STATE LOAD DESPATCH CENTRE

CSPTCL

(A GOVT.OF C.G.UNDERTAKING)

ANNUAL REPORT

YEAR: 2009-2010

(NOT FOR COMMERCIAL PURPOSE)

COMPILED & PREPARED BY :

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ANNUAL REPORT: 2009-10

1.1 Power Supply Position:-

The maximum demand of CSEB met during the year was **2880 MW** on 20.04.2009, which is 1.41% more than the previous year maximum demand of 2840 MW and is ever highest. The maximum unrestricted demand during the year was **3005 MW** on 28.04.2009 and minimum registered demand was **1393 MW** on 14th Jul'2009.The details of month wise demand met from the different sources & extent of load shedding exercised is brought out the Table- 04. These figures include the injection of M/s JSPL, M/s JPL, M/s BALCO & NSPCL and also the power injected by various other CPPs/IPPs in the state. A comparison of 2009-10 year maximum demands from that of 2008-09 year is given below:

Sl. No.	MAXIMUM DEMANDS	UNIT	Year 2009-10	Year 2008-09	Change (%)
A	Met	MW	2880	2840	1.41
B	Morning Peak MET	MW	2650	2518	5.25
C	Evening Peak MET	MW	2880	2840	1.41
D	Unrestricted Demand	MW	3005	2896	3.76

Chhattisgarh has been declared as zero power cut state w.e.f 01/01/08.The total load shedding during the year was only **73.72 MU** which included scheduled load shedding to agricultural pumps against "*Atal Jyoti Yogna*" & unscheduled load shedding to industrial feeders in case of emergencies like tripping of major generating units to maintain balance in the grid.

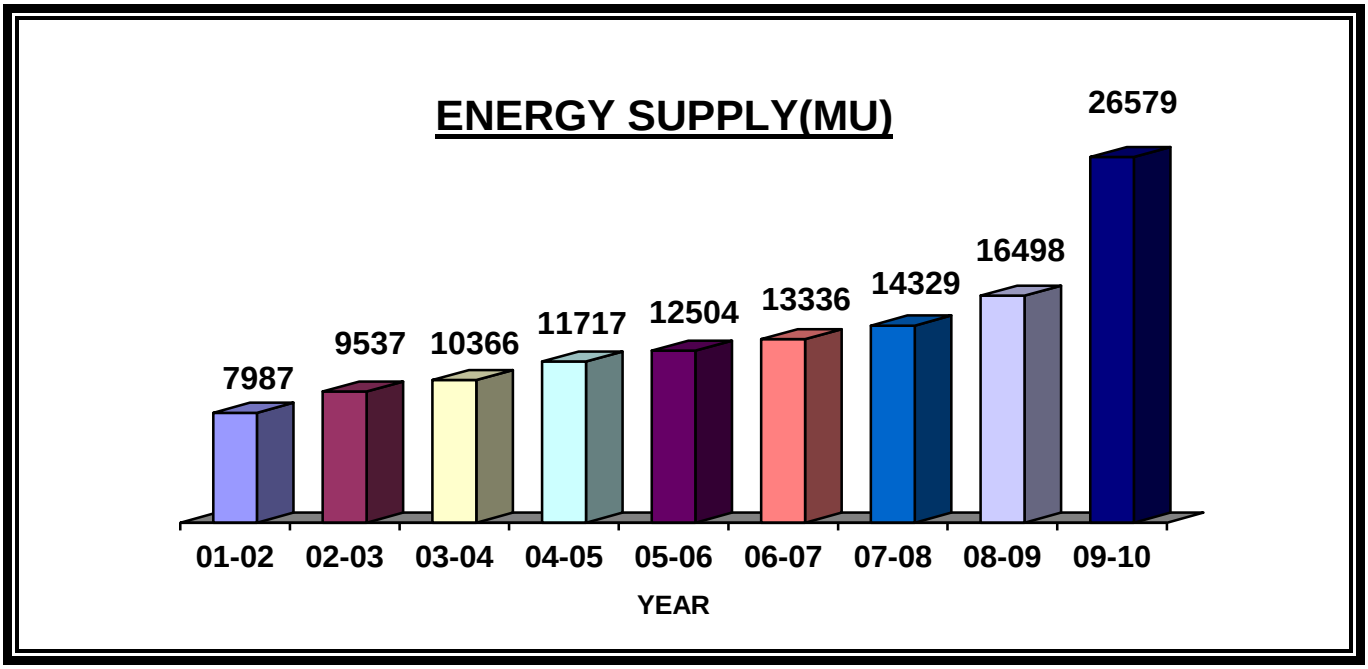
1.2 Energy Supply & requirement

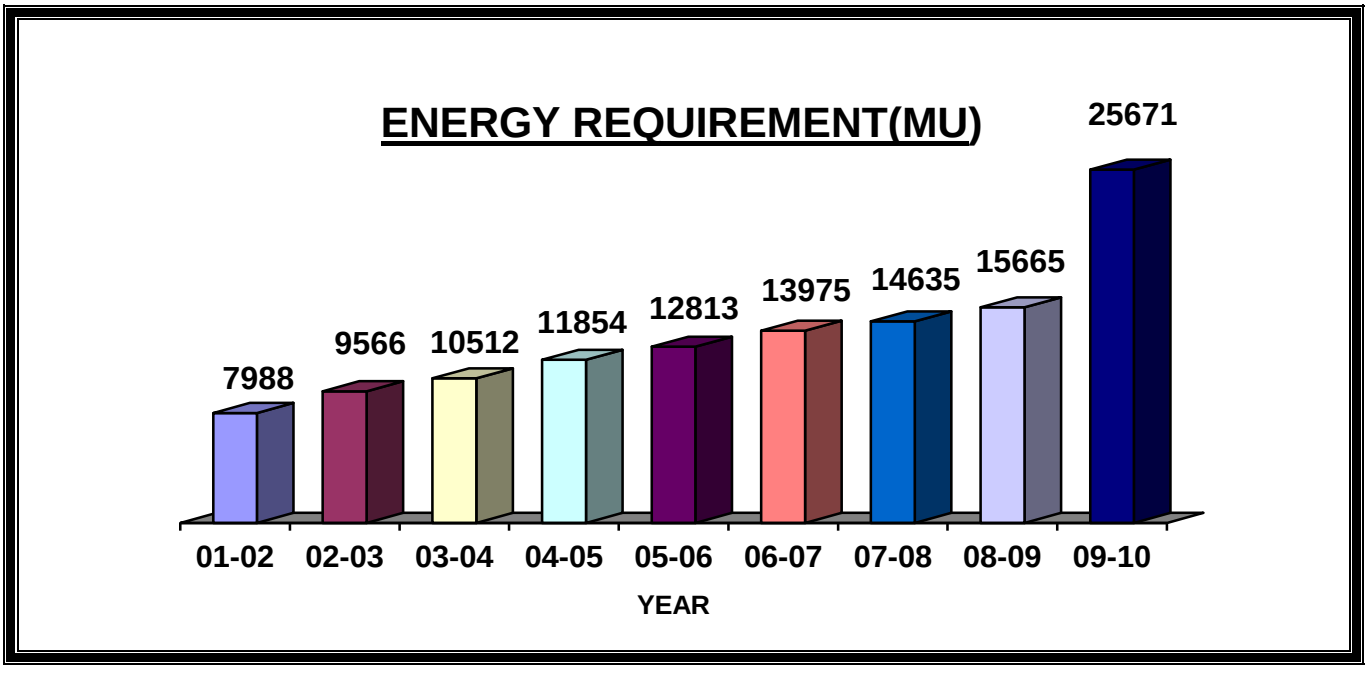
The total energy supplied (ex-power station bus) into CSEB grid including power received from Central Sector, over drawl/under drawl, additional power purchase, power sold through traders and injection from CPPs, IPPs & other utilities injection (up to 132 KV) of the state during the year 2009-10 was **26579.30 MU** which is 61.11 % more than that supplied in the year 2008-2009 which was 16498.08 MU.
The requirement in the year 2009-10 was for **25671.55 MU** against the requirement of 15665.14 MU in year 2008-09 which is 6.88 % higher.

