



Government of India

भारत सरकार

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विद्युत मंत्रालय

Ministry of Power

पूर्वी क्षेत्रीय विद्युत समिति

EASTERN REGIONAL POWER COMMITTEE

मासिक प्रगति रिपोर्ट

**PROGRESS REPORT FOR THE MONTH
OF**

मई - 2016

MAY - 2016

पूर्वी क्षेत्रीय विद्युत समिति

Eastern Regional Power Committee

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Highlights of Eastern Regional Power System for May-2016

- The **Maximum Net Demand** met of Eastern Region (ER) during the month of May, 2016 was 18306 MW which is 4.00% more than the May, 2015 (17602 MW). Individual Peak Demand (MW) of majority constituents decreased compared to the corresponding period of last year.
- The **Average Net Energy Consumption** per day in ER for the month of May, 2016 was 350.35 MU excluding export, which is 1.15% more than the corresponding period of last year (346.36 MU).
- The **Average regional PLF of thermal units 62.29% during the month**, which is 2.36% less than the corresponding period of the last year (64.65%).
- **Budge-Budge** of CESC registered the highest PLF of 96.90%, followed by TTPS (Gridco) (96.42%) & NTPC (TSTPP) (92.90%) during the month of May' 2016.
- **Total Net generation** of ER was 18764 MW against total **Effective Capacity** of 35334 MW (including that of Bhutan), and import from CPPs was 1022 MW at the time of Regional peak (18306 MW on 02.05.16 at 21.00 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 69.80% of time during the period. **Average frequency** for the month was 50.00 Hz. The instantaneous maximum and the minimum frequency touched were 50.44 Hz and 49.56 Hz respectively. The integrated (Fifteen minutes time block average) maximum and minimum frequency were 50.26 Hz and 49.73 Hz respectively (refer Annexure-I).
- The **Maximum Voltage** recorded 431KV at Jamshedpur 400 KV S/s whereas the minimum voltage recorded 369 KV at Jeypore 400 KV S/s of Powergrid.
- The **Maximum Export from ER to outside region** was 4937 MW on 31st May'16 at 12.00 hrs. Total net energy export during the month was 2021.56 MU (including transmission loss), which corresponds to 15.79% of ex-bus total generation (12800 MU) of Eastern Region and 8.07% less than the corresponding period of previous year.
- The import from CPPs/IPPs was 1656.04 MU, which is 112.20% more than corresponding period of last year (780.42 MU).

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

Export / Import by Bihar	May, 2016(In MU)	Cum. (Apr'16-May'16) in MU
Export to NEPAL by Bihar (NBPDC)	114.00	293.00
Export to NEPAL by NVVN	56.00	110.00

- The total energy exchange between India & Bangladesh was:

Export	During May, 2016(In MU)	Cum. (Apr'16-May'16) in MU
Exchange between India & Bangladesh	326.50	632.29

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

Region	Max. Export of Power ER (MW)	Max. Import of Power by ER (MW)	Net Export of Energy (MU)
NR	2673	389	867.38
WR	1635	1587	62.17
SR	1307	440	311.41
NER	1064	485	398.22

SALIENT FEATURES

(YEAR TO YEAR COMPARISON)

		May-16	MAY-2015	CHANGE	% CHANGE
1)	Effective Capacity (end of the Month)				
	THERMAL (MW)	29155	25495	3660	14.36
	HYDRO (MW)	4686	\$ 4298	388	9
	DIESEL (MW)	7	0	7	0
	SOLAR (MW)	10	0	0	0
	TOTAL (MW)	33858	29793	4065	13.65
2)	Peak Demand (MW)	18600	17717	883	4.98
3)	Peak Demand Met (MW)	18306	17602	704	4.00
4)	Shortage (MW)	294	115	179	155.55
5)	% Shortage	1.58	0.65	0.93	143.09
6)	Average Energy Requirement Per Day (MU)	355.45	349.67	5.78	1.65
7)	Average Energy Availability Per Day (MU)	350.35	346.36	3.99	1.15
8)	Average Shortage Per Day (MU)	5.10	3.31	1.79	54.14
9)	% Shortage	1.44	0.95	0.49	51.09
10)	Net Generation for the Month				
	Thermal (MU)	11657.85	10579.55	1078.30	10.19
	Hydro (MU)	1140.92 *	1324.80	-183.88	-13.88
	Diesel (MU)	0.00	0.00	0.00	-
	Total (MU)	12800	11904.35	895.75	7.52
11)	Generation at the Time of Max. Regional Demand Met (02-05-16 at 21.00 Hrs.)				
	Thermal (MW)	16750	15889	861	5.42
	Hydro (MW)	2014 *	2776	-762	-27.45
	Diesel (MW)	0	0	0	-
	Total (MW)	18764	18665	99	0.53
12)	Inter-Regional Energy Transfer				
	Export (MU)	2021.56	2199	-177.44	-8.07
	Import (MU)	0.00	0.00	0.00	-
	Net Exp.(+)/Net Imp.(-) (MU)	2021.5575	2199	-177.44	-8.07
13)	Import From Captive(MU)	1656.04	780.42	875.62	112.20
14)	Peak Inter Regional Power Transfer				
	Max Export (MW) on 31-05-16 at 12.00Hrs	4937	4490	447	9.96
	Max Import (MW) on 10-05-16 at 19.00Hrs	1608	416	1192	286.65
	Max Net Export(+)/Import (-) (MW) on 00-01-00 at 00.00Hrs	4607	4490	117	2.62
15)	Maximum voltage recorded	431	JAMSHEDPUR		
16)	Minimum voltage recorded	369	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 MAY-2016

A) Net Average Energy Per Day

System	Demand Met (MU/Day)	Requirement (MU/Day)	Shortage (MU/Day)	% Shortage
BSEB	64.08	67.76	3.68	5.43
JSEB	21.83	21.98	0.15	0.69
DVC	48.93	49.29	0.36	0.74
ODISHA	70.64	70.66	0.01	0.02
WBSEDCL	104.35	105.23	0.88	0.84
CESC	33.82	33.83	0.01	0.02
DPL	5.54	5.55	0.00	0.02
SIKKIM	1.16	1.17	0.00	0.40
REGION	350.35	355.45	5.10	1.44

B) Peak Demand in MW:

System	Demand Met (MW)	Requirement (MW)	Shortage (MW)	% Shortage
BSEB	3634	3659	25	0.68
JSEB	1116	1117	1	0.10
DVC	2493	2540	48	1.88
ODISHA	3965	3968	3	0.08
WBSEDCL	5820	5854	34	0.59
CESC	2009	2011	2	0.1
DPL	274	275	0	0.09
SIKKIM	79	79	0	0.00
REGION	18306	18600	294	2

➤ DIVERSITY FACTOR : 1.06

➤ Regional Peak Demand Met on 2-5-2016 at 21.00 hrs. at 49.99 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 (MU/Day)	Requirement (MU/Day)	Shortage (MU/Day)	Shortage (%)	Avg. Freq. (HZ)	Demand Met (MU/Day)	Requirement (MU/Day)	Shortage (MU/Day)	Shortage (%)	Avg. Freq. (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	350.35	355.45	5.10	1.44	50.00
JUNE	351.46	353.07	1.61	0.46	49.99	-	-	-	-	-
JULY	342.90	344.59	1.68	0.49	49.98	-	-	-	-	-
AUGUST	363.08	364.98	1.90	0.52	49.97	-	-	-	-	-
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 (MW)	Requirement (MW)	Shortage (MW)	Shortage (%)	Avg. Freq. (HZ)	Demand Met (MW)	Requirement (MW)	Shortage (MW)	Shortage (%)	Avg. Freq. (HZ)
APRIL	17346	17424	78	0.44	49.96	18607	18861	254	1.35	49.97
MAY	17602	17717	115	0.65	49.95	18306	18600	294	1.58	50.00
JUNE	17013	17195	182	1.06	49.99	-	-	-	-	-
JULY	16603	16662	58	0.35	49.98	-	-	-	-	-
AUGUST	17381	17839	458	2.57	49.97	-	-	-	-	-
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		to			During May-16		BILATERAL [EXPORT(-) / IMPORT(+)] (EX-SELLER BUS)	NET DRAWAL SCHEDULE (AFTER LOSS)	ACTUAL DRAWAL FROM GRID	
		1-Apr-16	ENTITLEMENT (EX-BUS)	DRAWAL SCHEDULE (EX-BUS)	31/Mar/17	ENTITLEMENT (EX-BUS)	DRAWAL SCHEDULE (EX-BUS)					
BSEB	FARAKKA STPS I	381.06	362.85				263.18	252.04				
	FARAKKA STPS III	248.95	249.07				127.76	126.33				
	KAHALGAON STPS I	441.42	400.36				234.82	199.95				
	KAHALGAON STPS II	100.70	104.38				51.17	42.19				
	TALCHER STPS I	552.37	537.60				282.78	271.94				
	BARH STPS II	852.45	852.45				518.60	518.60				
	RANGIT HEP	12.93	12.93				8.45	8.45				
	CHUKHA HEP	24.50	59.39				13.21	30.89				
	KIRUCHHU HEP	0.00	0.00				0.00	0.00				
	TALA HPS	66.04	46.74				41.45	35.26				
	TEESTA HEP	100.79	100.79				55.39	55.39				
	TOTAL	2781.20	2726.57	1013.17	3742.12	3776.14	1596.80	1541.04	386.10	1924.99	1898.76	
	JSEB	FARAKKA STPS I	104.00	101.19				71.85	70.10			
		FARAKKA STPS III	47.37	47.50				24.31	24.29			
KAHALGAON STPS I		33.76	33.79				17.96	16.80				
KAHALGAON STPS II		25.25	39.89				12.83	16.53				
TALCHER STPS I		102.69	106.27				52.57	54.85				
BARH STPS II		86.91	78.14				54.44	48.06				
RANGIT HEP		4.93	4.93				3.22	3.22				
CHUKHA HEP		8.88	21.53				4.79	11.20				
KIRUCHHU HEP		0.00	0.00				0.00	0.00				
TALA HPS		29.68	21.01				18.63	15.85				
TEESTA HEP		58.50	58.50				32.15	32.15				
TOTAL		501.97	512.74	302.57	863.18	945.63	292.74	293.04	129.06	444.20	456.45	
DVC		FARAKKA STPS I	9.12	8.82				6.30	6.06			
		FARAKKA STPS III	48.36	47.40				24.82	23.91			
	KAHALGAON STPS I	7.19	6.32				3.83	3.21				
	KAHALGAON STPS II	15.43	13.47				7.84	6.43				
	TALCHER STPS I	13.70	11.88				7.01	5.66				
	RANGIT HEP	3.70	3.70				2.42	2.42				
	CHUKHA HEP	8.58	20.78				4.62	10.81				
	KIRUCHHU HEP	6.95	10.44				6.95	10.44				
	TALA HPS	14.35	10.15				9.01	7.66				
	TEESTA HEP	40.96	40.96				22.51	22.51				
	TOTAL	168.33	173.93	-2419.35	-2090.53	-2090.77	95.30	99.11	-1149.06	-975.08	-947.06	
	GRIDCO	FARAKKA STPS I	172.11	168.27				118.88	115.43			
		FARAKKA STPS III	116.91	111.08				60.00	53.22			
		KAHALGAON STPS I	166.36	149.95				88.50	70.84			
KAHALGAON STPS II		52.99	51.60				26.93	23.82				
TALCHER STPS (Stg-I)		433.17	434.17				221.75	220.53				
TALCHER STPS (Stg-II)		266.07	261.39				134.46	131.23				
BARH STPS II		180.28	147.81				112.92	83.47				
RANGIT HEP		0.00	0.00				0.00	0.00				
CHUKHA HEP		12.56	30.44				6.77	15.84				
KIRUCHHU HEP		0.00	0.00				0.00	0.00				
TALA HPS		11.01	7.79				6.91	5.88				
TEESTA HEP		97.61	97.61				53.65	53.65				
TOTAL		1509.07	1460.11	111.87	1525.60	1585.07	830.75	773.89	60.71	811.26	843.51	
WBSECL		FARAKKA STPS I	381.75	239.57				263.67	184.60			
	FARAKKA STPS III	219.50	84.71				112.65	40.46				
	KAHALGAON STPS I	9.69	9.45				5.16	4.84				
	KAHALGAON STPS II	18.59	18.40				9.44	9.09				
	TALCHER STPS I	134.18	110.44				68.69	47.31				
	RANGIT HEP	10.47	10.47				6.84	6.84				
	CHUKHA HEP	26.34	63.84				14.20	33.21				
	KIRUCHHU HEP	10.30	10.44				6.95	10.44				
	TALA HPS	99.05	70.11				62.18	52.89				
	TEESTA HEP	113.68	113.68				62.48	62.48				
	TOTAL	1023.56	731.11	1920.78	2599.26	2635.48	612.25	452.17	843.16	1259.26	1281.27	
	SIKKIM	FARAKKA STPS I	19.78	11.42				13.66	9.13			
		FARAKKA STPS III	0.00	0.00				0.00	0.00			
		KAHALGAON STPS I	16.35	8.51				8.70	6.89			
KAHALGAON STPS II		6.67	3.47				3.39	2.79				
TALCHER STPS I		32.14	20.26				16.45	13.74				
BARH STPS II		18.50	2.71				11.59	1.01				
RANGIT HEP		4.93	4.93				3.22	3.22				
CHUKHA HEP		1.84	4.45				0.99	2.31				
KIRUCHHU HEP		0.00	0.00				0.00	0.00				
TEESTA HEP		62.53	62.53				34.37	34.37				
TOTAL		162.73	118.27	-38.29	75.65	66.71	92.37	73.46	-33.50	37.65	33.71	
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	-548.69	-541.73				-278.35	-287.36			
	TALCHER STPS I	0.00	0.00				0.00	0.00				
	BARH STPS II	0.00	0.00				0.00	0.00				
	TOTAL	-548.69	-541.73	719.67	-530.69	-235.64	-278.35	-287.36	323.69	-333.00	-173.47	
SR	FARAKKA STPS I	-15.34	-23.91				-10.50	-10.81				
	KAHALGAON STPS I	-7.25	-13.26				-3.80	-3.93				
	KAHALGAON STPS II	0.00	0.00				0.00	0.00				
	TALCHER STPS STG-I	-11.20	-11.61				-5.64	-5.83				
	TALCHER STPS STG-II	261.39	261.39				131.23	131.23				
	TOTAL	333.94	318.48	-1890.26	-729.34	-693.89	111.28	110.66	923.92	-327.37	382.48	
NR	FARAKKA STPS I	-93.38	-84.88				-63.07	-57.13				
	KAHALGAON STPS I	-329.61	-277.43				-174.43	-149.13				
	KAHALGAON STPS II	-1147.71	-978.48				-578.32	-500.31				
	TALCHER STPS I	0.00	0.00				0.00	0.00				
	TALA HPS	-38.84	-27.50				-24.38	-20.74				
	TOTAL	-1609.56	-1368.28	-1272.20	-2608.97	-973.62	-840.21	-727.30	-634.49	-1339.79	-106.25	
WR+SR+NR (GRAND TOTAL)	-1824.31	-1591.53	-2442.79	-3869.00	-1903.15	-1007.27	-904.01	-1234.72	-2000.16	662.20		
NER	FARAKKA STPS I	-40.17	-36.33				-27.74	-25.86				
	FARAKKA STPS III	-0.63	-1.01				-0.32	-0.23				
	KAHALGAON STPS I	-31.16	-21.50				-16.57	-10.55				
	KAHALGAON STPS II	-104.85	-57.14				-53.28	-25.09				
	TALCHER STPS I	-39.52	-29.50				-20.23	-13.24				
	TOTAL	-335.34	-260.67	64.49	-196.65	-571.38	-118.15	-74.97	109.35	34.18	-247.98	

