



सरकारभरत
Government of India

भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

पूर्वी क्षेत्रीय विद्युत समिति

EASTERN REGIONAL POWER COMMITTEE

मासिक प्रगति रिपोर्ट

**PROGRESS REPORT FOR THE MONTH
OF**

मार्च – 2016

MARCH - 2016

पूर्वी क्षेत्रीय विद्युत समिति

Eastern Regional Power Committee

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Highlights of Eastern Regional Power System for March-2016

- The **Maximum Net Demand** met of Eastern Region (ER) during the month of Mar, 2016 was 18086 MW which is 4.89% more than the Mar, 2015 (17243 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 Mar, 2016 was 366.12 MU excluding export, which is 9.68% more than the corresponding period of last year (333.82 MU).
- The **Average regional PLF of thermal units** is 59.71% during the month, which is 4.95% less than the corresponding period of the last year (64.66%).
- NTPC of TSTPP registered the highest PLF of 99.98%, followed by CESC (Budge Budge TPS) (96.48%) & Bakreswar TPP WBPDC (89.60%) during the month of Mar' 2016.
- **Total Net generation** of ER was 17275 MW against total **Effective Capacity** of 35042 MW (including that of Bhutan), and import from CPPs was 1582 MW at the time of Regional peak (18086 MW on 11.03.16 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 70.01% 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 49.68 Hz respectively. The integrated (Fifteen minutes time block average) maximum and minimum frequency were 50.17 Hz and 49.75 Hz respectively (refer Annexure-I).
- The **Maximum Voltage** recorded 432KV at Jamshedpur 400 KV S/s whereas the minimum voltage recorded 368 KV at Jeypore 400 KV S/s of Powergrid.
- The **Maximum Export from ER to outside region** was 4467 MW on 4th Mar'16 at 15.00 hrs. Total net energy export during the month was 1606.80 MU (including transmission loss), which corresponds to 12.64% of ex-bus total generation (12709 MU) of Eastern Region and 10.15% more than the corresponding period of previous year.
- The **import from CPPs/IPP**s was 865.41 MU, which is 21.01% more than corresponding period of last year (715.15 MU).
- The **Total Energy Exchange between Nepal and Bihar (ER)** was:

Export / Import by Bihar	Mar, 2016(In MU)	Cum. (Apr'15-Mar'16) in MU
Export to NEPAL by Bihar (NBPDC)	114.73	1210.57
Import from NEPAL by Bihar (NBPDC)	0	0
Net export to NEPAL by Bihar (NBPDC)	114.73	1210.57

- The total energy exchange between India & Bangladesh was:

Export	During Mar, 2016(In MU)	Cum. (Apr'15-Mar'16) in MU
Exchange between India & Bangladesh	281.50	3337.71

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

Region	Max. Export of Power ER (MW)	Max. Import of Power by ER (MW)	Net Export of Energy (MU)
NR	2628	666	768.64
WR	1192	1278	63.83
SR	1809	533	533.60
NER	1302	712	240.73

SALIENT FEATURES

(YEAR TO YEAR COMPARISON)

		Mar-16	MARCH-2015	CHANGE	% CHANGE
1)	Effective Capacity (end of the Month)				
	THERMAL (MW)	29155	25495	3660	14.36
	HYDRO (MW)	4394	\$ 4298	96	2
	DIESEL (MW)	7	0	7	0
	TOTAL (MW)	33566	29793	3773	12.67
2)	Peak Demand (MW)	18278	17546	732	4.17
3)	Peak Demand Met (MW)	18086	17243	843	4.89
4)	Shortage (MW)	192	303	-111	-36.72
5)	% Shortage	1.05	1.73	-0.68	-39.36
6)	Average Energy Requirement Per Day (MU)	369.34	337.49	31.85	9.44
7)	Average Energy Availability Per Day (MU)	366.12	333.82	32.30	9.68
8)	Average Shortage Per Day (MU)	3.22	3.67	-0.45	-12.38
9)	% Shortage	0.87	1.09	-0.22	-20.12
10)	Net Generation for the Month				
	Thermal (MU)	12004.94	10841.82	1163.12	10.73
	Hydro (MU)	702.55 *	695.73	6.82	0.98
	Diesel (MU)	0.00	0.00	0.00	-
	Total (MU)	12709	11537.55	1171.11	10.15
11)	Generation at the Time of Max. Regional Demand Met (11-03-16 at 21.00 Hrs.)				
	Thermal (MW)	15047	15041	6	0.04
	Hydro (MW)	2228 *	2591	-363	-14.01
	Diesel (MW)	0	0	0	-
	Total (MW)	17275	17632	-357	-2.02
12)	Inter-Regional Energy Transfer				
	Export (MU)	1606.80	1594.27	12.53	0.79
	Import (MU)	0.00	0.00	0.00	-
	Net Exp.(+)/Net Imp.(-) (MU)	1606.7991	1594.27	12.53	0.79
13)	Import From Captive(MU)	865.41	715.15	150.26	21.01
14)	Peak Inter Regional Power Transfer				
	Max Export (MW) on 04-03-16 at 15.00Hrs	4467	4502	-35	-0.77
	Max Import (MW) on 20-03-16 at 19.00Hrs	1361	1102	259	23.51
	Max Net Export(+)/Import (-) (MW) on 04-03-16 at 15.00Hrs	4467	4502	-35	-0.77
15)	Maximum voltage recorded	432	JAMSHEDPUR		
16)	Minimum voltage recorded	368	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 MARCH-2016

A) Net Average Energy Per Day

System	Demand Met (MU/Day)	Requirement (MU/Day)	Shortage (MU/Day)	% Shortage
BSEB	68.47	70.19	1.72	2.45
JSEB	21.74	21.76	0.02	0.10
DVC	50.68	51.32	0.64	1.24
ODISHA	77.93	77.96	0.03	0.04
WBSEDCL	112.52	113.31	0.79	0.69
CESC	27.90	27.91	0.01	0.05
DPL	5.49	5.49	0.00	0.04
SIKKIM	1.39	1.39	0.01	0.37
REGION	366.12	369.34	3.22	0.87

B) Peak Demand in MW:

System	Demand Met (MW)	Requirement (MW)	Shortage (MW)	% Shortage
BSEB	3400	3471	70	2.03
JSEB	1103	1104	1	0.13
DVC	2471	2490	19	0.76
ODISHA	4152	4157	5	0.11
WBSEDCL	5843	5914	70	1.19
CESC	1692	1693	1	0.0
DPL	310	310	0	0.00
SIKKIM	89	89	0	0.00
REGION	18086	18278	192	1

➤ DIVERSITY FACTOR : 1.05

➤ Regional Peak Demand Met on 11-3-2016 at 21.00 hrs. at 49.97 Hz.

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

A) Net Average Energy

Month	2014-15					2015-16				
	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	343.44	348.21	4.77	1.37	49.88	326.76	329.95	3.19	0.97	49.96
MAY	328.90	332.86	3.96	1.19	49.94	346.36	349.67	3.31	0.95	49.95
JUNE	336.98	342.14	5.16	1.51	49.84	351.46	353.07	1.61	0.46	49.99
JULY	332.12	337.07	4.95	1.47	49.85	342.90	344.59	1.68	0.49	49.98
AUGUST	331.94	337.09	5.15	1.53	49.83	363.08	364.98	1.90	0.52	49.97
SEPTEMBER	339.31	343.98	4.67	1.36	49.89	369.71	372.07	2.36	0.63	49.93
OCTOBER	329.32	333.51	4.18	1.25	49.92	365.03	367.31	2.28	0.62	49.94
NOVEMBER	297.96	301.46	3.49	1.16	49.98	396.36	398.22	1.86	0.47	49.98
DECEMBER	294.34	300.05	5.70	1.90	49.95	314.80	316.71	1.91	0.60	49.98
JANUARY	302.24	306.00	3.76	1.23	49.97	323.38	327.05	3.67	1.12	49.97
FEBRUARY	314.52	316.93	2.41	0.76	49.98	340.98	344.66	3.68	1.07	49.99
MARCH	333.82	337.49	3.67	1.09	49.96	366.12	369.34	3.22	0.87	49.99

B) Peak in MW:

Month	2014-15					2015-16				
	Demand Met	Requirement	Shortage	Shortage	Avg. Freq.	Demand Met	Requirement	Shortage	Shortage	Avg. Freq.
	(MW)	(MW)	(MW)	(%)	(HZ)	(MW)	(MW)	(MW)	(%)	(HZ)
APRIL	16774	16920	146	0.86	49.88	17346	17424	78	0.44	49.96
MAY	16648	16858	210	1.25	49.94	17602	17717	115	0.65	49.95
JUNE	16328	16765	437	2.61	49.84	17013	17195	182	1.06	49.99
JULY	16907	17249	341	1.98	49.85	16603	16662	58	0.35	49.98
AUGUST	16218	16691	473	2.83	49.83	17381	17839	458	2.57	49.97
SEPTEMBER	16768	17087	319	1.87	49.89	17632	18102	470	2.60	49.93
OCTOBER	16772	16964	192	1.13	49.92	18170	18908	738	3.90	49.94
NOVEMBER	16275	16352	77	0.47	49.98	17444	17516	71	0.41	49.98
DECEMBER	15656	15812	156	0.99	49.95	16993	17311	318	1.84	49.97
JANUARY	15369	15475	106	0.70	49.97	16692	16821	129	0.77	49.97
FEBRUARY	16200	16283	82	0.50	49.98	17125	17383	258	1.49	49.99
MARCH	17243	17546	303	1.73	49.96	18086	18278	192	1.05	49.99