The total energy supplied (ex-power station bus) in the month of Oct' 2009 was 2385.34 MU which is also the highest monthly energy supplied in any month during the year as well as ever highest after the inception of CSEB.

Monthly details of energy i.e. own availability, schedule/ actual drawal, UI energy, bilateral exchanges including STOA (Short term Open Access) and additional power purchase & sold is given at Table-03.

The energy supplied & requirement since the year 2001-02 is given under:-





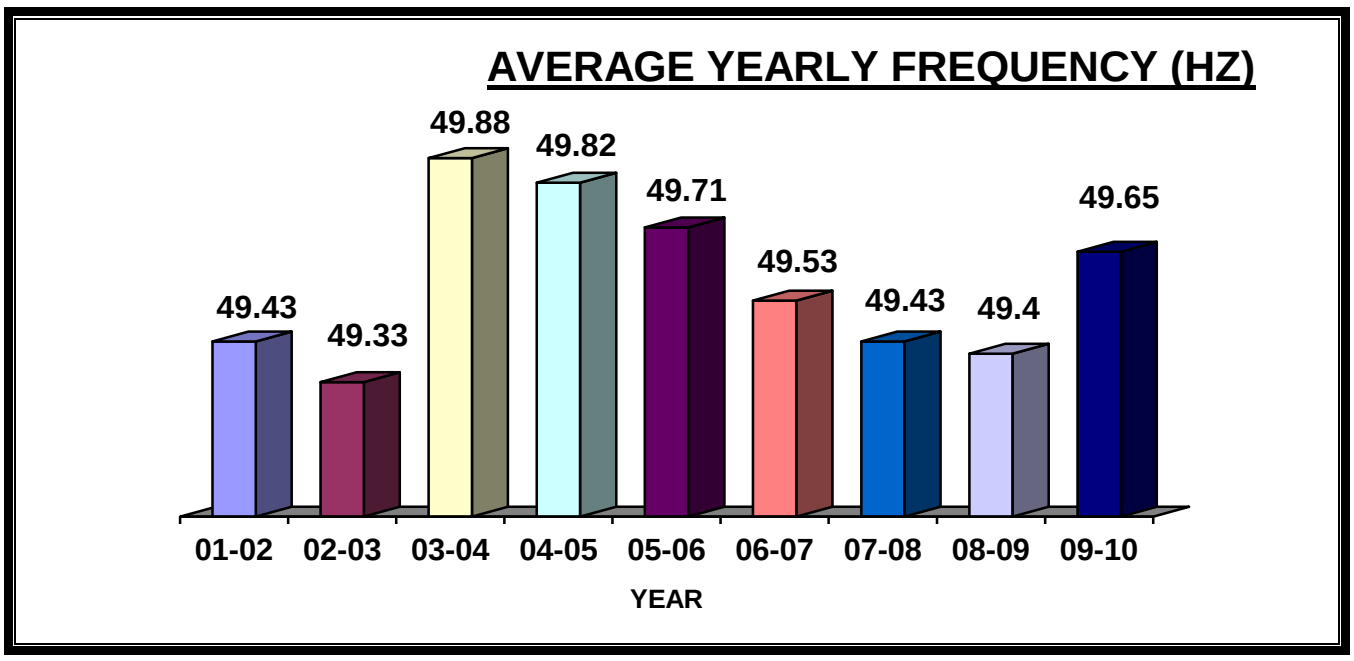
1.3 System Frequency :-

The average frequency of the Western Regional Grid during the year 2009-10 has been 49.65 Hz which is 0.25 Hz higher than 49.40 Hz of year 2008-09.
The monthly block wise average frequency & daily average frequency from April 09 to March-10 are annexed in the Exhibits. The month wise Maximum, Minimum instantaneous as well as integrated over one hr & average frequency for the year 2009-10is given at page No.4.

During the year 2009-10 & 2008-09, the percentage of time frequency remained between various ranges is given below:

Frequency Range			Percentage of Time	
			In Yr.09-10	In Yr.08-09
A	Above 50.5 Hz	%	1.43	0.08
B	Between 50.2 HZ to 50.5Hz	%	2.84	2.63
C	Between 49.8 Hz to 50.2Hz	%	30.29	17.62
D	Between 49.5 Hz to 49.8Hz	%	33.42	26.71
E	Between 49.0 Hz to 49.5 Hz	%	23.10	44.71
F	Between 48.5 Hz to 49.0Hz	%	8.81	8.26
G	Between 48.5 Hz to 48.8Hz	%	0.12	1.29
H	Below 48.5HZ	%	0	0

The yearly average frequency from the year 2001-02 to 2009-10 is shown below:



2. **Energy Generation**

A) **State Generation (CSEB)**

2.1 Thermal :-

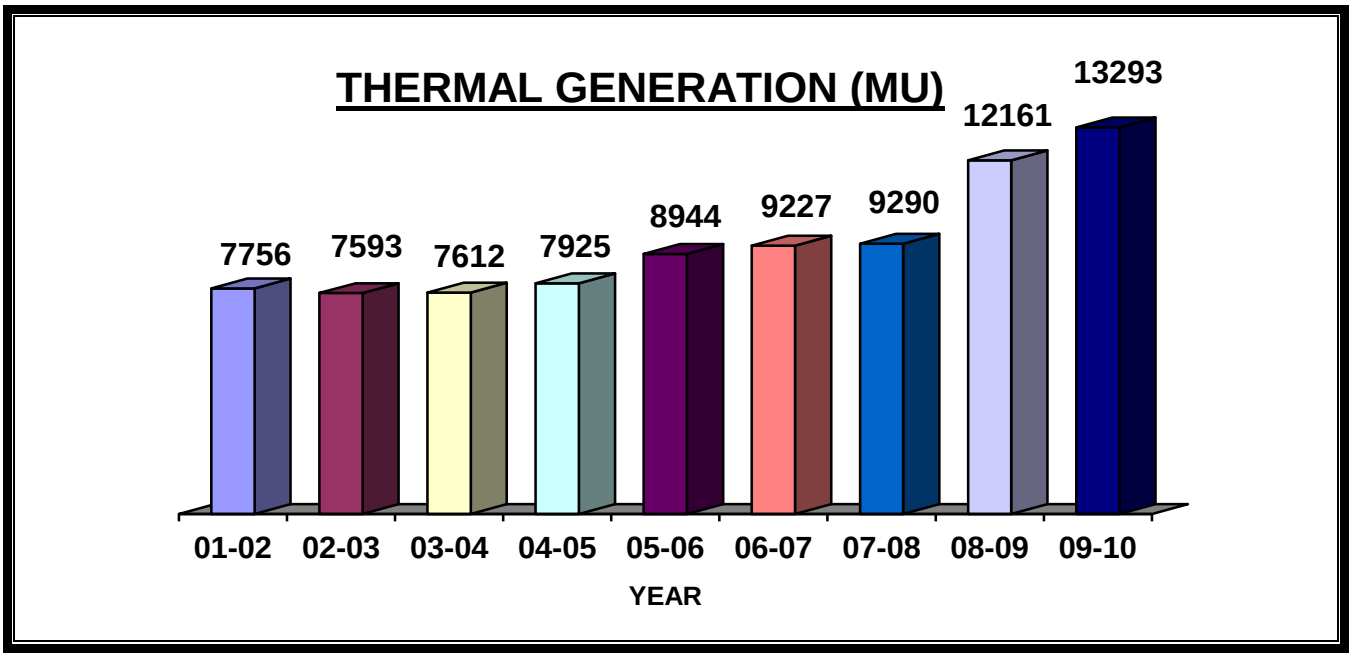
During the year 2009-10, the total generation by thermal stations has touched new peak. The annual generation of CSEB thermal units was 13292.91 MU against 12161.32 MU in year 2008-09.