PERFORMANCE OF GENERATING STATIONS IN THE EASTERN REGION DURING THE MONTH OF MAY-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	112.91	101.62	217.17	195.45
		Thermal Total	440.00	430.00	112.91	101.62	217.17	195.45
	Hydro	Kosi	20.00	20.00	0.33	0.33	0.33	0.33
		Dehri & others	24.90	24.90	0.00	0.00	0.00	0.00
		Total Hydro	44.90	44.90	0.33	0.33	0.33	0.33
	Total BIHAR		484.90	474.90	113.24	101.95	217.50	195.78
JHARKHAND								
TVNL	Thermal	TVNL	420.00	420.00	114.26	98.19	270.20	233.31
JSEB	Thermal	Patratu	840.00	770.00	45.65	38.90	91.63	78.38
	Hydro	Subarnrekha (U#1,2)	130.00	130.00	0.00	0.00	0.19	0.19
	Total		970.00	900.00	45.65	38.90	91.83	78.57
DVC	Thermal	Bokaro-B(1,2,3)	630.00	630.00	127.24	110.76	302.44	264.35
		Chandrapura (1,2,3)	420.00	390.00	219.44	197.95	435.53	393.65
		Chandrapura(U7 # 8)	500.00	500.00	323.38	293.73	652.40	593.69
		Durgapur(3,4)	350.00	350.00	0.00	0.00	128.12	113.41
		Mezla(1,2,3,4,5,6)	1340.00	1340.00	532.23	472.23	1203.82	1069.95
		Mezla(U # 7,8)	1000.00	1000.00	589.13	560.13	1103.73	1046.59
		Durgapur STPS (U#1,2)	1000.00	1000.00	577.30	547.61	1141.86	1083.56
		Raghunathpur TPS (U#1,2)	1200.00	1200.00	170.17	157.41	170.17	157.41
	Koderma STPS (U#1,2)	1000.00	1000.00	315.74	295.93	801.28	754.07	
	Total Thermal		7440.00	7410.00	2854.63	2635.75	5939.34	5476.66
	Hydro	Maithon (U#1,2,3)	63.20	63.20	0.77	0.73	1.56	1.49
		Panchet (U#1,2)	80.00	80.00	0.38	0.25	0.77	0.54
		Tilaya (U#1,2)	4.00	4.00	0.00	0.00	0.00	0.00
		Hydro Total	147.20	147.20	1.14	0.97	2.32	2.02
Total DVC		7587.20	7557.20	2855.78	2636.72	5941.67	5478.68	
WEST BENGAL								
WBPDCCL	Thermal	Bandel TPS	540.00	450.00	129.32	112.30	309.03	272.57
		Santalidih TPS(U#5&6)	500.00	500.00	284.34	258.99	608.24	555.94
		Kolaghat TPS	1260.00	1260.00	591.45	530.03	1213.42	1088.60
		Bakreswar TPP	1050.00	1050.00	618.96	555.69	1326.15	1195.92
		Sagardighi TPP	600.00	600.00	298.89	260.83	668.75	588.77
		Thermal Total	3950.00	3860.00	1922.95	1717.85	4125.59	3701.80
WBSEDCL	Hydro	Jaldhaka (3x9+2x4)	35.00	35.00	20.68	20.68	34.14	34.14
		Ramam (4x12.73)	51.00	51.00	13.45	13.45	21.62	21.62
		Teesta C.F. (3x3x7.3)	67.30	67.30	2.32	2.32	15.05	15.05
		Small hydro	12.00	12.00	0.00	0.00	0.00	0.00
		Purulia PSS (4x225)	900.00	900.00	88.78	88.78	159.29	159.29
		Total Hydro	1065.30	1065.30	125.23	125.23	230.11	230.11
DPL	Thermal	DPPS (110+300+250 *)	660.00	660.00	161.66	146.43	459.66	414.98

* Synchronised on 31.03.2014

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

ORGANISATION	TYPE	POWER STATION	INSTALLED	EFFECTIVE	Gross	Net	Cummulative Gross	Cummulative Net
			CAPACITY	CAPACITY	Energy	Energy	Energy Generation	Energy Generation
			(in MW)	(in MW)	in MU	in MU	upto Current Month (2016-17) in MU	upto Current Month (2016-17) in MU
CESC	Thermal	Titagarh (4x60)	240.00	240.00	55.63	50.02	129.63	117.07
		Southern (2x67.5)	135.00	135.00	63.63	57.90	133.13	120.98
		Budge-Budge (3x250)	750.00	750.00	540.68	497.54	1048.63	965.61
		Total CESC	1125.00	1125.00	660.14	605.46	1311.39	1203.66
HEL	Thermal	HEL	600.00	600.00	335.81	301.32	677.98	608.35
		Total West Bengal	7612.30	7522.30		2896.28	6804.72	6158.89
ODISHA (NTPC)	Thermal	Talcher-I	250.00	240.00	172.50	153.74	326.00	290.76
		Talcher-II	220.00	220.00	157.50	140.37	309.90	276.41
		Total Thermal	470.00	460.00	330.00	294.12	635.90	567.18
OPGC	Thermal	IB TPS	420.00	420.00	200.38	178.39	486.05	434.76
OHPC	Hydro	Hirakud-I (Burla)	275.50	275.50	39.32	39.07	64.89	64.41
		Hirakud-II (Chiplima)	72.00	72.00	7.25	7.20	23.80	23.71
		Balimela (6x60+2x75)	510.00	510.00	52.46	52.11	116.04	115.32
		Rengali (5x50)	250.00	250.00	37.50	37.40	67.54	67.34
		Upper Kolab (4x80)	320.00	320.00	60.16	59.86	140.04	139.42
		Indravati HPS (4x150)	600.00	600.00	95.59	95.34	189.87	189.39
		Mckd.(Odisha drawal)	57.38	57.38	19.86	19.86	39.57	39.57
		Total Hydro	2084.88	2084.88	312.13	310.84	641.77	639.16
	Total Odisha	2974.88	2964.88	642.13	604.96	1277.67	1206.34	
(**) SIKKIM	Hydro	Mini Hydro	14.00	14.00	3.00	3.00	6.00	6.00
		^ Diesel	7.10	7.10				
NTPC	Thermal	FSTPP# I&II (3x200+2x500)	1600.00	1600.00	774.02	715.97	1090.62	1008.82
		FSTPP (U# 6)	500.00	500.00	282.86	261.65	558.56	516.67
		KhSTPP (4x210+3x500)	2340.00	2340.00	1441.43	1333.32	2885.98	2669.53
		TSTPP (2x500)	1000.00	1000.00	691.15	639.32	1381.45	1277.84
		BARH STPS II (2X860)	1320.00	1320.00	692.07	640.17	1135.79	1050.61
		Total NTPC	6760.00	6760.00	3881.53	3590.42	7052.40	6523.47
NHPC	HYDRO	Rangit (3x20)	60.00	60.00	25.18	25.18	39.44	39.44
		Teesta (3x170)	510.00	510.00	269.98	269.98	492.24	492.24
		TLDP - (4x33+2x40)	212.00	212.00	86.95	86.95	147.78	147.78
		Total NHPC	782.00	782.00	382.12	382.12	679.45	679.45
IPP		MPL (U#1&2)	1050.00	1050.00	596.60	562.85	1239.93	1171.60
		SSL (U#1,2,3 & 4) (4x600) *	2400.00	2400.00	0.00	0.00	730.61	670.48
IPP		APNRL (U#1,2)	540.00	540.00	294.86	267.61	600.11	545.87
		GMR (3x350)	1050.00	1050.00	544.24	500.25	1145.86	1059.63
		JITPL (2X800)	1200.00	1200.00	655.08	605.94	1381.07	1277.49
		CHUZACHEN** (2x55)	110.00	110.00	43.87	43.78	73.05	72.90
		JORETHANG (2x48)	96.00	96.00	21.42	21.42	34.65	34.65
		Total Thermal (E.R)	29365.00	29155.00	12710.69	11657.85	26364.89	24175.83
EASTERN REGIONAL		Total Hydro (E.R)	4686.28	4686.28	889.24	887.69	1667.87	1664.81
		Total Diesel	7.10	7.10	0.00	0.00	0.00	0.00
		Total Solar	10.00	10.00	1.33	1.33	2.60	2.60
		TOTAL (E.R)	34068.38	33858.38	13601.26	12546.86	28035.36	25843.24
BHUTAN	Hydro	CHPC(4x90)	360.00	270.00	84.97	84.97	170.32	170.32
		Kurichu (4x15)	60.00	60.00	20.28	20.28	29.09	29.09
		TALA (6x170)	1020.00	1020.00	135.33	135.33	179.45	179.45
		DAGACHU (2x63)	126.00	126.00	12.65	12.65	23.34	23.34
		Grand Total	35634.38	35334.38	13854.49	12800	28437.57	26245.44

