



भारत सरकार
Government of India
विद्युत विभाग
Ministry of Power
पूर्व क्षेत्रीय बिजली प्राधिकार
EASTERN REGIONAL POWER COMMITTEE

प्रगति रिपोर्ट
**PROGRESS REPORT FOR THE MONTH
OF
अगस्त & 2016
AUGUST - 2016**

पूर्व क्षेत्रीय बिजली प्राधिकार
Eastern Regional Power Committee
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Highlights of Eastern Regional Power System for August-2016

- The **Maximum Net Demand** met of **Eastern Region (ER)** during the month of **Aug, 2016** was **18418 MW** which is 7.67% more than the **Aug, 2015** (17107 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 **Aug, 2016** was **370.20 MU** excluding export, which is marginally less than the corresponding period of last year (372.59 MU).
- **The Average regional PLF of thermal units 57.07% during the month**, which is marginally less than the corresponding period of the last year (56.08%).
- **Budge-Budge** of CESC registered the highest **PLF of 97.49%**, followed by **TSTPP (NTPC) (92.18%) & TTPS (Gridco) (88.27%)** during the month of **Aug' 2016**.
- **Total Net generation** of ER was **19998 MW** against total **Effective Capacity of 35994 MW** (including that of Bhutan), and import from CPPs was **849 MW** at the time of Regional peak (18418 MW on 30.08.16 at 20.00 hrs.)
- The **IEGC frequency** band has been revised w.e.f. 17.02.2014 and the system frequency in the new recommended band (49.9 Hz to 50.05 Hz) remained for 73.07% of time during the period. **Average frequency** for the month was **49.99 Hz**. The instantaneous maximum and the minimum frequency touched were 50.35 Hz and 49.65 Hz respectively. The integrated (Fifteen minutes time block average) maximum and minimum frequency were **50.23 Hz** and **49.77 Hz** respectively (**refer Annexure-I**).
- The **Maximum Voltage** recorded **436KV** at Jamshedpur 400 **KV S/s** whereas the minimum voltage recorded 365 KV at Jeypore 400 KV S/s of Powergrid.
- **The Maximum Export from ER to outside region was 5710 MW on 22nd Aug'16 at 15.00 hrs.** Total net energy export during the month was 2785.98 **MU** (including transmission loss), which corresponds to 19.69% of ex-bus total generation (14151.22 MU) of Eastern Region and 47.35% more than the corresponding period of previous year.
- **The import from CPPs/IPP**s was **1646.06 MU**, which is 92.82% more than corresponding period of last year (**853.68 MU**).

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

Export / Import by Bihar	Aug, 2016(In MU)	Cum. (Apr'16-Aug'16) in MU
Export to NEPAL by Bihar (NBPDC)	78.05	564.04
Export to NEPAL by NVVN	41.06	263.60

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

Export	During Aug, 2016(In MU)	Cum. (Apr'16-Aug'16) in MU
Exchange between India & Bangladesh	328.81	1600.08

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

Region	Max. Export of Power ER (MW)	Max. Import of Power by ER (MW)	Net Export of Energy (MU)
NR	3688	0	1724.25
WR	738	1874	-331.59
SR	1734	841	525.68
NER	2430	73	497.77

SALIENT FEATURES

(YEAR TO YEAR COMPARISION)

		Aug-16	AUGUST-2015	CHANGE	% CHANGE
1)	Effective Capacity (end of the Month)				
	THERMAL (MW)	29655	27295	2360	8.65
	HYDRO (MW)	4846	\$ 4298	548	13
	DIESEL (MW)	7	0	7	0
	SOLAR (MW)	10	0	0	0
	TOTAL (MW)	34518	31593	2925	9.26
2)	Peak Demand (MW)	18749	17564	1184	6.74
3)	Peak Demand Met (MW)	18418	17107	1312	7.67
4)	Shortage (MW)	330	457	-127	-27.79
5)	% Shortage	1.76	2.60	-0.84	-32.35
6)	Average Energy Requirement Per Day (MU)	372.52	374.50	-1.98	-0.53
7)	Average Energy Availability Per Day (MU)	370.20	372.59	-2.38	-0.64
8)	Average Shortage Per Day (MU)	2.31	1.91	0.40	21.14
9)	% Shortage	0.62	0.51	0.11	21.78
10)	Net Generation for the Month				
	Thermal (MU)	11564.42	10274.32	1290.10	12.56
	Hydro (MU)	2585.95	* 2527.71	58.25	2.30
	Diesel (MU)	0.00	0.00	0.00	-
	Total (MU)	14151	12802.03	1349.19	10.54
11)	Generation at the Time of Max. Regional Demand Met (30-08-16 at 20.00 Hrs.)				
	Thermal (MW)	15091	13987	1104	7.89
	Hydro (MW)	4907	* 3952	956	24.18
	Diesel (MW)	0	0	0	-
	Total (MW)	19998	17939	2060	11.48
12)	Inter-Regional Energy Transfer				
	Export (MU)	3117.57	2238.52	879.06	39.27
	Import (MU)	331.59	347.77	-16.18	-4.65
	Net Exp.(+)/Net Imp.(-) (MU)	2785.98	1890.75	895.24	47.35
13)	Import From Captive(MU)	1646.06	853.684	792.37	92.82
14)	Peak Inter Regional Power Transfer				
	Max Export (MW) on 22-08-16 at 15.00Hrs	5710	4384	1325	30.23
	Max Import (MW) on 31-08-16 at 01.00Hrs	1874	1865	9	0.49
	Max Net Export(+)/Import (-) (MW) on 00-01-00 at 00.00Hrs	5710	4049	1661	41.01
15)	Maximum voltage recorded	436	JAMSHEDPUR		
16)	Minimum voltage recorded	365	JEYPORE		

\$ Excludes 1350 MW contribution from HEPs of Bhutan

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

POWER SUPPLY POSITION FOR THE MONTH OF AUGUST-2016

A) Net Average Energy Per Day

System	Demand Met (MU/Day)	Requirement (MU/Day)	Shortage (MU/Day)	% Shortage
BSEB	71.31	72.70	1.39	1.92
JSEB	21.08	21.09	0.01	0.03
DVC	53.63	53.87	0.25	0.45
ODISHA	74.58	74.60	0.02	0.03
WBSIEDCL	109.53	110.17	0.64	0.58
CESC	32.59	32.60	0.01	0.03
DPL	6.34	6.34	0.00	0.03
SIKKIM	1.16	1.16	0.00	0.03
REGION	370.20	372.52	2.31	0.62

B) Peak Demand in MW:

System	Demand Met (MW)	Requirement (MW)	Shortage (MW)	% Shortage
BSEB	3529	3589	60	1.67
JSEB	1162	1164	2	0.20
DVC	2382	2386	4	0.15
ODISHA	4105	4105	0	0.00
WBSIEDCL	6079	6101	22	0.37
CESC	1837	1837	0	0.0
DPL	391	391	0	0.01
SIKKIM	78	78	0	0.00
REGION	18418	18749	330	2

➤ DIVERSITY FACTOR : 1.06

➤ Regional Peak Demand Met on 30-8-2016 at 20.00 hrs. at 49.98 Hz.

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

A) Net Average Energy

Month	2015-16					2016-17				
	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	326.76	329.95	3.19	0.97	49.96	385.58	390.83	5.25	1.34	49.97
MAY	346.36	349.67	3.31	0.95	49.95	353.14	358.24	5.10	1.42	50.00
JUNE	351.46	353.07	1.61	0.46	49.99	377.01	380.64	3.63	0.95	49.99
JULY	342.90	344.59	1.68	0.49	49.98	370.16	371.83	1.67	0.45	50.00
AUGUST	363.08	364.98	1.90	0.52	49.97	370.20	372.52	2.31	0.62	49.99
SEPTEMBER	369.71	372.07	2.36	0.63	49.93	-	-	-	-	-
OCTOBER	365.03	367.31	2.28	0.62	49.94	-	-	-	-	-
NOVEMBER	396.36	398.22	1.86	0.47	49.98	-	-	-	-	-
DECEMBER	314.80	316.71	1.91	0.60	49.98	-	-	-	-	-
JANUARY	323.38	327.05	3.67	1.12	49.97	-	-	-	-	-
FEBRUARY	340.98	344.66	3.68	1.07	49.99	-	-	-	-	-
MARCH	366.12	369.34	3.22	0.87	49.99	-	-	-	-	-

B) Peak in MW:

Month	2015-16					2016-17				
	Demand Met	Requirement	Shortage	Shortage	Avg. Freq.	Demand Met	Requirement	Shortage	Shortage	Avg. Freq.
	(MW)	(MW)	(MW)	(%)	(HZ)	(MW)	(MW)	(MW)	(%)	(HZ)
APRIL	17346	17424	78	0.44	49.96	18607	18861	254	1.35	49.97
MAY	17602	17717	115	0.65	49.95	18427	18721	294	1.57	50.00
JUNE	17013	17195	182	1.06	49.99	18302	18816	514	2.73	49.99
JULY	16603	16662	58	0.35	49.98	18338	18553	215	1.16	50.00
AUGUST	17381	17839	458	2.57	49.97	18418	18749	330	1.76	49.99
SEPTEMBER	17632	18102	470	2.60	49.93	-	-	-	-	-
OCTOBER	18170	18908	738	3.90	49.94	-	-	-	-	-
NOVEMBER	17444	17516	71	0.41	49.98	-	-	-	-	-
DECEMBER	16993	17311	318	1.84	49.97	-	-	-	-	-
JANUARY	16692	16821	129	0.78	49.99	-	-	-	-	-
FEBRUARY	17125	17383	258	1.48	49.99	-	-	-	-	-
MARCH	18086	18278	192	1.05	49.99	-	-	-	-	-