PERFORMANCE OF GENERATING STATIONS IN THE EASTERN REGION DURING THE MONTH OF MARCH-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 (2015-16) in MU	Cummulative Net Energy Generation upto Current Month (2015-16) 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	55.60	50.04	705.14	634.62	
		Thermal Total	440.00	430.00	55.60	50.04	705.14	634.62	
	Hydro	Kosi	20.00	20.00	2.60	2.60	31.73	31.73	
		Dehri & others	24.90	24.90	0.00	0.00	21.99	21.99	
		Total Hydro	44.90	44.90	2.60	2.60	53.72	53.72	
	Total BIHAR		484.90	474.90	58.20	52.64	758.86	688.34	
JHARKHAND									
TVNL	Thermal	Tenughat U1	210.00	210.00	127.66	111.90	1272.69	1118.97	
		Tenughat U2	210.00	210.00	129.81	113.79	1364.05	1199.45	
		Total TVNL	420.00	420.00	257.47	225.69	2636.74	2318.42	
JSEB	Thermal	Patratu	840.00	770.00	45.02	39.53	594.02	514.37	
		Hydro	Subarnrekha (U#1,2)	130.00	130.00	0.08	0.08	51.29	51.29
		Total	970.00	900.00	45.10	39.61	645.30	565.66	
DVC	Thermal	Bokaro-B(1,2,3)	630.00	630.00	130.97	115.86	1859.85	1634.55	
		Chandrapura (1,2,3)	420.00	390.00	196.55	181.22	2211.43	1995.96	
		Chandrapura(U7 # 8)	500.00	500.00	317.33	289.30	2864.06	2592.61	
		Durgapur(3,4)	350.00	350.00	124.84	110.56	903.84	788.73	
		Mezla(1,2,3,4,5,6)	1340.00	1340.00	630.11	560.80	5792.48	5137.65	
		Mezla(U # 7,8)	1000.00	1000.00	494.16	463.72	6193.73	5879.20	
		Durgapur STPS (U#1,2)	1000.00	1000.00	343.50	320.65	4440.01	4184.88	
		Koderma STPS (U#1,2)	1000.00	1000.00	334.19	314.41	3326.80	3142.93	
	Total Thermal	7440.00	7410.00	2571.64	2356.31	27592.18	25356.51		
	Hydro	Maithon (U#1,2,3)	63.20	63.20	1.14	1.11	106.75	106.45	
		Panchet (U#1,2)	80.00	80.00	0.40	0.32	69.17	68.01	
		Tilaya (U#1,2)	4.00	4.00	0.00	-0.01	8.78	8.64	
		Hydro Total	147.20	147.20	1.54	1.41	184.69	183.09	
		Total DVC	7587.20	7557.20	2573.18	2357.73	27776.88	25539.61	
WEST BENGAL									
WBPDCL	Thermal	Bandel TPS	540.00	450.00	171.51	152.28	1110.04	948.95	
		Santalidih TPS(U#5&6)	500.00	500.00	315.28	288.00	3701.99	3378.09	
		Kolaghat TPS	1260.00	1260.00	506.68	454.30	5766.15	5124.39	
		Bakreswar TPP	1050.00	1050.00	699.94	634.04	6669.45	5973.89	
		Sagardighi TPP	600.00	600.00	389.75	346.10	2720.30	2355.73	
		Thermal Total	3950.00	3860.00	2083.16	1874.73	19967.93	17781.06	
WBSEDCL	Hydro	Jaldhaka (3x9+2x4)	35.00	35.00	9.72	9.72	173.37	173.37	
		Ramam (4x12.73)	51.00	51.00	8.15	8.15	253.96	253.96	
		Teesta C.F. (3x3x7.3)	67.30	67.30	14.19	14.19	80.03	80.03	
		Small hydro	12.00	12.00	0.00	0.00	0.00	0.00	
		Purulia PSS (4x225)	900.00	900.00	91.90	91.90	1055.00	1055.00	
		Total Hydro	1065.30	1065.30	123.95	123.95	1562.35	1562.35	
Total (Thermal+Hydro)		5015.30	4925.30	2207.11	1998.68	21530.27	19343.40		
DPL	Thermal	DPPS (110+300+250 *)	660.00	660.00	182.44	165.52	1950.52	1729.41	
* Synchronised on 31.03.2014									

* Synchronised on 31.03.2014

PERFORMANCE OF GENERATING STATIONS IN THE EASTERN REGION DURING THE MONTH OF MARCH-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 (2015-16) in MU	Cummulative Net Energy Generation upto Current Month (2015-16) in MU
CESC	Thermal	Titagarh (4x50)	240.00	240.00	0.00	0.00	663.83	601.30
		Southern (2x67.5)	135.00	135.00	21.58	19.18	531.28	478.77
		Budge-Budge (3x250)	750.00	750.00	538.37	497.73	5793.36	5327.27
		Total CESC	1125.00	1125.00	559.95	516.91	6988.47	6407.33
HEL	Thermal		600.00	600.00	331.92	304.07	3596.26	3262.78
		Total West Bengal (WBPDCL+WBSEDCL + DPL + CESC+HEL)	7400.30	7310.30	3281.42	2985.18	34065.52	30742.93
ODISHA (NTPC)	Thermal	Talcher-I	250.00	240.00	158.50	141.43	2001.78	1787.88
		Talcher-II	220.00	220.00	141.80	126.53	1760.73	1573.08
		Total Thermal	470.00	460.00	300.30	267.97	3762.51	3360.95
OPGC	Thermal	IB TPS	420.00	420.00	275.15	246.24	2888.60	2553.29
OHPC	Hydro	Hirakud-I (Burla)	275.50	275.50	19.41	19.22	457.09	454.31
		Hirakud-II (Chiplima)	72.00	72.00	11.83	11.48	217.03	216.00
		Ballimela (6x50+2x75)	510.00	510.00	49.15	48.78	608.79	603.93
		Rengali (5x50)	250.00	250.00	28.68	28.58	574.97	573.65
		Upper Kolab (4x80)	320.00	320.00	95.05	94.65	727.62	724.15
		Indravati HPS (4x150)	600.00	600.00	85.93	85.78	1653.32	1650.34
		Mckd.(Odisha drawal)	57.38	57.38	25.35	25.35	280.25	280.25
		Total Hydro	2084.88	2084.88	315.40	313.84	4519.07	4502.63
		Total Odisha	2974.88	2964.88	615.70	561.80	8281.59	7863.58
(**) SIKKIM	Hydro	Mini Hydro	14.00	14.00	3.00	3.00	36.00	36.00
		^ Diesel	7.10	7.10				
NTPC	Thermal	FSTPP# I&II (3x200+2x500)	1600.00	1600.00	485.24	448.84	9452.07	8743.17
		FSTPP (U# 6)	500.00	500.00	194.96	180.34	2907.40	2689.34
		KhSTPP (4x210+3x500)	2340.00	2340.00	1310.24	1211.97	15338.30	14190.93
		TSTPP (2x500)	1000.00	1000.00	743.88	688.09	7840.25	7252.23
		BARH STPS II (2X660)	1320.00	1320.00	783.05	724.32	4746.87	4390.86
		Total NTPC	6760.00	6760.00	3517.37	3253.58	40284.89	37266.52
NHPC	HYDRO	Rangit (3x20)	60.00	60.00	14.16	14.16	339.53	339.53
		Teesta (3x170)	510.00	510.00	131.00	131.00	2686.19	2686.19
		Teesta Low Dam-III (4x33)	132.00	132.00				
		Total NHPC	702.00	702.00	180.29	180.29	3219.64	3219.64
JPP		MPL (U#1&2)	1050.00	1050.00	638.69	604.21	7240.20	6780.44
JPP		SSL (U#1,2,3 & 4) (4x600) *	2400.00	2400.00	697.41	645.87	8094.48	7446.75
		APNRL (U#1,2)	540.00	540.00	328.77	299.70	2900.14	2657.04
		GMR (3x350)	1050.00	1050.00	584.68	541.24	6021.18	5550.45
		JITPL (2X600)	1200.00	1200.00	663.09	613.36	6339.96	5871.36
		CHUZACHEN** (2x55)	110.00	110.00	12.83	12.80	429.87	427.47
		JOETHANG (2x48)	96.00	96.00	11.12	11.12	112.54	112.54
EASTERN REGIONAL		Total Thermal (E.R)	29365.00	29155.00	13092.65	12004.94	141563.20	129491.32
		Total Hydro (E.R)	4394.28	4394.28	650.81	649.08	10169.17	10169.17
		TOTAL (E.R)	33776.38	33566.38	13744.62	12655.19	151744.24	139654.17
BHUTAN	Hydro	CHPC(4x90)	360.00	270.00	30.28	30.28	1732.40	1732.40
	Hydro	Kurichu (4x15)	60.00	60.00	0.00	0.00	103.03	103.03
	Hydro	TALA (6x170)	1020.00	1020.00	19.57	19.57	3320.77	3320.77
	Hydro	DAGACHU (2x63)	126.00	126.00	3.61	3.61	222.86	222.86
		Grand Total	35342.38	35042.38	13798.08	12709	157123.29	145033.23

Santalidih 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 227.58 MU to the Grid in addition to 340.77 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