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 NIL MU to the Grid in addition to NIL 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

Mailthon 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 MAY-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	112.91	68.98	217.17	67.43
		Thermal Total	440.00	430.00	112.91	35.29	217.17	34.50
	Hydro	Kosi	20.00	20.00	0.33		0.33	
		Dehri & others	24.90	24.90	0.00		0.00	
		Total Hydro	44.90	44.90	0.33		0.33	
		Total BIHAR	484.90	474.90	113.24		217.50	
JHARKHAND								
TVNL	Thermal	TVNL	420.00	420.00	114.26	36.57	270.20	43.94
JSEB	Thermal	Patratu	840.00	770.00	45.65	7.97	91.63	8.13
	Hydro	Subarnrekha (U#1,2)	130.00	130.00	0.00		0.19	
	Total		970.00	900.00	45.65		91.83	
DVC	Thermal	Bokaro-B(1,2,3)	630.00	630.00	127.24	27.15	302.44	32.79
		Chandrapura (1,2,3)	420.00	390.00	219.44	75.63	435.53	76.28
		Chandrapura(U7 # 8)	500.00	500.00	323.38	86.93	652.40	89.13
		Durgapur(3,4)	350.00	350.00	0.00	0.00	128.12	25.00
		Mezla(1,2,3,4,5,6)	1340.00	1340.00	532.23	53.38	1203.82	61.36
		Mezla(U # 7,8)	1000.00	1000.00	589.13	79.18	1103.73	75.39
		Durgapur STPS (U#1,2)	1000.00	1000.00	577.30	77.59	1141.86	78.00
		Raghunathpur TPS (U#1,2)	1200.00	1200.00	170.17	19.06	170.17	9.69
	Koderma STPS (U#1,2)	1000.00	1000.00	315.74	42.44	801.28	54.73	
	Total Thermal	7440.00	7410.00	2854.63	51.78	5939.34	54.75	
	Hydro	Maithon (U#1,2,3)	63.20	63.20	0.77		1.56	
		Panchet (U#1,2)	80.00	80.00	0.38		0.77	
		Tilaya (U#1,2)	4.00	4.00	0.00		0.00	
		Hydro Total	147.20	147.20	1.14		2.32	
Total DVC	7587.20	7557.20	2855.78		5941.67			
WEST BENGAL								
WBPDC	Thermal	Bandel TPS	540.00	450.00	129.32	38.63	309.03	46.91
		Santalidih TPS(U#5&6)	500.00	500.00	284.34	76.44	608.24	83.09
		Kolaghat TPS	1260.00	1260.00	591.45	63.09	1213.42	65.78
		Bakreswar TPP	1050.00	1050.00	618.96	79.23	1326.15	86.27
		Sagardighi TPP	600.00	600.00	298.89	66.95	668.75	76.13
		Thermal Total	3950.00	3860.00	1922.95	66.96	4125.59	73.01
WBSEDCL	Hydro	Jaldhaka (3x9+2x4)	35.00	35.00	20.68		34.14	
		Ramam (4x12.73)	51.00	51.00	13.45		21.62	
		Teesta C.F. (3x3x7.3)	67.30	67.30	2.32		15.05	
		Small hydro	12.00	12.00	0.00		0.00	
		Purulia PSS (4x225)	900.00	900.00	88.78		159.29	
		Total Hydro	1065.30	1065.30	125.23		230.11	
		TLDP -(4x33+2x40)	212.00	212.00	86.95		147.78	
DPL	Thermal	DPPS (110+300+250 *)	660.00	660.00	161.66	32.92	459.66	47.57

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

ORGANI- SATION	TYPE	POWER STATION	INSTALLED CAPACITY	EFFECTIVE CAPACITY	Gross Energy Generation	PLF of Current Month	Cummulative Gross Energy Generation upto Current Month	Cummulative PLF upto Current Month
			(in MW)	(in MW)	in MU	(%)	(2016-17) in MU	(%)
CESC	Thermal	Titagarh (4x60)	240.00	240.00	55.63	31.16	129.63	36.89
		Southern (2x67.5)	135.00	135.00	63.83	63.55	133.13	67.36
		Budge-Budge (3x250)	750.00	750.00	540.68	96.90	1048.63	95.50
		Total CESC	1125.00	1125.00	660.14	78.87	1311.39	79.62
HEL	Thermal		600.00	600.00	335.81	75.23	677.98	77.18
		Total West Bengal	7612.30	7522.30	3205.79		6804.72	
ODISHA	Thermal	Talcher-I	250.00	240.00	172.50	96.61	326.00	92.78
(NTPC)		Talcher-II	220.00	220.00	157.50	96.22	309.90	96.22
		Total Thermal	470.00	460.00	330.00	96.42	635.90	94.43
OPGC	Thermal	IB TPS	420.00	420.00	200.36	64.13	486.05	79.05
OHPC	Hydro	Hirakud-I (Burla)	275.50	275.50	39.32		64.89	
		Hirakud-II (Chiplima)	72.00	72.00	7.25		23.80	
		Balimela (6x60+2x75)	510.00	510.00	52.46		116.04	
		Rengali (5x50)	250.00	250.00	37.50		67.54	
		Upper Kolab (4x80)	320.00	320.00	60.16		140.04	
		Indravati HPS (4x150)	600.00	600.00	95.59		189.67	
		Mckd.(Odisha drawal)	57.38	57.38	19.86		39.57	
		Total Hydro	2084.88	2084.88	312.13		641.77	
		Total Odisha	2974.88	2964.88	642.13		1277.67	
(**) SIKKIM	Hydro	Mini Hydro	14.00	14.00	3.00		6.00	
		^ Diesel	7.10	7.10				
NTPC	Thermal	FSTPPP I&II (3x200+2x500)	1600.00	1600.00	774.02	65.02	1090.62	46.56
		FSTPP (U# 6)	500.00	500.00	282.86	76.04	558.56	76.31
		KhSTPP (4x210+3x500)	2340.00	2340.00	1441.43	82.79	2885.98	84.24
		TSTPP (2x500)	1000.00	1000.00	691.15	92.90	1381.45	94.36
		BARH STPS II (2X660)	1320.00	1320.00	692.07	70.47	1135.79	58.77
		Total NTPC	6760.00	6760.00	3881.53	77.18	7052.40	71.26
NHPC	HYDRO	Ranglit (3x20)	60.00	60.00	25.18		39.44	
		Teesta (3x170)	510.00	510.00	269.98		492.24	
		TLDP -(4x33+2x40)	212.00	212.00	86.95		147.78	
		Total NHPC	782.00	782.00	382.12		679.45	
IPP	Thermal	MPL (U#1&2)	1050.00	1050.00	596.60	76.37	1239.93	80.66
		SSL (U#1,2,3 & 4) (4x600) *	2400.00	2400.00	0.00	0.00	730.61	20.79
		APNRL (U#1,2)	540.00	540.00	294.86	73.39	600.11	75.91
		GMR (3x350)	1050.00	1050.00	544.24	69.67	1145.86	74.54
		JITPL (2X600)	1200.00	1200.00	655.08	73.37	1381.07	78.61
		CHUZACHEN** (2x55)	110.00	110.00	43.87		73.05	
		JORETHANG (2x48)	96.00	96.00	21.42		34.65	
		Total Thermal (E.R)	29365.00	29155.00	12710.69	62.29	28364.89	63.39
Total Hydro (E.R)	4686.28	4686.28	889.24		1667.87			
Total Diesel	7.10	7.10	0.00		0.00			
Total Solar	10.00	10.00	1.33		2.60			
TOTAL (E.R)	34068.38	33858.38	13601.26		28035.36			
BHUTAN	Hydro	CHPC(4x90)	360.00	270.00	84.97		170.32	
		Kurichu (4x15)	60.00	60.00	20.28		29.09	
		TALA (6x170)	1020.00	1020.00	135.33		179.45	
		DAGACHU (2x63)	126.00	126.00	12.65		23.34	
		Grand Total	35634.38	35334.38	13854.49		28437.57	

) 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 2-May-16
 Time 21.00 Hrs.
 Frequency 49.99 Hz.

(All Fig. in MW)

System/State	Installed	Effective	Hydro	Thermal	Total
	Capacity	Capacity			
BSEB	485	475	0	92	92
JSEB	1390	1320	0	139	139
DVC	7587	7557	9	3725	3734
ODISHA	2975	2965	476	789	1266
WBSEDCL	5015	4925	628	2762	3390
TLDP	212	212	168	0	168
HEL HALDIA	600	600	0	541	541
CESC	1125	1125	0	904	904
DPL	660	660	0	190	190
SIKKIM	14	14	0	0	0
NTPC	6760	6760	0	5187	5187
NHPC	782	782	487	0	487
CHUKHA	360	270	28	0	28
KURICHU	60	60	12	0	12
TALA	1020	1020	44	0	44
SEL	2400	2400	0	-13	-13
APNRL	540	540	0	430	430
Kamalganga (GMR)	1050	1050	0	468	468
JITPL	1200	1200	0	561	561
Chuzachen	110	110	101	0	101
Jorethang	96	96	48	0	48
Daghachu	126	126	13	0	13
Total	35634	35334	2014	16750	18764
Import From Captive:					1022
Export To:					
NER					714
SR					701
WR					-1058
NR					592.23
Total					1480
					18306

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

Hourly Load Generation Data OF ER On Regional Peak Day During The Month of MAY-2016 (2-5-2016)