ENTITLEMENT, DRAWAL SCHEDULE (EX- BUS) AND ACTUAL DRAWAL FROM CENTRAL SECTOR GENERATION .											All figures are in MU										
	FROM	Cumulative from ENTITLEMENT (EX-BUS)	DRAWAL SCHEDULE (EX-BUS)	1-Apr-16 to BILATERAL [EXPORT(-) / IMPORT(+)] (EX-SELLER BUS)	31/ Mar/ 17		During August-16														
					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										
BSEB	FARAKKA STPS I	1368.28	1261.96					335.47	306.91												
	FARAKKA STPS III	621.73	589.57					124.14	112.99												
	KAHALGAON STPS I	1117.56	1001.18					217.14	203.48												
	KAHALGAON STPS II	240.46	237.92					52.06	57.60												
	TALCHER STPS I	1372.87	1330.10					276.64	267.47												
	BARH STPS II	2340.24	2340.24					516.22	516.22												
	RANGIT HEP	54.31	54.43					15.22	15.22												
	CHUKHA HEP	183.06	297.76					64.90	90.54												
	KIRUCHHU HEP	0.00	0.00					0.00	0.00												
	TALA HPS	543.28	314.90					193.93	167.95												
	TEESTA HEP	307.59	309.24					69.89	69.89												
	TOTAL	8149.40	7737.30	2016.33	9904.01	9910.33	1865.59	1808.27	308.65	2119.12	2122.60										
	JSEB	FARAKKA STPS I	208.97	255.64					91.62	75.59											
FARAKKA STPS III		119.29	100.78					23.62	16.08												
KAHALGAON STPS I		58.79	64.84					16.60	13.70												
KAHALGAON STPS II		50.36	70.65					13.05	15.45												
TALCHER STPS I		168.65	194.89					51.43	42.34												
BARH STPS II		155.49	157.32					54.91	27.92												
RANGIT HEP		45.00	20.73					5.80	5.80												
CHUKHA HEP		53.28	107.53					23.52	32.42												
KIRUCHHU HEP		85.57	0.00					0	0.00												
TALA HPS		178.35	207.55					87.15	75.48												
TEESTA HEP		609.93	179.49					40.56	40.56												
TOTAL		1654.33	1477.94	738.39	2332.89	2384.13	408.28	345.33	118.30	489.14	470.33										
DVC		FARAKKA STPS I	99.23	26.64					8.03	4.72											
	FARAKKA STPS III	158.18	107.54					24.11	17.41												
	KAHALGAON STPS I	46.02	13.23					3.54	1.36												
	KAHALGAON STPS II	244.64	27.41					7.98	3.50												
	TALCHER STPS I	139.74	23.60					6.86	2.49												
	RANGIT HEP	133.24	15.55					4.35	4.35												
	CHUKHA HEP	45.79	104.21					22.71	31.69												
	KIRUCHHU HEP	85.23	33.29					22.58	8.46												
	TALA HPS	80.38	100.33					42.13	36.49												
	TEESTA HEP	227.95	125.67					28.40	28.40												
	TOTAL	634.93	577.48	-5262.79	-4360.61	-4301.37	170.69	138.86	-708.56	-571.77	-555.58										
	GRIDCO	FARAKKA STPS I	618.09	570.11					151.55	116.17											
		FARAKKA STPS III	291.98	269.36					58.30	45.14											
KAHALGAON STPS I		421.17	369.11					81.83	55.07												
KAHALGAON STPS II		126.54	114.28					27.40	19.25												
TALCHER STPS (Stg-I)		1076.59	1075.44					216.94	216.94												
TALCHER STPS (Stg-II)		645.87	633.09					115.48	113.31												
BARH STPS II		522.16	424.08					113.90	52.79												
RANGIT HEP		0.00	0.00					0.00	0.00												
CHUKHA HEP		93.85	152.65					33.27	46.42												
KIRUCHHU HEP		0.00	0.00					0.00	0.00												
TALA HPS		90.55	76.97					32.32	27.99												
TEESTA HEP		297.90	299.49					67.68	67.68												
TOTAL		4184.68	3984.58	-53.79	3821.26	3957.76	898.67	760.75	-102.10	632.50	636.10										
WBSEDC	FARAKKA STPS I	1370.91	987.70					336.13	283.07												
	FARAKKA STPS III	548.19	320.68					109.45	89.35												
	KAHALGAON STPS I	24.54	24.80					4.77	5.16												
	KAHALGAON STPS II	44.38	49.26					9.61	14.06												
	TALCHER STPS I	333.49	301.10					67.20	64.29												
	RANGIT HEP	43.98	44.07					12.32	12.32												
	CHUKHA HEP	196.78	320.07					69.76	97.32												
	KIRUCHHU HEP	70.10	33.29					22.58	8.46												
	TALA HPS	814.92	692.72					290.89	251.92												
	TEESTA HEP	346.95	348.80					78.83	78.83												
	TOTAL	3794.23	3122.49	3225.45	6305.03	6514.19	1001.54	904.79	427.53	1348.59	1427.39										
	SIKKIM	FARAKKA STPS I	71.03	38.21					17.42	6.76											
		FARAKKA STPS III	0.00	0.00					0.00	0.00											
KAHALGAON STPS I		41.38	20.81					8.04	1.44												
KAHALGAON STPS II		15.93	8.14					3.45	0.61												
TALCHER STPS I		79.88	63.76					16.10	13.73												
BARH STPS II		53.59	10.13					11.69	2.43												
RANGIT HEP		20.68	20.73					5.80	5.80												
CHUKHA HEP		13.72	22.31					4.86	6.78												
KIRUCHHU HEP		0.00	0.00					0.00	0.00												
TEESTA HEP		190.84	191.85					43.36	43.36												
TOTAL		487.06	375.95	-178.42	184.73	165.65	110.71	80.92	-40.95	37.86	32.17										
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	-1318.84	-976.88					-279.05	-140.31												
	TALCHER STPS I	0.00	0.00					0.00	0.00												
	BARH STPS II	0.00	0.00					0.00	0.00												
	TOTAL	-1318.84	-976.88	1569.09	-946.92	-436.68	-279.05	-140.31	923.70	361.87	331.59										
	SR	FARAKKA STPS I	-55.91	-92.04					-13.78	-25.90											
		KAHALGAON STPS I	-18.56	-42.59					-3.63	-13.22											
		KAHALGAON STPS II	0.00	0.00					0.00	0.00											
		TALCHER STPS STG-I	-28.11	-28.46					-5.70	-5.70											
		TALCHER STPS STG-II	633.09	633.09					113.31	113.31											
		TOTAL	636.86	575.86	-5096.78	-2253.50	-1805.18	90.19	68.49	-1348.93	-662.18	-525.68									
		NR	FARAKKA STPS I	-320.96	-266.50					-75.75	-56.85										
KAHALGAON STPS I			-831.41	-659.20					-160.92	-113.81											
KAHALGAON STPS II			-2728.18	-2298.07					-588.95	-477.84											
TALCHER STPS I			0.00	0.00					0.00	0.00											
TALA HPS			-319.58	-271.66					-114.07	-98.80											
TOTAL			-4200.13	-3495.43	-5257.21	-8642.29	-6105.27	-939.70	-747.30	-1775.44	-2396.06	-1724.25									
WR+SR+NR (GRAND TOTAL)											-4882.11	-3896.45	-8784.90	-11842.71	-8347.13	-1128.55	-819.12	-2200.66	-2696.37	-1918.35	
NER	FARAKKA STPS I		-144.28	-129.56					-35.38	-32.44											
	FARAKKA STPS III		-1.56	-1.11					-0.31	0.00											
	KAHALGAON STPS I		-78.89	-63.06					-15.33	-14.33											
	KAHALGAON STPS II		-250.39	-181.77					-54.21	-52.69											
	TALCHER STPS I		-98.22	-78.28					-19.79	-17.54											
	TOTAL		-692.35	-568.97	829.27	262.13	-1215.65	-125.02	-117.00	178.70	65.37	-497.77									

PERFORMANCE OF GENERATING STATIONS IN THE EASTERN REGION DURING THE MONTH OF AUGUST-2016

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 (2016-17) in MU	Cummulative Net Energy Generation upto Current Month (2016-17) in MU
BIHAR	Thermal	Barauni (U# 6&7)	220.00	210.00	0.00	0.00	0.00	0.00
		Muzaffarpur	220.00	220.00	47.59	42.83	429.90	386.91
		Thermal Total	440.00	430.00	47.59	42.83	429.90	386.91
	Hydro	Kosi	20.00	20.00	2.42	2.42	5.17	5.17
		Dehri & others	24.90	24.90	0.00	0.00	0.00	0.00
		Total Hydro	44.90	44.90	2.42	2.42	5.17	5.17
	Total BIHAR		484.90	474.90	50.01	45.25	435.07	392.08
JHARKHAND								
TVNL	Thermal	TVNL	420.00	420.00	123.43	106.20	607.39	521.45
JSEB	Thermal	Patratu	840.00	770.00	20.62	16.45	184.59	155.49
	Hydro	Subarnrekha (U#1,2)	130.00	130.00	7.66	7.66	7.85	7.85
	Total		970.00	900.00	28.28	24.11	192.44	163.34
DVC	Thermal	Bokaro-B(1,2,3)	630.00	630.00	127.29	111.65	713.53	623.78
		Chandrapura (1,2,3)	420.00	390.00	146.22	130.93	915.86	825.37
		Chandrapura(U7 # 8)	500.00	500.00	176.86	159.77	1432.25	1299.08
		Durgapur(3,4)	350.00	350.00	0.00	-1.40	128.12	112.01
		Mezia(1,2,3,4,5,6)	1340.00	1340.00	496.09	438.67	2638.94	2341.10
		Mezia(U # 7,8)	1000.00	1000.00	636.14	604.39	2895.27	2747.53
		Durgapur STPS (U#1,2)	1000.00	1000.00	249.79	233.82	2483.50	2351.39
		Raghunathpur TPS (U#1,2)	1200.00	1200.00	165.42	148.48	712.06	647.57
		Koderma STPS (U#1,2)	1000.00	1000.00	300.60	281.07	1698.19	1594.94
	Total Thermal		7440.00	7410.00	2298.42	2107.38	13617.71	12541.40
	Hydro	Maithon (U#1,2,3)	63.20	63.20	30.01	29.96	34.33	34.12
		Panchet (U#1,2)	80.00	80.00	40.73	40.54	54.97	54.38
		Tilaya (U#1,2)	4.00	4.00	0.00	-0.01	0.00	-0.01
		Hydro Total	147.20	147.20	70.74	70.49	89.30	88.48
Total DVC		7587.20	7557.20	2369.15	2177.87	13707.01	12629.88	
WEST BENGAL								
WBPDC	Thermal	Bandel TPS	540.00	450.00	168.13	147.77	701.99	614.47
		Santalalih TPS(U#5&6)	500.00	500.00	176.70	160.56	1383.40	1262.99
		Kolaghat TPS	1260.00	1260.00	519.53	459.92	2907.44	2597.77
		Bakreswar TPP	1050.00	1050.00	654.82	586.30	3311.97	2977.46
		Sagardighi TPP	1100.00	1100.00	370.28	321.93	1856.54	1626.06
		Thermal Total	4450.00	4360.00	1889.45	1676.48	10161.34	9078.75
WBSEDCL	Hydro	Jaldhaka (3x9+2x4)	35.00	35.00	22.52	22.52	103.21	103.21
		Ramam (4x12.73)	51.00	51.00	37.03	37.03	118.75	118.75
		Teesta C.F. (3x3x7.3)	67.30	67.30	0.00	0.00	26.64	26.64
		Small hydro	12.00	12.00	0.00	0.00	0.00	0.00
		Purulia PSS (4x225)	900.00	900.00	110.33	110.33	479.71	479.71
		Total Hydro	1065.30	1065.30	169.87	169.87	728.32	728.32
DPL	Thermal	DPSP (110+300+250 *)	660.00	660.00	125.41	110.09	983.07	878.72
* Synchronised on 31.03.2014								

