2.63	5.10	5.10	
	RES		29.72	29.72	0.00	0.00	0.00	0.00	
		Total	159.72	159.72	2.63	2.63	5.10	5.10	
DVC	Thermal	Bokaro-B(3)	210.00	210.00	0.00	0.00	185.71	163.36	
		Chandrapura (3)	140.00	130.00	0.00	0.00	0.00	0.00	
		Chandrapura(U7 # 8)	500.00	500.00	329.96	298.99	1231.30	1117.30	
		Durgapur(4)	210.00	210.00	59.66	51.16	347.70	303.72	
		Mezia(1,2,3,4,5,6)	1340.00	1340.00	645.69	577.39	2211.06	1979.11	
		Mezia(U # 7,8)	1000.00	1000.00	377.04	356.37	2133.78	2025.99	
		Bokaro-A(1,2)	500.00	500.00	241.73	226.93	1230.46	1162.36	
		Durgapur STPS (U#1,2)	1000.00	1000.00	587.03	557.90	2473.26	2354.89	
		Raghunathpur TPS (U#1,2)	1200.00	1200.00	271.04	252.99	1067.25	994.47	
		Koderma STPS (U#1,2)	1000.00	1000.00	545.68	518.10	2517.19	2398.35	
		Total Thermal	7100.00	7090.00	3057.83	2839.16	13397.72	12498.87	
	6.273	Hydro	Maithon (U#1,2,3)	63.20	63.20	7.52	7.48	35.12	34.95
			Panchet (U#1,2)	80.00	80.00	9.44	9.34	15.90	15.62
			Tilaya (U#1,2)	4.00	4.00	0.24	0.23	0.24	0.21
Hydro Total			147.20	147.20	17.20	17.05	51.26	50.77	
	Total DVC	7247.20	7237.20	3075.03	2856.21	13448.97	12549.65		
WEST BENGAL									
WBPDCCL	Thermal	Bandel TPS	540.00	450.00	125.12	109.58	564.93	501.96	
		Santalidih TPS(U#5&6)	500.00	500.00	336.56	308.18	1330.20	1220.07	
		Kolaghat TPS	1260.00	1260.00	400.21	354.26	1604.18	1419.04	
		Bakreswar TPP	1050.00	1050.00	621.17	562.48	2579.07	2340.58	
		Sagardighi TPP	1600.00	1600.00	529.58	477.76	2077.93	1869.05	
		Thermal Total	4950.00	4860.00	2012.63	1812.26	8156.31	7350.69	
WBSIEDCL	Hydro	Jaldhaka (3x9+2x4)	35.00	35.00	24.48	24.48	83.75	83.75	
		Ramam (4x12.73)	51.00	51.00	37.01	37.01	84.25	84.25	
		Teesta C.F. (3x3x7.3)	67.30	67.30	11.03	11.03	43.77	43.77	
		Purulia PSS (4x225)	900.00	900.00	113.61	113.61	342.59	342.59	
		Total Hydro	1053.30	1053.30	186.14	186.14	554.36	554.36	
		RES	281.52	281.52	0.00	0.00	0.00	0.00	
DPL	Thermal	DPPS (110+300+250 *)	660.00	660.00	155.99	140.04	936.03	837.89	
		RES	1.00	1.00	0.44	0.44	2.09	2.09	
	➤	Chandrapura #1 is retired on 17.01.17							
	➤	Patratu # 1,2,3,5,8 are retired on 21.12.16							

PERFORMANCE OF GENERATING STATIONS IN THE EASTERN REGION DURING THE MONTH OF JULY-2018

ORGANI- SATION	TYPE	POWER STATION	INSTALLED CAPACITY (in MW)	EFFECTIVE CAPACITY (in MW)	Gross Energy Generation in MU	Net Energy Generation in MU	Cummulative Gross Energy Generation upto Current Month (2017-18) in MU	Cummulative Net Energy Generation upto Current Month (2017-18) in MU
CESC	Thermal	Titagarh (4x60)	240.00	240.00	0.00	0.00	0.00	0.00
		Southern (2x67.5)	135.00	135.00	20.03	18.17	128.79	116.62
		Budge-Budge (3x250)	750.00	750.00	555.99	513.06	2155.80	1988.63
		Total CESC	1125.00	1125.00	576.02	531.24	2284.59	2105.25
HEL	Thermal	HEL	600.00	600.00	424.67	392.53	1637.51	1512.32
		Total West Bengal	8670.82	8580.82	3355.45	3062.21	13570.46	12362.16
ODISHA (NTPC)	Thermal	Talcher-I	250.00	240.00	141.28	125.81	656.30	588.29
		Talcher-II	220.00	220.00	150.92	134.40	602.01	537.45
		Total Thermal	470.00	460.00	292.20	260.21	1258.31	1125.74
OPGC	Thermal	IB TPS	420.00	420.00	193.88	171.55	994.97	886.10
OHPC	Hydro	Hirakud-I (Burla)	275.50	275.50	43.57	43.35	135.40	134.50
		Hirakud-II (Chiplima)	72.00	72.00	20.60	20.53	81.45	81.16
		Balimela (6x60+2x75)	510.00	510.00	138.70	138.25	621.67	619.77
		Rengali (5x50)	250.00	250.00	62.62	62.52	227.43	227.01
		Upper Kolab (4x80)	320.00	320.00	45.57	45.35	228.40	227.69
		Indravati HPS (4x150)	600.00	600.00	63.95	62.50	516.85	506.39
		Mckd.(Odisha drawal)	57.38	57.38	20.89	20.89	81.62	81.62
		Total Hydro	2084.88	2084.88	395.92	393.39	1892.82	1878.14
		RES	184.30	184.30	8.84	8.84	48.23	48.23
		Total Odisha	3159.18	3149.18	890.84	833.99	4194.34	3938.21
(**) SIKKIM	Hydro	RES	52.11	52.11	3.00	3.00	12.00	12.00
NTPC		MTPS Stg-II	390.00	390.00	154.084	137.18	614.72	542.70
		FSTPP# I&II (3x200+2x500)	1600.00	1600.00	970.80	907.66	3382.68	3138.84
		FSTPP (U# 6)	500.00	500.00	299.44	279.36	1185.41	1105.55
		KhSTPP (4x210+3x500)	2340.00	2340.00	1240.60	1147.16	5227.99	4840.39
		TSTPP (2x500)	1000.00	1000.00	621.51	567.86	2642.63	2430.70
		BARH STPS II (2X660)	1320.00	1320.00	883.89	838.94	3333.84	3159.57
		Total NTPC	7150.00	7150.00	4170.32	3878.16	16387.27	15217.75
NHPC	HYDRO	Rangit (3x20)	60.00	60.00	44.14	44.14	131.03	131.03
		Teesta (3x170)	510.00	510.00	369.00	369.00	1145.23	1145.23
		TLDP -(4x33+4x40)	292.00	292.00	207.11	207.11	536.36	536.36
		Total NHPC	862.00	862.00	620.25	620.25	1812.62	1812.62
IPP		MPL (U#1&2)	1050.00	1050.00	532.63	500.02	2476.84	2339.28
IPP		APNRL (U#1,2)	540.00	540.00	327.45	299.64	1171.63	1073.77
GMR (2x350)		700.00	700.00	346.37	326.45	1615.17	1522.30	
JITPL (2X600)		1200.00	1200.00	348.85	324.47	1614.74	1503.05	
BRBCL # 1,2		500.00	500.00	128.11	116.07	580.28	530.62	
CHUZACHEN** (2x55)		110.00	110.00	74.49	73.85	199.30	198.66	
JORETHANG (2x48)		96.00	96.00	71.29	71.29	161.81	161.81	
TEESTA URJA St III (6x200)		1200.00	1200.00	562.35	562.35	1744.03	1744.03	
Tashilding (2x48.5)		97.00	97.00	74.27	74.27	160.87	160.87	
DICKCHU (3X32)		96.00	96.00	71.66	71.66	225.79	225.79	
TALCHER SOLAR		10.00	10.00	0.79	0.79	4.68	4.68	
Total Thermal (E.R)		27325.00	27205.00	12720.69	11724.52	53257.48	49144.05	
EASTERN REGIONAL		Total Hydro (E.R)	5876.38	5876.38	2076.19	2072.87	6810.95	6795.14
Total RES		886.05	886.05	55.98	55.98	156.13	156.13	
TOTAL (E.R)	34087.43	33967.43	14852.85	13853.36	60224.57	56095.33		
BHUTAN	Hydro	CHPC(4x90)	360.00	270.00	291.91	291.91	590.15	590.15
		Kurichu (4x15)	60.00	60.00	71.29	71.29	144.08	144.08
		TALA (6x170)	1020.00	1020.00	605.05	605.05	1034.42	1034.42
		DAGACHU (2x63)	126.00	126.00	58.98	58.98	106.74	106.74
		Grand Total	35653.43	35443.43	15880.07	14880.58	62099.97	57970.73