(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	GT	Total							
1	1260	19316	0	20575	623	168	612	16038	-20	194	16212
2	1250	19273	1	20525	659	158	967	15811	-7	96	15901
3	1211	19239	2	20452	727	156	1312	15589	-12	63	15640
4	1017	19112	3	20132	776	151	1281	15518	-10	64	15572
5	1031	18778	4	19813	816	144	1317	15470	-3	90	15557
6	950	18381	5	19336	853	125	2053	14486	-10	97	14573
7	929	18158	6	19093	834	119	2026	14073	-23	102	14151
8	762	18281	7	19051	824	116	2062	13962	-9	94	14047
9	610	18576	8	19194	857	121	2073	13945	1	106	14052
10	466	19105	9	19580	930	133	2246	14140	4	102	14246
11	509	19873	10	20392	926	140	2391	14534	-8	72	14599
12	565	20454	11	21030	874	123	2358	14887	9	47	14943
13	596	20815	12	21422	895	146	2372	15164	-4	58	15218
14	484	20970	13	21467	889	162	2137	15366	-1	46	15410
15	585	21340	14	21939	889	154	1922	15736	28	210	15973
16	693	21300	15	22008	794	143	2131	15539	4	263	15806
17	628	20591	16	21235	891	107	1951	15339	-20	763	16082
18	713	20033	17	20764	1042	92	2031	14966	-35	533	15464
19	1765	21711	18	23494	997	73	1188	17065	-21	785	17829
20	2039	22210	19	24269	1005	73	1112	18094	19	460	18573
21	1930	22242	20	24192	1022	84	950	18306	8	286	18600
22	1634	22214	21	23869	1090	100	1120	17984	16	255	18255
23	1762	22361	22	24145	887	117	1401	17854	45	245	18143
24	1766	22078	23	23867	872	116	1847	17265	15	275	17556

Hourly Load Generation Data of ER On Regional Lean Day During The Month of MAY-2016 (25-5-2016)

(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	GT	Total							
1	1459	13850	0	15308	1302	294	2750	15141	25	42	15208
2	1189	13413	1	14603	1290	302	2321	14771	-9	39	14801
3	1152	13200	2	14354	1280	307	2169	14636	-9	38	14666
4	1354	13014	3	14372	1218	303	2251	14433	1	66	14501
5	1311	12968	4	14283	1293	286	2220	14239	4	42	14285
6	1271	12678	5	13954	1308	252	2280	13759	-19	42	13781
7	876	12154	6	13036	1261	258	2240	12942	-17	30	12954
8	840	12075	7	12922	1265	283	2284	12795	-36	16	12810
9	990	11858	8	12855	1175	291	1610	13310	-21	21	13331
10	1263	11630	9	12902	1116	294	2152	12813	0	23	12835
11	1575	12017	10	13602	1184	294	3044	12777	-3	91	12864
12	1692	11943	11	13646	1167	300	3164	12892	1	93	12986
13	1699	12062	12	13773	1147	307	3293	13022	-3	84	13103
14	1698	12110	13	13820	1170	371	3246	13166	-6	116	13277
15	1434	12349	14	13797	1057	406	4048	12245	-10	204	12440
16	1196	11776	15	12987	1068	497	4599	10990	-5	292	11278
17	1010	11523	16	12549	864	490	4237	10586	-20	286	10852
18	921	11105	17	12043	880	473	3415	10848	-36	271	11083
19	1371	11191	18	12580	904	445	2689	12155	-35	246	12365
20	1854	11999	19	13871	1079	441	2466	13951	7	293	14252
21	1766	12379	20	14165	1130	456	2477	14363	20	113	14496
22	1787	12757	21	14565	1146	473	2660	14609	4	105	14717
23	1807	12844	22	14673	1136	482	2932	14443	34	170	14647
24	1916	12722	23	14661	1169	472	2959	14397	14	166	14577

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

POWER CUT / RESTRICTIONS

BSEB	NO NOTIFIED CUTS/RESTRICTIONS However there was loadshedding of 37.62 MU
JSEB	NO NOTIFIED CUTS/RESTRICTIONS However there was loadshedding of 0.00 MU
DVC	NO NOTIFIED CUTS/RESTRICTIONS. However there was loadshedding of 12.09 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 26.86 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 May-16

DATE	H O U R S									INST. FREQ				15 MIN. INTEGRATED				
	00 TO 05	05 TO 10	10 TO 17	17 TO 22	22 TO 24	00 TO 24	<49.9	49.9 TO 50.1	>50.05 TO 50.05	MAX HZ	HRS.	MIN HZ	HRS.	MAX HZ	HRS.	MIN HZ	HRS.	
	01-May	49.99	50.04	49.99	50.05	50.00	50.01	2.80	65.57	31.63	65.57	50.30	18.03	49.85	0.10	50.19	18.00	49.90
02-May	50.02	50.02	50.00	50.01	49.95	50.00	3.24	72.01	24.75	72.01	50.36	18.02	49.78	22.24	50.13	18.00	49.87	22.15
03-May	49.98	50.00	49.97	50.01	49.98	49.99	5.96	74.35	19.69	74.35	50.21	18.02	49.77	21.12	50.12	18.30	49.80	14.15
04-May	50.00	50.01	49.99	50.07	49.98	50.01	3.91	68.13	27.96	68.13	50.33	18.05	49.83	0.04	50.26	18.00	49.90	12.15
05-May	50.02	50.01	49.98	50.02	49.99	50.00	2.55	71.10	26.35	71.10	50.23	18.04	49.84	14.45	50.12	18.00	49.90	14.00
06-May	50.02	50.02	50.00	50.02	49.97	50.01	2.22	66.74	31.04	66.74	50.24	18.03	49.85	12.14	50.12	17.30	49.90	14.15
07-May	50.01	50.02	49.99	50.00	49.99	50.00	2.73	73.38	23.89	73.38	50.18	8.03	49.82	12.46	50.08	6.00	49.90	19.15
08-May	50.01	50.05	50.02	50.05	50.01	50.03	0.79	60.69	38.52	60.69	50.42	18.03	49.79	12.31	50.26	18.00	49.95	0.00
09-May	50.01	50.00	49.98	49.97	49.92	49.99	4.75	81.18	14.07	81.18	50.17	6.02	49.73	22.10	50.05	7.00	49.81	22.00
10-May	50.00	50.00	49.99	49.98	49.97	49.99	6.42	75.16	18.42	75.16	50.17	6.00	49.77	19.09	50.06	16.00	49.84	19.15
11-May	50.04	50.01	49.99	49.98	49.96	50.00	5.10	67.09	27.81	67.09	50.21	17.02	49.74	19.40	50.12	6.45	49.87	19.30
12-May	49.99	50.00	49.96	49.99	49.97	49.98	7.20	77.82	14.98	77.82	50.17	6.01	49.78	14.52	50.05	6.00	49.84	14.45
13-May	49.97	50.00	49.96	50.00	49.95	49.98	9.56	76.44	14.00	76.44	50.17	19.02	49.78	13.49	50.09	6.00	49.85	14.15
14-May	49.99	50.01	49.95	49.97	49.95	49.97	10.84	75.65	13.51	75.65	50.16	8.02	49.73	19.20	50.06	6.00	49.82	14.15
15-May	49.97	50.03	49.98	49.98	49.93	49.99	7.19	75.16	17.65	75.16	50.21	6.03	49.83	22.11	50.10	6.00	49.80	22.00
16-May	49.99	49.99	49.99	49.98	49.98	49.99	4.94	78.89	16.17	78.89	50.15	19.02	49.84	19.41	50.07	4.00	49.91	19.30
17-May	50.01	50.00	49.99	50.01	49.99	50.00	2.11	77.72	20.17	77.72	50.17	6.02	49.79	14.41	50.09	21.45	49.90	14.30
18-May	50.03	50.01	49.96	50.00	50.01	50.00	5.97	70.03	24.00	70.03	50.44	17.31	49.75	14.17	50.08	4.00	49.87	14.30
19-May	50.01	50.02	49.97	49.96	50.00	49.99	7.09	76.60	16.31	76.60	50.20	6.03	49.78	19.50	50.09	6.00	49.83	19.45
20-May	50.02	50.02	49.98	50.01	50.01	50.00	4.25	70.87	24.88	70.87	50.24	17.03	49.83	12.44	50.15	17.00	49.87	12.30
21-May	50.03	50.03	50.00	50.00	50.01	50.01	2.23	66.82	30.95	66.82	50.26	8.04	49.81	19.11	50.17	8.00	49.88	19.30
22-May	50.01	50.06	49.99	49.99	50.00	50.01	2.81	67.85	29.34	67.85	50.28	6.03	49.82	21.19	50.17	9.00	49.87	21.30
23-May	50.01	50.04	50.03	50.08	50.00	50.03	2.00	53.02	44.98	53.02	50.34	18.03	49.82	19.41	50.24	18.00	49.94	10.15
24-May	50.10	50.03	49.94	49.91	49.90	49.98	20.22	48.14	31.64	48.14	50.26	4.00	49.71	21.10	50.21	4.15	49.75	19.45
25-May	50.00	50.04	50.02	50.02	49.95	50.01	2.58	64.91	32.51	64.91	50.22	17.06	49.83	22.17	50.15	17.00	49.88	22.15
26-May	50.00	50.00	49.95	49.91	49.83	49.95	21.91	65.36	12.73	65.36	50.15	13.02	49.56	22.12	50.04	0.00	49.73	23.00
27-May	49.95	49.96	49.94	49.96	49.95	49.95	19.10	72.29	8.61	72.29	50.18	18.03	49.70	0.10	50.06	8.00	49.81	14.30
28-May	49.97	49.97	49.95	50.05	50.03	49.99	10.84	64.23	24.93	64.23	50.20	21.58	49.79	13.41	50.11	21.30	49.86	13.15
29-May	50.09	50.07	49.99	50.02	49.98	50.03	1.01	52.72	46.27	52.72	50.27	18.05	49.85	14.12	50.17	4.15	49.92	23.30
30-May	50.00	50.02	49.97	49.96	49.93	49.98	8.37	76.41	15.22	76.41	50.18	6.03	49.78	19.54	50.09	6.00	49.85	22.00
MAX	50.10	50.07	50.03	50.08	50.03	50.03	21.91	81.18	46.27	81.18	50.44		49.85		50.26		49.95	
MIN	49.94	49.96	49.94	49.91	49.83	49.95	0.79	48.14	6.12	48.14	50.15		49.56		50.04		49.73	
AVG	50.01	50.02	49.98	50.00	49.97	50.00	6.68	69.80	23.52	69.80	50.23		49.78		50.12		49.86	

SUMMARY:

Avg Frequency : 50.00 Hz.

Instantaneous Frequency :

15 Minutes Integrated Frequency :

Maximum Frequency : 50.44 Hz On 00/01/00 at 17:31 Hrs.
Minimum Frequency : 49.56 Hz On 00/01/00 at 22:12 Hrs.

Maximum Frequency : 50.26 Hz On 00/01/00 at 18:00 Hrs.
Minimum Frequency : 49.73 Hz On 00/01/00 at 23:00 Hrs

Frequency Distribution in % of Time			
Hz	<49.9	49.9-50.05	>50.05
% of Time	6.68	69.80	23.52

VOLTAGE ANALYSIS

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

(All figs. in kV)

PGCIL	FARAKKA		SUBHASGRAM		DURGAPUR		JEERAT		PURNEA	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	803	759	427	399	426	412	423	382	425	387

PGCIL	FARAKKA		SUBHASGRAM		DURGAPUR		JEERAT	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	424	385	431	412	419	403	423	369

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
MAY-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	
			(31-5-16)	(31-5-15)		
Hirakud	192	180	183.64	184.17	185.79	01.5.16
Balimela	462	439	450.07	452.54	450.19	01.5.16
Rengali	123	109	111.22	117.21	114.24	01.5.16
Upperkolab	858	844	848.14	851.23	849.56	01.5.16
Indravati	642	625	630.66	631.10	631.76	01.5.16
Subernrekha	590	580	584.82	586.01	585.03	01.5.16

B.