PERFORMANCE OF GENERATING STATIONS IN THE EASTERN REGION DURING THE MONTH OF AUGUST-2016

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 (2016-17) in MU	Cummulative Net Energy Generation upto Current Month (2016-17) in MU
CESC	Thermal	Titagarh (4x60)	240.00	240.00	0.00	0.00	188.34	170.04
		Southern (2x67.5)	135.00	135.00	41.65	37.63	254.76	230.94
		Budge-Budge (3x250)	750.00	750.00	544.00	500.55	2658.63	2446.66
		Total CESC	1125.00	1125.00	585.65	538.18	3101.73	2847.64
HEL	Thermal	HEL	600.00	600.00	332.90	305.27	1726.29	1565.53
		Total West Bengal	8192.30	8102.30	3267.76	2964.37	16865.22	15263.43
ODISHA	Thermal	Talcher-I	250.00	240.00	179.90	160.55	800.80	713.97
(NTPC)		Talcher-II	220.00	220.00	122.20	109.05	732.90	653.39
		Total Thermal	470.00	460.00	302.10	269.61	1533.70	1367.36
OPGC	Thermal	IB TPS	420.00	420.00	275.45	246.44	1305.34	1166.64
OHPC	Hydro	Hirakud-I (Burla)	275.50	275.50	103.31	103.03	235.35	234.12
		Hirakud-II (Chiplima)	72.00	72.00	30.77	30.72	77.34	77.11
		Balimela (6x60+2x75)	510.00	510.00	126.06	125.57	380.72	378.77
		Rengali (5x50)	250.00	250.00	135.31	135.18	265.29	263.97
		Upper Kolab (4x80)	320.00	320.00	43.38	43.24	278.95	277.69
		Indravati HPS (4x150)	600.00	600.00	145.55	145.28	662.89	661.59
		Mckd.(Odisha drawal)	57.38	57.38	30.82	30.82	120.06	120.06
		Total Hydro	2084.88	2084.88	615.20	613.83	2020.60	2013.31
		Total Odisha	2974.88	2964.88	917.30	883.44	3554.30	3380.66
(**) SIKKIM	Hydro	Mini Hydro	14.00	14.00	3.00	3.00	15.00	15.00
		^ Diesel	7.10	7.10				
NTPC	Thermal	FSTPP# I&II (3x200+2x500)	1600.00	1600.00	976.92	903.65	3953.61	3657.08
		FSTPP (U# 6)	500.00	500.00	302.50	279.81	1457.56	1348.25
		KhSTPP (4x210+3x500)	2340.00	2340.00	1343.13	1242.39	6759.58	6252.61
		TSTPP (2x500)	1000.00	1000.00	685.80	634.36	3421.78	3165.14
		BARH STPS II (2X660)	1320.00	1320.00	633.39	585.89	3140.48	2904.95
		Total NTPC	6760.00	6760.00	3941.74	3646.11	18733.01	17328.03
NHPC	HYDRO	Rangit (3x20)	60.00	60.00	45.46	45.46	164.08	164.08
		Teesta (3x170)	510.00	510.00	325.51	325.51	1489.99	1489.99
		TLDP -(4x33+4x40)	292.00	292.00	164.48	164.48	572.31	572.31
		Total NHPC	862.00	862.00	535.45	535.45	2226.38	2226.38
IPP		MPL (U#1&2)	1050.00	1050.00	568.09	535.11	3053.95	2881.15
IPP		SSL (U#1,2,3 & 4) (4x600) *	2400.00	2400.00	707.18	648.98	2772.91	2538.34
		APNRL (U#1,2)	540.00	540.00	246.70	223.71	1516.43	1389.83
		GMR (3x350)	1050.00	1050.00	431.99	390.68	2462.30	2256.75
		JITPL (2X600)	1200.00	1200.00	738.71	700.90	3229.95	3027.59
		CHUZACHEN** (2x55)	110.00	110.00	74.53	74.38	293.22	292.63
		JORETHANG (2x48)	96.00	96.00	68.64	68.64	202.37	202.37
EASTERN REGIONAL		Total Thermal (E.R)	29865.00	29655.00	12635.43	11564.42	65419.61	59931.57
		Total Hydro (E.R)	4846.28	4846.28	1547.51	1545.75	5588.21	5579.51
		Total Diesel	7.10	7.10	0.00	0.00	0.00	0.00
		Total Solar	10.00	10.00	0.85	0.85	5.40	5.40
		TOTAL (E.R)	34728.38	34518.38	14183.79	13111.01	71013.22	65516.48
BHUTAN	Hydro	CHPC(4x90)	360.00	270.00	258.21	258.21	843.16	843.16
	Hydro	Kurichu (4x15)	60.00	60.00	65.10	65.10	201.12	201.12
	Hydro	TALA (6x170)	1020.00	1020.00	651.15	651.15	1786.74	1786.74
	Hydro	DAGACHU (2x63)	126.00	126.00	65.75	65.75	196.70	196.70
		Grand Total	36294.38	35994.38	15223.99	14151	74040.95	68544.20

Santalidh U#1,2,3,4 (120*4=480MW) w.e.f 18.12.09, 4.10.09, 20.9.09 & 7.10.2008 respectively, DPL U#1,2 (2x30MW) w.e.f 01.04.11 & 01.04.11 & 3,4,5 (3x75 MW), Barauni U#4,5 (50*2=100MW) & Chandrapura U#4,5,6 (120*3=360MW) were decommissioned during 2010-11 & 2011-12 onwards.

\$ Barh U# CoD w.e.f 15.11.2014

** First Unit Synchronised on 19.04.2013

(*)--During this month, SEL has injected 146.85 MU to the Grid in addition to 0.98 MU bilateral exchange to ODISHA.

* CESC informed that N.Cossipore (130 MW)TPS ceased operation w.e.f 29.11.2014

* HEL U#1 COD on 06.06.14 & U#2 COD on 12.02.15

* JITPL U#1 COD on 28.01.15 & U#2 COD on 21.02.15

(**) Lachung HEP (3.00 MW), Mangley HEP (2.00 MW), Rongli HEP (5.00 MW), Meyong Chu HEP (4.00 MW) are working.

^ Gangtok diesel Power House (4.00 MW), Ranipool Diesel Power House (1.00 MW), Jali Power House, Stage-I (2.10 MW) are working

Maithon HPS U#2 capacity increased from 20 MW to 23.2 MW.

GTs in West Bengal and DVC including Diesel in Sikkim are not operational since long. Accordingly, installed capacity of 195 MW (GT & Diesel)

has been excluded from total installed capacity.

PLANT LOAD FACTOR (PLF) OF THERMAL POWER STATIONS IN EASTERN REGION DURING THE MONTH OF AUGUST-2016

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 (2016-17) in MU	Cummulative PLF upto Current Month (%)
BIHAR	Thermal	Barauni (U# 6&7)	220.00	210.00	0.00	0.00	0.00	0.00
		Muzaffarpur	220.00	220.00	47.59	29.08	429.90	53.22
		Thermal Total	440.00	430.00	47.59	14.88	429.90	27.23
	Hydro	Kosi	20.00	20.00	2.42		5.17	
		Dehri & others	24.90	24.90	0.00		0.00	
		Total Hydro	44.90	44.90	2.42		5.17	
	Total BIHAR		484.90	474.90	50.01		435.07	
JHARKHAND								
TVNL	Thermal	TVNL	420.00	420.00	123.43	39.50	607.39	39.38
JSEB	Thermal	Patratu	840.00	770.00	20.62	3.60	184.59	6.53
	Hydro	Subarnrekha (U#1,2)	130.00	130.00	7.66		7.85	
	Total		970.00	900.00	28.28		192.44	
DVC	Thermal	Bokaro-B(1,2,3)	630.00	630.00	127.29	27.16	713.53	30.84
		Chandrapura (1,2,3)	420.00	390.00	146.22	50.39	915.86	63.95
		Chandrapura(U7 # 8)	500.00	500.00	176.86	47.54	1432.25	78.01
		Durgapur(3,4)	350.00	350.00	0.00	0.00	128.12	9.97
		Mezia(1,2,3,4,5,6)	1340.00	1340.00	496.09	49.76	2638.94	53.63
		Mezia(U # 7,8)	1000.00	1000.00	636.14	85.50	2895.27	78.85
		Durgapur STPS (U#1,2)	1000.00	1000.00	249.79	33.57	2483.50	67.63
		Raghunathpur TPS (U#1,2)	1200.00	1200.00	165.42	18.53	712.06	16.16
		Koderma STPS (U#1,2)	1000.00	1000.00	300.60	40.40	1698.19	46.25
	Total Thermal		7440.00	7410.00	2298.42	41.69	13617.71	51.74
	Hydro	Maithon (U#1,2,3)	63.20	63.20	30.01		34.33	
		Panchet (U#1,2)	80.00	80.00	40.73		54.97	
		Tilaya (U#1,2)	4.00	4.00	0.00		0.00	
		Hydro Total	147.20	147.20	70.74		89.30	
	Total DVC		7587.20	7557.20	2369.15		13707.01	
WEST BENGAL								
WBPDC	Thermal	Bandel TPS	540.00	450.00	168.13	50.22	701.99	42.48
		Santalidih TPS(U#5&6)	500.00	500.00	176.70	47.50	1383.40	75.35
		Kolaghat TPS	1260.00	1260.00	519.53	55.42	2907.44	62.84
		Bakreswar TPP	1050.00	1050.00	654.82	83.82	3311.97	85.90
		Sagardighi TPP	1100.00	1100.00	370.28	45.24	1856.54	62.99
		Thermal Total	4450.00	4360.00	1889.45	58.25	10161.34	68.11
WBSEDCL	Hydro	Jaldhaka (3x9+2x4)	35.00	35.00	22.52		103.21	
		Ramam (4x12.73)	51.00	51.00	37.03		118.75	
		Teesta C.F. (3x3x7.3)	67.30	67.30	0.00		26.64	
		Small hydro	12.00	12.00	0.00		0.00	
		Purulia PSS (4x225)	900.00	900.00	110.33		479.71	
		Total Hydro	1065.30	1065.30	169.87		728.32	
	TLDP -(4x33+4x40)		292.00	292.00	164.48		572.31	
DPL	Thermal	DPPS (110+300+250 *)	660.00	660.00	125.41	25.54	983.07	40.56

PLANT LOAD FACTOR (PLF) OF THERMAL POWER STATIONS IN EASTERN REGION DURING THE MONTH OF AUGUST-2016

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 (2016-17) in MU	Cummulative PLF upto Current Month (%)
CESC	Thermal	Titagarh (4x60)	240.00	240.00	0.00	23.33	188.34	21.37
		Southern (2x67.5)	135.00	135.00	41.65	41.47	254.76	51.39
		Budge-Budge (3x250)	750.00	750.00	544.00	97.49	2658.63	96.54
		Total CESC	1125.00	1125.00	585.65	69.97	3101.73	75.08
HEL	Thermal		600.00	600.00	332.90	74.57	1726.29	78.35
		Total West Bengal	8192.30	8102.30	3267.76		16865.22	
ODISHA (NTPC)	Thermal	Talcher-I	250.00	240.00	179.90	100.75	800.80	90.87
		Talcher-II	220.00	220.00	122.20	74.66	732.90	90.72
		Total Thermal	470.00	460.00	302.10	88.27	1533.70	90.80
OPGC	Thermal	IB TPS	420.00	420.00	275.45	88.15	1305.34	84.64
OHPC	Hydro	Hirakud-I (Burla)	275.50	275.50	103.31		235.35	
		Hirakud-II (Chiplima)	72.00	72.00	30.77		77.34	
		Balimela (6x60+2x75)	510.00	510.00	126.06		380.72	
		Rengali (5x50)	250.00	250.00	135.31		265.29	
		Upper Kolab (4x80)	320.00	320.00	43.38		278.95	
		Indravati HPS (4x150)	600.00	600.00	145.55		662.89	
		Mckd.(Odisha drawal)	57.38	57.38	30.82		120.06	
		Total Hydro	2084.88	2084.88	615.20		2020.60	
		Total Odisha	2974.88	2964.88	917.30		3554.30	
(**) SIKKIM	Hydro	Mini Hydro	14.00	14.00	3.00		15.00	
		^ Diesel	7.10	7.10				
NTPC	Thermal	FSTPP# I&II (3x200+2x500)	1600.00	1600.00	976.92	82.07	3953.61	67.29
		FSTPP (U# 6)	500.00	500.00	302.50	81.32	1457.56	79.39
		KhSTPP (4x210+3x500)	2340.00	2340.00	1343.13	77.15	6759.58	78.67
		TSTPP (2x500)	1000.00	1000.00	685.80	92.18	3421.78	93.19
		BARH STPS II (2X660)	1320.00	1320.00	633.39	64.50	3140.48	64.79
		Total NTPC	6760.00	6760.00	3941.74	78.37	18733.01	75.47
NHPC	HYDRO	Rangit (3x20)	60.00	60.00	45.46		164.08	
		Teesta (3x170)	510.00	510.00	325.51		1489.99	
		TLDP -(4x33+4x40)	292.00	292.00	164.48		572.31	
		Total NHPC	862.00	862.00	535.45		2226.38	
IPP IPP	Thermal	MPL (U#1&2)	1050.00	1050.00	568.09	72.72	3053.95	79.21
		SSL (U#1,2,3 & 4) (4x600) *	2400.00	2400.00	707.18	39.60	2772.91	31.46
		APNRL (U#1,2)	540.00	540.00	246.70	61.40	1516.43	76.48
		GMR (3x350)	1050.00	1050.00	431.99	55.30	2462.30	106.21
		JITPL (2X600)	1200.00	1200.00	738.71	82.74	3229.95	73.30
		CHUZACHEN** (2x55)	110.00	110.00	74.53		293.22	
		JORETHANG (2x48)	96.00	96.00	68.64		202.37	
		Total Thermal (E.R)	29865.00	29655.00	12635.43	57.07	65419.61	54.14
EASTERN REGIONAL		Total Hydro (E.R)	4846.28	4846.28	1547.51		5588.21	
		Total Diesel	7.10	7.10	0.00		0.00	
		Total Solar	10.00	10.00	0.85		5.40	
		TOTAL (E.R)	34728.38	34518.38	14183.79		71013.22	
BHUTAN	Hydro	CHPC(4x90)	360.00	270.00	258.21		843.16	
	Hydro	Kurichu (4x15)	60.00	60.00	65.10		201.12	
	Hydro	TALA (6x170)	1020.00	1020.00	651.15		1786.74	
	Hydro	DAGACHU (2x63)	126.00	126.00	65.75		196.70	
		Grand Total	36294.38	35994.38	15223.99		74040.95	

➤ On calculation of Eastern Regional PLF, Installed Capacity of IPPs as well as their generations (MU) including infirm generation of various units have not been considered.