PLANT LOAD FACTOR (PLF) OF THERMAL POWER STATIONS IN EASTERN REGION DURING THE MONTH OF JULY-2018

ORGANI- SATION	TYPE	POWER STATION	INSTALLED CAPACITY (in MW)	EFFECTIVE CAPACITY (in MW)	Gross Energy Generation in MU	PLF of Current Month (%)	Cummulative Gross Energy Generation upto Current Month (2018-19) in MU	Cummulative PLF upto Current Month (%)
BIHAR	Thermal	Barauni (U# 6&7)	220.00	210.00	0.00	0.00	44.86	7.30
		Muzaffarpur Stg-I	220.00	220.00	48.14	29.41	175.75	27.28
		Thermal Total	440.00	430.00	48.14	15.05	220.61	17.52
	RES			42.91		92.13		
		Total BIHAR	767.40	757.40	91.04		312.73	
JHARKHAND								
TVNL	Thermal	TVNL	420.00	420.00	105.60	33.79	525.50	42.73
JSEB	Hydro	Subarnrekha (U#1,2)	130.00	130.00	2.63		5.10	
		RES	29.72	29.72	0.00		0.00	
		Total	159.72	159.72	2.63		5.10	
DVC	Thermal	Bokaro-B(3)	210.00	210.00	0.00	0.00	185.71	30.20
		Chandrapura (3)	140.00	130.00	0.00	0.00	0.00	0.00
		Chandrapura(U7 # 8)	500.00	500.00	329.96	88.70	1231.30	84.11
		Durgapur(4)	210.00	210.00	59.66	38.19	347.70	56.55
		Mezia(1,2,3,4,5,6)	1340.00	1340.00	645.69	64.77	2211.06	56.35
		Mezia(U # 7,8)	1000.00	1000.00	377.04	50.68	2133.78	72.87
		Bokaro-A(1,2)	500.00	500.00	241.73	64.98	1230.46	84.05
		Durgapur STPS (U#1,2)	1000.00	1000.00	587.03	78.90	2473.26	84.47
		Raghunathpur TPS (U#1,2)	1200.00	1200.00	271.04	30.36	1067.25	30.37
		Koderma STPS (U#1,2)	1000.00	1000.00	545.68	73.34	2517.19	85.97
		Total Thermal	7100.00	7090.00	3057.83	57.97	13397.72	64.54
	Hydro	Maithon (U#1,2,3)	63.20	63.20	7.52		35.12	
		Panchet (U#1,2)	80.00	80.00	9.44		15.90	
		Tilaya (U#1,2)	4.00	4.00	0.24		0.24	
Hydro Total		147.20	147.20	17.20		51.26		
	Total DVC	7247.20	7237.20	3075.03		13448.97		
WEST BENGAL								
WBPDCCL	Thermal	Bandel TPS	540.00	450.00	125.12	37.37	564.93	42.88
		Santalidih TPS(U#5&6)	500.00	500.00	336.56	90.47	1330.20	90.86
		Kolaghat TPS	1260.00	1260.00	400.21	42.69	1604.18	43.48
		Bakreswar TPP	1050.00	1050.00	621.17	79.51	2579.07	83.89
		Sagardighi TPP	1600.00	1600.00	529.58	44.49	2077.93	44.35
		Thermal Total	4950.00	4860.00	2012.63	55.66	8156.31	57.32
WBSEDCL	Hydro	Jaldhaka (3x9+2x4)	35.00	35.00	24.48		83.75	
		Ramam (4x12.73)	51.00	51.00	37.01		84.25	
		Teesta C.F. (3x3x7.3)	67.30	67.30	11.03		43.77	
		Purulia PSS (4x225)	900.00	900.00	113.61		342.59	
		Total Hydro	1053.30	1053.30	186.14		554.36	
		RES	281.52	281.52	0.00		0.00	
		TLDP -(4x33+4x40)	292.00	292.00	207.11		536.36	
DPL	Thermal	DPPS (110+300+250 *)	660.00	660.00	155.99	31.77	936.03	48.44
		RES	1.00	1.00	0.44		2.09	

PLANT LOAD FACTOR (PLF) OF THERMAL POWER STATIONS IN EASTERN REGION DURING THE MONTH OF JULY-2018

ORGANI- SATION	TYPE	POWER STATION	INSTALLED CAPACITY	EFFECTIVE CAPACITY	Gross Energy Generation in MU	PLF of Current Month (%)	Cummulative Gross Energy Generation upto Current Month (2017-18) in MU	Cummulative PLF upto Current Month (%)		
									(in MW)	(in MW)
CESC	Thermal	Titagarh (4x60)	240.00	240.00	0.00	0.00	0.00	0.00		
		Southern (2x67.5)	135.00	135.00	20.03	19.95	128.79	32.58		
		Budge-Budge (3x250)	750.00	750.00	555.99	99.64	2155.80	98.17		
		Total CESC	1125.00	1125.00	576.02	68.82	2284.59	69.36		
HEL	Thermal	600.00	600.00	424.67	95.13	1637.51	93.21			
		Total West Bengal	8670.82	8580.82	3355.45		13570.46			
ODISHA (NTPC)	Thermal	Talcher-I	250.00	240.00	141.28	79.12	656.30	93.39		
		Talcher-II	220.00	220.00	150.92	92.21	602.01	93.46		
		Total Thermal	470.00	460.00	292.20	85.38	1258.31	93.42		
OPGC	Thermal	IB TPS	420.00	420.00	193.88	62.04	994.97	80.91		
OHPC	Hydro	Hirakud-I (Burla)	275.50	275.50	43.57		135.40			
		Hirakud-II (Chiplima)	72.00	72.00	20.60		81.45			
		Balimela (6x60+2x75)	510.00	510.00	138.70		621.67			
		Rengali (5x50)	250.00	250.00	62.62		227.43			
		Upper Kolab (4x80)	320.00	320.00	45.57		228.40			
		Indravati HPS (4x150)	600.00	600.00	63.95		516.85			
		Mckd.(Odisha drawal)	57.38	57.38	20.89		81.62			
		Total Hydro	2084.88	2084.88	395.92		1892.82			
		RES	184.30	184.30	8.84		48.23			
Total Odisha	3159.18	3149.18	890.84		4194.34					
(**) SIKKIM	Hydro	RES	52.11	52.11	3.00		12.00			
NTPC		MTPS Stg-II	390	390	154.084	53.10	614.7207	53.83		
		FSTPP# I&II (3x200+2x500)	1600.00	1600.00	970.80	81.55	3382.68	72.21		
		FSTPP (U# 6)	500.00	500.00	299.44	80.49	1185.41	80.97		
		KhSTPP (4x210+3x500)	2340.00	2340.00	1240.60	71.26	5227.99	76.30		
		TSTPP (2x500)	1000.00	1000.00	621.51	83.54	2642.63	90.25		
		BARH STPS II (2X660)	1320.00	1320.00	883.89	90.00	3333.84	86.26		
		Total NTPC	7150.00	7150.00	4170.32	78.40	16387.27	78.28		
NHPC	HYDRO	Rangit (3x20)	60.00	60.00	44.14		131.03			
		Teesta (3x170)	510.00	510.00	369.00		1145.23			
		TLDP -(4x33+4x40)	292.00	292.00	207.11		536.36			
		Total NHPC	862.00	862.00	620.25		1812.62			
IPP	Thermal	MPL (U#1&2)	1050.00	1050.00	532.63	68.18	2476.84	80.56		
		APNRL (U#1,2)	540.00	540.00	327.45	81.50	1171.63	74.10		
		GMR (2x350)	700.00	700.00	346.37	66.51	1615.17	78.80		
		JITPL (2X600)	1200.00	1200.00	348.85	39.07	1614.74	45.96		
		BRBCL # 1,2	500.00	500.00	128.11	34.44	580.28	39.64		
		CHUZACHEN** (2x55)	110.00	110.00	74.49		199.30			
		JORETHANG (2x48)	96.00	96.00	71.29		161.81			
		TEESTA URJA St III (6x200)	1200.00	1200.00	562.35		1744.03			
		Tashilding (2x48.5)	97.00	97.00	74.27		160.87			
		DICKCHU (3X32)	96.00	96.00	71.66		225.79			
		TALCHER SOLAR	10.00	10.00	0.79		4.68			
		Total Thermal (E.R)	27325.00	27205.00	12720.69	62.85	53257.48	66.86		
		EASTERN REGIONAL		Total Hydro (E.R)	5876.38	5876.38	2076.19		6810.95	
				Total RES	886.05	886.05	55.98		156.13	
TOTAL (E.R)	34087.43			33967.43	14852.85		60224.57			
BHUTAN	Hydro	CHPC(4x90)	360.00	270.00	291.91		590.15			
		Kurichu (4x15)	60.00	60.00	71.29		144.08			
		TALA (6x170)	1020.00	1020.00	605.05		1034.42			
		DAGACHU (2x63)	126.00	126.00	58.98		106.74			
		Grand Total	35653.43	35443.43	15880.07		62099.97			

CONTRIBUTIONS OF DIFFERENT CONSTITUENTS AT THE TIME OF REGIONAL PEAK
DURING THE MONTH OF JULY-2018 (12-7-2018)

Date 12-Jul-18
Time 21.00 Hrs.
Frequency 49.97 Hz.