Further highest monthly generation of 1225.39 MU was recorded in the month Apr-09.

2.1.1 Targets / Actual Generation

The target for Annual Thermal Generation of CSPGCL was 13015.40 MU. The actual thermal generation was **13292.91** MU which is 102.13 % of Target. The generation during the year 2009-10 is **13292.91** MU which is 9.30% more than the previous year generation of 12161.32 MU.

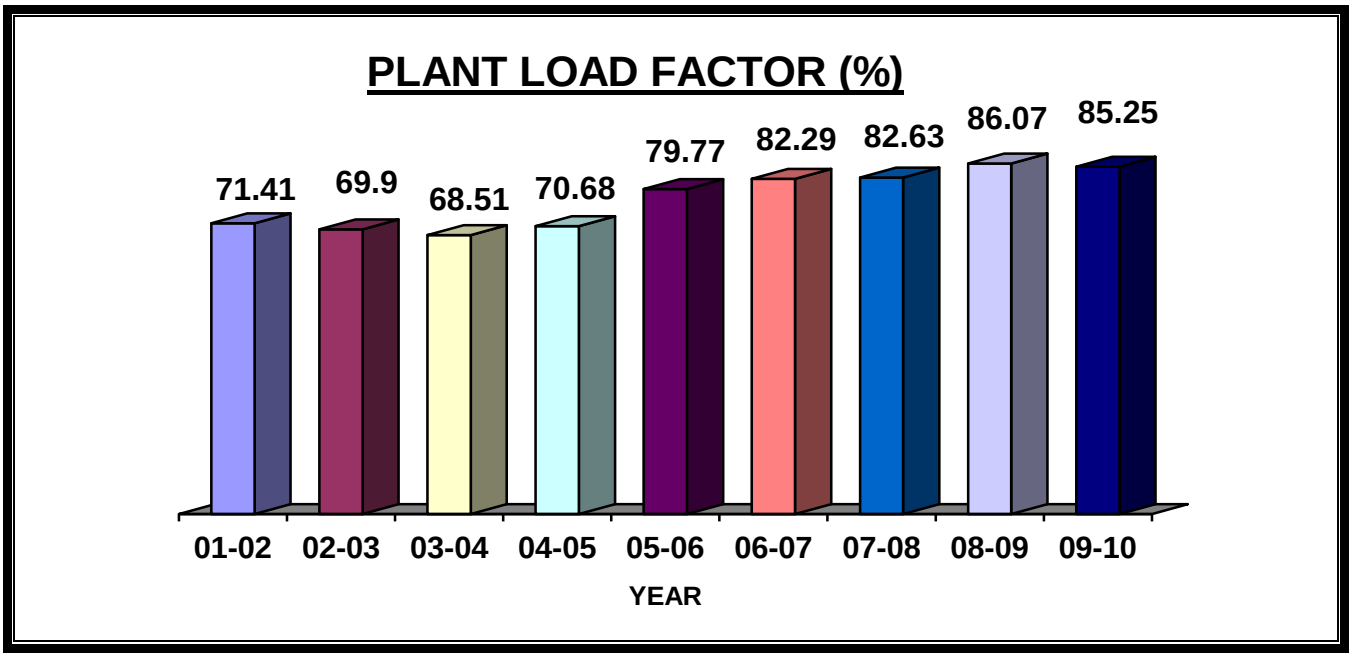
CSPGCL thermal generation since the year 2001-02 is indicated below:



2.1.2 **Plant Load Utilization Factor (PLF in %)**

Annual Plant Load Factor of Thermal Station of CSPTCL in the year 2009-10 is 85.25%. In the previous year i.e.2008-09, it was 86.07%.

PLF of CSEB thermal Plants since the year 2001-02 is depicted below.



2.1.3. **Plant Availability Factor**

The availability factor of Thermal generating units of CSEB during the year 2009-10 is 89.35% as compared to 90.87% in the previous year 2008-09.

2.1.4 **Planned Maintenance**

Loss of generation due to planned outages (annual overhauls) for CSEB was 6.19% of installed capacity generation in 09-10 as compared to 5.42% in the year 08-09.The details of AOH of Thermal generating units are given in enclosed annexure.

2.1.5. **Forced Outages**

The loss of generation due to forced outages at various thermal power stations of CSEB during 09-10 is 4.45% of installed capacity generation as against 3.71% in the year 08-09.Total number of tripping during the year is 289 .

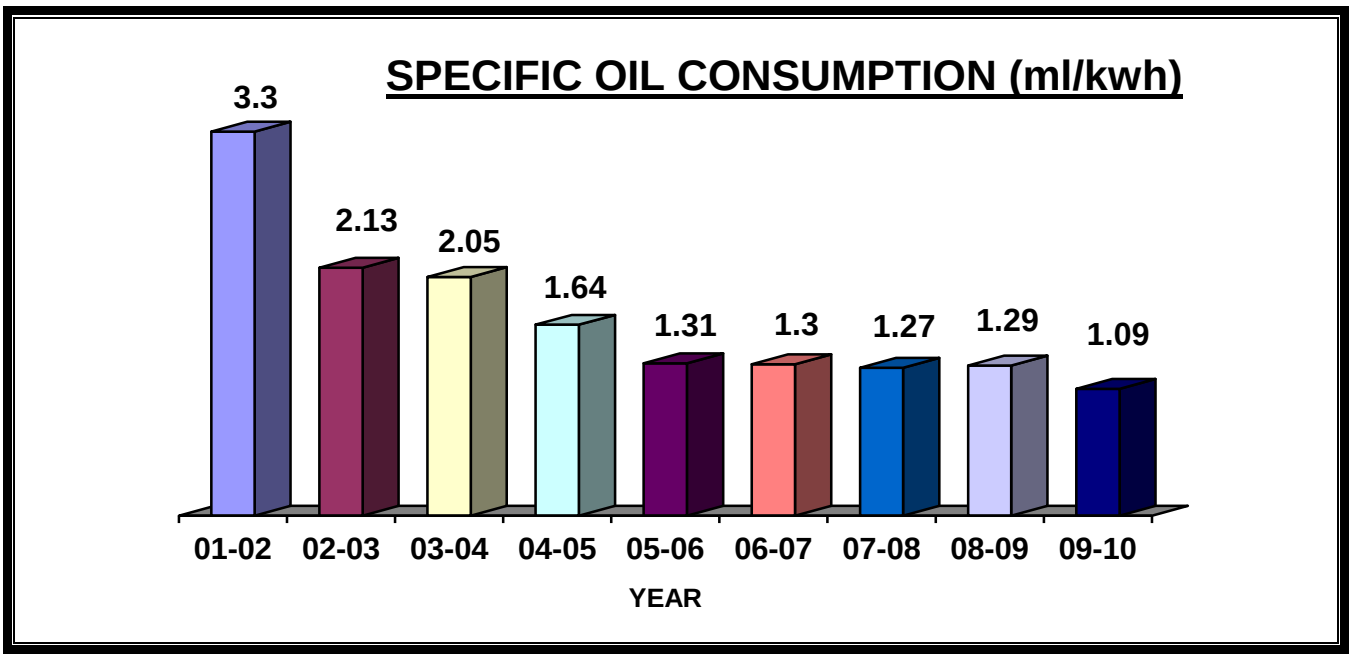
2.1.6 **Partial Losses**

The generation loss due to partial loss during the current year is 4.35% of installed capacity generation against 4.92% during 2008-2009.