CONTRIBUTIONS OF DIFFERENT CONSTITUENTS AT THE TIME OF REGIC

Date 30-Aug-16
Time 20.00 Hrs.
Frequency 49.98 Hz.

(All Fig. in MW)

System/State	Installed Capacity	Effective Capacity	Hydro	Thermal	Total
BSPHCL	485	475	0	86	86
JUSNL	1390	1320	45	152	197
DVC	7587	7557	108	3449	3556
ODISHA	2975	2965	1879	629	2508
WBSEDCL	5515	5425	672	2516	3188
TLDP	292	292	226	0	226
HEL HALDIA	600	600	0	533	533
CESC	1125	1125	0	739	739
DPL	660	660	0	207	207
SIKKIM	14	14	0	0	0
NTPC	6760	6760	0	4380	4380
NHPC	862	862	569	0	569
CHUKHA	360	270	303	0	303
KURICHU	60	60	61	0	61
TALA	1020	1020	765	0	765
SEL	2400	2400	0	395	395
APNRL	540	540	0	222	222
Kamalghanga (GMR)	1050	1050	0	201	201
JITPL	1200	1200	0	1133	1133
Chuzachen	110	110	109	0	109
Jorethang	96	96	104	0	104
Daghachu	126	126	67	0	67
Total	36294	35994	4907	15091	19998
Import From Captive:					849
Export To:					
NER					311
SR					1227
WR					-1320
NR					1712.59
Total					2429
					18418

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

Hourly Load Generation Data OF ER On Regional Peak Day During The Month of AUGUST-2016 (30-8-2016)

(All Figures in MW)

Generation					Import	Net	Net	Demand	Freq.	Load	
Hrs.	Hydro	Thermal	GT	Total	from Captive	Import From CHPS, KHPS & TALA	Export to other region	Met	Correction	Shed	Requirement
1	2421	18411	0	20832	1021	819	1096	15651	5	30	15686
2	2528	18338	1	20867	1020	1145	1574	16647	-10	30	16667
3	2493	17849	2	20345	1047	1214	1522	16618	-6	30	16642
4	2281	17923	3	20206	1041	1220	1336	16385	-26	23	16408
5	2202	17725	4	19931	1053	1227	1168	16577	-16	26	16587
6	2365	17313	5	19682	1122	1218	1647	16319	10	25	16354
7	2121	17266	6	19392	1064	1232	2303	15104	1	47	15153
8	2026	17465	7	19498	1042	1278	2641	14545	-19	38	14565
9	2006	17620	8	19633	1064	1274	2217	15224	-20	35	15239
10	2046	18005	9	20060	1058	1274	2468	15263	-1	42	15303
11	2126	17943	10	20079	1081	1240	2831	15189	-3	28	15214
12	2121	18060	11	20192	820	1221	2385	15495	5	20	15521
13	2173	18093	12	20278	823	1218	2506	15571	11	27	15609
14	2066	18104	13	20182	876	1162	2567	15076	-1	28	15103
15	2247	17991	14	20253	884	1152	2608	15498	11	35	15544
16	2279	17814	15	20108	855	1156	2671	15579	-1	24	15601
17	2210	18181	16	20407	869	1173	2658	15664	7	14	15684
18	2232	18434	17	20682	827	1156	2734	15419	16	17	15452
19	3242	19904	18	23165	825	1131	1500	17719	-19	84	17785
20	3779	20834	19	24632	850	1129	1930	18418	13	317	18749
21	3799	20653	20	24472	842	1146	2247	18092	-28	304	18367
22	3519	20471	21	24011	850	1159	2052	17835	-23	299	18111
23	3246	19954	22	23222	721	1186	1805	16835	-32	298	17100
24	3182	19136	23	22340	702	1191	1600	16614	-15	75	16675

Hourly Load Generation Data of ER On Regional Lean Day During The Month of AUGUST-2016 (18-8-2016)

(All Figures in MW)

Generation					Import	Net	Net	Demand	Freq.	Load	
Hrs.	Hydro	Thermal	GT	Total	from Captive	Import From CHPS, KHPS & TALA	Export to other region	Met	Correction	Shed	Requirement
1	2346	9798	0	12144	580	1038	2788	11823	4	179	12005
2	2286	11041	1	13329	597	1371	4026	12273	9	153	12435
3	2140	10711	2	12854	584	1368	3939	11825	10	145	11981
4	2102	10753	3	12858	581	1370	4246	11284	-8	151	11427
5	2051	10705	4	12760	585	1362	4431	11236	-2	144	11378
6	2078	10473	5	12556	576	1334	4586	10796	-7	140	10929
7	2115	10661	6	12782	575	1327	4996	10479	-9	171	10640
8	2159	10847	7	13013	447	1341	4992	10451	5	168	10623
9	2129	10762	8	12900	575	1344	4904	10522	-11	127	10638
10	2195	10851	9	13055	552	1341	5037	10511	1	119	10630
11	2273	10570	10	12852	545	1340	4891	10372	-4	108	10476
12	2190	10631	11	12832	608	1341	4506	10851	-9	90	10933
13	1958	10704	12	12673	548	1355	4543	10597	2	80	10679
14	1926	10647	13	12586	604	1350	4436	10643	-12	61	10692
15	2234	11045	14	13293	600	1339	4499	11331	-4	58	11385
16	2038	11243	15	13295	566	1365	4505	11450	1	52	11503
17	2161	11094	16	13272	610	1356	4060	11932	-1	43	11973
18	2190	11119	17	13325	565	1337	3911	12029	-17	40	12052
19	2998	11851	18	14867	601	1324	2969	14761	-10	47	14798
20	3596	12566	19	16180	598	1318	3237	15887	18	100	16005
21	3545	12748	20	16313	634	1330	3211	16098	31	100	16229
22	3307	12570	21	15898	601	1327	2860	15927	66	100	16092
23	3086	12528	22	15635	618	1188	3019	15351	44	111	15507
24	2981	12341	23	15345	549	1153	3448	14609	-6	105	14707

NOTIFIED POWER CUTS/RESTRICTIONS ON INDUSTRIES & POWER SUPPLY TO AGRICULTURE SECTOR
FOR THE MONTH OF AUGUST-2016

POWER CUT / RESTRICTIONS

BSEB	NO NOTIFIED CUTS/RESTRICTIONS However there was loadshedding of 42.59 MU
JSEB	NO NOTIFIED CUTS/RESTRICTIONS However there was loadshedding of 0.00 MU
DVC	NO NOTIFIED CUTS/RESTRICTIONS. However there was loadshedding of 7.12 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 18.77 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

Aug-16

D A T E	H O U R S										INST. FREQ.				15 MIN. INTEGRATED						
	00	05	10	17	22	00	49.9			>50.05			49.9								
	TO	TO	TO	TO	TO	TO	<49.9	TO			TO			MAX	HRS.	MIN	HRS.	MAX	HRS.	MIN	HRS.
	05	10	17	22	24	24		50.1			50.05			HZ		HZ		HZ		HZ	
01-Aug	50.05	50.02	50.05	50.03	50.04	50.04	0.35	50.24	49.41	50.24	50.21	13:03	49.85	19:13	50.19	0:00	49.97	0:00			
02-Aug	50.05	50.01	50.03	50.02	50.02	50.03	0.01	59.77	40.22	59.77	50.24	0:03	49.90	10:24	50.16	0:00	49.97	0:00			
03-Aug	50.01	50.02	50.01	49.97	50.00	50.00	3.41	71.18	25.41	71.18	50.20	8:04	49.83	19:24	50.12	0:00	49.87	0:00			
04-Aug	49.99	50.00	50.01	49.97	50.01	49.99	4.61	75.20	20.19	75.20	50.15	15:05	49.80	19:20	50.12	0:00	49.89	0:00			
05-Aug	50.00	49.99	49.99	49.98	49.98	49.99	5.65	77.91	16.44	77.91	50.26	13:07	49.82	11:09	50.19	0:00	49.89	0:00			
06-Aug	49.97	50.00	50.04	49.97	49.96	50.00	4.66	72.62	22.72	72.62	50.22	13:02	49.83	19:40	50.16	0:00	49.88	0:00			
07-Aug	49.99	50.00	50.00	49.97	49.98	49.99	4.43	79.67	15.90	79.67	50.24	18:04	49.80	19:12	50.07	0:00	49.91	0:00			
08-Aug	49.99	50.00	49.98	49.99	49.99	49.99	5.47	76.44	18.09	76.44	50.16	12:02	49.81	16:14	50.07	0:00	49.86	0:00			
09-Aug	49.99	50.02	50.00	49.98	50.03	50.00	3.28	74.39	22.33	74.39	50.16	8:03	49.84	18:12	50.08	0:00	49.91	0:00			
10-Aug	49.99	50.01	50.02	49.98	50.02	50.00	1.64	72.66	25.70	72.66	50.35	13:03	49.85	5:17	50.23	0:00	49.93	0:00			
11-Aug	49.99	50.01	50.02	49.99	50.00	50.00	2.19	74.18	23.63	74.18	50.19	18:02	49.81	19:26	50.11	0:00	49.88	0:00			
12-Aug	49.99	49.97	49.98	49.94	49.99	49.97	9.10	78.94	11.96	78.94	50.17	13:01	49.71	19:35	50.07	0:00	49.79	0:00			
13-Aug	49.96	49.98	49.98	49.91	49.92	49.95	15.32	77.86	6.82	77.86	50.15	6:02	49.68	21:12	50.06	0:00	49.77	0:00			
14-Aug	49.98	50.01	50.00	49.99	50.01	50.00	3.76	73.69	22.55	73.69	50.21	18:03	49.80	20:48	50.12	0:00	49.89	0:00			
15-Aug	49.99	50.04	50.02	50.02	50.02	50.02	0.73	63.84	35.43	63.84	50.21	8:14	49.76	4:48	50.12	0:00	49.92	0:00			
16-Aug	50.02	50.02	49.98	49.96	50.00	49.99	6.62	68.09	25.29	68.09	50.16	13:01	49.77	19:26	50.11	0:00	49.85	0:00			
17-Aug	49.98	49.99	49.98	49.99	49.97	49.99	3.59	81.48	14.93	81.48	50.17	6:01	49.78	22:16	50.10	0:00	49.91	0:00			
18-Aug	49.99	50.01	50.01	49.97	49.97	50.00	5.32	72.21	22.47	72.21	50.22	6:02	49.68	22:12	50.12	0:00	49.85	0:00			
19-Aug	49.97	49.96	49.95	49.95	49.95	49.96	14.98	74.34	10.68	74.34	50.15	13:04	49.73	11:11	50.08	0:00	49.80	0:00			
20-Aug	49.96	49.98	49.95	49.94	49.89	49.95	20.25	71.73	8.02	71.73	50.19	6:02	49.65	19:50	50.06	0:00	49.81	0:00			
21-Aug	49.97	49.98	49.98	49.98	49.98	49.98	10.22	74.83	14.95	74.83	50.18	18:33	49.65	0:08	50.07	0:00	49.79	0:00			
22-Aug	49.98	49.97	49.96	49.95	49.97	49.96	10.69	78.00	11.31	78.00	50.18	17:02	49.76	19:22	50.06	0:00	49.78	0:00			
23-Aug	49.94	49.91	49.97	49.95	49.97	49.95	21.45	69.90	8.65	69.90	50.20	18:01	49.76	9:09	50.07	0:00	49.82	0:00			
24-Aug	49.97	50.02	50.00	49.98	50.02	49.99	6.28	70.55	23.17	70.55	50.20	18:02	49.71	19:14	50.11	0:00	49.82	0:00			
25-Aug	49.99	49.99	49.99	50.02	50.01	50.00	2.63	76.24	21.13	76.24	50.21	18:02	49.81	0:12	50.09	0:00	49.98	0:00			
26-Aug	49.99	50.00	49.98	49.97	50.03	49.99	6.10	76.50	17.40	76.50	50.21	18:02	49.74	19:18	50.10	0:00	49.82	0:00			
27-Aug	49.98	50.01	50.00	49.98	50.00	49.99	3.18	76.71	20.11	76.71	50.20	6:04	49.79	19:11	50.12	0:00	49.89	0:00			
28-Aug	49.98	50.02	50.00	49.99	49.97	50.00	1.46	79.03	19.51	79.03	50.24	6:03	49.84	11:08	50.15	0:00	49.94	0:00			
29-Aug	49.99	50.02	49.99	50.01	50.00	50.00	2.95	73.42	23.63	73.42	50.21	13:01	49.80	12:41	50.10	0:00	49.88	0:00			
30-Aug	50.02	50.01	49.99	50.01	50.04	50.01	0.95	70.21	28.84	70.21	50.21	18:02	49.84	19:14	50.12	0:00	49.94	0:00			
31-Aug	50.04	50.03	50.02	50.00	49.98	50.02	0.79	73.21	26.00	73.21	50.22	6:03	49.82	18:12	50.10	0:00	49.93	0:00			
MAX	50.05	50.04	50.05	50.03	50.04	50.04	21.45	81.48	49.41	81.48	50.35		49.90		50.23		49.98				
MIN	49.94	49.91	49.95	49.91	49.89	49.95	0.01	50.24	6.82	50.24	50.15		49.65		50.06		49.77				
AVG	49.99	50.00	50.00	49.98	49.99	49.99	5.87	73.07	21.06	73.07	50.20		49.78		50.11		49.88				