(All Fig. in MW)

System/State	Installed	Effective	Hydro	Thermal	Total
	Capacity	Capacity			
BSPHCL	767	757	0	93	93
JUVNL	580	580	0	124	124
DVC	7247	7237	35	3897	3932
ODISHA	3159	3149	969	685	1654
WBSEDCL	6285	6195	949	2422	3371
TLDP	292	292	295	0	295
HEL HALDIA	600	600	0	538	538
CESC	1125	1125	0	847	847
DPL	661	661	0	171	171
SIKKIM	52	52	0	0	0
NTPC	7150	7150	0	5378	5378
NHPC	570	570	570	0	570
CHUKHA	360	270	395	0	395
KURICHU	60	60	105	0	105
TALA	1020	1020	819	0	819
MPL	1050	1050	0	740	740
SEL	0	0	0	0	0
APNRL	540	540	0	392	392
Kamalganga (GMR)	700	700	0	591	591
JITPL	1200	1200	0	482	482
BRBCL	500	500	0	211	0
Chuzachen	110	110	101	0	101
Jorethang	96	96	100	0	100
TEESTA URJA St III	1200	1200	788	0	788
Tashilding	97	97	108	0	108
DICKCHU	96	96	98	0	98
<u>Daghachu</u>	126	126	101	0	101
<u>Solar</u>	10	10	0	0	0
<u>Diseal</u>	0	0	0	0	0
<u>Total</u>	35653	35443	5432	16571	22003
Import From Captive:					894
Export To:					
NER					574
SR					659
WR					-2921
NR					2265.71
Bangladesh					433.20
Nepal					96.25
Total					1107
➤ I Net Peak Demand Met (MW) :					21790

Indicates Export(+)/Import(-) of Power

Hourly Load Generation Data OF ER On Regional Peak Day During The Month of JULY-2018 (12-7-2018)

(All Figures in MW)

Hrs.	Generation			Import from Captive	Net Import From CHPS, KHPS & TALA	Net Export to other region	Demand Met	Freq. Correction	Load Shed	Requirement
	Hydro	Thermal	Total							
1	3142	16693	19834	739	1364	1634	20303	53	6	20363
2	3036	16708	19744	779	1364	1683	20204	12	6	20222
3	2907	16601	19507	780	1359	1413	20234	-2	4	20236
4	2922	16316	19239	711	1357	1509	19797	17	4	19819
5	2904	16535	19439	719	1354	1697	19815	35	6	19856
6	2872	16233	19105	734	1335	2696	18478	32	6	18517
7	2866	16268	19134	762	1337	3956	17276	65	5	17346
8	2803	16313	19115	754	1341	4093	17118	-9	4	17122
9	2658	16296	18954	762	1338	3411	17646	0	5	17651
10	2639	16408	19047	757	1338	3191	17954	14	33	18001
11	2571	16556	19127	805	1337	3054	18218	16	28	18262
12	2532	16519	19051	795	1330	2770	18409	0	6	18415
13	2483	16042	18525	783	1338	2527	18122	-19	7	18129
14	2509	15904	18413	786	1360	2717	17845	-9	6	17852
15	2490	16129	18619	713	1337	2758	17912	8	5	17925
16	2575	16198	18773	704	1348	2843	17984	33	7	18024
17	2758	16294	19053	710	1357	3507	17613	43	40	17696
18	2810	16373	19183	694	1342	3979	17240	33	34	17307
19	3871	16494	20365	775	1330	3397	19074	57	310	19441
20	4054	16624	20678	918	1308	1660	21243	41	28	21312
21	4113	16571	20684	894	1319	1107	21790	23	36	21849
22	3834	16629	20462	903	1338	1381	21323	30	43	21396
23	3853	16682	20535	867	1352	1349	21405	28	36	21470
24	3489	16778	20267	794	1359	1662	20758	27	29	20815

Hourly Load Generation Data of ER On Regional Lean Day During The Month of JULY-2018 (22-7-2018)

(All Figures in MW)

Hrs.	Generation			Import from Captive	Net Import From CHPS, KHPS & TALA	Net Export to other region	Demand Met	Freq. Correction	Load Shed	Requirement
	Hydro	Thermal	Total							
1	3330	15562	18892	814	1348	2255	18799	12	50	18861
2	2773	15515	18287	795	1347	2186	18243	-14	57	18285
3	2698	15054	17752	826	1354	2203	17730	2	62	17793
4	2581	14309	16890	776	1359	2045	16979	-24	64	17020
5	2604	14113	16718	689	1353	2169	16591	3	66	16660
6	2695	13443	16138	691	1339	2595	15573	-16	75	15631
7	2861	13352	16213	732	1330	3063	15212	-24	78	15265
8	2796	13351	16146	755	1332	3216	15017	-9	147	15155
9	2677	12870	15546	759	1339	3023	14622	-13	129	14738
10	2496	12602	15098	737	1342	2916	14262	-32	73	14302
11	2470	12327	14798	728	1338	2690	14174	-27	63	14210
12	2482	12274	14756	708	1331	2594	14201	4	44	14249
13	2502	12485	14986	708	1336	2722	14309	1	55	14365
14	2486	12415	14901	716	1340	2692	14265	-26	50	14289
15	2469	12483	14952	719	1332	2921	14082	5	36	14124
16	2483	12711	15194	758	1343	3286	14009	-2	29	14035
17	2498	12571	15069	759	1362	3146	14044	-4	42	14082
18	2522	12718	15240	778	1338	3261	14095	28	34	14158
19	2739	13957	16695	789	1315	2996	15803	29	31	15863
20	3049	15118	18167	829	1305	2202	18098	35	23	18157
21	3413	15576	18989	811	1311	2019	19093	17	23	19132
22	3615	15253	18869	834	1332	1769	19266	32	28	19326
23	3359	15665	19024	817	1357	2517	18681	-3	26	18703
24	3131	15784	18916	793	1355	2802	18262	-14	26	18273

NOTIFIED POWER CUTS/RESTRICTIONS ON INDUSTRIES & POWER SUPPLY TO AGRICULTURE SECTOR
 FOR THE MONTH OF JULY-2018
POWER CUT / RESTRICTIONS

BSPHCL	NO NOTIFIED CUTS/RESTRICTIONS However there was loadshedding of 18.04 MU
JUVNL	NO NOTIFIED CUTS/RESTRICTIONS However there was loadshedding of 2.89 MU
DVC	NO NOTIFIED CUTS/RESTRICTIONS. However there was loadshedding of 1.98 MU
ODISHA	NO NOTIFIED CUTS/RESTRICTIONS However there was loadshedding of 0.00 MU
WEST BENGAL	NO NOTIFIED CUTS/RESTRICTIONS. However there was loadshedding of 13.62 MU

POWER SUPPLY TO AGRICULTURAL SECTOR

STATE	HOURS OF SUPPLY (AVERAGE / DAY)
BIHAR	18 HRS.00 MINS.
JHARKHAND	ABOUT 20 to 22 HRS.
ODISHA	24 HRS.
WEST BENGAL	23 HRS.