**CPP/IPP IMPORT by Eastern Region Constituents during
MAY-2016**

(All figs. are in MU)

System	Tata Power	Crescent Power	JSPL, Angul	Sterlite	Jindal	NALCO	TISCO	Others	Total
West Bengal	59.53	25.03	0	0	0	0	0	113.63	198.19
ODISHA	0	0	28.73	296.83	12.76	26.44	0	300.29	665.05
DVC	0	0	0	0	0	0	10.94	0	10.94
TOTAL	59.53	25.03	28.73	296.83	12.76	26.44	10.94	413.92	874.18

C.

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

(All figs. are in MU)

IPP	TPDDL	WBSEDCL	DVC *	Sale at IEX/NPCL	ODISHA	JSEB	CTU/Others	Total (Excl. Tr. Loss)
MPL	174.71	163.30	124.53	1.46	0	0	98.80	562.80
Sterlite	0	0	0	0	296.83	0	0.00	296.83
APNRL	0	59.06	0	0.00	0.00	70.09	137.064	266.22
GMR	0	0.00	0	7.65	149.77	0	346.30	503.72
Total	174.71	222.36	124.53	1.46	296.83	70.09	235.86	1125.85

(*)--During this month, DVC has drawn 124.53 MU of MPL energy which is included in its exchange with Grid.

D.

Monthwise Gross Generation from Chuzachen HEP

April'15	May'15	June'15	July'15	Aug'15	Sep'15	Cum. Total (2016-17)
29.18	43.87	0.00	0.00	0.00	0.00	
Oct'15	Nov'15	Dec'15	Jan'16	Feb'16	Mar'16	
0.00	0.00	0.00	0.00	0.00	0.00	

STATUS OF IMPORTANT TRANSMISSION LINES UNDER CONSTRUCTION

(As on 31.05.16)

Sl. No.	Name of the Trans. Line	Length (CKM)	Completion Target		Remarks/Constraints
			Schedule	Ant. / Act.	
1.0 <u>INTER REGIONAL SYSTEMS</u>					
1.1	Common Scheme for 765 KV Pooling Station and Network associated with DVC & Maithon RB Project etc. and Import by NR & WR via ER	2038	Aug'12	Dec'14	Project Completed.
1.1.1	400 KV D/C Maithon - Gaya line (Q) (Inclu. M/C portion for Koderma-Gaya)-39 Kms.	552	Aug'12		Commissioned
1.2	Supplementary Transmission System Associated with DVC & Maithon Right Bank Project				
1.2.1	400 KV D/C Bokaro TPS Extn. – Koderma TPS	200	Aug'12		Commissioned
1.2.2	400 KV D/C Koderma –Gaya line (Quad) (excl. M/C portion-39 Kms.)	256	Aug'12		Commissioned
2.0 <u>EASTERN REGION</u>					
2.1	Eastern Region Strengthening Scheme - III	716	Nov'12	Jun'17	
2.1.1	400 kv D/C Sasaram-Daltonganj line	392		Jun'17	
2.1.2	LILO of 400kv D/C (one ckt) Baripada-Mendhasal line at Dubri (OPTCL)	32			Commissioned
2.1.3	400 KV D/C Baripada-Mendhasal-at Pandiabil.	56			Commissioned
2.2	Transmission System for Phase-I Generation Projects in Jharkhand and West Bengal-Part-AI.	370	Nov'13	Jul'16	Gen. projects delayed (ant. In 2016-17 & beyond)
2.2.1	400kv D/C Ranchi (765/400kv S/S)-Jharkhand Pool-Gaya line (Quad)	136		Dec'15	Commissioned
2.3	Transmission System for Transfer of Power from Generation in SIKKIM to NR/WR Part-A	52	May'13	Sep'15	Revised BPTA Schedule-May'13 land for Kishanganj substation acquired in Aug'13.
2.3.1	LILO of Siliguri (Existing)-Purnea 400 KV D/c line at New Pooling station at Kishanganj	16			Commissioned.

2.3.2	LILO of Siliguri (Existing)-Purnea 400 KV D/c line (on which reconductoring is being carried out) at Kishanganj with QUAD Cond.	48		Jun'15	Completion matching with Kishanganj S/s.
2.3.3	LILO of Siliguri-Dalkhola 220KV D/c line at New pooling station Kishanganj	36			Commissioned
2.3.4	LILO of Gangtok-Melli 132 KV S/c line up to Rangpo	19			Commissioned
2.4	Eastern Region Strengthening Scheme - V	961		Dec'16	
2.4.1	400 kV Rajarhat – Purnea line(Tripal) with LILO of one Ckt at Gokarana (WBSETCL) & other Ckt at Farakka(NTPC)	953		Dec'16	Severe row problem in Jharkand area.
2.4.2	LILO of Subhasgram-Jeerat 400 kV S/C line at Rajarhat.	8		Sep'16	
2.5	Trans mission system associated with Darlipali TPS	48	Jun'18	Jun'18	
2.5.1	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.
2.6	Eastern Region Strengthening Scheme - XV	195	Apr'18	Apr'18	
2.6.1	400 kV D/C Farakka – Baharampur line (Twin HTLS)	160		Apr'18	Award place in Apr'16
2.6.2	LILO 400 kV S/C Farakka – Jeerat line at sagardighi.	30		Apr'18	Award place in Apr'16
2.6.3	LILO 400 kV S/C Sagardighi – Subhasgram t line at Jeerat.	2		Apr'18	Award place in Apr'16
2.6.4	Removal of the existing LILO Farakka – Jeerat S/C line at Baharampur.	3		Apr'18	Award place in Apr'16
2.7	Powergrids works associated with Common trans. System for Phase II Gen. Proj. in Odisha.	136	Apr'19	Apr'19	
2.7.1	LILO of both Ckt of 400kV D/C Rourkela- Raigarh (2 nd line) at Jharsuguda.	136		Apr'19	Award place in Apr'16
2.8	Associated transmission system for Nabinagar-II TPS.	482	Jun'19	Jun'19	
2.8.1	400kV D/C Nabinagar II- Gaya Line(Q)	204		Jun'19	Award place in Apr'16
2.8.2	400kV D/C Nabinagar II- Patna Line (Q)	278		Jun'19	Award place in Apr'16

2.0 JUSNL

2.1	220kV Govindpur- Dumka D/C				Present status awaited
2.2	220kV Dalton ganj - Garwah				Present status awaited

2.3	400kV Patraru-New Ranchi(PG)				Expected in Oct'16
2.4	400kV Patraru- Latehar				Present status awaited

3.0 DVC

3.1	220 KV D/C MTPS- Ramgarh line via Gola	342	Dec' 08	Mar'16	Working clearance obtained in 6.3.13. 108ckm of line has been charged at 220 kV from MTPS end on 09.09.15.
3.2	220 KV D/C Gola-Ranchi Line	112	Nov,14	Jul'16	Railway Crossing proposal, Line crossing proposal and PTCC proposal to be submitted in Feb'14.
3.3	220 KV D/C Koderma – Giridih	212			Commissioned.
3.4	2 nd Circuit LILO of MTPS-Kalyaneswari line at Bumpur Sub-station	37	Dec'10	Mar'16	Severe ROW problem in most locations.
3.5	a) 400kv D/C Raghunathpur TPS to Ranchi.	311		Dec'14	Working clearance obtained in Jan'13. PTCC clearance issued on 18.02.14.
3.6	220 kv D/C Koderma-Giridih line	212	Feb'10		Commissioned.

4.0 ODISHA

4.1	220 KV D/C line from Bidanasi to Cuttack	20.84	Oct'10		Commissioned.
4.2	400 KV line from Meramundali to Mendhasal	200.9	June'99		Commissioned.
4.3	Construction of 2 nos. 220kv feeders from 220/132/33 kv Grid s/s of OPTCL at Jaynagar to 400/220 kv Grid s/s of PGCIL at Jaynagar having line length of approx. 8.608 kms with 2 nos. of 220 kv bay extension at each end.	15.098	--		Commissioned.
4.4	Commissioning of 220kV/132kV Cuttack S/s				Expected in Sep'16

5.0 WBSETCL

5.1	Subhasgram (PG) – Saintala 220 KV D/C line (ACSR Zebra)	25	--	--	Converted to M/C line. Work will be carried jointly with CESC.
5.2	TLDC-IV-NJP 220 KV D/C (ACSR Zebra)-ckt-2			May'13	Commissioned.
5.3	Santaldhi TPS-Bishnupur 220 KV D/C	224.0			Work held up due to Contractual problem.
5.4	Raghunathpur to Hura 220 KV D/C	72.0		June'13	Foundation work not yet commenced.
5.5	2x160MVA 220/132kV Singur S/s				Present status awaited
5.6	220kV Arambagh- Rishra LILO at Singur				Present status awaited

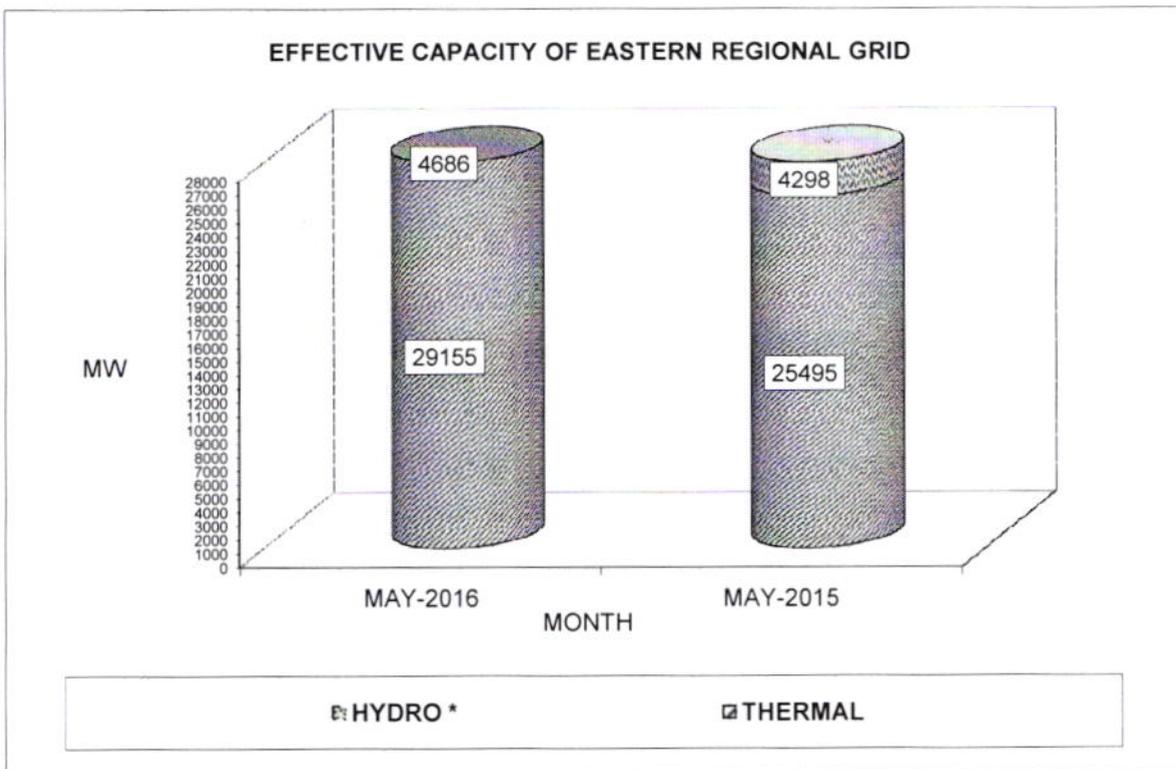
ANNEXURE-VI**COMMISSIONING SCHEDULE OF NEW GENERATING STATION**

(As on 31.05.16)