SUMMARY:

Avg. Frequency : 49.99 Hz.

Instantaneous Frequency :

Maximum Frequency : 50.35 Hz On 00/01/00 at 13:03 Hrs.

Minimum Frequency : 49.65 Hz On 00/01/00 at 00:08 Hrs.

15 Minutes Integrated Frequency :

Maximum Frequency : 50.23 Hz On 00/01/00 at 00:00 Hrs.

Minimum Frequency : 49.77 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	5.87	73.07	21.06

VOLTAGE ANALYSIS

MAXIMUM & MINIMUM VOLTAGES RECORDED AT IMPORTANT 400 kV S/S IN THE MONTH OF AUGUST-2016

(All figs. in kV)

PGCIL	FARAKKA		SUBHASGRAM		DURGAPUR		JEERAT	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	418	391	425	407	427	375	432	393

PGCIL	FARAKKA		SUBHASGRAM		DURGAPUR		JEERAT	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	418	386	436	412	422	401	415	365

ANNEXURE-III

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
AUGUST-2016**

(All figs.in mtrs.)

Name of the Reservoirs	FRL	MDDL	As on last day of the		As on first day of this month & date	
			(31-8-16)	(31-8-15)		
Hirakud	192	180	189.06	190.48	185.63	01.8.16
Balimela	462	439	456.32	452.54	452.45	01.8.16
Rengali	123	109	121.54	119.15	115.02	01.8.16
Upperkolab	858	844	854.10	851.06	850.93	01.8.16
Indravati	642	625	636.91	630.86	632.88	01.8.16
Subernrekha	590	580	589.27	587.01	586.31	01.8.16

B.

CPP/IPP IMPORT by Eastern Region Constituents during AUGUST-2016

(All figs. are in MU)

System	Tata Power	Crescent Power	JSPL, Angul	Sterlite	Jindal	NALCO	TISCO	Others	Total
West Bengal	52.16	24.89	0	0	0	0	0	193.99	271.04
ODISHA	0	0	26.77	0.98	0.98	25.12	0	476.01	529.86
DVC	0	0	0	0	0	0	40.11	0	40.11
TOTAL	52.16	24.89	26.77	0.98	0.98	25.12	40.11	670.00	841.01

C.

Distribution of Schedule Supply among Key Customers by IPPs during AUGUST-2016

(All figs. are in MU)

IPP	TPDDL	WBSEDCL	DVC *	Sale at IEX/NPCL	ODISHA	JSEB	CTU/Others	Total (Excl. Tr. Loss)
MPL	132.35	173.47	58.61	0.00	0	0	168.25	532.68
Sterlite	0	0	0	0	0.98	0	146.85	147.83
APNRL	0	52.42	0	2.60	0.00	119.26	49.465	223.75
GMR	0	0.49	0	0.00	0.00	0	77.29	77.78
Total	132.35	225.89	58.61	2.60	0.98	119.26	364.57	904.26

(*)--During this month, DVC has drawn 58.61 MU of MPL energy which is included in its exchange with Grid.

D.

Monthwise Gross Generation from Chuzachen HEP

April'16	May'16	June'16	July'16	Aug'16	Sep'16	Cum. Total (2016-17)
29.18	43.87	62.48	83.16	74.53	0.00	293.22
Oct'16	Nov'16	Dec'16	Jan'17	Feb'17	Mar'17	
0.00	0.00	0.00	0.00	0.00	0.00	

STATUS OF IMPORTANT TRANSMISSION LINES UNDER CONSTRUCTION

(As on 31.08.16)

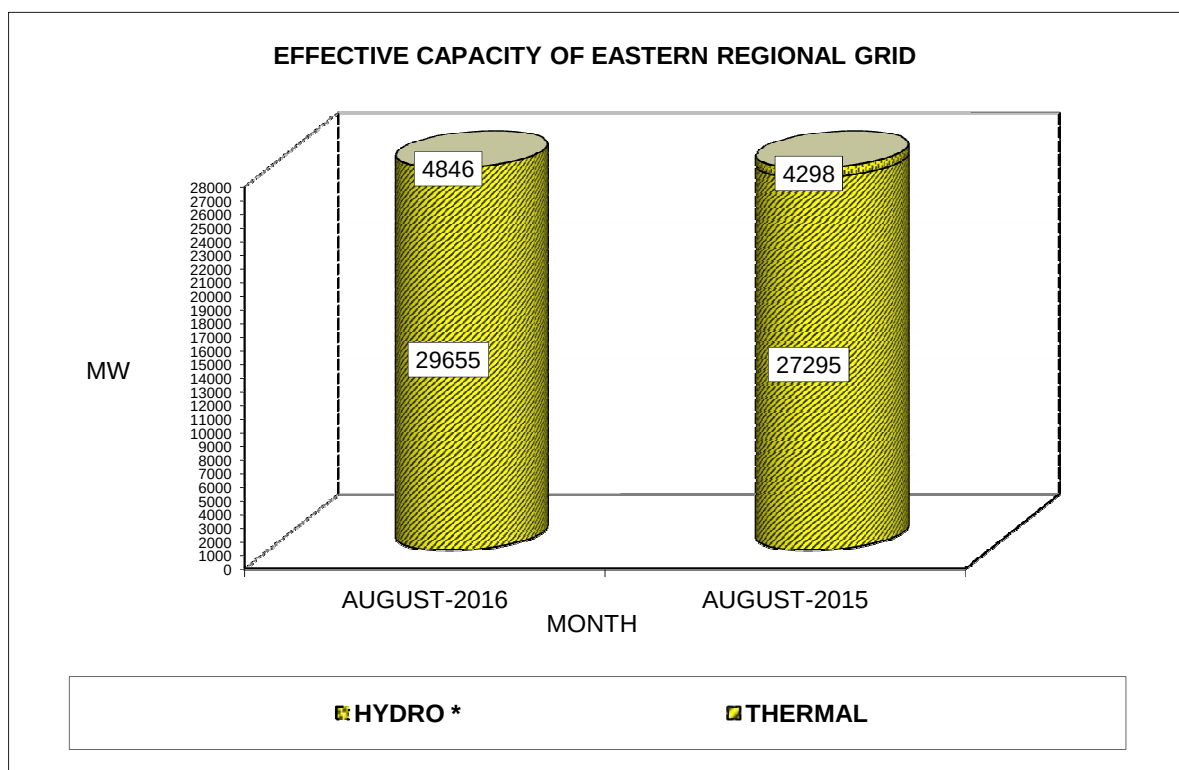
Sl. No.	Name of the Trans. Line	Length (CKM)	Completion Target		Remarks/Constraints
			Schedule	Ant. / Act.	
1.0 <u>EASTERN REGION</u>					
1.1	Transmission system for development of Polling station in Northern Region part of West Bengal & Transfer of power from Bhutan to NR/WR.	168	Jan'15	Dec'17	Gen. project delayed (ant. In 2017-18). Works slowed down to the extent feasible to match generation.
1.1.1	LILO of Biswanath Chaiali – Agra HVDC line at New Alipurduar for parallel operation of the HVDC stn.	22		Dec'17	Commissioning matching with associated HVDC terminal.
1.1.2	LILO of 400 KV D/C Bongaigaon-Siliguri line at new pooling station in Alipurduar.	13		Mar'17	Commissioning matching with Alipurduar PS.
1.1.3	400KV D/C Punatsangchu -1 (Gen. proj. in Bhutan) – Alipurduar line – India portion.	128		Dec'17	Gen. expected beyond 2017-18. Work slowed-down due to extent possible to match generation (Ph-II ant. By Mar'18)
1.1.4	LILO of 220 KV D/C Birpara-Salakati line at new pooling station in Alipurduar.			Mar'17	Commissioning matching with Alipurduar PS.
1.2	Eastern Region Strengthening Scheme - III	716	Nov'12	Oct'17	
1.2.1	400 kV D/C Sasaram-Daltonganj line	392		Oct'17	Delayed due to non-availability of s/s land.
1.2.2	LILO of 400kv D/C (one ckt) Baripada-Mendhasal line at Dubri (OPTCL)	32			Commissioned
1.3	Eastern Region Strengthening Scheme - V	961		Jun'17	
1.3.1	400 kV Rajarhat – Purnea line(Tripal) with LILO of one Ckt at Gokarana (WBSETCL) & other Ckt at Farakka(NTPC)	953		Jun'17	Severe row problem in Jharkand area.
1.3.2	LILO of Subhasgram-Jeerat 400 kV S/C line at Rajarhat.	8		Jan'17	Work almost completed.
1.4	Trans mission system associated with Darlipali TPS	48	Jun'18	Jun'18	
1.4.1	765 kV D/C Darlipalli TPS – Jharsuguda (Sundergarh) Polling Stn. Line.	48		Jun'18	Award placed in Jan'16. Efforts being made to complete in 2016-17 for start up power to NTPC.
1.5	Eastern Region Strengthening Scheme - XV	195	Apr'18	Apr'18	
1.5.1	400 kV D/C Farakka – Baharampur line (Twin HTLS)	160		Apr'18	Award place in Apr'16
1.5.2	LILO 400 kV S/C Farakka – Jeerat line at sagardighi.	30		Apr'18	Award place in Apr'16

Sl. No.	Name of the Trans. Line	Length (CKM)	Completion Target		Remarks/Constraints
			Schedule	Ant. / Act.	
1.5.3	LILO 400 kV S/C Sagardighi – Subhasgram t line at Jeerat.	2		Apr'18	Award place in Apr'16
1.5.4	Removal of the existing LILO Farakka – Jeerat S/C line at Baharampur.	3		Apr'18	Award place in Apr'16
1.6	Powergrids works associated with Common trans. System for Phase II Gen. Proj. in Odisha.	136	Apr'19	Apr'19	
1.6.1	LILO of both Ckt of 400kV D/C Rourkela- Raigarh (2 nd line) at Jharsuguda.	136		Apr'19	Work under progress.
1.7	Associted transmission system for Nabinagar-II TPS.	482	Jun'19	Jun'19	
1.7.1	400kV D/C Nabinagar II- Gaya Line(Q)	204		Jun'19	Tower erection commenced from Nov'16
1.7.2	400kV D/C Nabinagar II- Patna Line (Q)	278		Jun'19	Tower erection commenced from Nov'16