Malthon 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 MARCH-2016

ORGANI- SATION	TYPE	POWER STATION	INSTALLED	EFFECTIVE	Gross	PLF	Cummulative Gross	Cummulative PLF	
			CAPACITY	CAPACITY	Energy	of Current	Energy Generation		
			(in MW)	(in MW)	Generation in MU	Month (%)	upto Current Month (2015-16) in MU	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	55.60	33.97	705.14	36.59	
		Thermal Total	440.00	430.00	55.60	17.38	705.14	18.72	
	Hydro	Kosi	20.00	20.00	2.60		31.73		
		Dehri & others	24.90	24.90	0.00		21.99		
		Total Hydro	44.90	44.90	2.60		53.72		
	Total BIHAR		484.90	474.90	58.20		758.86		
JHARKHAND									
TVNL	Thermal	Tenughat U1	210.00	210.00	127.66	81.71	1272.69	69.18	
		Tenughat U2	210.00	210.00	129.81	83.08	1364.05	74.15	
		Total TVNL	420.00	420.00	257.47	82.40	2636.74	71.67	
JSEB	Thermal	Patratu	840.00	770.00	45.02	7.86	594.02	8.81	
		Hydro	Subarnrekha (U#1,2)	130.00	130.00	0.08		51.29	
		Total	970.00	900.00	45.10		645.30		
DVC	Thermal	Bokaro-B(1,2,3)	630.00	630.00	130.97	27.94	1859.85	33.70	
		Chandrapura (1,2,3)	420.00	390.00	196.55	67.74	2211.43	64.73	
		Chandrapura(U7 # 8)	500.00	500.00	317.33	85.30	2864.06	65.39	
		Durgapur(3,4)	350.00	350.00	124.84	47.94	903.84	29.48	
		Mezia(1,2,3,4,5,6)	1340.00	1340.00	630.11	63.20	5792.48	49.35	
		Mezia(U # 7,8)	1000.00	1000.00	494.16	66.42	6193.73	70.70	
	Hydro	Durgapur STPS (U#1,2)	1000.00	1000.00	343.50	46.17	4440.01	50.68	
		Koderma STPS (U#1,2)	1000.00	1000.00	334.19	44.92	3326.80	53.94	
		Total Thermal	7440.00	7410.00	2571.64	46.65	27592.18	43.10	
		Maithon (U#1,2,3)	63.20	63.20	1.14		106.75		
		Panchet (U#1,2)	80.00	80.00	0.40		69.17		
		Tilaya (U#1,2)	4.00	4.00	0.00		8.78		
	Hydro Total		147.20	147.20	1.54		184.69		
	Total DVC		7587.20	7557.20	2573.18		27776.88		
WEST BENGAL									
WBPDCCL	Thermal	Bandel TPS	540.00	450.00	171.51	51.23	1110.04	28.16	
		Santalidih TPS(U#5&6)	500.00	500.00	315.28	84.75	3701.99	84.52	
		Kolaghat TPS	1260.00	1260.00	506.68	54.05	5766.15	52.24	
		Bakreswar TPP	1050.00	1050.00	699.94	89.60	6669.45	72.51	
		Sagardighi TPP	600.00	600.00	389.75	87.31	2720.30	51.76	
		Thermal Total	3950.00	3860.00	2083.16	72.54	19967.93	59.05	
WBSEDCL	Hydro	Jaldhaka (3x9+2x4)	35.00	35.00	9.72		173.37		
		Ramam (4x12.73)	51.00	51.00	8.15		253.96		
		Teesta C.F. (3x3x7.3)	67.30	67.30	14.19		80.03		
		Small hydro	12.00	12.00	0.00		0.00		
		Purulia PSS (4x225)	900.00	900.00	91.90		1055.00		
		Total Hydro	1065.30	1065.30	123.95		1562.35		
		Total (Thermal+Hydro)	5015.30	4925.30	2207.11		21530.27		
DPL	Thermal	DPPS (110+300+250 *)	660.00	660.00	182.44	37.15	1950.52	33.74	

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

ORGANI- SATION	TYPE	POWER STATION	INSTALLED	EFFECTIVE	Gross	PLF	Cummulative Gross	Cummulative PLF
			CAPACITY	CAPACITY	Energy	of Current	Energy Generation	
			(in MW)	(in MW)	Generation	Month	upto Current Month	upto Current
					in MU	(%)	(2015-16) in MU	Month
CESC	Thermal	Titagarh (4x60)	240.00	240.00	0.00	12.09	663.83	31.57
		Southern (2x67.5)	135.00	135.00	21.58	21.49	531.28	44.92
		Budge-Budge (3x250)	750.00	750.00	538.37	96.48	5793.36	88.18
		Total CESC	1125.00	1125.00	559.95	66.90	6988.47	70.91
HEL	Thermal		600.00	600.00	331.92	74.35	3596.26	68.42
		Total West Bengal	7400.30	7310.30	2863.71		2810.30	
(WBSEDCL+WBPDCL+ DPL + CESC+HEL)								
ODISHA	Thermal	Talcher-I	250.00	240.00	158.50	88.77	2001.78	95.21
(NTPC)		Talcher-II	220.00	220.00	141.80	86.63	1760.73	91.36
		Total Thermal	470.00	460.00	300.30	87.75	3762.51	93.37
OPGC	Thermal	IB TPS	420.00	420.00	275.15	88.05	2888.60	78.51
OHPC	Hydro	Hirakud-I (Burla)	275.50	275.50	19.41		457.09	
		Hirakud-II (Chiplima)	72.00	72.00	11.83		217.03	
		Balimela (6x60+2x75)	510.00	510.00	49.15		608.79	
		Rengali (5x50)	250.00	250.00	28.68		574.97	
		Upper Kolab (4x80)	320.00	320.00	95.05		727.62	
		Indravati HPS (4x150)	600.00	600.00	85.93		1653.32	
		Mckd.(Odisha drawal)	57.38	57.38	25.35		280.25	
		Total Hydro	2084.88	2084.88	315.40		4519.07	
		Total Odisha	2974.88	2964.88	615.70		8281.59	
(**) SIKKIM	Hydro	Mini Hydro	14.00	14.00	3.00		36.00	
		^ Diesel	7.10	7.10				
NTPC	Thermal	FSTPP# I&II (3x200+2x500)	1600.00	1600.00	485.24	40.76	9452.07	67.44
		FSTPP (U# 6)	500.00	500.00	194.96	52.41	2907.40	66.38
		KhSTPP (4x210+3x500)	2340.00	2340.00	1310.24	75.26	15338.30	74.83
		TSTPP (2x500)	1000.00	1000.00	743.88	99.98	7840.25	89.50
		BARH STPS II (2X660)	1320.00	1320.00	783.05	79.73	4746.87	41.05
		Total NTPC	6760.00	6760.00	3517.37	69.94	40284.89	68.03
NHPC	HYDRO	Rangit (3x20)	60.00	60.00	14.16		339.53	
		Teesta (3x170)	510.00	510.00	131.00		2686.19	
		Teesta Low Dam-III (4x33)	132.00	132.00				
IPP	Thermal	MPL (U#1&2)	1050.00	1050.00	638.69	81.76	7240.20	78.71
IPP		SSL (U#1,2,3 & 4) (4x600) *	2400.00	2400.00	697.41	39.06	8094.48	38.50
		APNRL (U#1,2)	540.00	540.00	328.77	81.83	2900.14	61.31
		GMR (3x350)	1050.00	1050.00	584.68	74.84	6021.18	78.60
		JITPL (2X600)	1200.00	1200.00	663.09	74.27	6339.96	60.31
		CHUZACHEN** (2x55)	110.00	110.00	12.83		429.87	
		JORETHANG (2x48)	96.00	96.00	11.12		112.54	
EASTERN REGIONAL		Total Thermal (E.R)	29365.00	29155.00	13092.65	59.71	141563.20	55.16
		Total Hydro (E.R)	4394.28	4394.28	650.81		10169.17	
		TOTAL (E.R)	33776.38	33566.38	13744.62		151744.24	
BHUTAN	Hydro	CHPC(4x90)	360.00	270.00	30.28		1732.40	
	Hydro	Kurichu (4x15)	60.00	60.00	0.00		103.03	
	Hydro	TALA (6x170)	1020.00	1020.00	19.57		3320.77	
	Hydro	DAGACHU (2x63)	126.00	126.00	3.61		222.86	
		Grand Total	35342.38	35042.38	13798.08		157123.29	

➤ 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
REGIONAL PEAK DURING THE MONTH OF MARCH-2016 (11-3-2016)**

Date **11-Mar-16**
Time **21.00** **Hrs.**
Frequency **49.97** **Hz.**

(All Fig. in MW)

System/State	Installed Capacity	Effective Capacity	Hydro	Thermal	Total
BSEB	485	475	0	92	92
JSEB	1390	1320	0	360	360
DVC	7587	7557	8	3452	3460
ODISHA	2975	2965	842	678	1520
WBSEDCL	5615	5525	769	2462	3230
CESC	1125	1125	0	737	737
DPL	660	660	0	223	223
SIKKIM	14	14	0	0	0
NTPC	6760	6760	0	3322	3322
NHPC	702	702	477	0	477
CHUKHA	360	270	30	0	30
KURICHU	60	60	-21	0	-21
TALA	1020	1020	20	0	20
SEL	2400	2400	0	540	540
APNRL	540	540	0	558	558
Kamalganga (GMR)	1050	1050	0	600	600
JITPL	1200	1200	0	960	960
Chuzachen	110	110	57	0	57
Jorethang	96	96	47	0	47
<u>Daghachu</u>	126	126	0	0	0
<u>Total</u>	35342	35042	2228	15047	17275
Import From Captive:					1582
Export To:					
NER					431
SR					815
WR					-827
NR					-184.85
Bangladesh					465.89
Nepal					72.49
Total					771
					18086