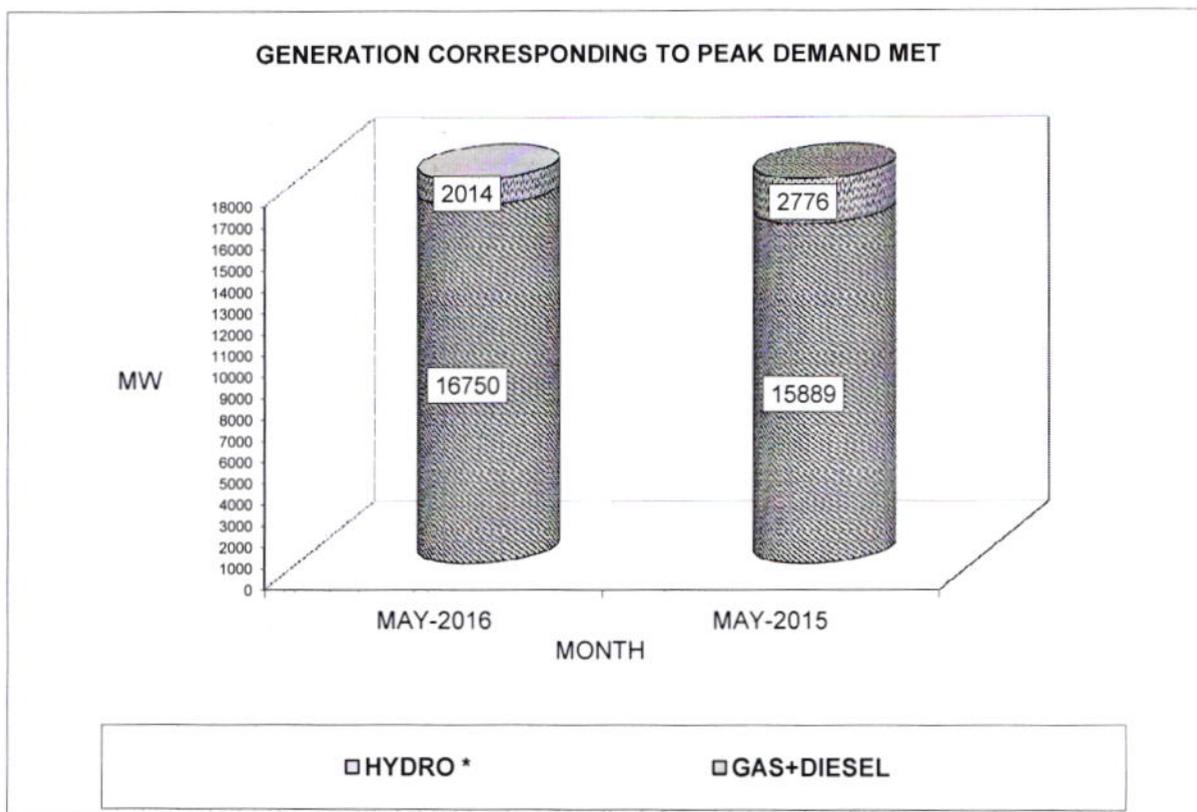
Sl. No.	AGENCY	NAME OF POWER STATION	STATE	TYPE	UNIT NO.	CAPACITY (MW)	LATEST COMMISSIONING SCHEDULE
1	DVC	BTPS 'A'	Jharkand	THERMAL	1	500	Status awated
2	ODISHA	Corporate Power Ltd.	Odisha	THERMAL	1	257	Status awated
3	WBPDC	Sagardighi	West Bengal	THERMAL	3	500	Status awated
4	WBPDC	Sagardighi	West 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	NHPC	Teesta Urja	West Bengal	Hydro	3	200	Present status awated
11	NTPC	Barh Stage- I	Bihar	THERMAL	3	660	Status awated from NTPC
12	Lanco Babandh Power Ltd	Lanco Babandh TPP	ODISHA	THERMAL	1	660	

IPP

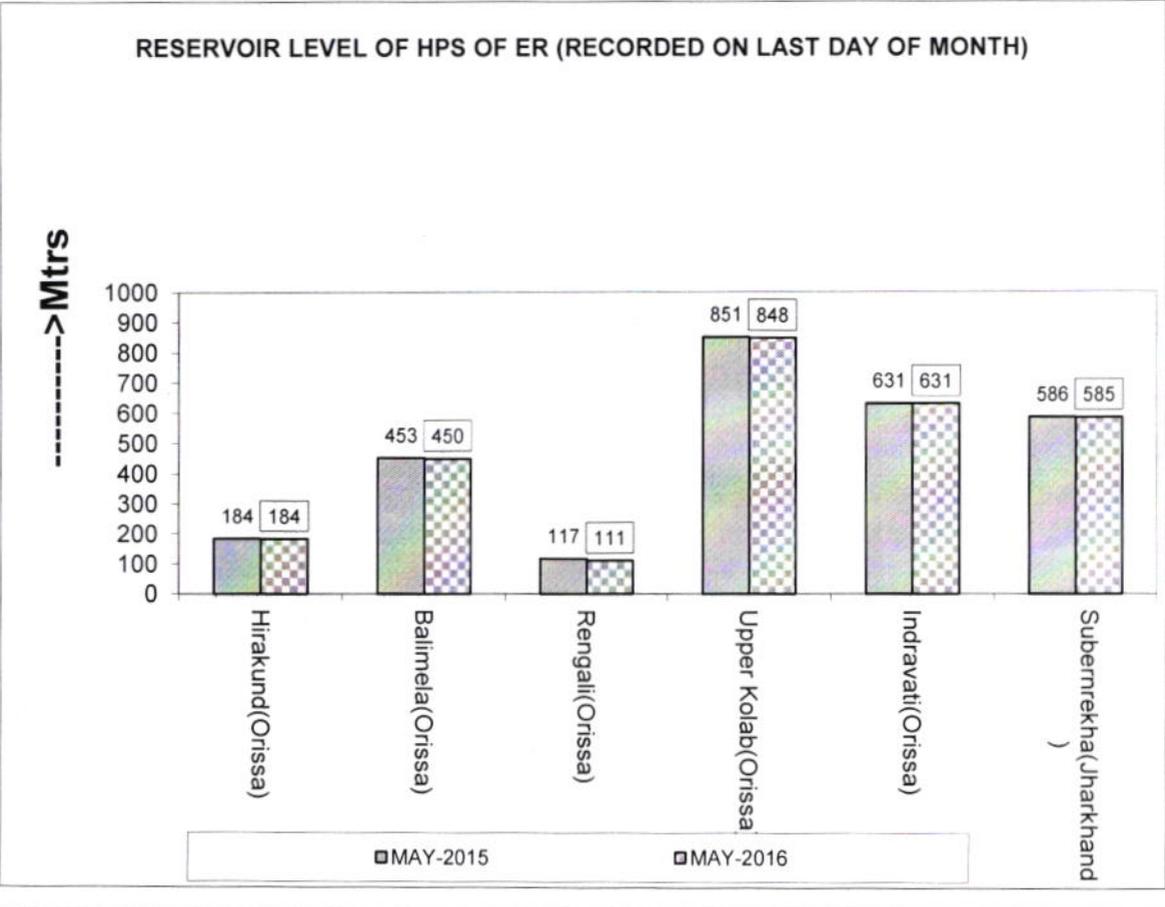
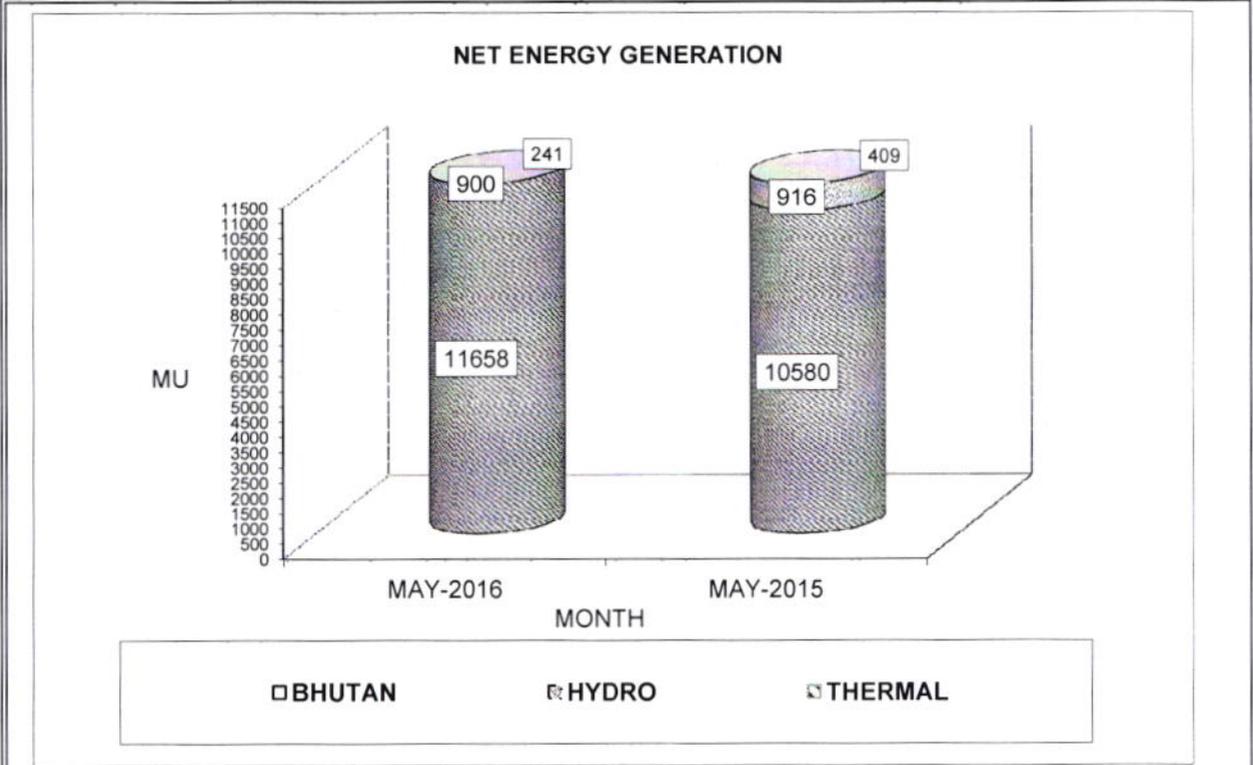
13	Corporate Power Ltd	Mata shri Usha TPP- Ph-I	Jharkand	THERMAL	2	270	
14	IPP	Ind Bharat TPP	Odisha	THERMAL	1	350	COD on Jul' 2016
15	IPP	Ind Bharat TPP	Odisha	THERMAL	1	350	COD on Jul' 2016