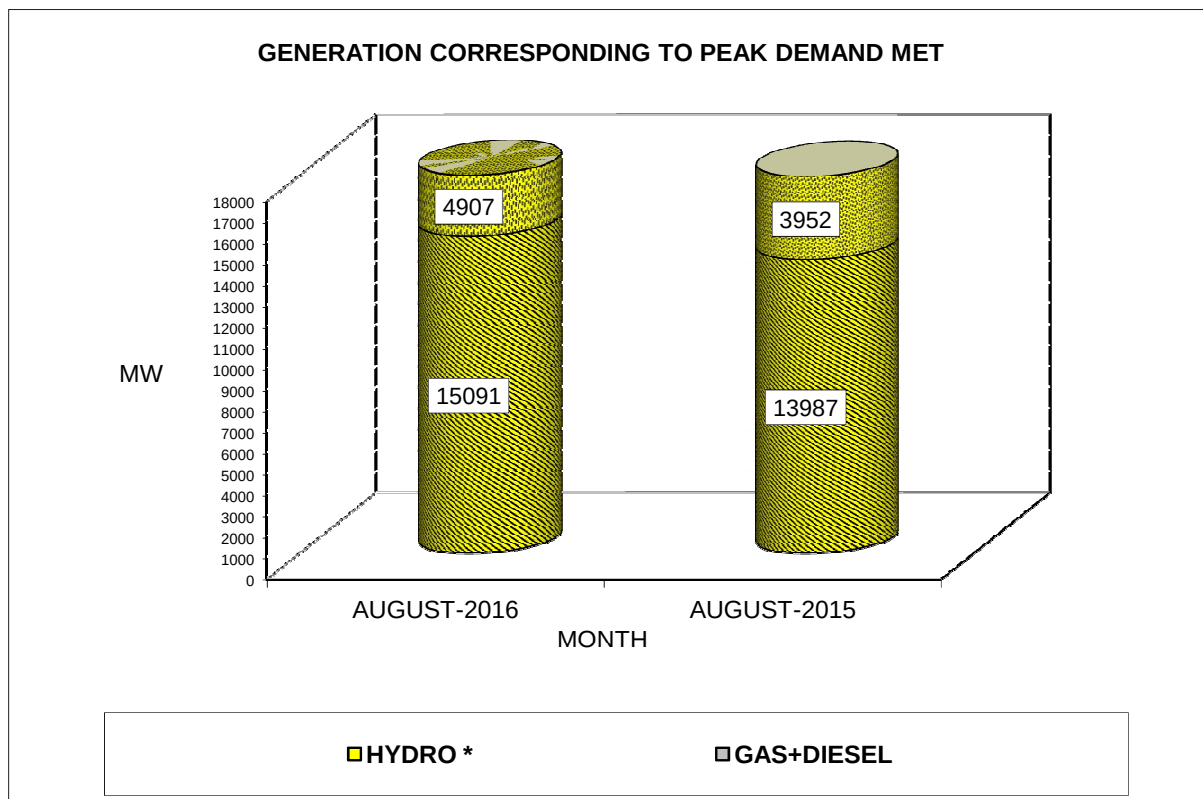
ANNEXURE-VI**COMMISSIONING SCHEDULE OF NEW GENERATING STATION****(As on 31.08.16)**

Sl. No .	AGENCY	NAME OF POWER STATION	STATE	TYPE	UNIT NO.	CAPACITY (MW)	LATEST COMMISSIONING SCHEDULE
1	DVC	BTPS 'A'	Jharkand	THERMAL	1	500	Status awated
2	ODISHA	Corporate Power Ltd.	Odisha	THERMAL	1	257	Status awated
3	WBPDC	Sagardighi	West Bengal	THERMAL	3	500	Status awated
4	WBPDC	Sagardighi	West Bengal	THERMAL	4	500	Status awated
5	KBUNL	Muzaffarpur (MTPS)	Bihar	THERMAL	1	195	Expected COD on Mar, 2017
6	KBUNL	Muzaffarpur (MTPS)	Bihar	THERMAL	2	195	Expected COD on Mar, 2017
7	BRBCL	Nabinagar TPP	Bihar	THERMAL	4	4x250	Expected COD from Mar, 2017
8	BRBCL	New Nabinagar STPP	Bihar	THERMAL	2	2x600	Expected Dec, 2017
9	DVC	Maithon Left Bank	West Bengal	THERMAL	2	525	Status awated from DVC
10	NTPC	Barh Stage- I	Bihar	THERMAL	3	660	Status awated from NTPC
11	Lanco Babandh Power Ltd	Lanco Babandh TPP	ODISHA	THERMAL	1	660	

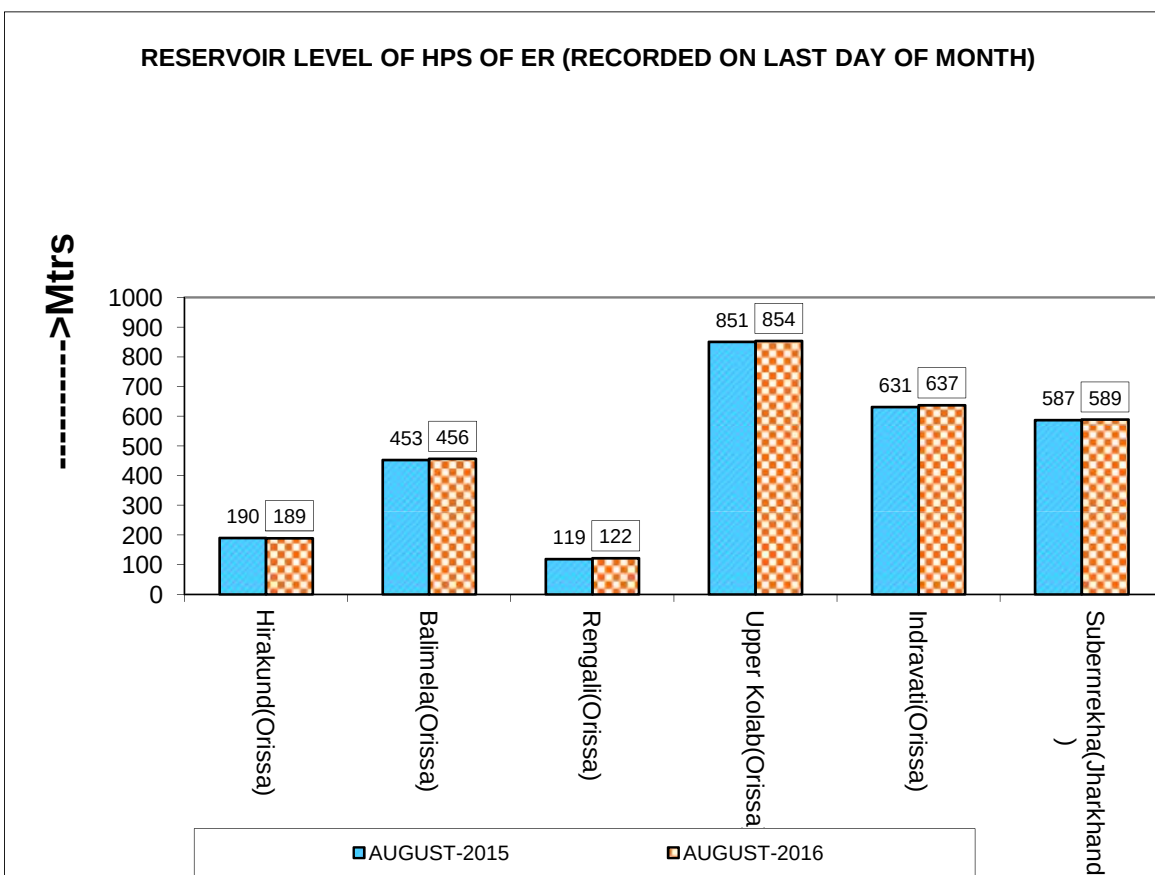
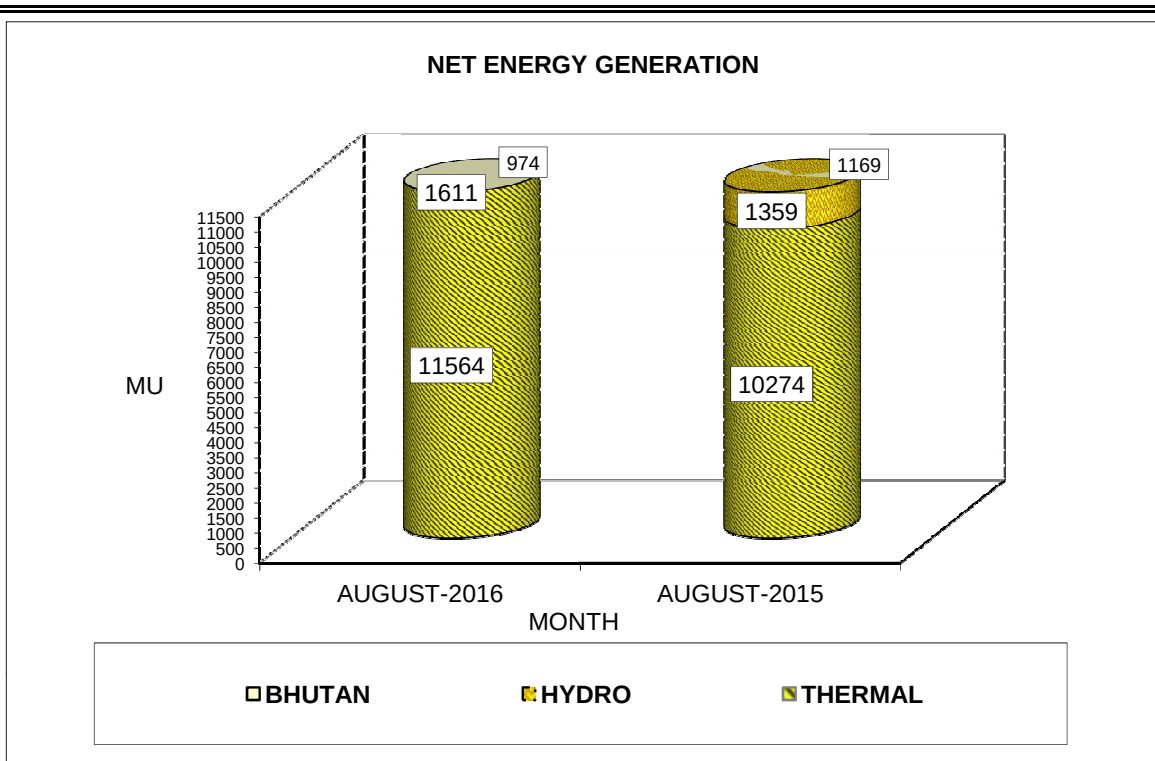
I P P							
12	Corporate Power Ltd	Mata shri Usha TPP-Ph-I	Jharkand	THERMAL	2	270	
13	IPP	Ind Bharat TPP	Odisha	THERMAL	1	350	COD on Jul' 2016
14	IPP	Ind Bharat TPP	Odisha	THERMAL	1	350	COD on Jul' 2016
15	IPP	Teesta Urja	West Bengal	Hydro	1,2,3	200x3	Expected Nov, 2016
16	IPP	Teesta Urja	West Bengal	Hydro	4,5,6	200x3	Expected Jan, 2017
17	IPP	Shiga Energy Pvt. Ltd.	Sikkim	Hydro	1,2	2x48	Expected Jan, 2017
18	IPP	Sneha Kinetic Power Projects Ltd. (Dikchu)	Sikkim	Hydro		2x48	Expected Nov, 2016