2.1.7 **Fuel Oil Consumption**

The specific fuel oil consumption of CSEB during the year 09-10 is 1.093 ml/Kwh which is 0.2 ml/kwh less than that of the year 08-09.

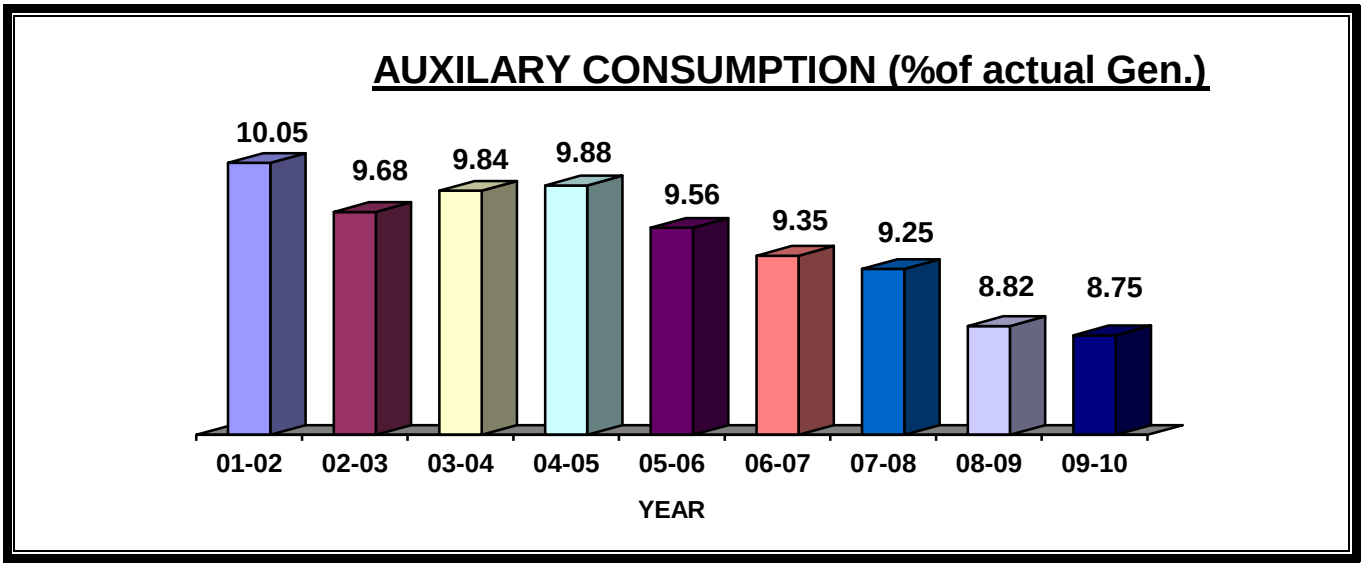
The specific fuel oil consumption of CSEB thermal Plants since the year 2001-02 is depicted below.



2.1.8 **Auxiliary Consumption**:-

Percentage Auxiliary consumption in the thermal stations of CSEB during the year was 8.79% as against 8.75% in the previous year 2008-09.

The Auxiliary consumption of CSEB thermal Plants since the year 2001-02 is depicted below.



2.2 **HYDEL GENERATION**:-

2.2.1 Target/Actual

The total generation target for the stations situated in the state is 346.00 MU. The total hydel generation achieved was 247.00 MU which is 71.38% of target.

Of the total 247.00 MU, the units generated by Bango Hydel are 214.00 MU, 18.95 MU by Gangrel HPS & 6.63 MU by Sikasar HPS. In addition to this, the Mini Hydel (850 KW) korba west has generated 7.26 MU.

The Hydel units were run as per the running hours conveyed by the Water Resource Dept. of state Govt., time to time & system requirement.

2.2.2 Reservoir Levels

Month wise levels of reservoirs of Hydel Stations of Bango on the first & last day of the month, along with the comparison with last year levels, are given at Table No.

B. Central Sector Generation & Share of CSEB

The share of CSEB in Central Sector units as on 31.03.10 is given in enclosed sheet.

C. Un schedule Inter change (Over drawl/ under drawl)

During the year 2009-10, CSEB has **under drawl** of 2011.80 MU from the grid. Now days CSEB is not only to selling the power but also under draw from the grid. The UI rates have also been implemented w.e.f 01.04.2009.The details are as shown under:

Frequency (Hz) Vs UI rate (Rs.) w.e.f 1st April, 2009

S.No.	Freq	UI Rate	S.No.	Freq	UI Rate	S.No.	Freq	UI Rate	S.No.	Freq	UI Rate
0	49.00	*7.35*									
1	49.02	*7.35*	**26**	49.52	*4.68*	**51**	50.02	*1.68*	**76**	50.52	**ZERO**
2	49.04	*7.35*	**27**	49.54	*4.56*	**52**	50.04	*1.56*	**77**	50.54	
3	49.06	*7.35*	**28**	49.56	*4.44*	**53**	50.06	*1.44*	**78**	50.56	
4	49.08	*7.35*	**29**	49.58	*4.32*	**54**	50.08	*1.32*	**79**	50.58	
5	49.10	*7.35*	**30**	49.60	*4.20*	**55**	50.10	*1.20*	**80**	50.60	
6	49.12	*7.35*	**31**	49.62	*4.08*	**56**	50.12	*1.08*	**81**	50.62	
7	49.14	*7.35*	**32**	49.64	*3.96*	**57**	50.14	*0.96*	**82**	50.64	
8	49.16	*7.35*	**33**	49.66	*3.84*	**58**	50.16	*0.84*	**83**	50.66	
9	49.18	*7.35*	**34**	49.68	*3.72*	**59**	50.18	*0.72*	**84**	50.68	
10	49.20	*7.35*	**35**	49.70	*3.60*	**60**	50.20	*0.60*	**85**	50.70	
11	49.22	*7.18*	**36**	49.72	*3.48*	**61**	50.22	*0.48*	**86**	50.72	
12	49.24	*7.01*	**37**	49.73	*3.36*	**62**	50.24	*0.36*	**87**	50.74	
13	49.26	*6.84*	**38**	49.76	*3.24*	**63**	50.26	*0.24*	**88**	50.76	
14	49.28	*6.67*	**39**	49.78	*3.12*	**64**	50.28	*0.12*	**89**	50.78	
15	49.30	*6.50*	**40**	49.80	*3.00*	**65**	50.30	**ZERO**	**90**	50.80	
16	49.32	*6.33*	**41**	49.82	*2.88*	**66**	50.32		**91**	50.82	
17	49.34	*6.16*	**42**	49.84	*2.76*	**67**	50.34		**92**	50.84	
18	49.36	*5.99*	**43**	49.86	*2.64*	**68**	50.36		**93**	50.86	
19	49.38	*5.82*	**44**	49.88	*2.52*	**69**	50.38		**94**	50.88	
20	49.40	*5.65*	**45**	49.90	*2.40*	**70**	50.40		**95**	50.90	
21	49.42	*5.48*	**46**	49.92	*2.28*	**71**	50.42		**96**	50.92	
22	49.44	*5.31*	**47**	49.94	*2.16*	**72**	50.44		**97**	50.94	
23	49.46	*5.14*	**48**	49.96	*2.04*	**73**	50.46		**98**	50.96	
24	49.48	*4.97*	**49**	49.98	*1.92*	**74**	50.48		**99**	50.98	
25	49.50	*4.80*	**50**	50.00	*1.80*	**75**	50.50		**100**	51.00	