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

Hourly Load Generation Data OF ER On Regional Peak Day During The Month of MARCH-2016 (11-3-2016)

(All Figures in MW)

Hrs.	Generation				Import	Net	Net	Demand	Freq.	Load	Requirement
	Hydro	Thermal	GT	Total	from Captive	Import From CHPS, KHPS & TALA	Export to other region	Met	Correction	Shed	
1	694	18024	0	18719	1542	41	1917	14877	39	221	15137
2	659	17905	0	18564	1438	110	1926	14659	32	218	14909
3	589	17705	0	18294	1328	142	1780	14536	15	217	14769
4	601	17538	0	18139	1361	101	2049	14040	74	217	14331
5	716	17794	0	18510	1289	44	2485	14174	78	217	14469
6	716	17967	0	18683	1349	0	2017	14873	74	221	15168
7	715	18133	0	18848	1324	-17	2244	14540	41	63	14645
8	573	18226	0	18799	1406	11	2595	14165	7	50	14222
9	446	18127	0	18572	1440	44	3049	13746	23	115	13883
10	499	18134	0	18633	1558	44	3333	13771	52	127	13950
11	532	18769	0	19301	1600	39	3602	13790	47	153	13989
12	505	18906	0	19410	1542	22	3139	14090	15	61	14166
13	314	18656	0	18970	1510	42	3278	13601	14	50	13665
14	360	18468	0	18829	1029	37	3398	12816	2	52	12870
15	593	18210	0	18804	1051	39	3073	12974	18	108	13100
16	752	18537	0	19289	1178	29	3427	13238	36	113	13387
17	836	18308	0	19144	1314	19	3373	13471	0	108	13579
18	1483	18781	0	20264	1336	13	2598	14481	-3	281	14760
19	2141	19821	0	21962	1547	3	1037	17164	42	299	17505
20	2248	19724	0	21972	1617	16	889	17518	23	215	17757
21	2096	19723	0	21819	1582	29	233	18086	17	174	18278
22	1995	19281	0	21277	1581	35	316	17718	11	132	17860
23	1886	18696	0	20582	1588	46	1092	16663	7	146	16817
24	1007	17840	0	18847	1638	50	1386	15125	4	130	15259

Hourly Load Generation Data of ER On Regional Lean Day During The Month of MARCH-2016 (6-3-2016)

(All Figures in MW)

Hrs.	Generation				Import	Net	Net	Demand	Freq.	Load	Requirement
	Hydro	Thermal	GT	Total	from Captive	Import From CHPS, KHPS & TALA	Export to other region	Met	Correction	Shed	
1	724	11912	0	12636	1321	54	1302	13693	-16	270	13948
2	771	12031	0	12802	1255	38	1336	13645	1	199	13845
3	838	12076	0	12914	1189	36	1255	13718	-8	200	13909
4	803	12004	0	12807	1202	30	1441	13314	5	200	13518
5	833	12132	0	12965	1126	26	1489	13551	-7	199	13743
6	899	12205	0	13104	1162	15	1676	13702	10	220	13932
7	903	12124	0	13026	1228	-5	1924	13494	14	41	13550
8	801	12075	0	12876	1232	-3	2121	13208	8	48	13264
9	769	12345	0	13114	1279	16	2661	13041	-7	37	13071
10	746	12432	0	13179	1249	14	3147	12590	6	51	12646
11	621	12389	0	13010	1263	-1	3179	12366	15	47	12428
12	629	12279	0	12909	1225	7	3280	12154	31	36	12221
13	545	12298	0	12843	1345	9	3556	11926	18	33	11977
14	572	12115	0	12687	1297	11	3465	11731	-14	27	11744
15	487	11848	0	12335	1260	20	3580	11248	-20	21	11250
16	595	11427	0	12022	1234	30	3430	11045	-8	20	11058
17	649	11090	0	11738	1285	32	2718	11533	2	18	11553
18	1250	11372	0	12622	1223	142	2354	12813	-8	112	12918
19	1742	12177	0	13919	1324	111	1128	15470	7	194	15671
20	1942	12928	0	14870	1359	106	1685	15988	-10	198	16176
21	1771	13419	0	15190	1445	77	1859	16202	-7	176	16370
22	1363	13352	0	14716	1313	85	1708	15759	-6	157	15910
23	1375	13001	0	14376	1435	86	2307	14901	9	218	15129
24	818	12968	0	13786	1354	99	2404	14021	6	150	14177

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

POWER CUT / RESTRICTIONS

BSEB	NO NOTIFIED CUTS/RESTRICTIONS However there was loadshedding of 52.32 MU
JSEB	NO NOTIFIED CUTS/RESTRICTIONS However there was loadshedding of 0.358 MU
DVC	NO NOTIFIED CUTS/RESTRICTIONS. However there was loadshedding of 19.01 MU
ODISHA	NO NOTIFIED CUTS/RESTRICTIONS However there was loadshedding of 0.70 MU
WEST BENGAL	NO NOTIFIED CUTS/RESTRICTIONS. However there was loadshedding of 22.85 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

Mar-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		MAX	HRS.	MIN	HRS.	MAX	HRS.	MIN	HRS.
	TO	TO	TO	TO	TO	TO	<49.9	TO	TO		HZ		HZ		HZ		HZ	
	05	10	17	22	24	24		50.1	50.05									
01-Mar	49.99	50.01	49.99	49.98	50.00	49.99	6.16	72.68	21.16	72.68	50.23	18.00	49.78	17.53	50.07	1.00	49.87	17.45
02-Mar	50.00	49.99	49.98	49.96	49.97	49.98	9.55	71.90	18.55	71.90	50.22	18.17	49.78	20.34	50.06	23.45	49.84	20.30
03-Mar	49.98	50.00	49.97	49.95	49.94	49.97	10.75	73.43	15.82	73.43	50.19	18.04	49.74	22.06	50.08	13.00	49.83	20.30
04-Mar	49.95	49.98	49.96	50.01	49.96	49.97	11.31	72.52	16.17	72.52	50.24	18.02	49.75	12.15	50.09	21.45	49.84	11.30
05-Mar	49.98	50.00	50.00	50.04	50.03	50.01	2.80	68.82	28.38	68.82	50.25	18.17	49.84	0.06	50.12	18.15	49.89	0.00
06-Mar	50.01	49.99	49.99	50.01	49.99	50.00	4.17	71.11	24.72	71.11	50.21	17.02	49.76	6.50	50.08	14.00	49.87	6.45
07-Mar	49.99	49.97	49.99	50.01	49.99	49.99	5.94	72.07	21.99	72.07	50.35	18.03	49.75	18.42	50.10	14.00	49.85	18.45
08-Mar	49.99	49.99	49.96	50.00	49.97	49.98	10.00	72.18	17.82	72.18	50.25	18.02	49.78	16.15	50.07	1.45	49.86	12.00
09-Mar	49.96	49.97	49.98	49.96	49.93	49.97	15.30	72.17	12.53	72.17	50.26	13.04	49.73	11.20	50.10	13.00	49.85	22.00
10-Mar	49.96	49.97	49.96	49.95	49.94	49.96	18.28	71.16	10.56	71.16	50.22	18.02	49.69	18.56	50.07	2.45	49.78	18.45
11-Mar	49.91	49.92	49.96	49.97	49.99	49.95	26.18	60.66	13.16	60.66	50.19	18.02	49.73	4.52	50.07	13.00	49.80	4.45
12-Mar	50.02	50.01	49.98	49.99	49.99	50.00	5.35	66.06	28.59	66.06	50.19	4.05	49.75	18.54	50.11	4.00	49.82	18.45
13-Mar	50.02	50.02	50.01	50.00	50.01	50.01	1.54	66.35	32.11	66.35	50.21	14.06	49.83	7.49	50.15	14.00	49.94	7.45
14-Mar	50.01	50.00	49.98	49.99	49.98	49.99	7.94	70.32	21.74	70.32	50.21	7.02	49.70	19.10	50.12	13.00	49.80	19.00
15-Mar	49.99	49.97	49.97	50.01	49.97	49.98	8.96	79.93	11.11	79.93	50.21	18.04	49.74	0.06	50.10	18.15	49.82	0.00
16-Mar	49.99	49.97	49.98	50.01	50.00	49.99	4.72	75.74	19.54	75.74	50.25	18.17	49.76	14.23	50.11	18.15	49.84	14.15
17-Mar	50.00	49.99	49.96	49.96	49.96	49.97	11.83	73.56	14.61	73.56	50.19	13.04	49.68	19.10	50.08	13.00	49.83	19.00
18-Mar	50.01	49.99	49.95	49.98	49.99	49.98	12.06	67.43	20.51	67.43	50.21	18.02	49.84	14.33	50.07	21.45	49.75	14.30
19-Mar	50.01	50.01	50.00	50.02	49.99	50.01	2.82	69.48	27.90	69.48	50.21	16.05	49.76	16.14	50.08	13.00	49.93	11.00
20-Mar	49.99	50.06	49.99	50.00	49.99	50.01	3.17	67.07	29.76	67.07	50.26	6.02	49.69	21.05	50.14	6.00	49.88	21.00
21-Mar	49.99	49.97	49.99	49.97	49.97	49.98	11.53	68.69	19.78	68.69	50.26	13.05	49.76	10.16	50.13	13.00	49.79	19.00
22-Mar	49.97	49.98	49.98	49.95	49.95	49.97	14.25	69.45	16.30	69.45	50.18	13.08	49.77	20.49	50.14	13.00	49.86	20.30
23-Mar	49.98	50.00	49.98	50.04	49.99	50.00	6.79	68.58	24.63	68.58	50.31	18.03	49.77	8.01	50.17	18.00	49.86	0.00
24-Mar	50.01	50.05	50.02	50.02	50.00	50.02	0.56	64.63	34.81	64.63	50.26	6.32	49.86	19.06	50.17	17.00	49.94	19.00
25-Mar	50.02	49.97	49.98	49.98	49.97	49.99	8.58	68.62	22.80	68.62	50.22	18.02	49.78	9.38	50.08	13.15	49.84	9.30
26-Mar	49.98	50.01	49.96	49.95	49.95	49.97	11.37	74.27	14.36	74.27	50.19	13.03	49.75	15.18	50.09	7.00	49.81	16.45
27-Mar	49.95	49.99	49.96	49.98	49.93	49.97	13.23	73.30	13.47	73.30	50.21	18.01	49.75	14.24	50.07	18.00	49.78	14.15
28-Mar	49.97	49.98	49.97	50.02	50.00	49.98	7.05	74.59	18.36	74.59	50.31	18.02	49.81	6.30	50.10	18.00	49.88	14.15
29-Mar	50.02	50.03	50.02	49.99	49.96	50.01	5.12	64.98	29.90	64.98	50.26	13.01	49.75	19.33	50.13	12.45	49.87	21.00
30-Mar	49.91	49.93	50.02	50.02	49.98	49.99	9.80	68.35	21.85	68.35	50.23	17.02	49.80	4.30	50.09	16.45	49.85	4.15
31-Mar	50.01	50.04	50.04	50.03	50.02	50.03	2.57	60.35	37.08	60.35	50.26	12.01	49.80	19.01	50.14	13.00	49.88	18.45
MAX	50.02	50.06	50.04	50.04	50.03	50.03	26.16	79.93	37.08	79.93	50.35		49.86		50.17		49.94	
MIN	49.91	49.92	49.95	49.95	49.93	49.95	0.56	60.35	10.56	60.35	50.18		49.68		50.06		49.75	
AVG	49.99	49.99	49.98	49.99	49.98	49.99	8.69	70.01	21.29	70.01	50.23		49.76		50.10		49.85	