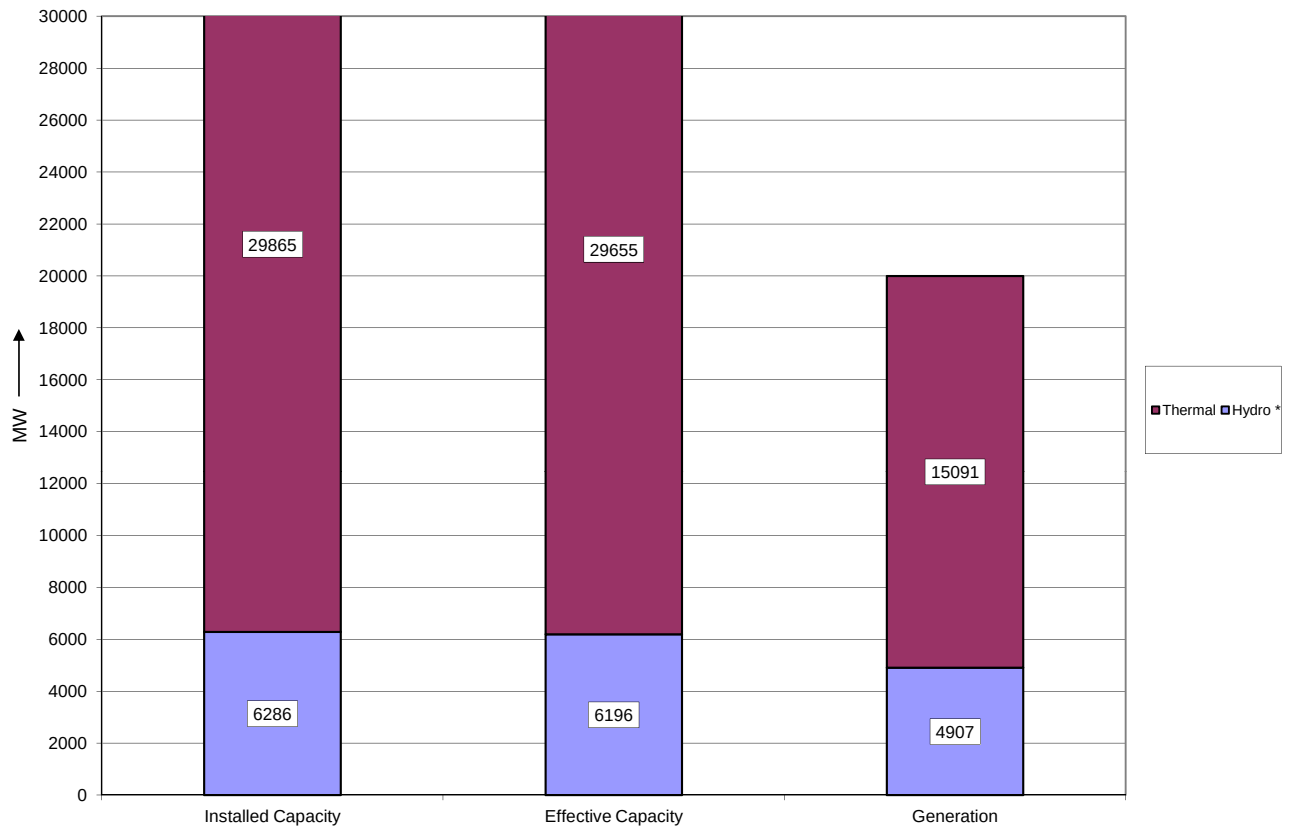
*Excludes 1350 MW contribution from HEPs of Bhutan



*Includes contribution from HEP of Bhutan

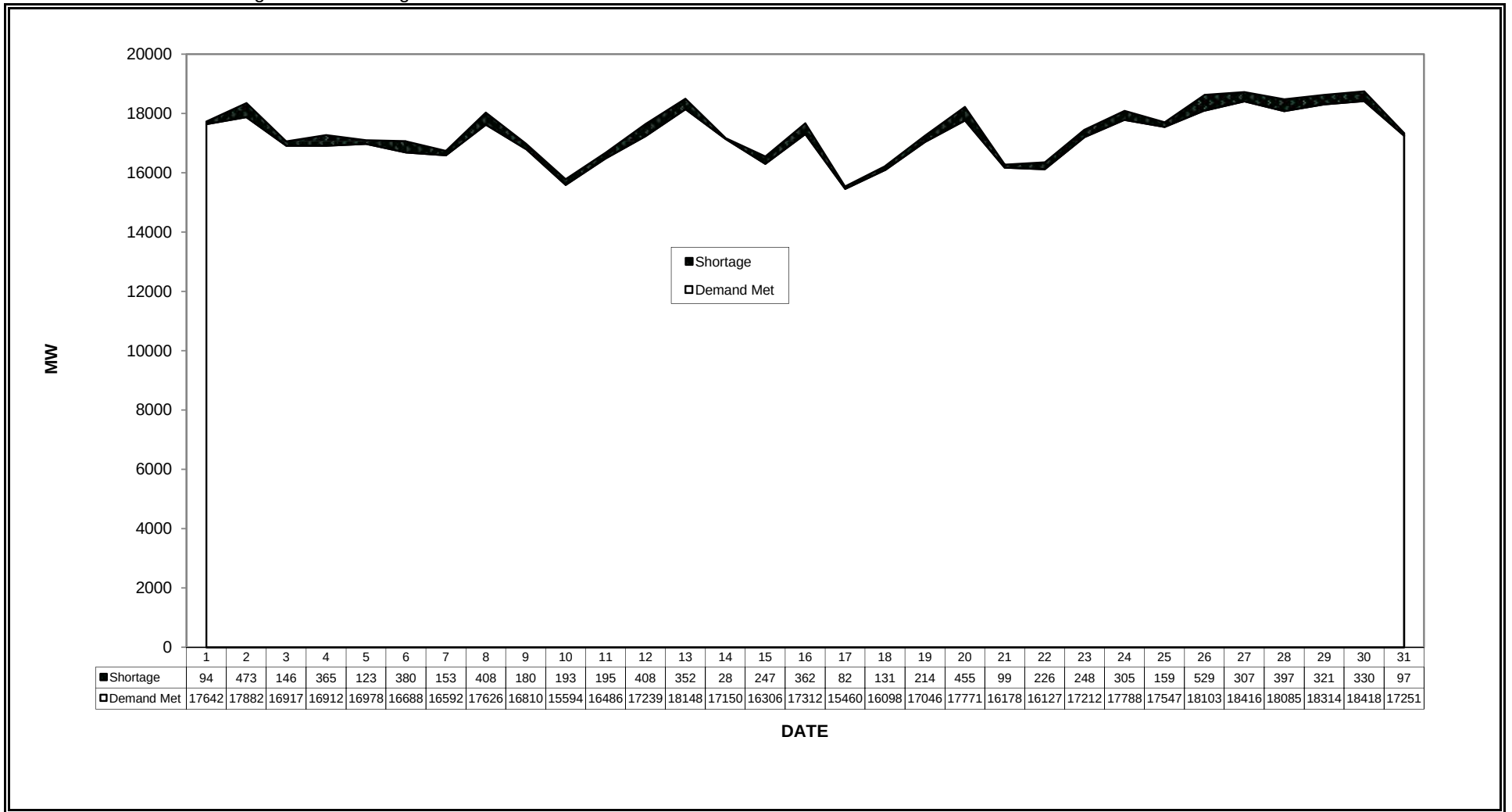


Capacity / Actual Generation Pattern of ER on Peak Day (30-8-2016) at 20.00 hrs.

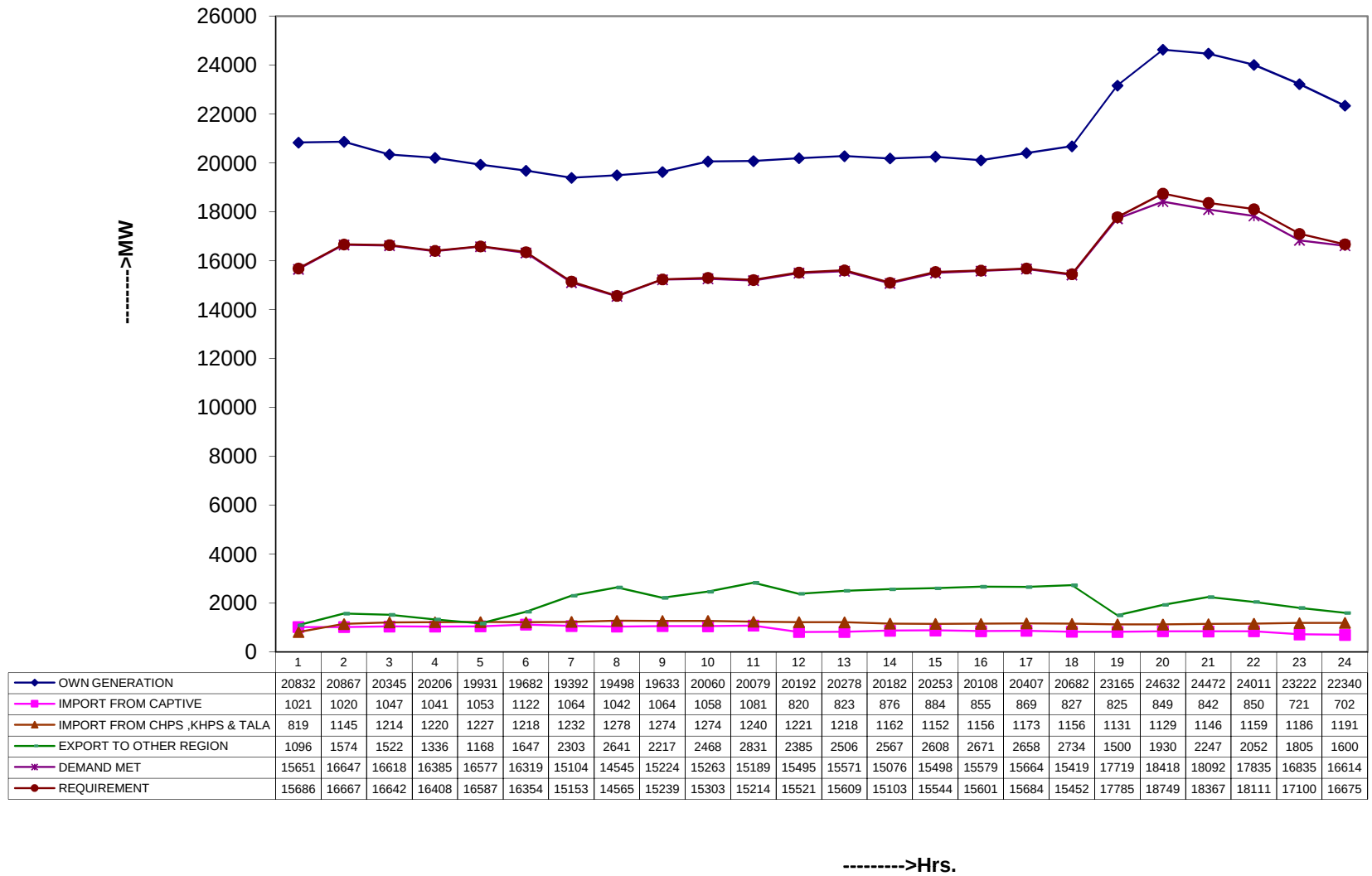


(*)--Includes contribution from HEP of Bhutan (Chukka, Kurichhu & Tala)