(Each 0.02 Hz step is equivalent to 12.0 paise/kWh in the 50.3-49.5 Hz frequency range and to 17.0 paise/kWh in the 49.5-49.2 Hz frequency range)

Provided that Unscheduled Interchange rate shall be capped at 408 paise per kWh ("hereinafter UI Cap Rate") for all generating stations using coal or lignite or gas supplied under Administered Price Mechanism (APM) as the fuel, in case when actual generation is higher or lower than the scheduled generation in the frequency range between 50.3 Hz and up to 49.2 Hz

D. **Additional Power Purchase**:-

During the year 2009-10, the power position of CSEB has improved a lot and power of about 194.64 MU was only purchased under SWAP basis through NVVNL from J&K.

F. **Sale of power.**

During the year 2009-10 the power sold by CSEB through different traders has been about for 3146 MU. The details of power sold, power purchase and swap power from various utilities every month from April-09 to March-10 is given from page 77 To 81.

G. Grant of Open Access & UI Billing

(i) During the year 2009-10 open access was granted to 37 no customers & 2434.754MU transactions were done through open access. Various charges received by SLDC from Open Access Customer and different RLDC are tabulated below:

CHARGES PAYABLE BY OPEN ACCESS CUSTOMERS DURING THE YEAR 2009-10

S.No	PARTICULAR	AMOUNT (RS)
1	Application Charges	44,36,150

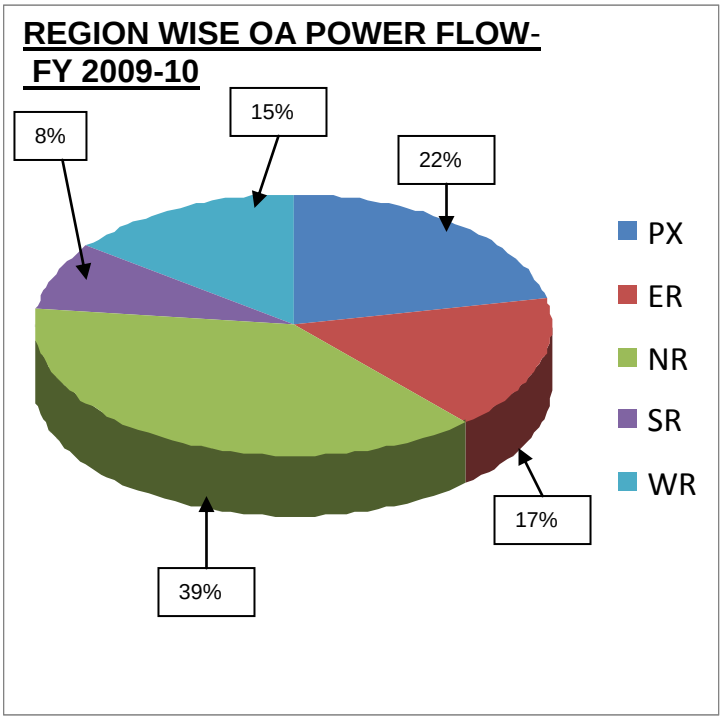
CHARGES RECEIVED FROM DIFFERENT RLDC DURING THE YEAR 2009-10

S.No	PARTICULAR	AMOUNT (RS)
1	SLDC Charges	1,31,10,750
2	Transmission Charges	12,87,00,216
3	Operating Charges (PX)	8,04,000
4	Operating Charges (IEX)	76,46,000

(ii) In the Year 09-10, 37 no of STOA (OAC) were involved. The STOA OAC customers have marketed 1,464,956.13 MWH (39%) of the STOA power to the Northern Region (NR), 319,636.26 MWH (8%) to the Southern Region (SR), 556,137.55 MWH (15%) to the Western Region (WR), 625,385.16 MWH (17%) to the Eastern Region (ER) and 822,132.23 MWH (22%) to the Power exchange.

Total power schedule under STOA during the FY 2009-10 was **37, 88,247.33 MWH**

REGION	MWH	%age
PX	822,132.23	22%
ER	625,385.16	17%
NR	1,464,956.13	39%
SR	319,636.26	8%
WR	556,137.55	15%
TOTAL	**3,788,247.33**	



List of Traders were involved in the trading business of STOA power are given in the Table:

TRADER	ENERGY	
	in MWH	in % age
CIAL CSEB	9,831.16	0.26%
DD	106,260.00	2.80%
DNH	153,972.00	4.06%
GMRETL	159,777.35	4.22%
IEX	624,617.10	16.49%
IEXL	354.63	0.01%
INSTINCT	80.00	0.00%
KISPL	629,245.20	16.61%
LANCO	1,106,995.82	29.22%
MPPL	629.60	0.02%
MPPL MPSEB	7,546.80	0.20%
MPSEB	5,040.00	0.13%
NVVNL	273,535.35	7.22%
PTC	4,432.00	0.12%
PTC LTD	90,762.89	2.40%
PX	154,494.91	4.08%
PXI	43,020.22	1.14%
PXIL	490.00	0.01%
RPGPTCL	3,731.80	0.10%
RPTCL	725.20	0.02%
TPC MSEB	1,080.00	0.03%
TPTCL	406,425.30	10.73%
UPPCL	5,200.00	0.14%
TOTAL	**3,788,247.33**	

The OAC availed the STOA for the off peak hours i.e. from 0000-1700 hrs and 2300-2400 hrs. For the peak hours, almost each of them has an agreement with licensee (CSPDCL) for the sale of power.

IMPORTANT EVENTS/SYSTEM HAPPENING IN THE YEAR 2009-10

IMPORTANT EVENTS:-

1) Commissioning of 40MVA Xmer at 132 KV Balod S/s, charged on 27.03.2010
2) Commissioning of new S/s with 40 MVA Xmer at 132 KV Bagbhera, charged on 03.07.2009.
3) Commissioning of S/s with installation of 40 MVA transformer at 132 KV S/s Chakrabhata charged on 26.10.2009
4) Installation of 3rd 160 MVA Xmer at 220 KV Raigarh charged on 05.07.2009.
5) Installation of 2nd 40 MVA Xmer at 132 KVA Adbhar charged on 05.07.2009
6) Installation of 160 MVA Xmer at 220 KV Thelkadih charged on 04.08.2009
7) Installation of 2nd 40 MVA Xmer at 132 KV Sarang-garh charged on 13.10.2009.
8) Installation of 2nd 40 MVA Xmer at 132 KV Jhalab charged on 17.11.2009.
9) Installation of additional 20 MVA Xmer at 132 KV Dongargarh charged on 30.12.2009.
10) Installation of 2nd 40 MVA Xmer at 132 KV Kanker charged on 18.01.2010.
11) Installation of 2nd 40 MVA Xmer at 132 KV Gurur charged on 27.02.2010.
12) Augmentation of 40 by 63 MVA Xmer at 132 KV Kawardha charged on 26.05.2009.
13) Augmentation of 40 by 63 MVA Xmer at 132 KV Kachna charged on 04.06.2009.
14) Augmentation of 16 by 40 MVA Xmer at 132 KV Bishrampur charged on 02.07.2009
15) Augmentation of 40 by 63 MVA Xmer at 132 KV Ruabandha charged on 31.08.2009.
16) Augmentation of 20 by 40 MVA Xmer at 132 KV Saja charged on 13.11.2009.
17) Augmentation of 40 by 63 MVA Xmer at 132 KV Beergaon charged on 21.11.2009.
18) Installation of 10 MVAR Capacitor Bank at 220 KV Thelkadih charged on 15.09.2009
19) Replacement of failed 40 MVA Xmer at 132 KV Beergaon charged on 27.04.2009

20) Installation of 40 MVA Xmer to replace the failed Xmer at 132 KV Chakrabhata Charged on 19.02.2010

21) First scheduling of the NSPCL generating station, the joint venture of SAIL & NTPC has been started on 22.04.09.