FREQUENCY DETAILS FOR THE MONTH OF

Jul-18

D A T E	H O U R S						INST. FREQ.				15 MIN. INTEGRATED							
	00	05	10	17	22	00	<49.9	49.9	>50.05	49.9	MAX	HRS.	MIN	HRS.	MAX	HRS.	MIN	HRS.
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	HZ		HZ		HZ		HZ	
01-Jul	49.94	50.01	49.99	49.96	49.94	49.97	6.90	81.70	11.40	81.70	50.14	18:02	49.68	0:09	50.08	0:00	49.81	0:00
02-Jul	50.00	50.00	49.98	49.96	49.96	49.98	7.00	77.50	15.50	77.50	50.15	10:07	49.79	6:15	50.11	0:00	49.86	0:00
03-Jul	50.03	49.99	50.01	49.96	50.00	50.00	2.80	78.70	18.50	78.70	50.17	12:02	49.84	14:28	50.11	0:00	49.90	0:00
04-Jul	50.02	50.02	49.99	49.94	49.98	49.99	7.40	71.20	21.40	71.20	50.20	13:04	49.76	19:37	50.12	0:00	49.81	0:00
05-Jul	49.96	49.95	49.98	49.93	49.88	49.95	17.80	73.60	8.60	73.60	50.17	16:00	49.77	20:19	50.09	0:00	49.81	0:00
06-Jul	49.93	49.94	49.95	49.89	49.91	49.93	27.40	67.90	4.80	67.90	50.17	13:03	49.67	6:14	50.09	0:00	49.75	0:00
07-Jul	49.94	49.96	49.97	49.94	49.95	49.95	12.60	83.60	3.80	83.60	50.13	16:03	49.78	16:47	50.05	0:00	49.85	0:00
08-Jul	49.95	49.99	49.99	49.96	49.95	49.97	7.30	83.80	8.90	83.80	50.17	17:04	49.79	21:07	50.11	0:00	49.84	0:00
09-Jul	49.98	49.98	49.97	49.94	49.94	49.97	13.60	76.50	9.90	76.50	50.12	13:01	49.72	14:28	50.07	0:00	49.78	0:00
10-Jul	49.93	49.94	49.92	49.87	49.97	49.92	31.80	64.90	3.30	64.90	50.13	8:01	49.66	19:31	50.07	0:00	49.76	0:00
11-Jul	49.96	50.01	50.01	49.94	50.01	49.98	6.00	79.70	14.30	79.70	50.15	13:01	49.80	19:30	50.08	0:00	49.85	0:00
12-Jul	49.97	49.97	49.98	49.95	49.96	49.97	8.70	83.60	7.70	83.60	50.18	13:01	49.79	18:20	50.08	0:00	49.84	0:00
13-Jul	49.97	49.98	49.99	49.93	49.97	49.97	9.10	79.80	11.10	79.80	50.14	9:57	49.73	19:52	50.10	0:00	49.81	0:00
14-Jul	49.96	49.96	49.96	49.93	49.98	49.96	12.80	82.70	4.50	82.70	50.12	12:02	49.77	20:47	50.06	0:00	49.84	0:00
15-Jul	49.98	49.98	50.00	49.96	49.98	49.98	4.50	86.00	9.50	86.00	50.14	15:07	49.78	19:30	50.09	0:00	49.87	0:00
16-Jul	49.97	50.01	50.00	49.95	50.01	49.99	3.80	82.80	13.40	82.80	50.15	16:02	49.78	0:39	50.09	0:00	49.86	0:00
17-Jul	49.99	50.01	49.99	49.93	49.97	49.98	5.30	82.40	12.30	82.40	50.14	16:03	49.64	19:39	50.09	0:00	49.83	0:00
18-Jul	49.96	49.97	49.96	49.89	49.96	49.95	18.40	75.80	5.80	75.80	50.10	8:01	49.61	19:44	50.05	0:00	49.73	0:00
19-Jul	49.95	49.95	49.94	49.90	49.95	49.94	23.70	71.80	4.50	71.80	50.14	16:02	49.82	19:28	50.05	0:00	49.73	0:00
20-Jul	49.97	49.98	50.00	49.90	49.95	49.98	3.40	83.30	13.30	83.30	50.17	14:02	49.83	13:41	50.08	0:00	49.91	0:00
21-Jul	49.97	50.01	50.00	49.98	49.94	49.99	3.30	83.50	13.20	83.50	50.19	13:02	49.82	23:52	50.10	0:00	49.90	0:00
22-Jul	50.01	50.04	50.01	49.95	50.01	50.00	2.90	72.40	24.70	72.40	50.16	14:06	49.73	21:14	50.12	0:00	49.89	0:00
23-Jul	49.98	49.98	49.96	49.95	49.96	49.96	12.80	76.30	10.90	76.30	50.18	17:05	49.73	19:19	50.12	0:00	49.80	0:00
24-Jul	50.01	49.97	49.98	49.97	49.95	49.98	5.60	81.50	12.90	81.50	50.24	18:01	49.83	19:25	50.11	0:00	49.87	0:00
25-Jul	50.01	50.02	49.99	49.96	49.98	49.99	6.60	69.80	23.60	69.80	50.18	12:03	49.66	19:17	50.12	0:00	49.83	0:00
26-Jul	50.02	50.00	49.98	49.97	49.99	49.99	4.80	74.60	20.60	74.60	50.14	13:07	49.75	14:53	50.11	0:00	49.79	0:00
27-Jul	49.97	49.95	49.99	49.93	49.94	49.96	13.60	77.80	8.60	77.80	50.16	13:01	49.66	6:15	50.10	0:00	49.79	0:00
28-Jul	49.95	49.97	49.98	49.93	49.93	49.96	12.70	80.70	6.60	80.70	50.17	13:02	49.74	19:39	50.10	0:00	49.80	0:00
29-Jul	49.98	50.00	49.99	49.93	49.93	49.97	6.90	83.90	9.20	83.90	50.17	6:01	49.73	22:20	50.06	0:00	49.79	0:00
30-Jul	49.99	49.96	49.98	49.91	49.96	49.96	12.20	81.30	6.50	81.30	50.13	13:02	49.74	22:16	50.08	0:00	49.80	0:00
31-Jul	49.93	49.96	29.83	50.00	49.98	49.97	5.90	83.70	10.40	83.70	50.15	12:02	49.83	14:21	50.08	0:00	49.86	0:00
MAX	50.03	50.04	50.01	50.00	50.01	50.00	31.80	86.00	24.70	86.00	50.24		49.84		50.12		49.91	
MIN	49.93	49.94	29.83	49.87	49.88	49.92	2.80	64.90	3.30	64.90	50.10		49.61		50.05		49.73	
AVG	49.97	49.98	49.33	49.94	49.96	49.97	10.25	78.48	11.28	78.48	50.16		49.75		50.09		49.82	

SUMMARY:

Avg. Frequency : **49.97 Hz.**Instantaneous Frequency :

Maximum Frequency : 50.24 Hz On 00/01/00 at 18:01 Hrs.

Minimum Frequency : 49.61 Hz On 00/01/00 at 19:28 Hrs.

15 Minutes Integrated Frequency :

Maximum Frequency : 50.12 Hz On 00/01/00 at 00:00 Hrs.

Minimum Frequency : 49.73 Hz On 00/01/00 at 00:00 Hrs.

Frequency Distribution in % of Time			
Hz	<49.9	49.9-50.05	>50.05
% of Time	10.25	78.48	11.28

VOLTAGE ANALYSIS

MAXIMUM & MINIMUM VOLTAGES RECORDED AT IMPORTANT 400 kV S/S IN THE MONTH OF JULY-2018

(All figs. in kV)

PGCIL	BINAGURI		MAITHON		JEERAT		BIHARSHARIFF	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	416	396	421	404	419	375	421	398

PGCIL	MUZAFFARPUR		JAMSHEDPUR		ROURKELA		JEYPORE	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	416	385	423	406	414	399	424	397

DETAILS OF CONSTITUENT WISE LOAD SHEDDING IMPLEMENTED THROUGH UFRs IN THE EASTERN REGION

Expected Load Relief through UFRs by ER Constituent:

(All Fig. are in MW)

STATES/ UTILITIES	STAGE-I (49.2 Hz) (Inst.)	STAGE-II (49.0 Hz) (Inst.)	STAGE-III (48.8 Hz) (Inst.)	STAGE-IV 48.2 Hz (Inst.)	Total Load Relief by Control Area
BIHAR	98	99	99	101	397
JHARKHAND	61	62	61	62	246
DVC	134	135.5	136	137	542.5
ODISHA	181.5	183.5	184	186	735
WEST BENGAL (incl. CESC)	345.5	350	350	354	1399.5
TOTAL	820	830	830	840	3320

As decided in the National Power Committee (NPC) meeting held on 16.07.2013 and subsequently in the 89th OCC meeting of ERPC to implement the scheme w.e.f. 30.09.2013.

A. WATER LEVEL OF MAJOR HYDEL RESERVOIRS OF THE REGION IN Jul-18

(All figs.in mtrs.)

Name of the Reservoirs	FRL	MDDL	As on last day of the		As on first day of this month & date	
			(31-07-18)	(31-07-17)		
Hirakud	192	180	186.21	185.03	183.05	01.07.18
Balimela	462	439	450.56	449.03	444.49	01.07.18
Rengali	123	109	116.21	116.50	111.11	01.07.18
Upperkolab	858	844	850.58	850.24	845.84	01.07.18
Indravati	642	625	634.64	632.80	627.00	01.07.18
Subernrekha	590	580	586.01	589.12	583.84	01.07.18

B. CPP/IPP IMPORT by Eastern Region Constituents during Jul-18

(All figs. are in MU)

System	Tata Power	Cresent Power	JSPL, Angul	Sterlite	Jindal	NALCO	TISCO	Others	Total
JUVNL									48.26
West Bengal	54.36	26.09	0	0	0	0	0	36.46	116.90
ODISHA	0	0	32.55	44.12	9.67	10.17	0	362.92	459.44
DVC	0	0	0	0	0	0	15.86	0	15.86
TOTAL	54.36	26.09	32.55	44.12	9.67	10.17	15.86	399.38	640.46

C. Distribution of Schedule Supply among Key Customers by IPPs during Jul-18

(All figs. are in MU)