SUMMARY:

Avg. Frequency : 49.99 Hz.

Instantaneous Frequency :

Maximum Frequency : 50.35 Hz On 00/01/00 at 18:03 Hrs.

Minimum Frequency : 49.68 Hz On 00/01/00 at 14:33 Hrs.

15 Minutes Integrated Frequency :

Maximum Frequency : 50.17 Hz On 00/01/00 at 18:00 Hrs.

Minimum Frequency : 49.75 Hz On 00/01/00 at 14:30 Hrs.

Frequency Distribution in % of Time			
Hz	<49.9	49.9-50.05	>50.05
% of Time	8.69	70.01	21.29

VOLTAGE ANALYSIS

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

(All figs. in kV)

PGCIL	FARAKKA		SUBHASGRAM		DURGAPUR		JEERAT		PURNEA	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	428	408	423	382	422	403	419	375	429	393

PGCIL	FARAKKA		SUBHASGRAM		DURGAPUR		JEERAT	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	412	392	432	413	405	391	421	368

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
MARCH-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	
			(31-3-16)	(31-3-15)		
Hirakud	192	180	187.61	187.15	188.85	01.3.16
Balimela	462	439	451.07	455.16	453.33	01.3.16
Rengali	123	109	116.10	120.05	117.46	01.3.16
Upperkolab	858	844	851.64	853.76	853.58	01.3.16
Indravati	642	625	632.98	636.18	633.87	01.3.16
Subernrekha	590	580	585.58	586.77	585.89	01.3.16

B.

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

(All figs. are in MU)

System	Tata Power	Crescent Power	JSPL, Angul	Sterlite	Jindal	NALCO	TISCO	Others	Total
West Bengal	62.14	27.85	0	0	0	0	0	60.39	150.38
ODISHA	0	0	32.98	227.58	14.21	27.30	0	382.37	684.44
DVC	0	0	0	0	0	0	30.59	0	30.59
TOTAL	62.14	27.85	32.98	227.58	14.21	27.30	30.59	442.76	865.41

C.

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

(All figs. are in MU)

IPP	TPDDL	WBSEDCL	DVC *	Sale at IEX/NPCL	ODISHA	JSEB	CTU/Others	Total (Excl. Tr. Loss)
MPL	179.46	181.34	147.02	3.44	0	0	93.70	604.96
Sterlite	0	0	0	0	227.58	0	340.77	568.35
APNRL	0	74.32	0	56.17	0.00	91.10	74.34	295.94
GMR	0	1.85	0	0.00	0.00	0	344.61	344.61
Total	179.46	255.66	147.02	59.61	227.58	91.10	508.81	1469.24

(*)—During this month, DVC has drawn 147.02 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 (2015-16)
22.98	43.81	24.73	79.45	80.25	76.75	429.87
Oct'15	Nov'15	Dec'15	Jan'16	Feb'16	Mar'16	
40.10	19.84	13.08	10.11	5.93	12.83	

ANNEXURE-V**STATUS OF IMPORTANT TRANSMISSION LINES UNDER CONSTRUCTION**

(As on 31.03.16)

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	Transmission 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 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

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 Burnpur 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.

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.

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.
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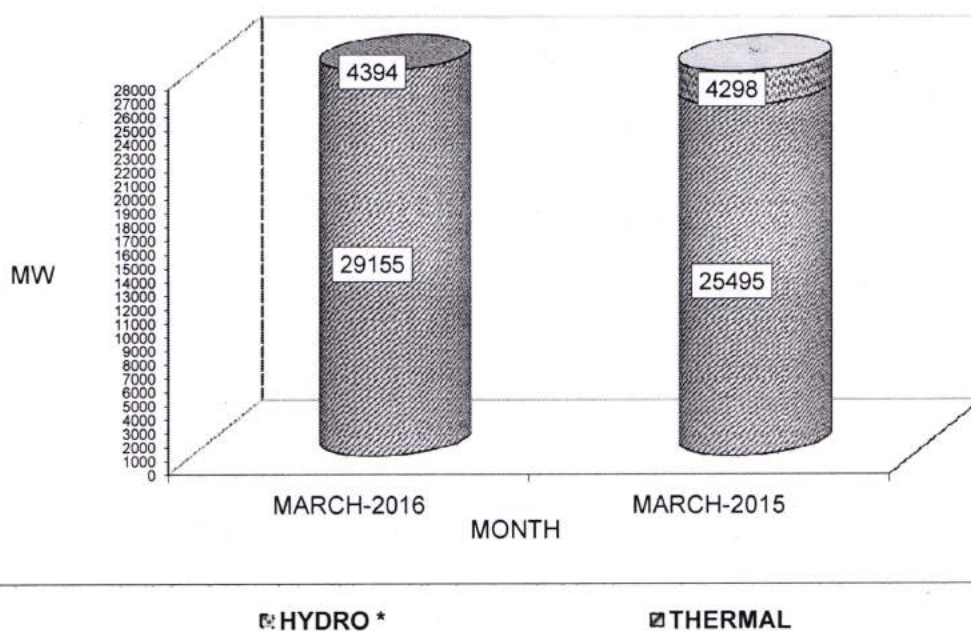
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5.0 WBSETCL

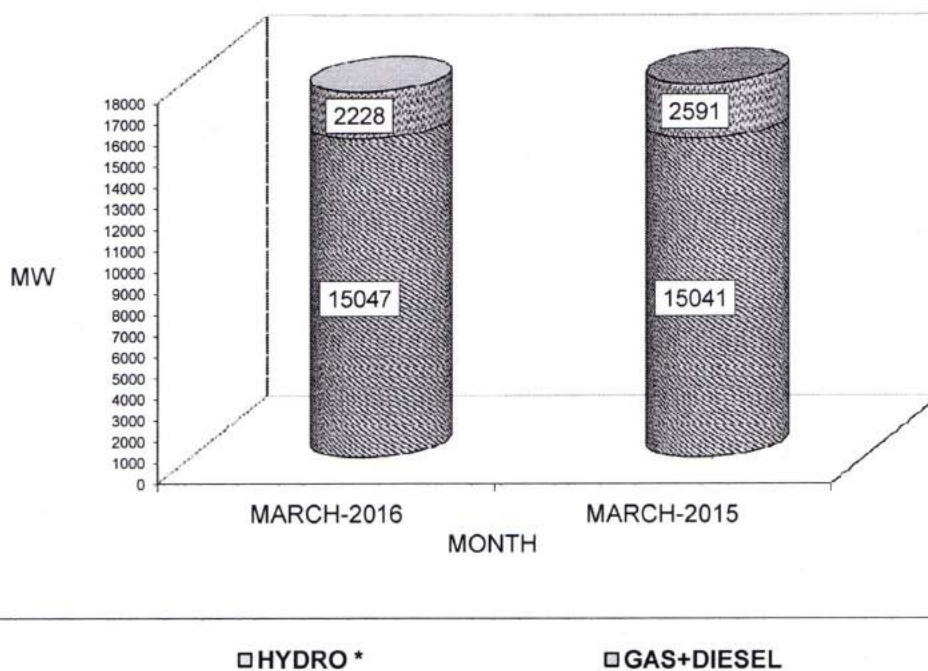
5.1	Subhasgram (PG) – Saintala 220 KV D/C line (ACSR Zebra)	25	--	--	Converted to M/C line. Work will be carried jointly with CESC.
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5.3	Santaldhi TPS-Bishnupur 220 KV D/C	224.0			Work held up due to Contractual problem.
5.4	Raghunathpur to Hura 220 KV D/C	72.0		June'13	Foundation work not yet commenced.