22) NSPCL 250MW unit#1 generating station, joint venture of SAIL & NTPC has been Commercially declared on 22.04.09

23) NSPCL 250MW unit#2 generating station, joint venture of SAIL & NTPC has been Commercially declared on 20.10.09

24) Separate web site for SLDC (sldccg@gov.in) has been launched on 17-11-2009 as per the statutory requirement. This website has unique feature of real time data of generation of different power houses, CPP & IPPs, Central sector drawls, demand & availability of power & sale of power by STOA and bilateral agreements.

HIGHLIGHTS YEAR:- 2009-10 Vs 2008-09

			2009-10	2008-09
A	**Installed Capacity / Share**			**TOTAL**
1	Thermal OWN	MW	1780	1780
2	Hydel OWN	MW	137	137
3	Mini/Micro OWN	MW	1.7	0.85
4	**TOTAL**	MW	1918.70	1917.85
5	CENTRAL SECTOR : WR (AS ON 31 ST MARCH)	MW	521.00	707.51
6	CENTRAL SECTOR : ER (AS ON 31 ST MARCH)	MW	21.82	21.00
	HIRAKUD : ER (AS ON 31 ST MARCH)	MW	1.82	1.98
7	**TOTAL**	MW	544.64	730.49
B	**GENERATION**			
I	**THERMAL**			
1	Thermal Target	MU	13015.4	11510.37
2	Thermal Generation	MU	13292.91	12161.32
3	% Achievement	%	102.13	105.66
4	Plant Load Factor	%	**85.25**	**86.07**
II	**HYDEL**			
1	Hydel Target	MU	341	402.00
2	Hydel Generation	MU	247.00	299.06
3	% Achievement	%	72.43	74.39
4	Total Generation Target (TH+HYD)	MU	13356.40	11912.37
5	Actual Generation (TH+HYD)	MU	13539.91	12460.38
6	% Achievement (TH+HYD)	%	101.37	104.60
C	**Power Supply**			
1	CSEB Availability(Ex-Bus)	MU	12369.02	12346.74
2	Central Sector Schedule(Ex-CG periphery)(self share)	MU	4548.095	3998.00
3	Central Sector Schedule(Ex-CG periphery)(un requisioned)	MU	0.00	0.00
4	STOA Power	MU	-2649.01	-1034.00
5	Unschedule Interchange	MU	-2014.88	-1515.00
6	Additional Power Purchase (Ex-CG periphery)	MU	184.91	172.00
7	Sale of Power	MU	-3145.57	-1873.00
8	Injection of CPPs & Other Utilities (Upto 132 KV only)	MU	8254.27	4399.30
D	**C.G. Supply Ex- Power Station Bus**	**MU**	**17550.83**	**16498.04**
	Energy Supplied Ex. Power Station Bus			
1	Maximum Daily	MU	61.40	55.70
2	Average Daily	MU	74.05	44.82
E	**DEMAND MET**			
1	Morning Peak	MW	2518	2518
2	Evening Peak	MW	2880	2840
3	Maximum Met	MW	2880	2840
F	**FREQUENCY REGIME**			
1	% Time Frequency remains between 49.0 to 50.5 Hz	% TIME	89.65	88.33
G	**Specific Oil Consumption**	**ml/kwh**	**1.093**	**1.290**

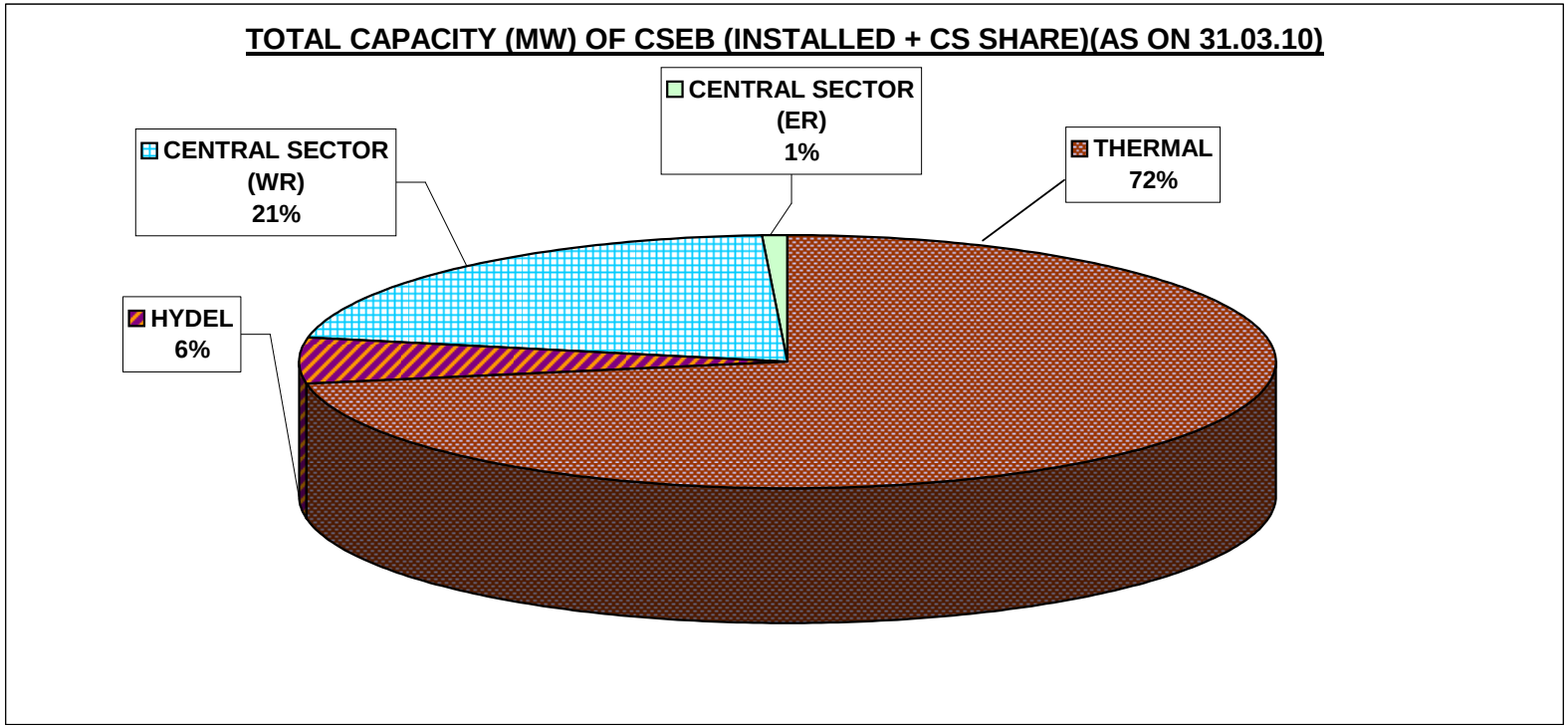
TABLE-1

INSTALLED CAPACITY : THERMAL : CSEB

STATION NAME	POWER HOUSE	UNIT NO.	Unit Capacity	Installed Capacity	Derated Capacity	Year of Commissioning
THERMAL			MW	MW	MW	YEAR
KORBA EAST	II	1	50	200		05/05/1966
		2	50			16/05/1967
		3	50			23/03/1968
		4	50			31/10/1968
KORBA EAST	III	5	120	240		27/04/1976
		6	120			05/04/1981
KORBA WEST	I	1	210	420		21/06/1983
		2	210			31/03/1984
KORBA WEST	II	1	210	420		26/03/1985
		2	210			13/03/1986
CSEB THERMAL			1280	1280		
KORBA EAST EXTN.		1	250	250		FIRST SYN. ON 17.08.07. Commercially declared on 27/01/08
		2	250	250		FIRST SYN. ON 18.02.08. Commercially declared on 30/11/08.
CSEB THERMAL.				1780		