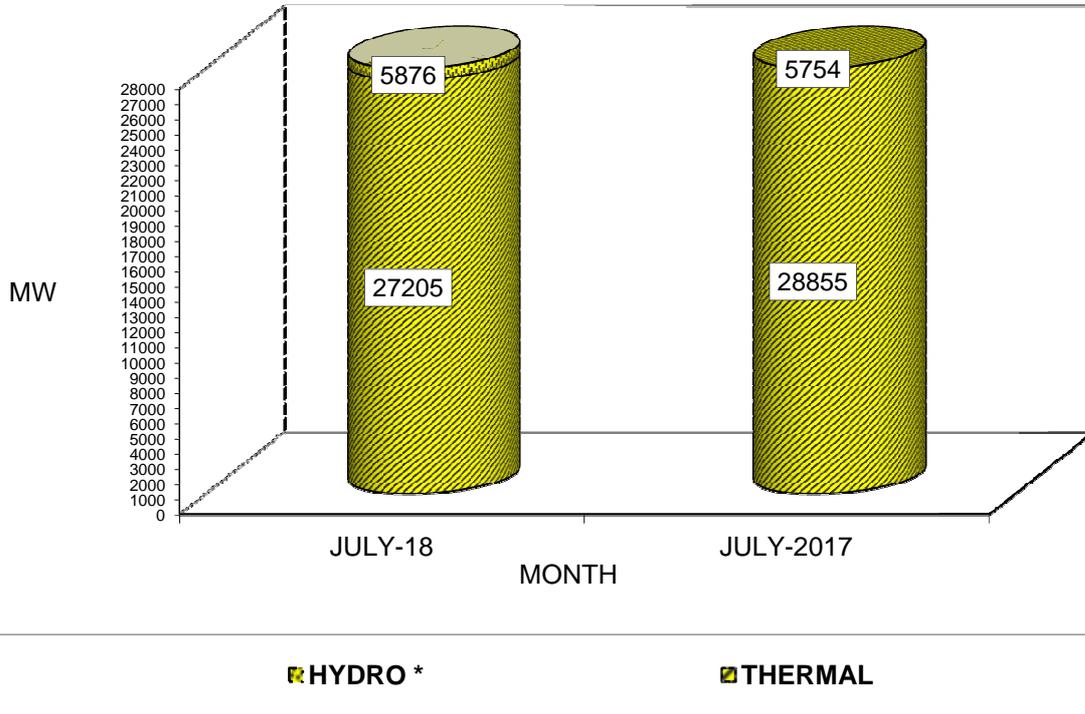
IPP	TPDDL	WBSEDCL/ WBPDCCL	DVC *	Sale at IEX/NPCL	ODISHA	JSEB	CTU/Others	Total (Excl. Tr. Loss)
MPL	132.94	147.68	72.42	0.00	0	0	149.16	502.21
Sterlite	0	0	0	0	0.00	0	0.00	0.00
APNRL	0	69.73	0	27.06	0.00	134.62	71.00	302.41
GMR	0	0.00	0	0.00	0.00	0	0.00	0.00
Total	132.94	217.41	72.42	27.06	0.00	134.62	220.16	804.62

(*)--During this month, DVC has drawn 72.42 MU of MPL energy which is included in its exchange with Grid.

D. Monthwise Gross Generation from Chuzachen HEP

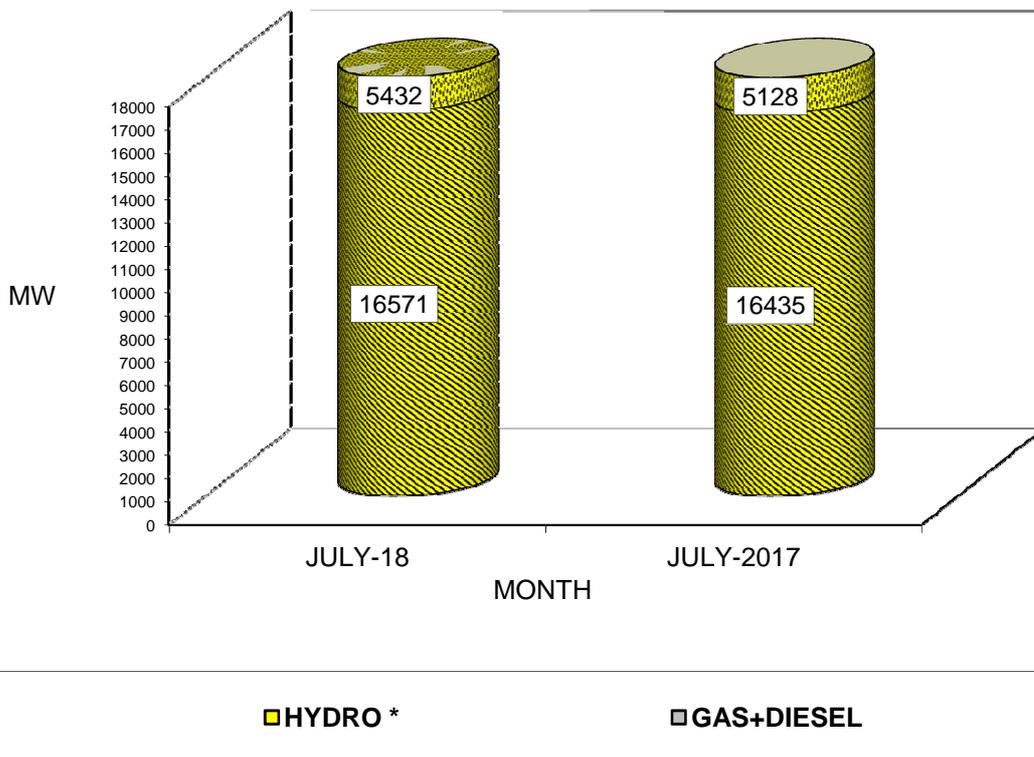
April'18	May'18	June'18	July'18	Aug'18	Sep'18	Cum. Total (2018-19)
24.01	44.24	56.56	74.49	0.00	0.00	
Oct'18	Nov'18	Dec'18	Jan'19	Feb'19	Mar'19	199.30
0.00	0.00	0.00	0.00	0.00	0.00	

EFFECTIVE CAPACITY OF EASTERN REGIONAL GRID



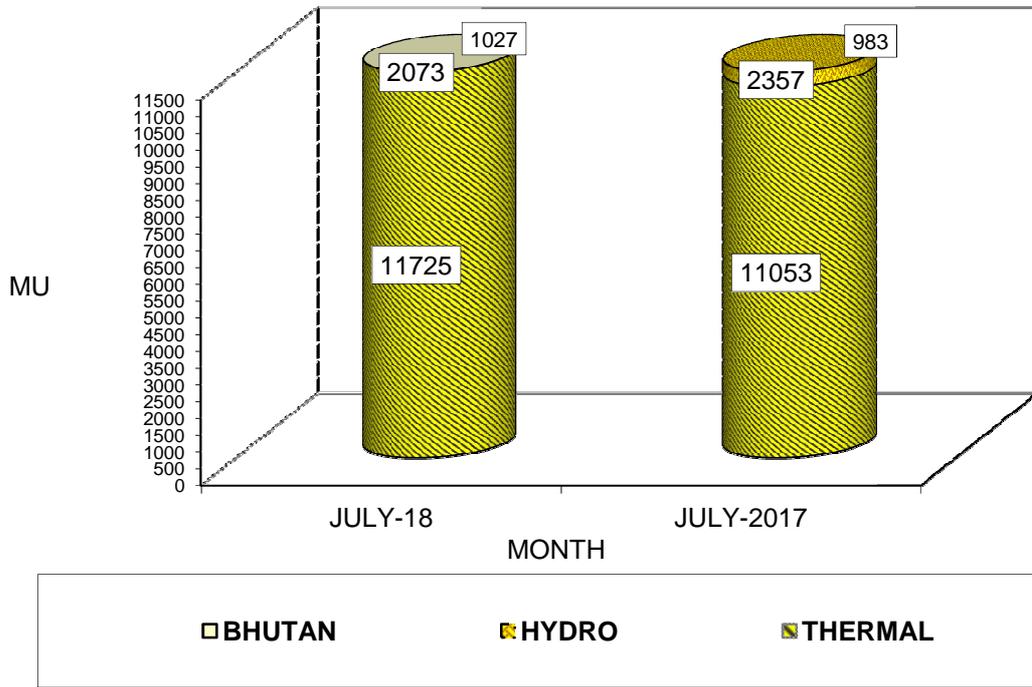
*Excludes 1350 MW contribution from HEPs of Bhutan