EFFECTIVE CAPACITY OF EASTERN REGIONAL GRID



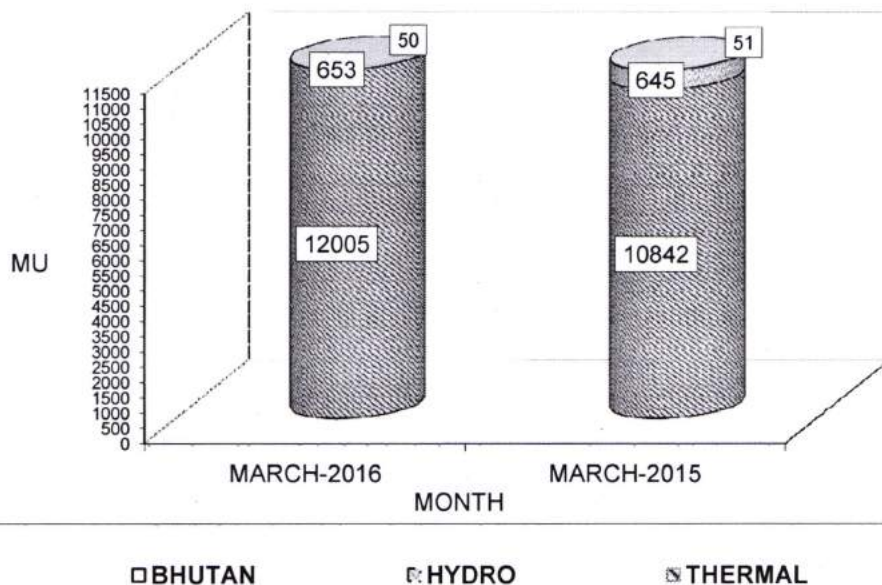
*Excludes 1350 MW contribution from HEPs of Bhutan

GENERATION CORRESPONDING TO PEAK DEMAND MET

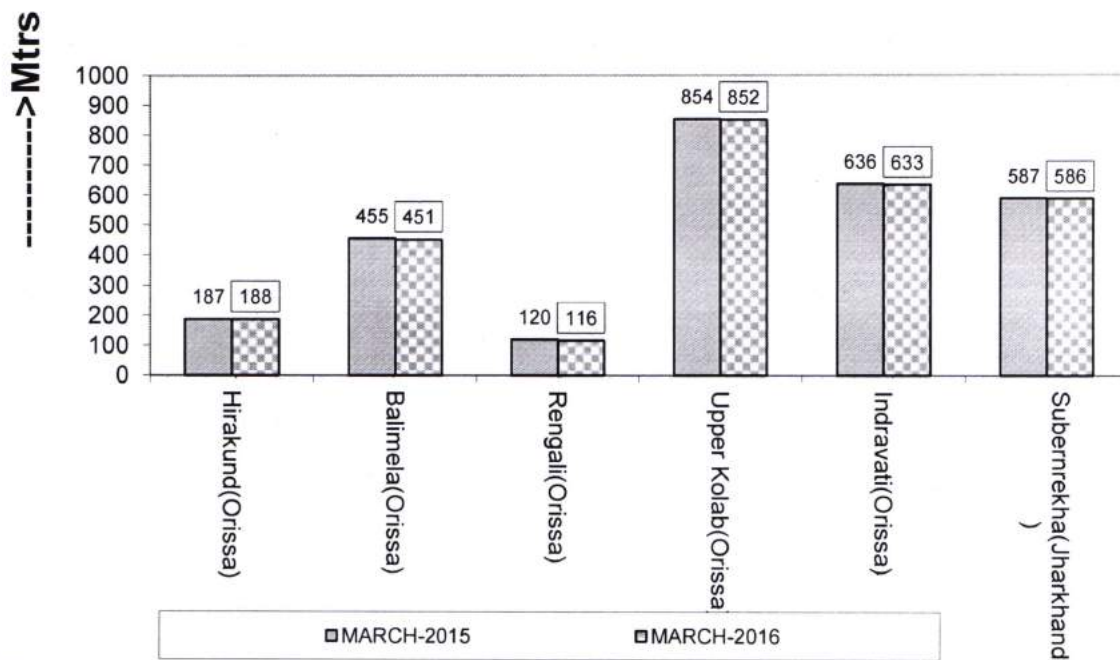


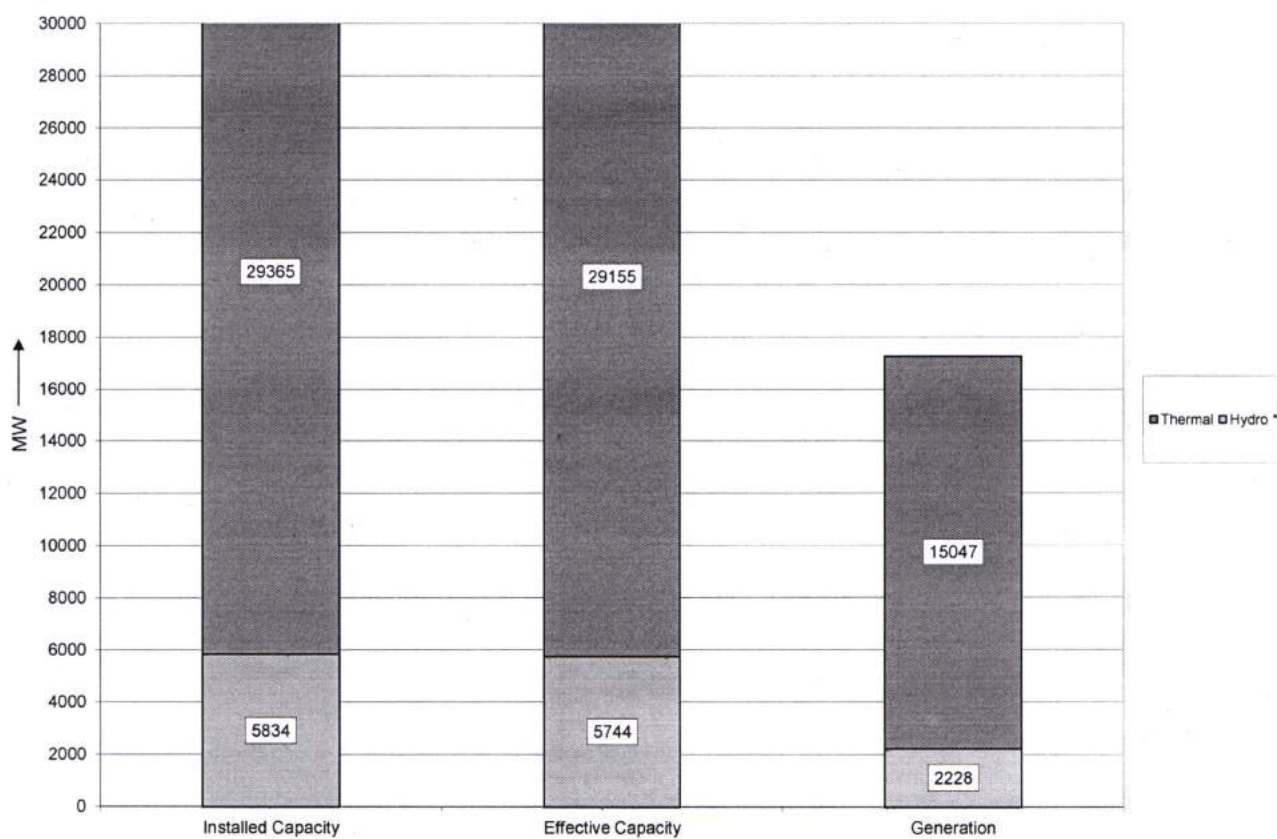
*Includes contribution from HEP of Bhutan