INSTALLED CAPACITY : HYDEL : CSEB

STATION NAME	POWER HOUSE	NO. OF UNITS	Unit Capacity	Installed Capacity	Derated Capacity	Year of Commissioning
HYDEL			MW	MW	MW	YEAR
BANGO		1	40	120		21/03/1994
		2	40			21/11/1994
		3	40			11/01/1995
GANGREL	1	1	2.5	10		22/04/2004
		2	2.5			29/06/2004
		3	2.5			17/10/2004
		4	2.5			05/11/2004
SIKASAR		1	3.5	7		03.09.2006
		2	3.5			03.09.2006
CSEB HYDEL		19	137	137		
MINI/MICRO						
KORBA WEST	1	1	0.85	1.7		12.01.2003
		2	0.85			29.05.2007
TOTAL HYDEL including Mini/Micro				138.7		
CO-GEN PLANT, KAWARDHA		1	6.00	6.00		04.09.2006
TOTAL CSEB THERMAL +HYDEL+CO-GEN				**1924.70**		



TOTAL INSTALLED CAPACITY INCL. CS SHARE AS ON 31.03.10:-2461.51

I. SHARE OF CHHATTISGARH STATE ELECTRICITY BOARD IN CENTRAL SECTOR GENERATING STATIONS IN WESTERN REGION IN MW. (As on 31.03.2010)

S.NO.	POWER STATION	Unit Capacity	Total Capacity	Firm Share	Allocation from unallocated Share	Total Allocated Share
1	Korba Super Thermal Station (Chhattisgarh)	3x200 + 3x500	2100	210	0	210
2	Vindhyachal Super Thermal Station (Madhya Pradesh)	6x210	1260.00	_	0	0
		2x500	1000	_	0	0
		2X500	1000	105	0	105.00
3	Kawas Gas Power Project (Gujarat)	4x106+2x116.1	656.2	_	0	0
4	Gandhar Gas Power Project (Gujarat)	3x144.3 + 224.49	657.39	_	0	0
5	KAPP (Gujarat)	2x220	440	0	0	0
6	TAPP - 3 & 4	2x540	540	48	0	48
7	SIPAT	2X500	1000	158	0	158
TOTAL			7393.59	521	0	520.99

II. SHARE OF C.G. STATE ELECTRICITY BOARD IN EASTERN REGION NTPC GENERATING STATIONS

1	KAHALGAON THERMAL POWER STATION		840			21.82
2	FARRAKA THERMAL POWER STATION		1600			0.00
3	TALCHER THERMAL POWER STATION		1000			0.00
	TOTAL		3440			21.82

III. TOTAL SHARE OF C.G. STATE ELECTRICITY BOARD

1	NTPC WR			521.00	0.00	520.99
2	NTPC ER			0.00	21.82	21.82
TOTAL				521.00	21.82	542.81

TABLE-3

2009-2010 : YEAR'S MAXIMUMS/MINIMUMS

Month	Demand Met						Minimum Registered Demand		Un-Restricted Peak		Thermal Generation		Thermal + Hydel Generation		FREQUENCY	
	DAY'S Peak		Morning peak		Evening Peak										INSTANTANEOUS	INTEGRATED OVER
	MW	DATE	MW	DATE	MW	DATE	MW	DATE	MW	DATE	MW	DATE	MW	DATE	Hz	Hz
Apr-09	**2880**	20.04.09	**2650**	19.04.09	2880	20.04.09	1445	09.04.09	3005	28.04.09	1785	06.04.09	1895	09.04.09	50.27	50.53
May-09	2754	02.05.09	2422	06.05.09	2754	02.05.09	1546	23.05.09	2836	02.05.09	1773	01.05.09	1863	01.05.09	50.62	50.82
Jun-09	2558	28.06.09	2267	12.06.09	2558	28.06.09	1436	08.06.09	2660	28.06.09	1437	07.06.09	1518	07.06.09	50.25	50.59
Jul-09	2551	24.07.09	2207	31.07.09	2551	24.07.09	1393	14.07.09	2621	24.07.09	1657	09.07.09	1698	09.07.09	50.40	50.56
Aug-09	2795	18.08.09	2594	19.08.09	2795	18.08.09	1759	01.08.09	2941	07.08.09	1506	10.08.10	1620	10.08.09	50.14	50.46
Sep-09	2853	28.09.09	2572	19.09.09	2853	28.09.09	1796	28.09.09	2938	25.09.09	1697	22.09.09	1814	22.09.09	50.24	50.49
Oct-09	2764	13.10.09	2406	01.10.09	2764	13.10.09	1715	03.10.09	2847	13.10.09	1768	11.10.09	1879	11.10.09	50.26	50.50
Nov-09	2557	05.11.09	2147	06.11.09	2557	05.11.09	1440	25.11.09	2631	06.11.09	1784	27.11.09	1809	26.11.09	50.36	50.58
Dec-09	2559	28.12.09	2446	11.12.09	2559	28.12.09	1449	02.12.09	2577	28.12.09	1785	23.12.09	1820	23.12.09	50.39	50.57
Jan-10	2612	07.01.10	2378	25.01.10	2612	07.01.10	1646	13.01.10	2687	23.01.10	1788	02.01.10	1812	16.01.10	50.65	51.08
Feb-10	2653	19.02.10	2319	12.02.10	2653	19.02.10	1624	16.02.10	2695	19.02.10	1793	04.02.10	1811	20.02.10	50.41	50.59
Mar-10	2749	19.03.10	2439	27.03.10	2749	19.03.10	1466	01.03.10	2835	19.03.10	1764	19.03.10	1805	19.03.10	50.68	50.69
MAX	**2880**	20.04.09	**2650**	27.03.10	**2880**	19.03.10	**1796**	28.09.09	**3005**	28.04.09	**1793**	04.02.10	**1895**	09.04.09	**50.68**	**51.08**