GENERATION CORRESPONDING TO PEAK DEMAND MET

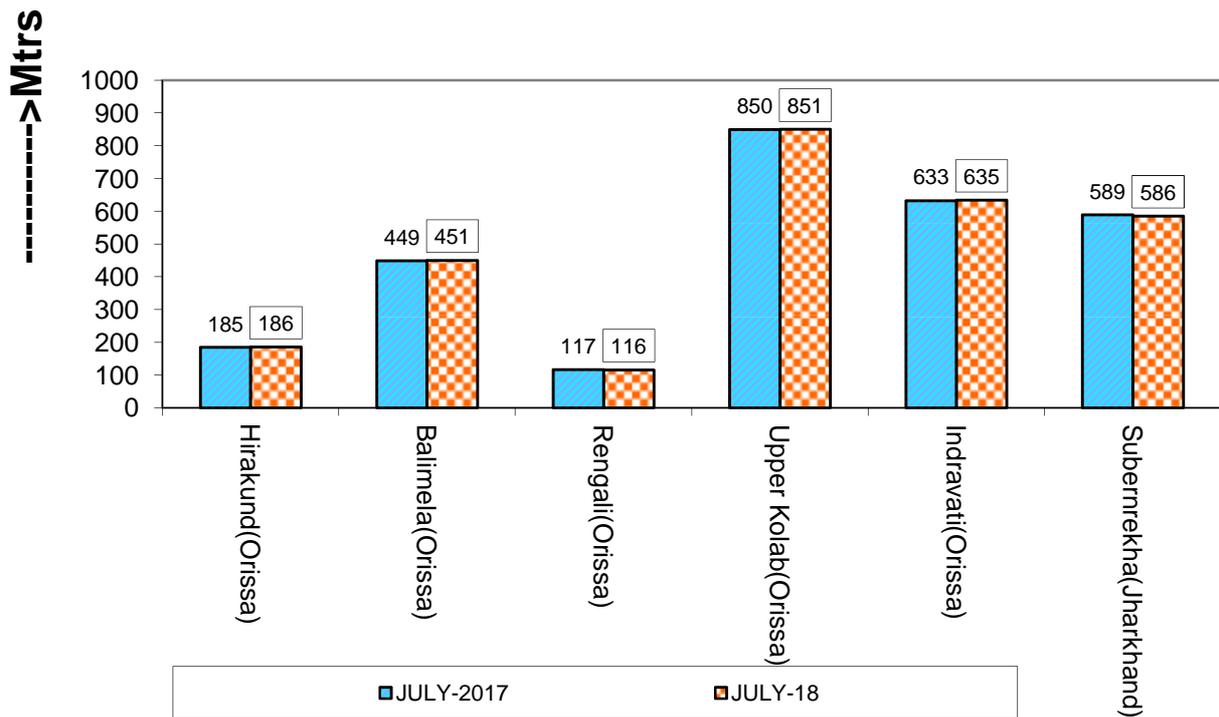


*Includes contribution from HEP of Bhutan

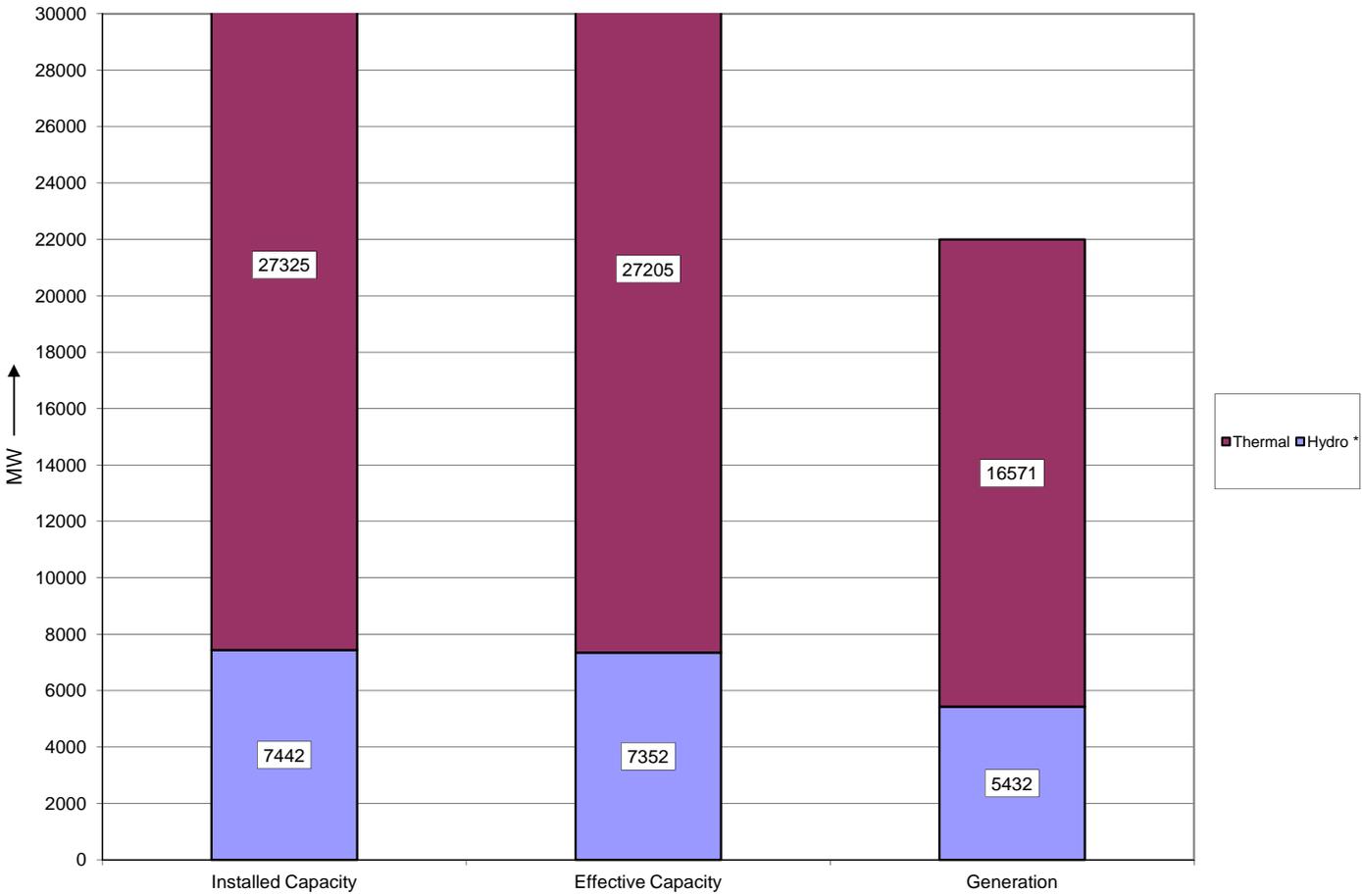
NET ENERGY GENERATION



RESERVOIR LEVEL OF HPS OF ER (RECORDED ON LAST DAY OF MONTH)

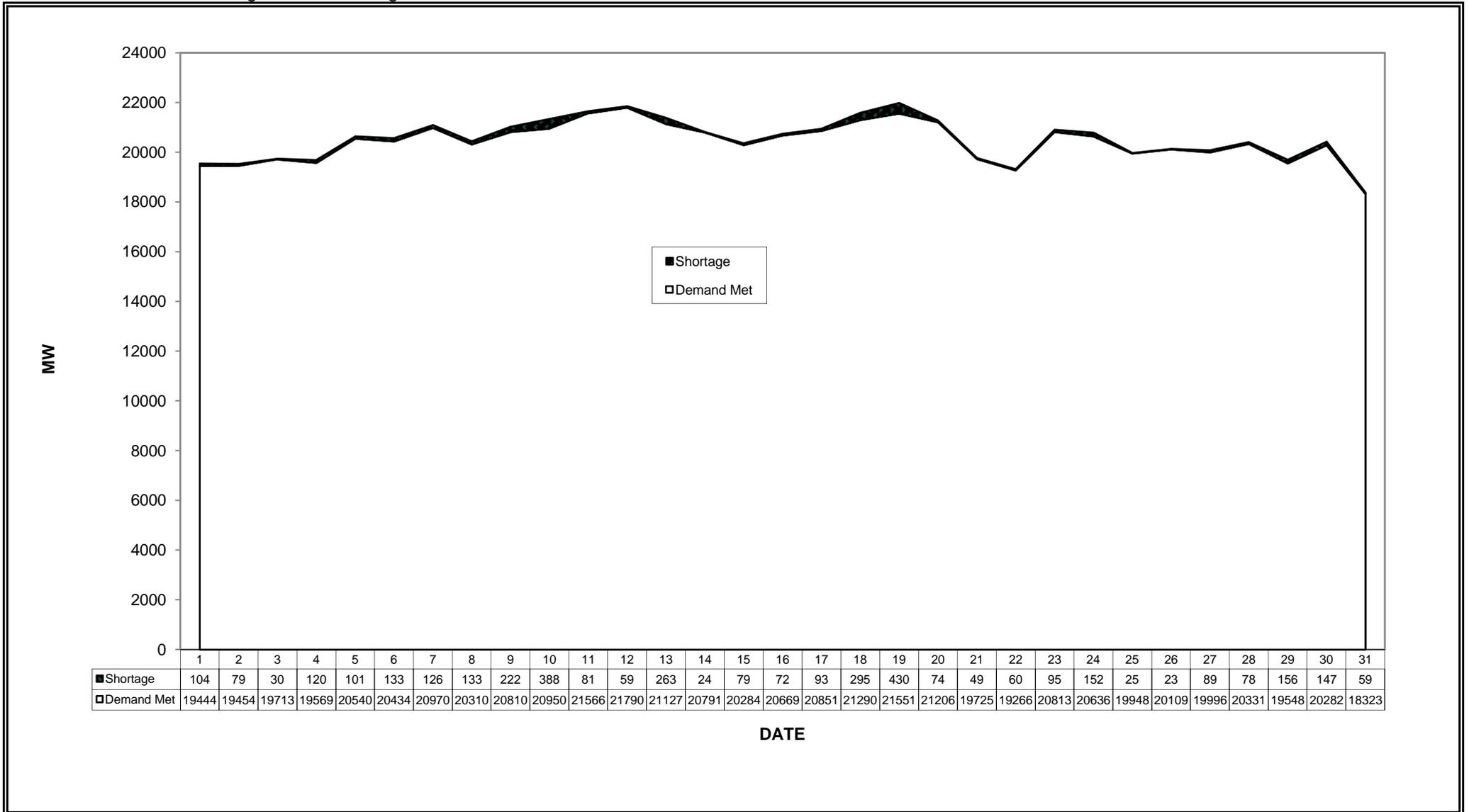


Capacity / Actual Generation Pattern of ER on Peak Day (12-7-2018) at 21.00 hrs.