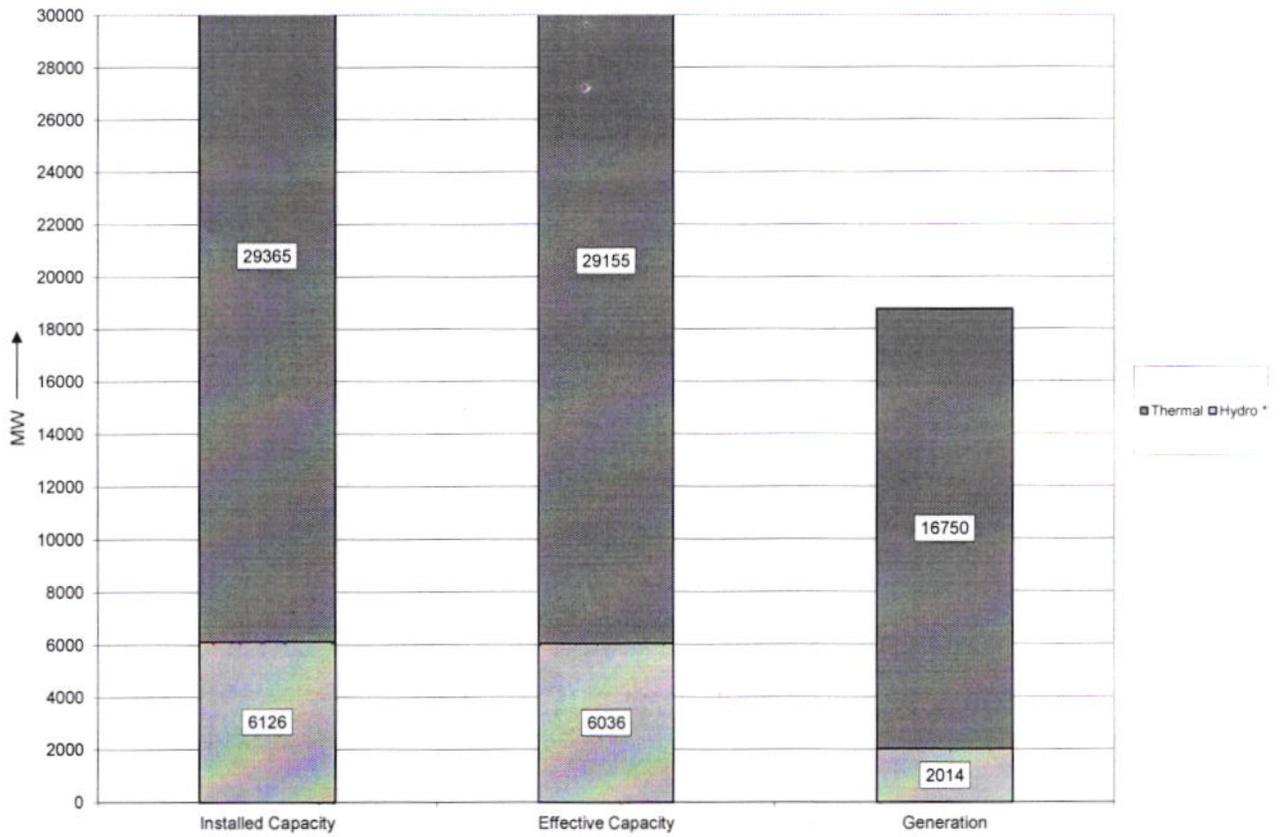
*Excludes 1350 MW contribution from HEPs of Bhutan



*Includes contribution from HEP of Bhutan

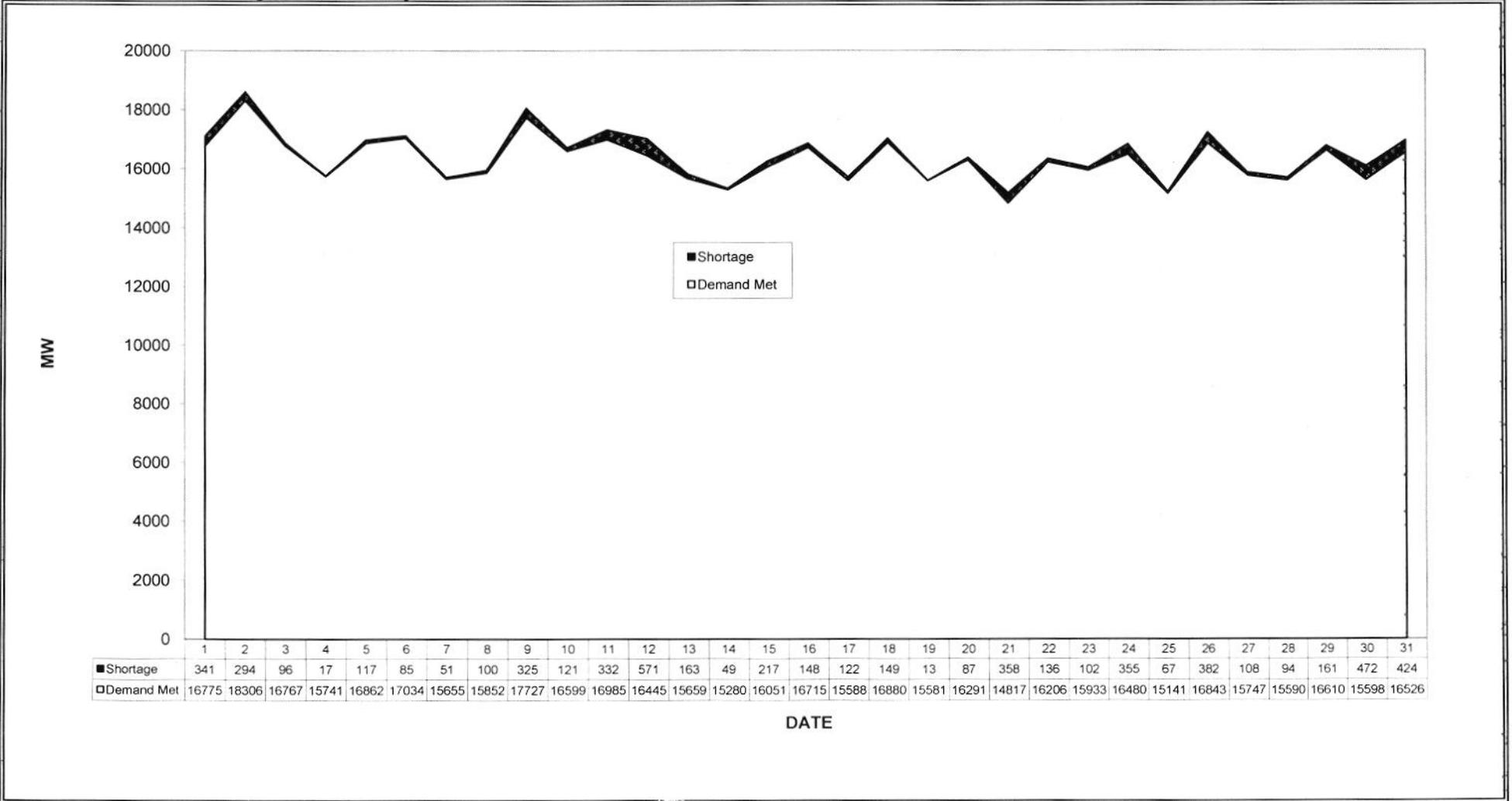


Capacity / Actual Generation Pattern of ER on Peak Day (2-5-2016) at 21.00 hrs.

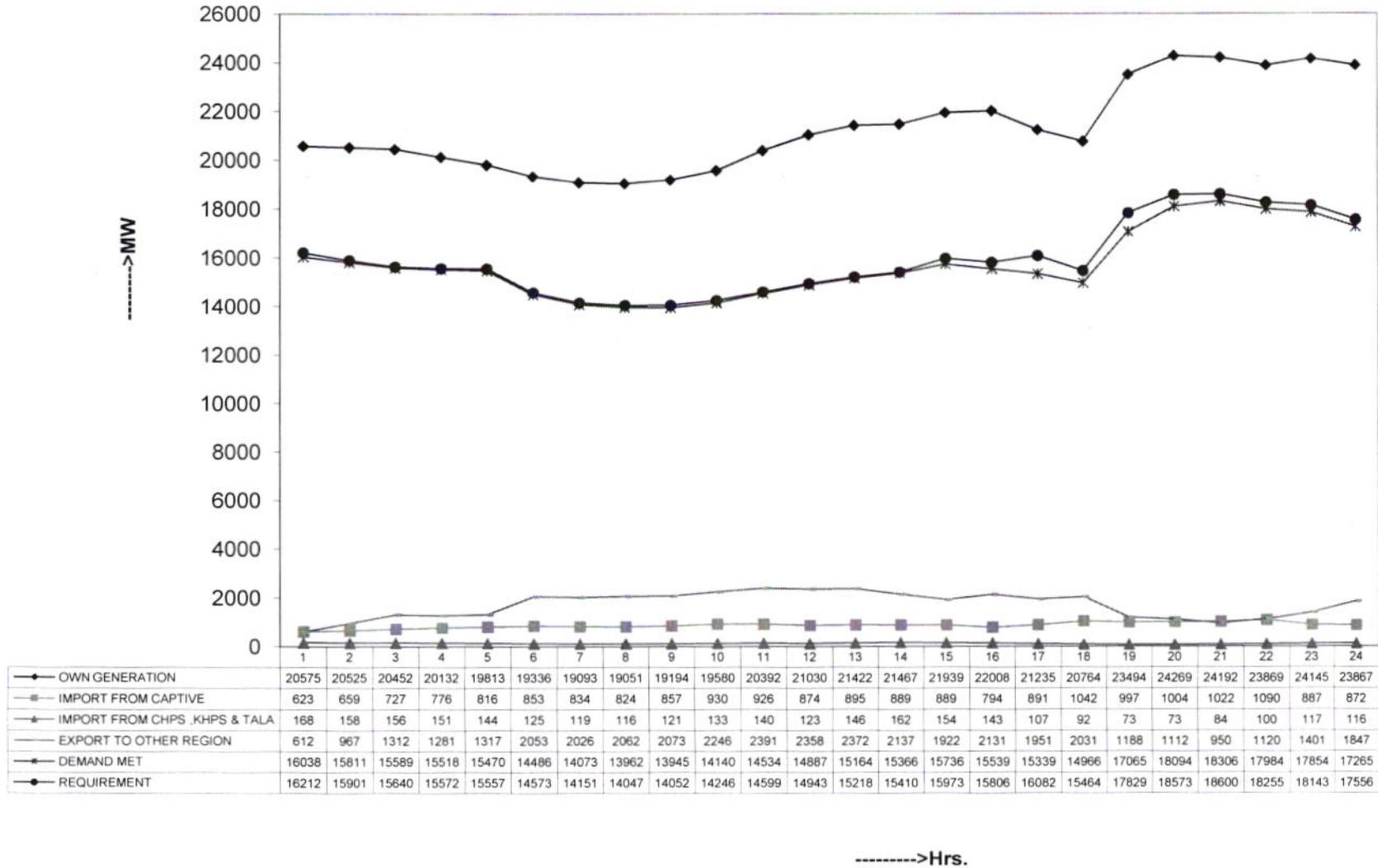


(*)--Includes contribution from HEP of Bhutan (Chukka, Kurichhu & Tala)