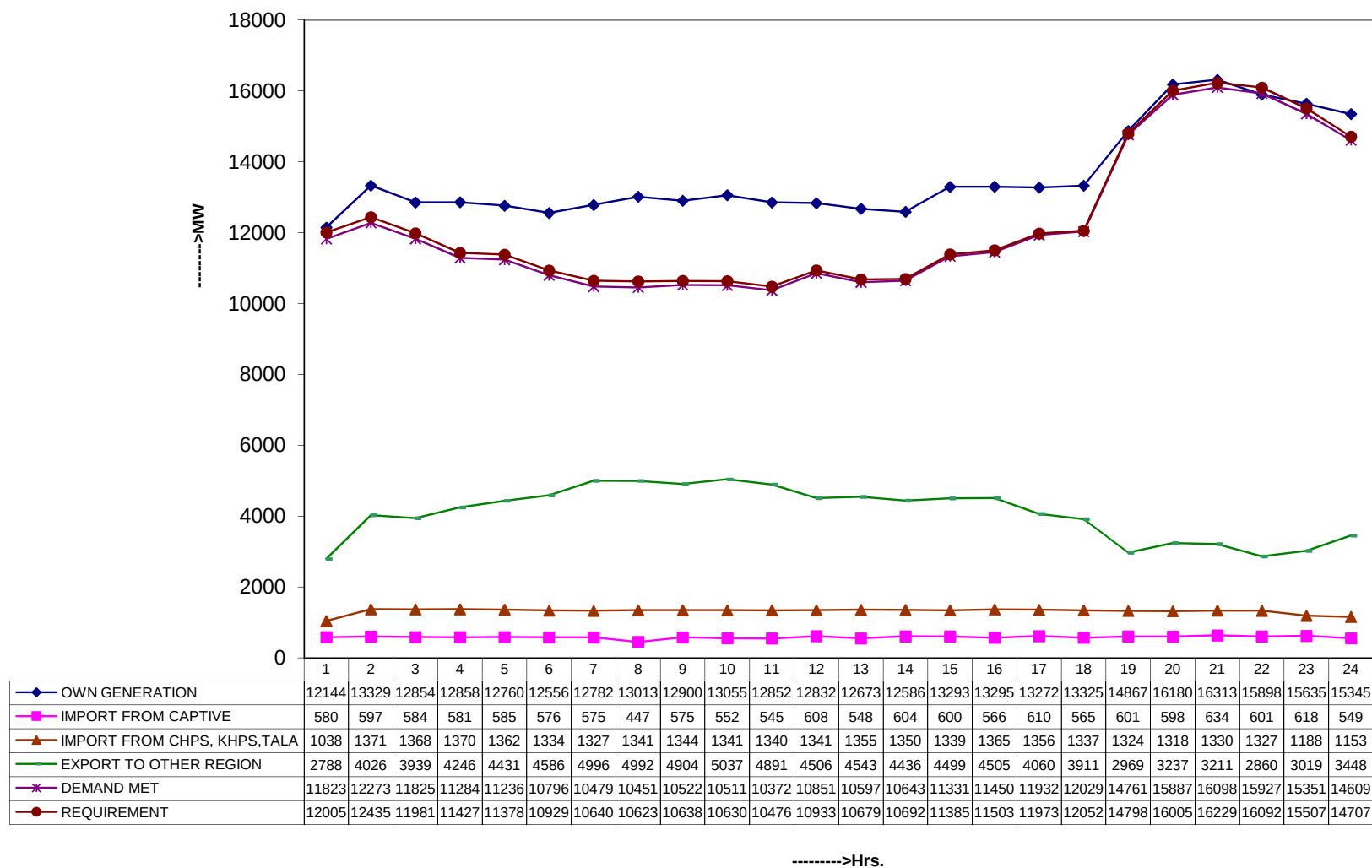
Peak Demand Met / Shortage of Eastern Region For The Month Of AUGUST-2016



Hourly Load Generation Data OF ER On Regional Peak Day During The Month of AUGUST-2016 (30-8-2016)

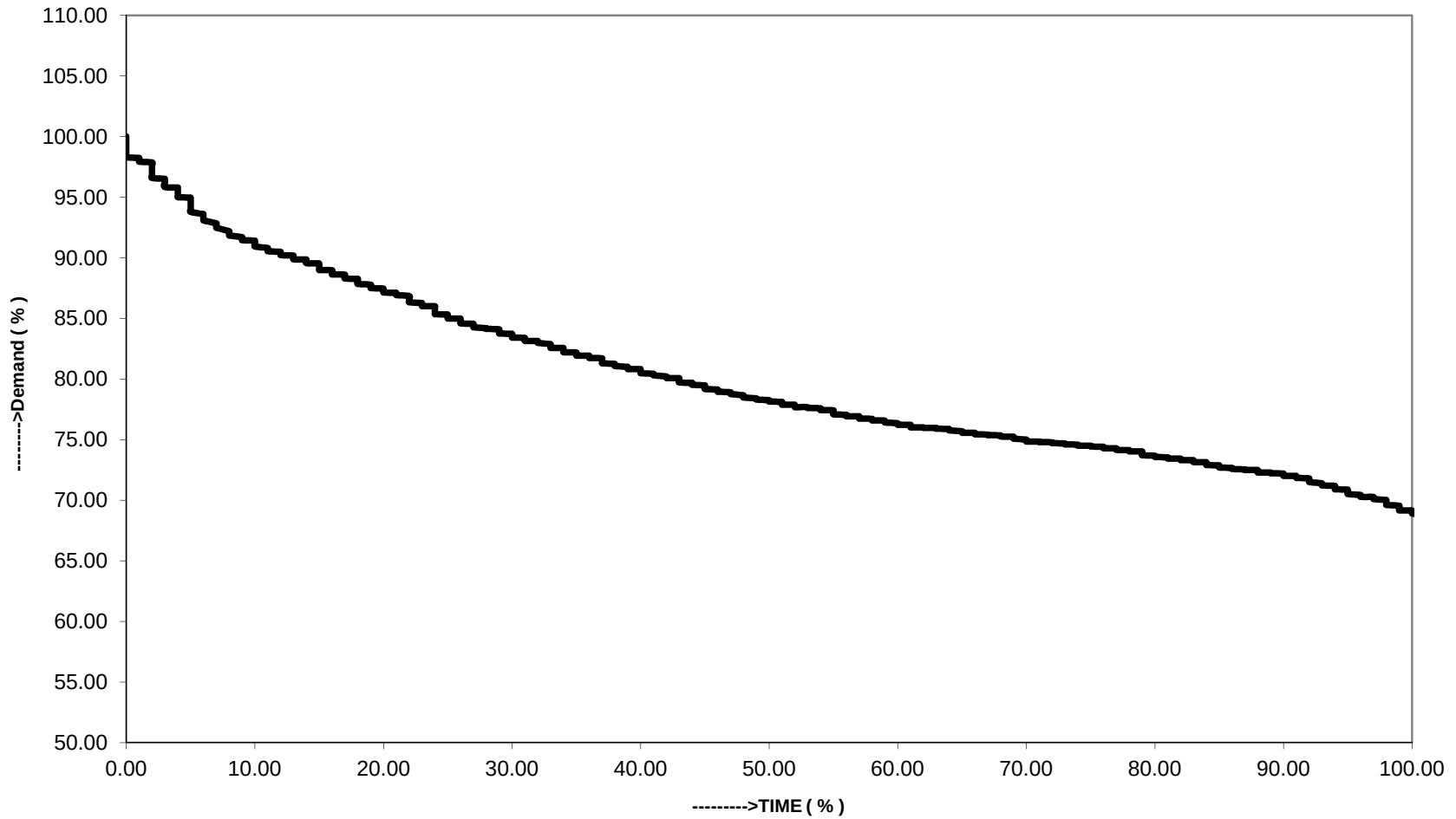


Hourly Load Generation Data of ER On Regional Lean Day During The Month of AUGUST-2016 (18-8-2016)



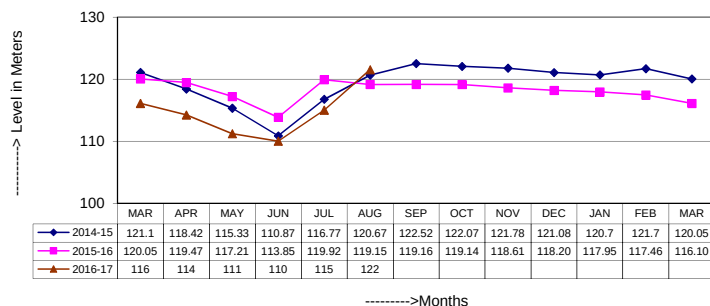
Monthly Load Duration Curve of Eastern Region for AUGUST-2016

Maximum Demand met : 18418 MW
Minimum Demand met: 10372 MW

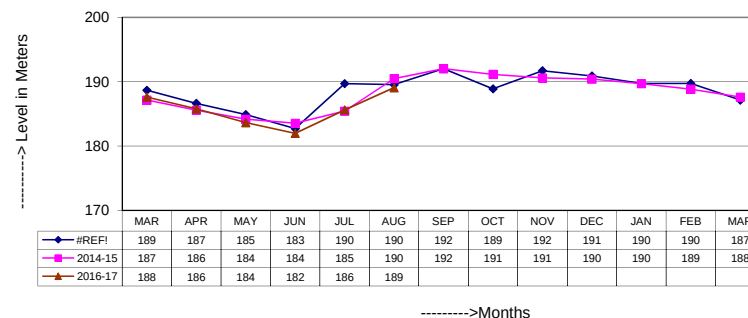


WATER LEVEL IN MAJOR RESERVOIRS ON LAST DATE OF MONTH

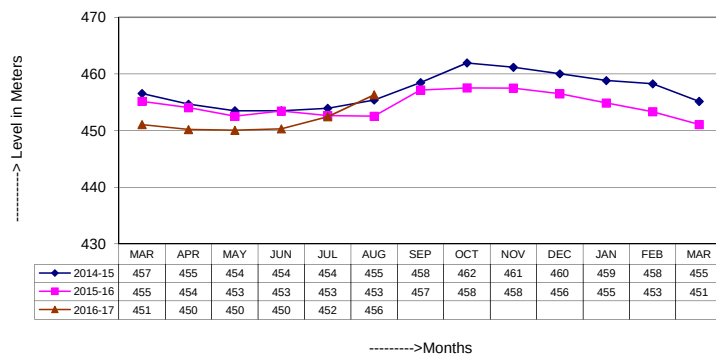
RENGALI RESERVOIR LEVEL



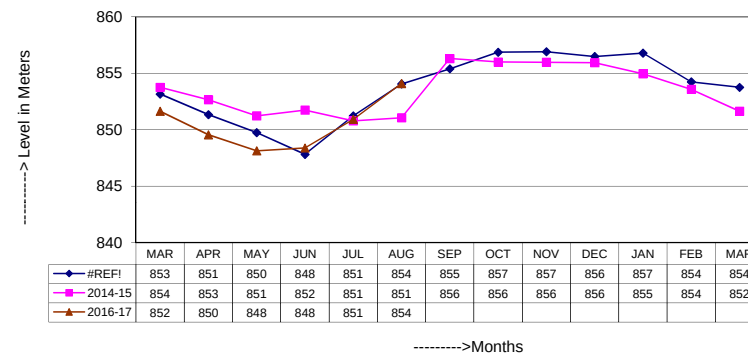
HIRAKUD RESERVOIR LEVEL



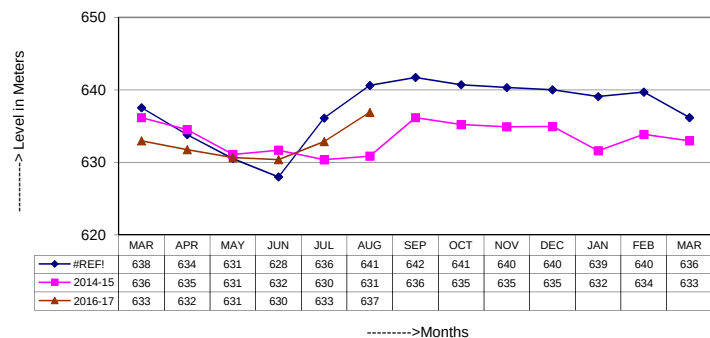
BALIMELA RESERVOIR LEVEL



UPPER KOLAB RESERVOIR LEVEL



INDRAVATI RESERVOIR LEVEL



SUBERNREKHA RESERVOIR LEVEL