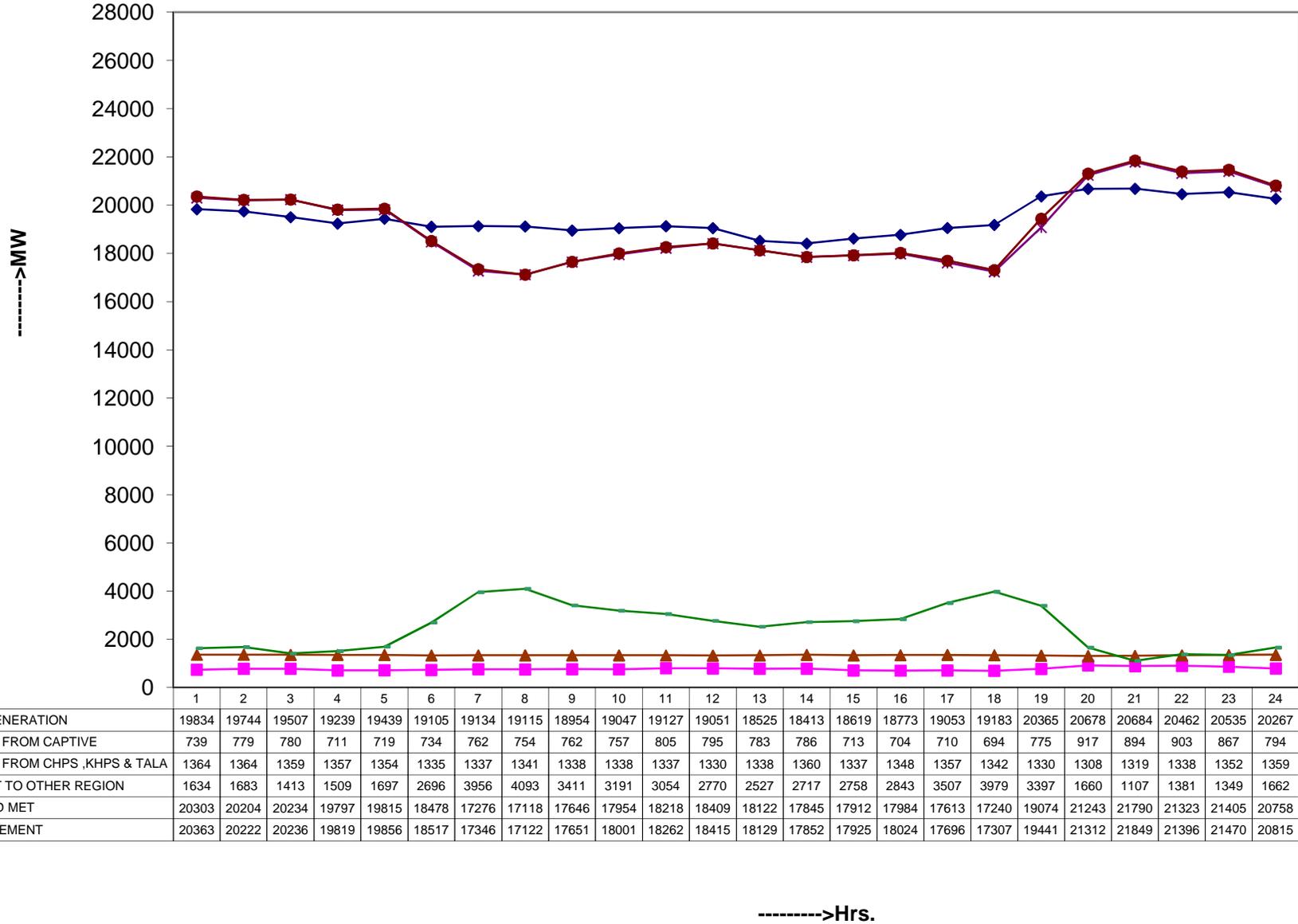


(*)--Includes contribution from HEP of Bhutan (Chukka, Kurichhu & Tala)

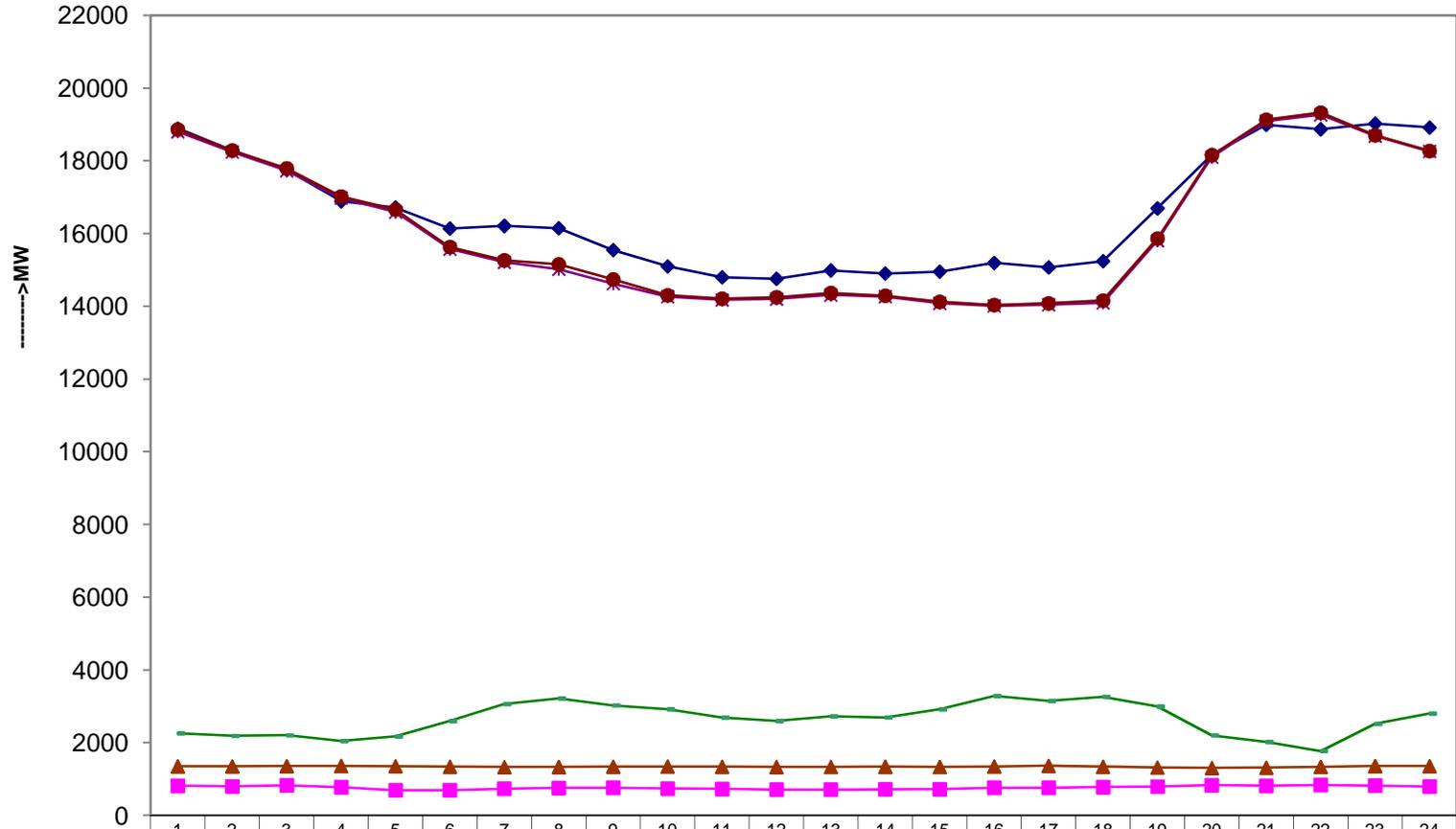
Peak Demand Met / Shortage of Eastern Region For The Month Of JULY-2018



Hourly Load Generation Data OF ER On Regional Peak Day During The Month of JULY-2018 (12-7-2018)



Hourly Load Generation Data of ER On Regional Lean Day During The Month of JULY-2018 (22-7-2018)