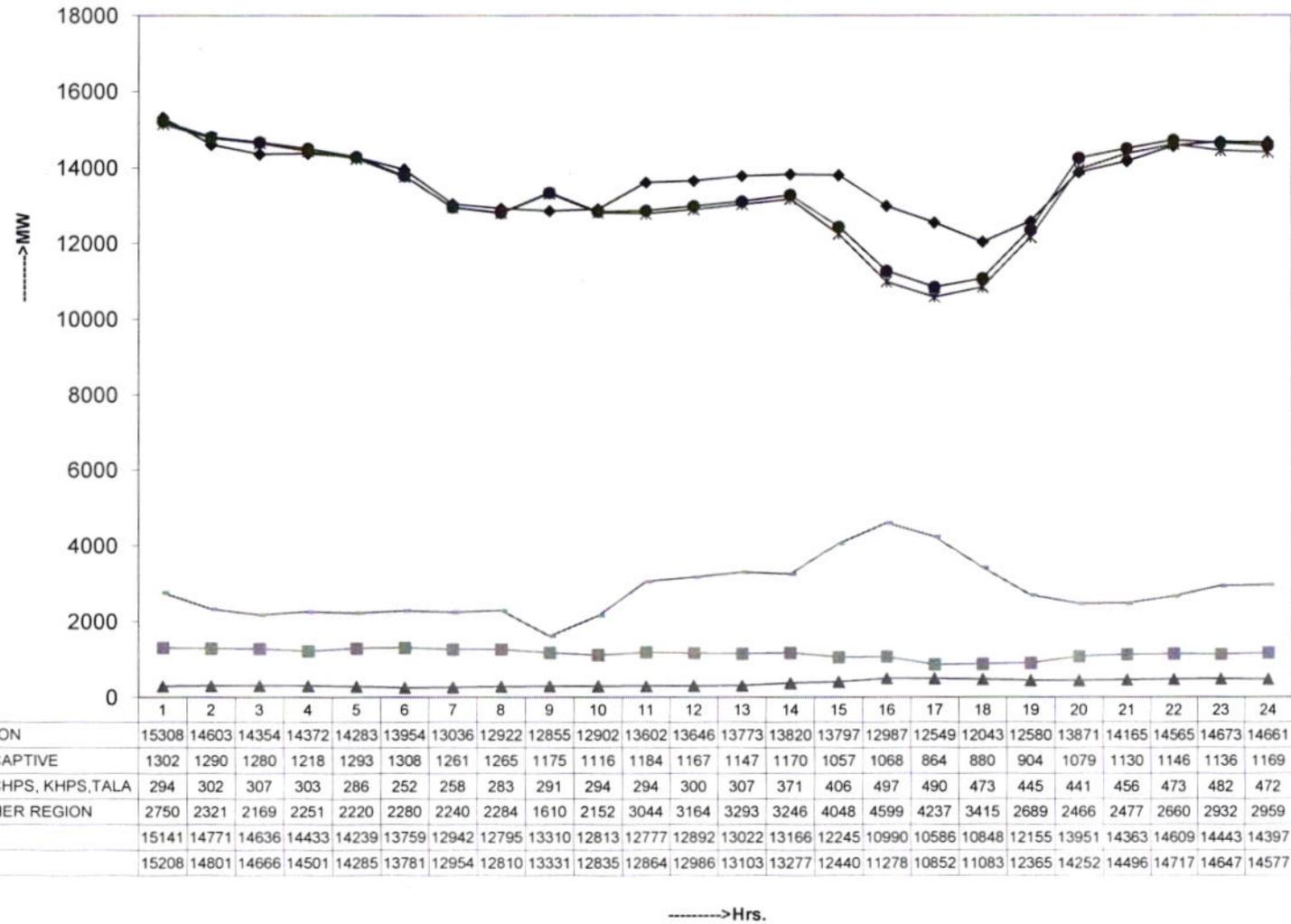
Peak Demand Met / Shortage of Eastern Region For The Month Of MAY-2016



Hourly Load Generation Data OF ER On Regional Peak Day During The Month of MAY-2016 (2-5-2016)

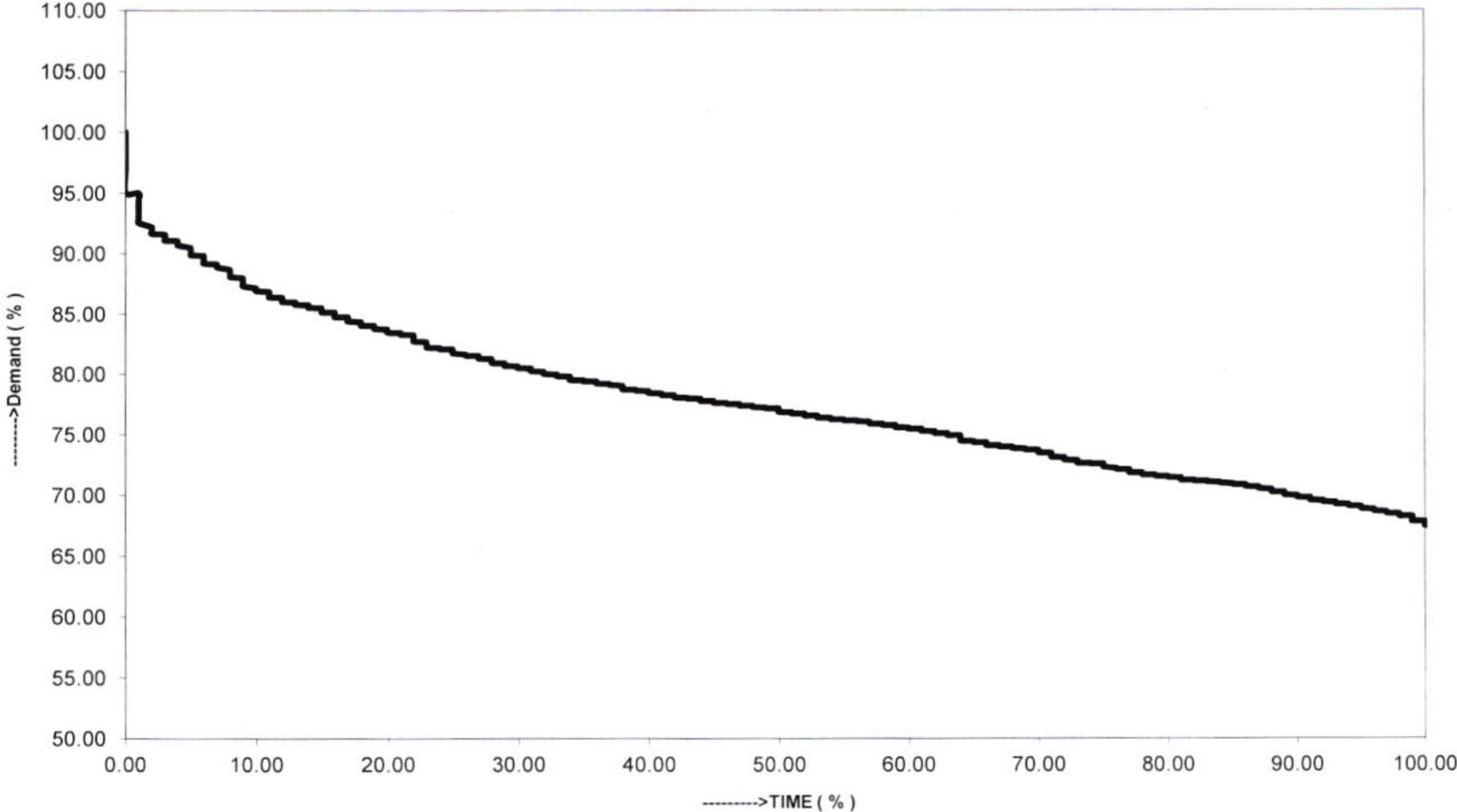


Hourly Load Generation Data of ER On Regional Lean Day During The Month of MAY-2016 (25-5-2016)



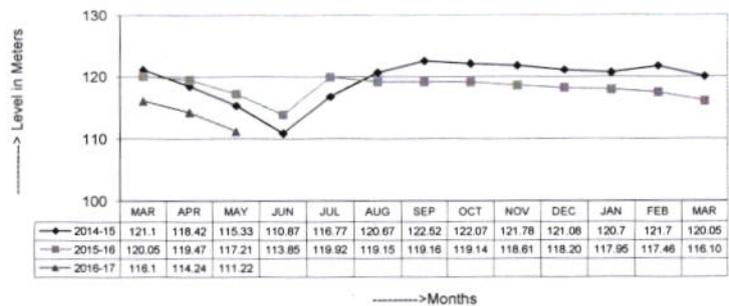
Monthly Load Duration Curve of Eastern Region for MAY-2016

Maximum Demand met : 18306 MW
Minimum Demand met: 10586 MW

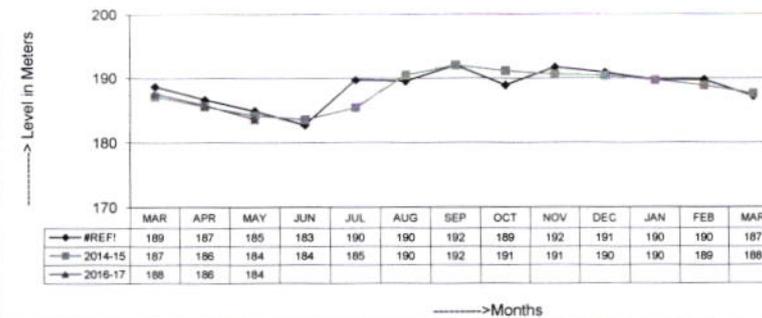


WATER LEVEL IN MAJOR RESERVOIRS ON LAST DATE OF MONTH

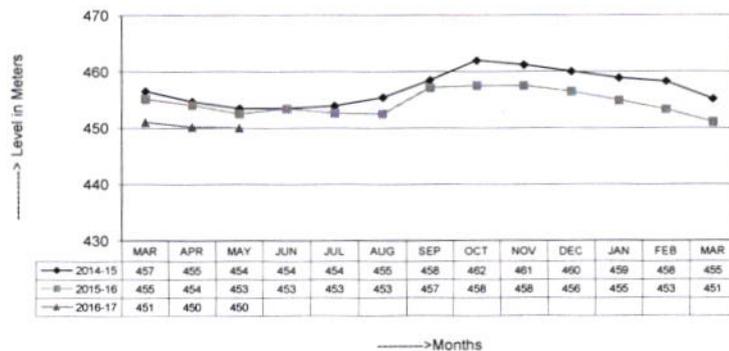
RENGALI RESERVOIR LEVEL



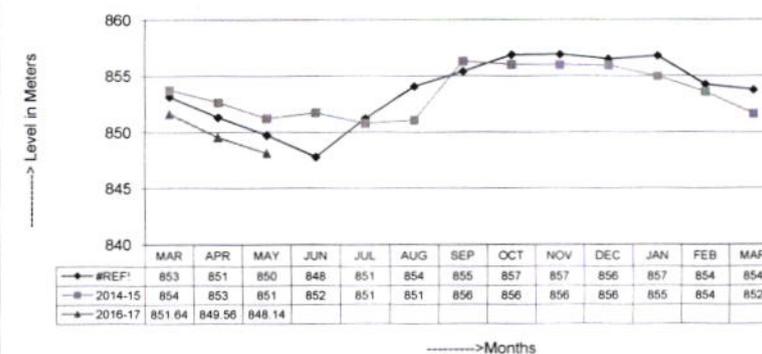
HIRAKUD RESERVOIR LEVEL



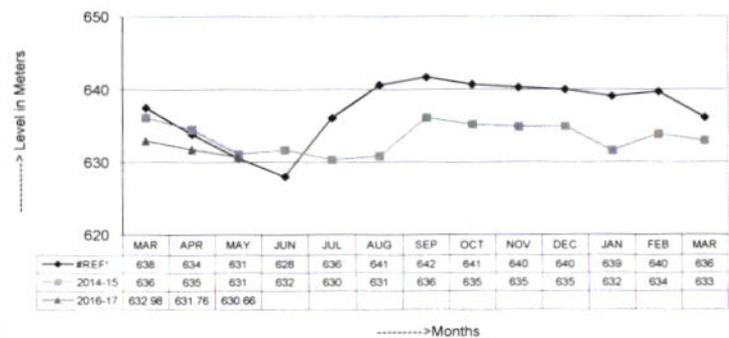
BALIMELA RESERVOIR LEVEL



UPPER KOLAB RESERVOIR LEVEL



INDRAVATI RESERVOIR LEVEL



SUBERNREKHA RESERVOIR LEVEL