NET ENERGY GENERATION



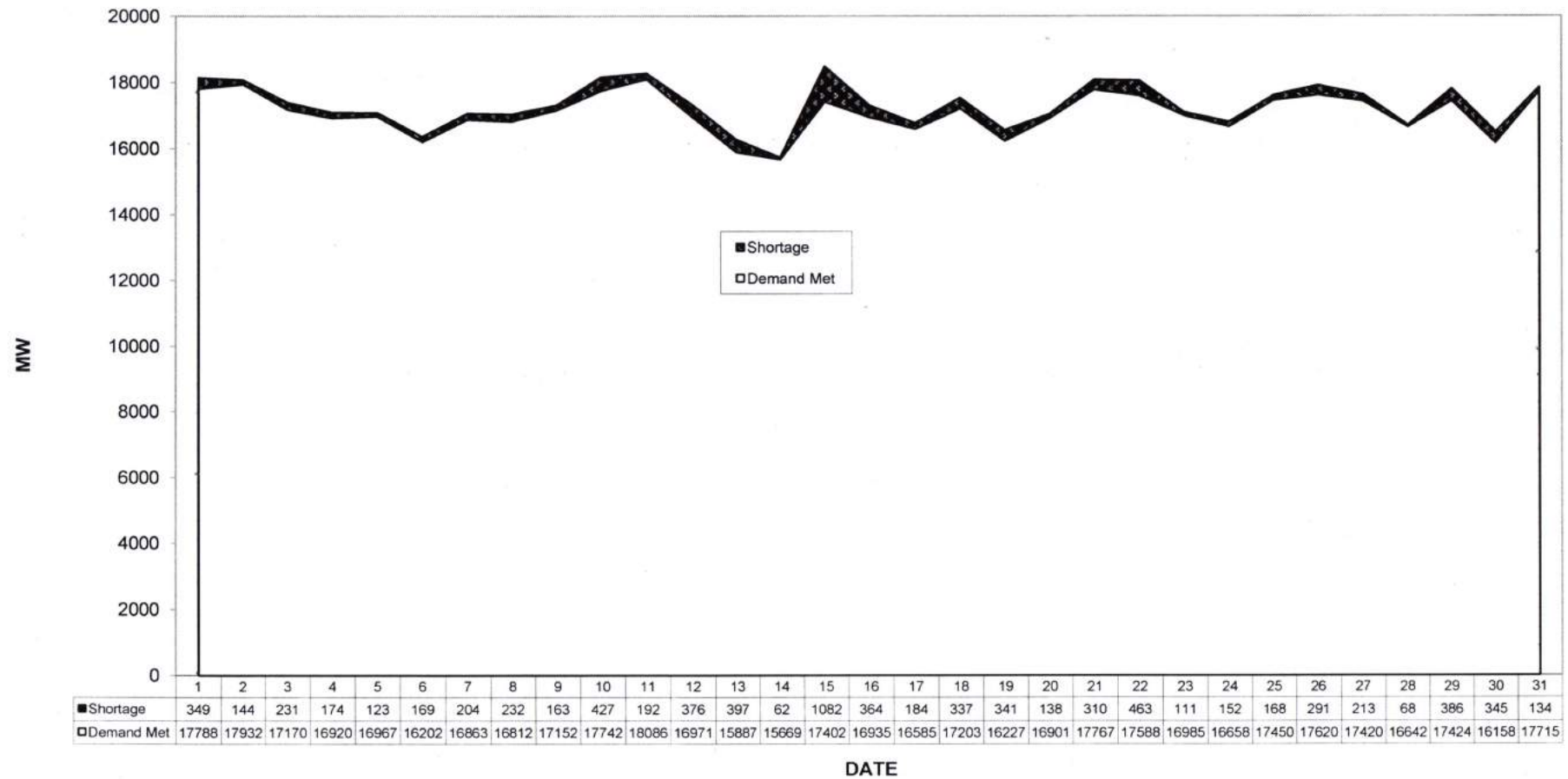
RESERVOIR LEVEL OF HPS OF ER (RECORDED ON LAST DAY OF MONTH)



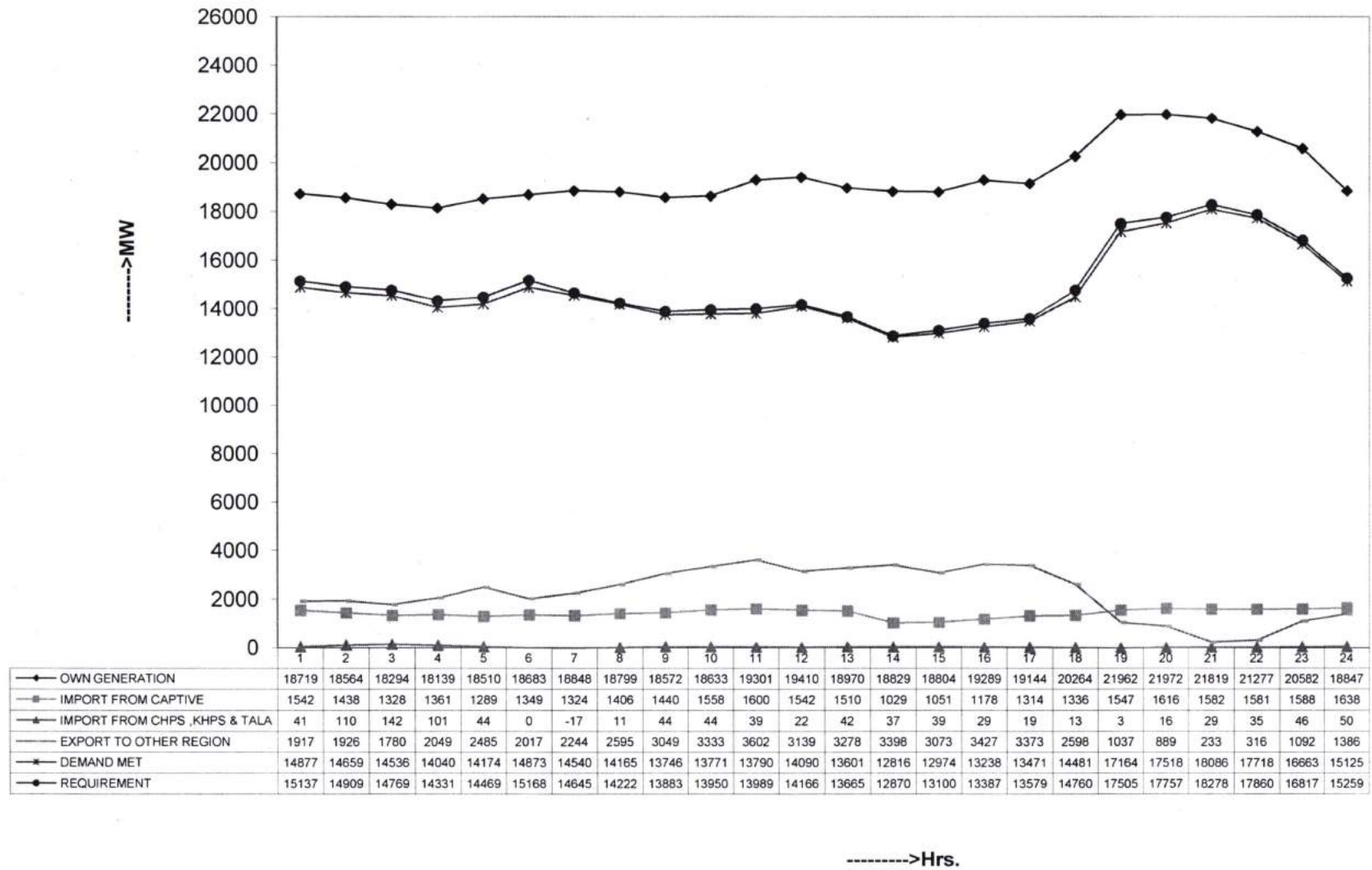
Capacity / Actual Generation Pattern of ER on Peak Day (11-3-2016) at 21.00 hrs.

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

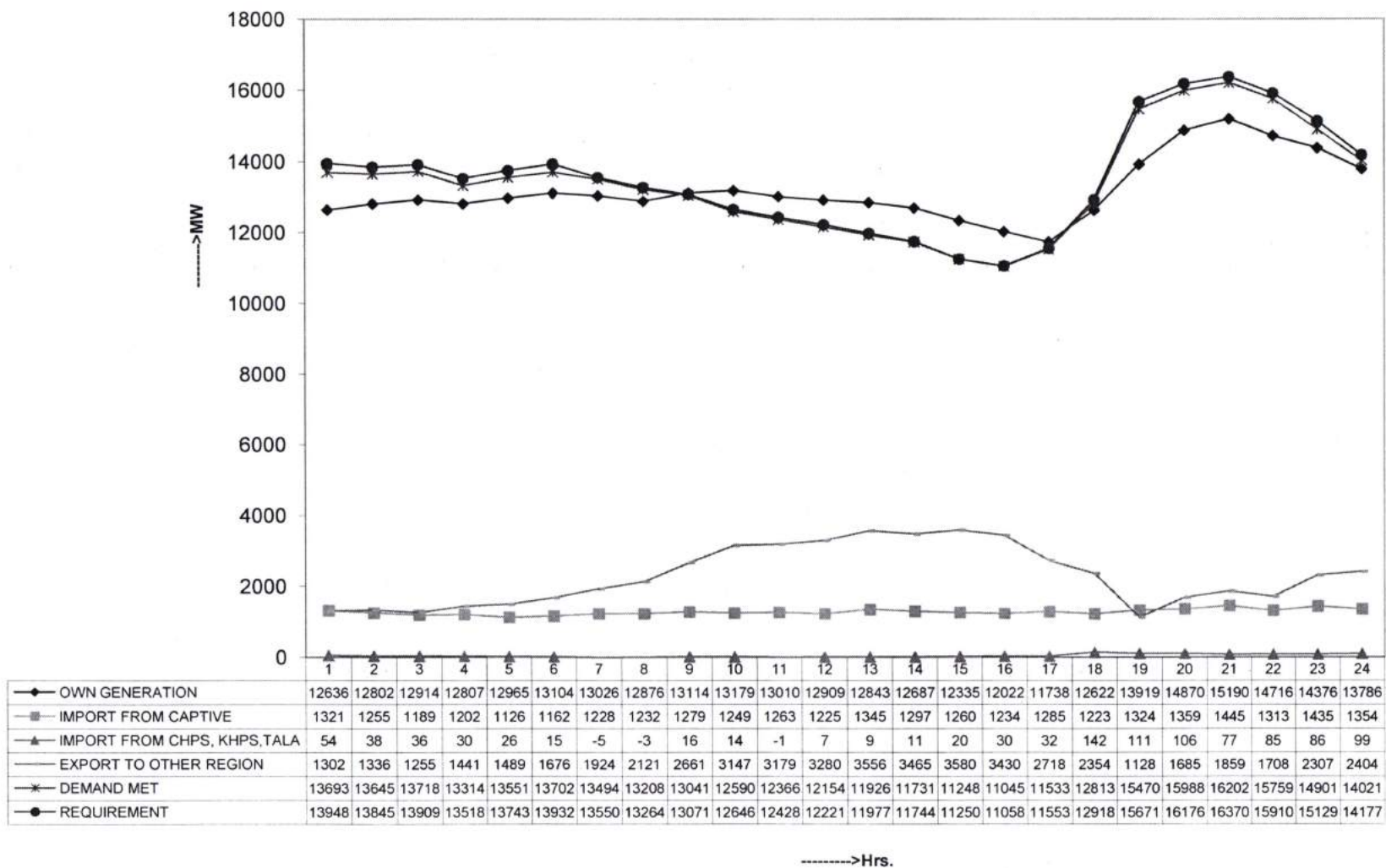
Peak Demand Met / Shortage of Eastern Region For The Month Of MARCH-2016