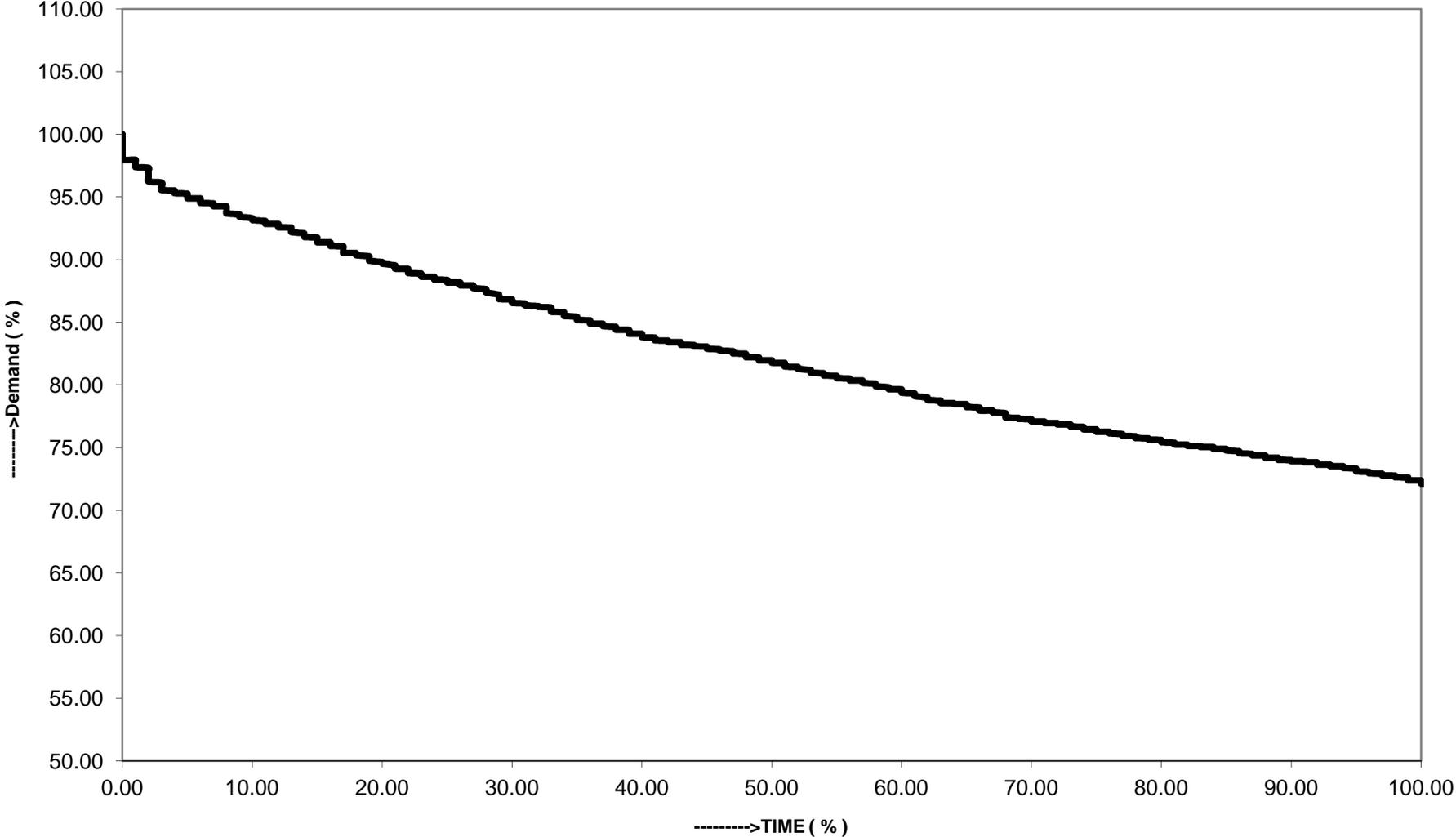


◆ OWN GENERATION	18892	18287	17752	16890	16718	16138	16213	16146	15546	15098	14798	14756	14986	14901	14952	15194	15069	15240	16695	18167	18989	18869	19024	18916
■ IMPORT FROM CAPTIVE	814	795	826	776	689	691	732	755	759	737	728	708	708	716	719	758	759	778	789	829	811	834	817	793
▲ IMPORT FROM CHPS, KHPS, TALA	1348	1347	1354	1359	1353	1339	1330	1332	1339	1342	1338	1331	1336	1340	1332	1343	1362	1338	1315	1305	1311	1332	1357	1355
— EXPORT TO OTHER REGION	2255	2186	2203	2045	2169	2595	3063	3216	3023	2916	2690	2594	2722	2692	2921	3286	3146	3261	2996	2202	2019	1769	2517	2802
* DEMAND MET	18799	18243	17730	16979	16591	15573	15212	15017	14622	14262	14174	14201	14309	14265	14082	14009	14044	14095	15803	18098	19093	19266	18681	18262
● REQUIREMENT	18861	18285	17793	17020	16660	15631	15265	15155	14738	14302	14210	14249	14365	14289	14124	14035	14082	14158	15863	18157	19132	19326	18703	18273

----->Hrs.

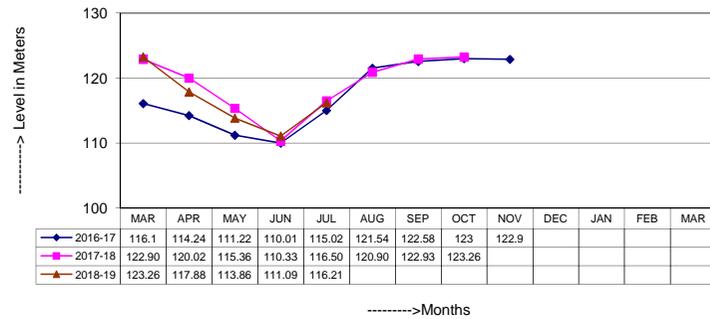
Monthly Load Duration Curve of Eastern Region for JULY-2018

Maximum Demand met : 21790 MW
Minimum Demand met: 14009 MW

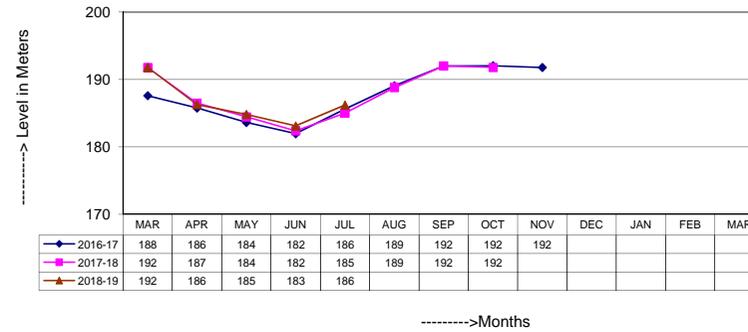


WATER LEVEL IN MAJOR RESERVOIRS ON LAST DATE OF MONTH

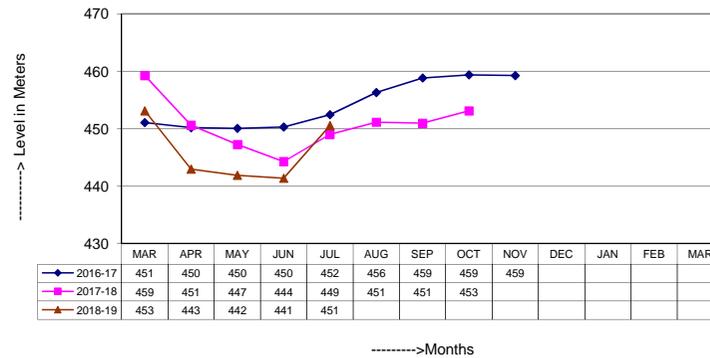
RENGALI RESERVOIR LEVEL



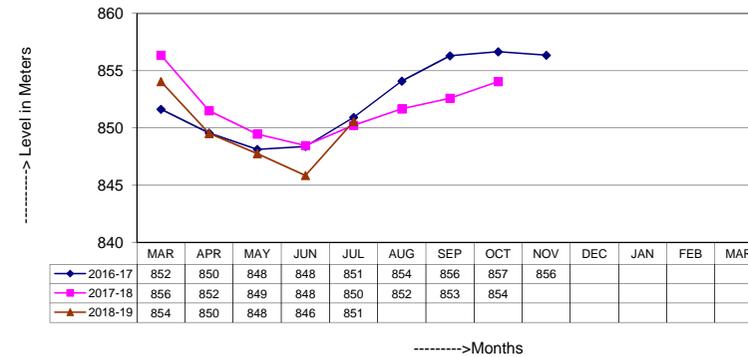
HIRAKUD RESERVOIR LEVEL



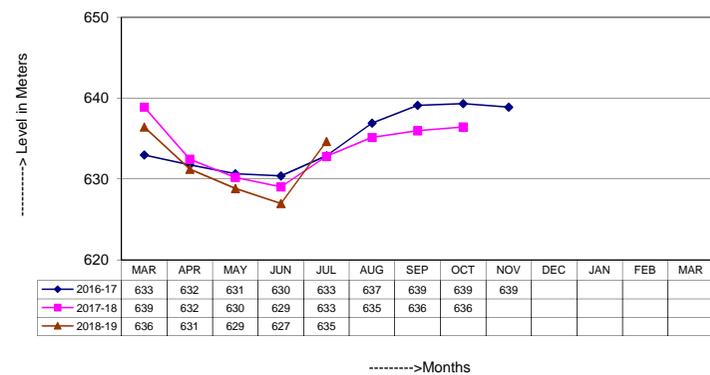
BALIMELA RESERVOIR LEVEL



UPPER KOLAB RESERVOIR LEVEL



INDRAVATI RESERVOIR LEVEL



SUBERNREKHA RESERVOIR LEVEL