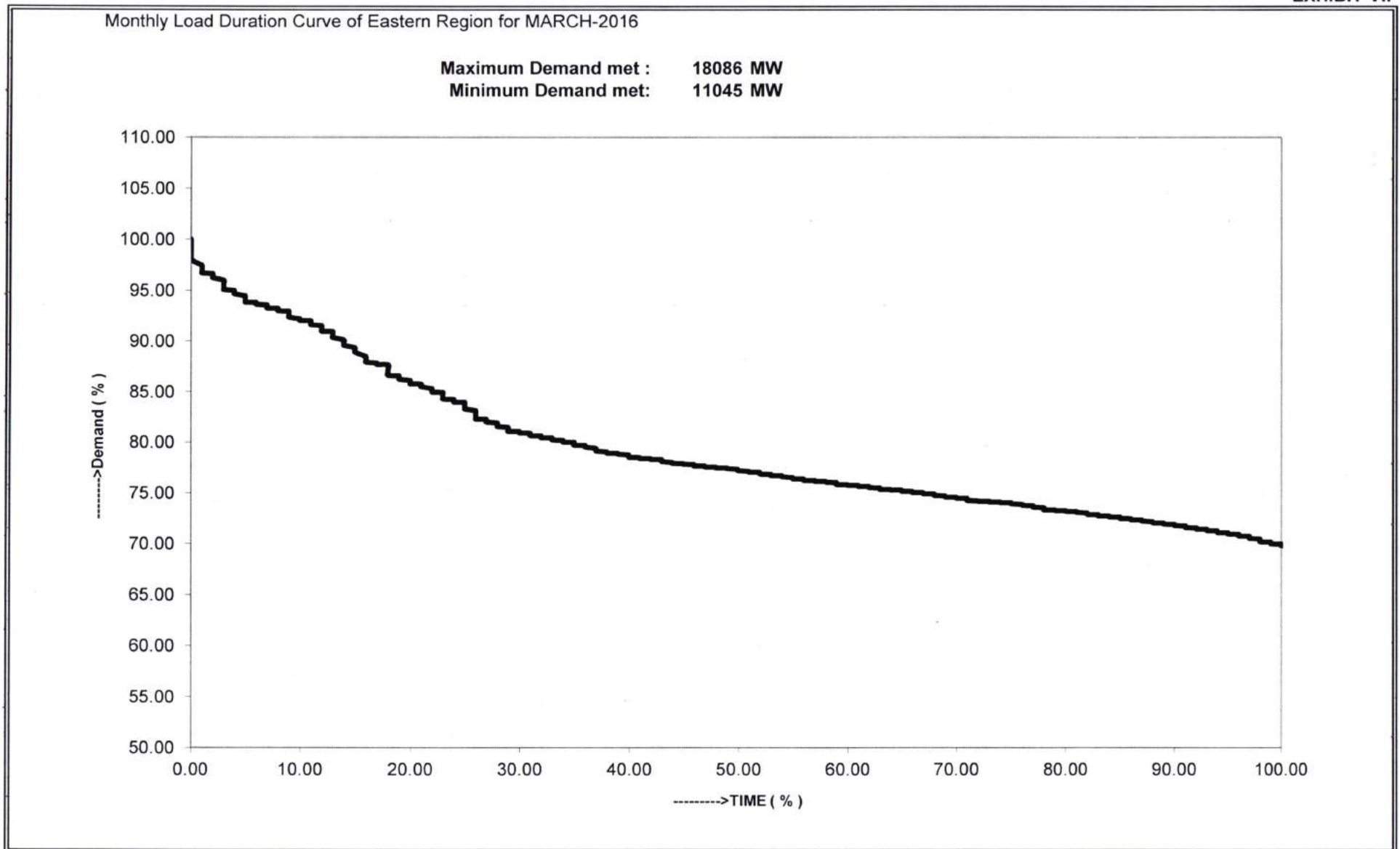


Hourly Load Generation Data OF ER On Regional Peak Day During The Month of MARCH-2016 (11-3-2016)



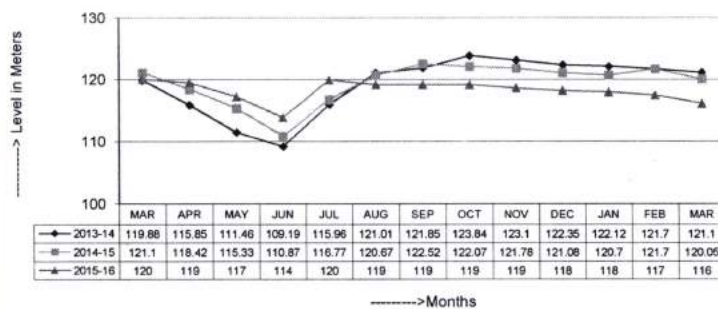
Hourly Load Generation Data of ER On Regional Lean Day During The Month of MARCH-2016 (6-3-2016)



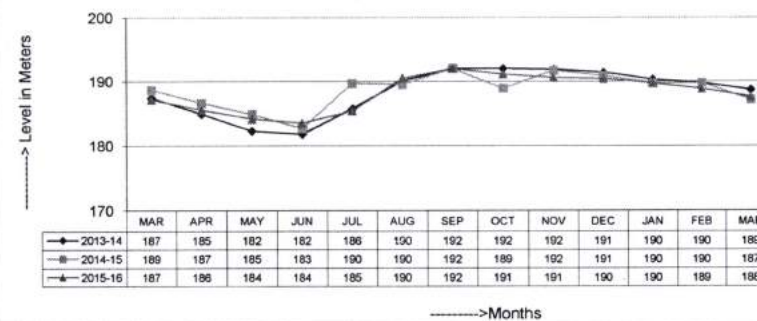


WATER LEVEL IN MAJOR RESERVOIRS ON LAST DATE OF MONTH

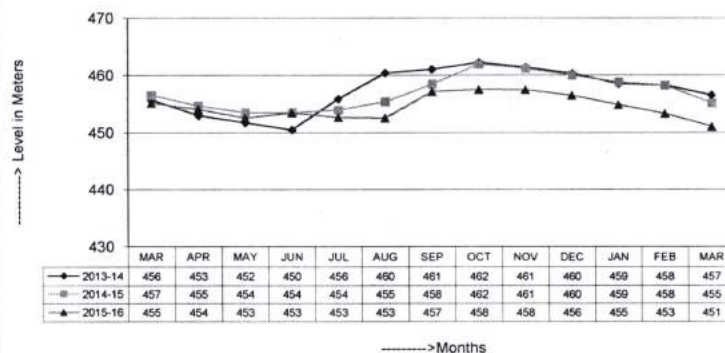
RENGALI RESERVOIR LEVEL



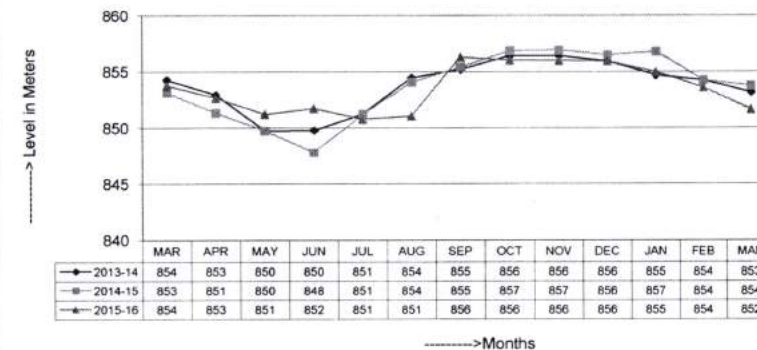
HIRAKUD RESERVOIR LEVEL



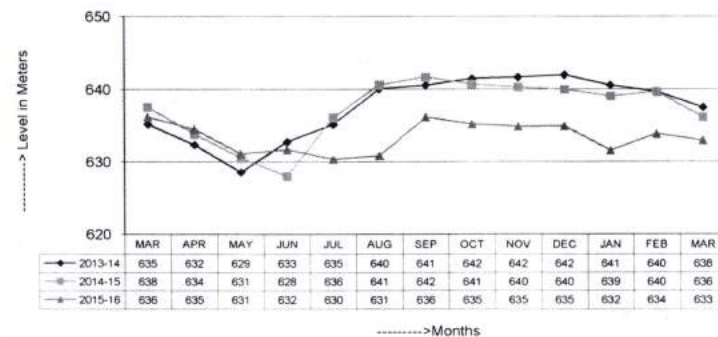
BALIMELA RESERVOIR LEVEL



UPPER KOLAB RESERVOIR LEVEL



INDRAVATI RESERVOIR LEVEL



SUBERNREKHA RESERVOIR LEVEL