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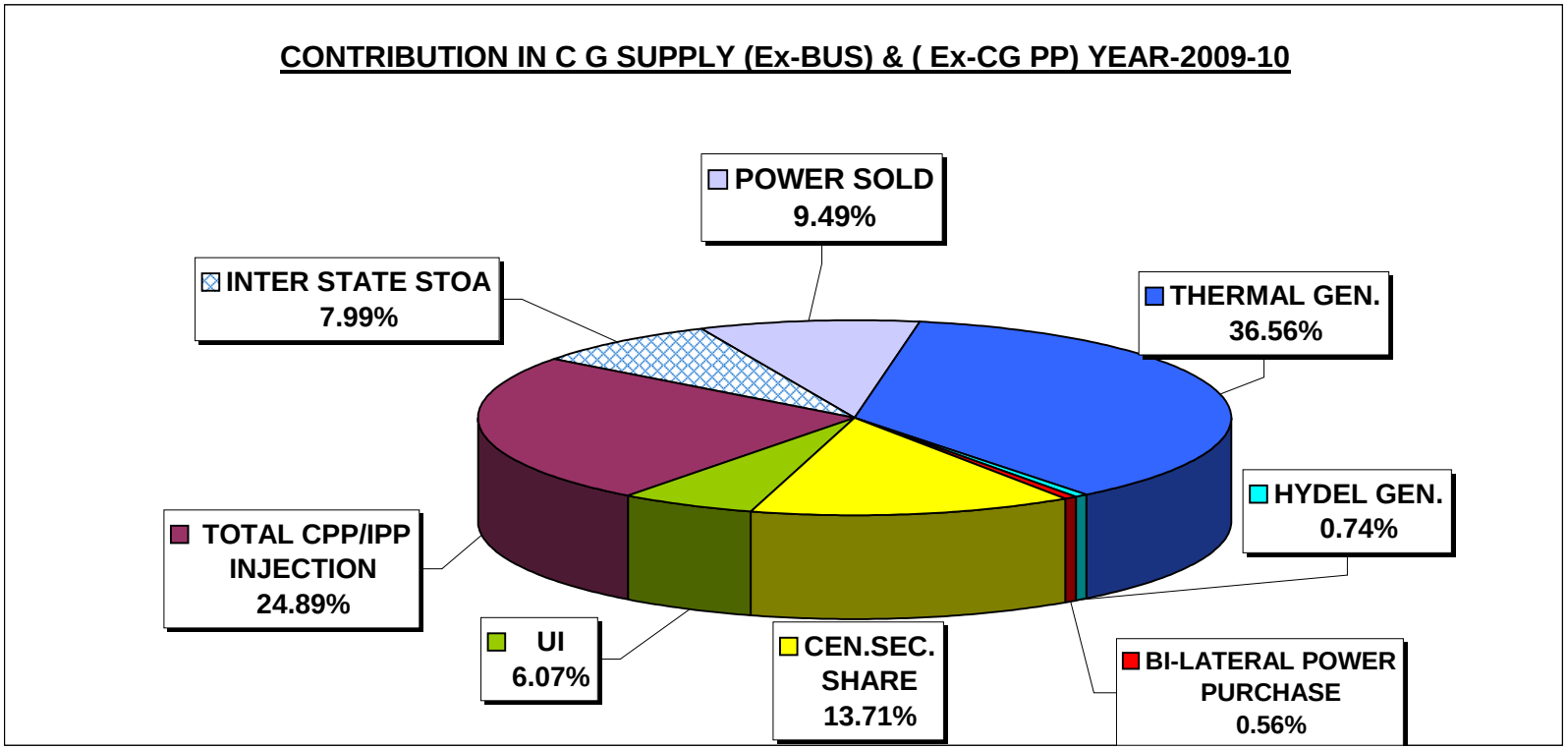
EXECUTIVE SUMMARY

2009-2010 VS 2008-2009

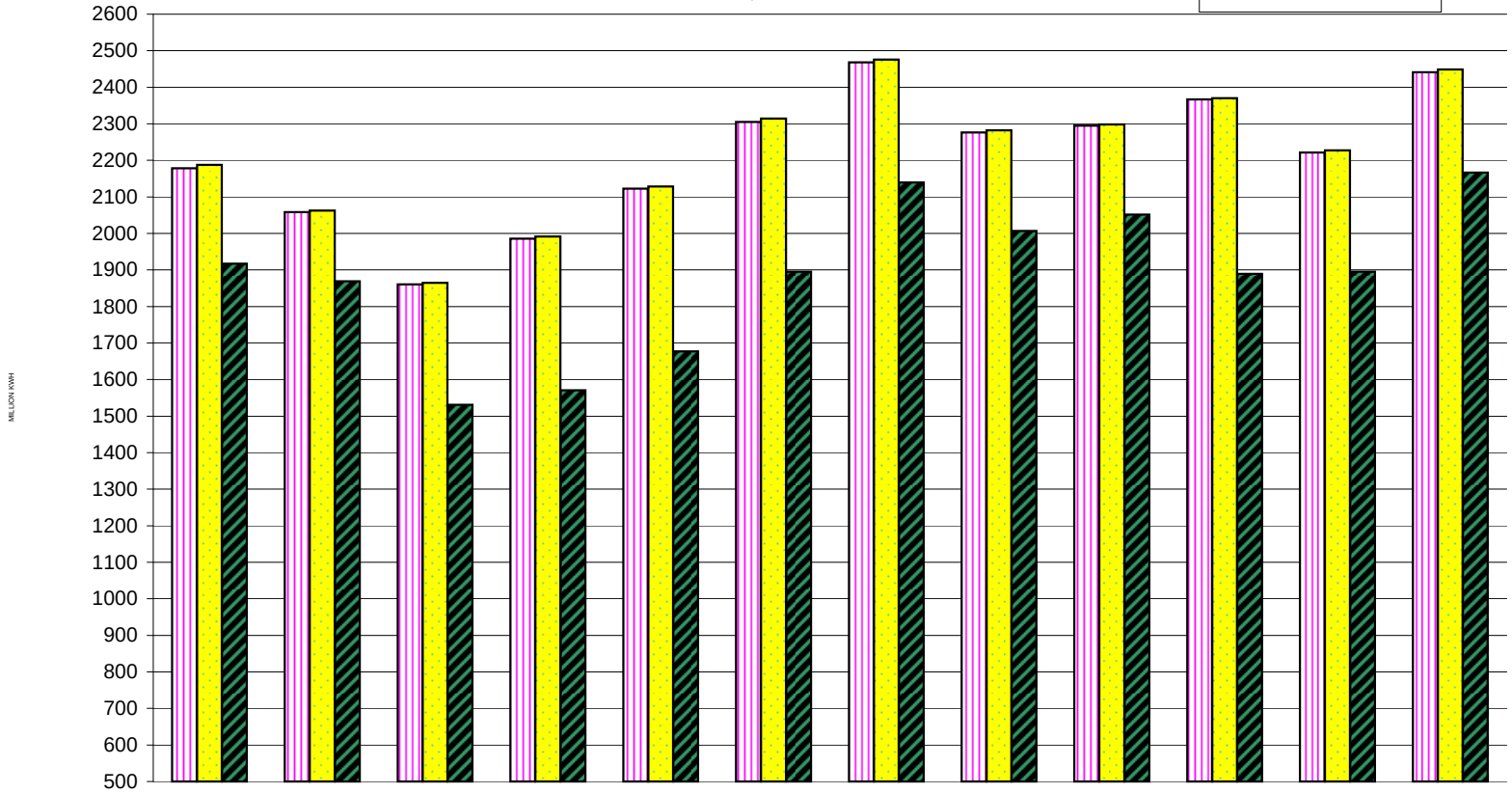
GENERATION / POWER SUPPLY / DEMAND MET

S.NO	PARTICULARS		YEAR 2009-2010	YEAR 2008-2009	Difference	% Change
A	**CSEB GENERATION**					
1	Thermal Generation	MU	13292.91	12161.32	1131.59	9.3
2	Plan Target	MU	13015.40	11510.37	1505.03	13.1
3	Achievement 1 as % of 2	%	102.13	105.66	-3.52	-3.3
4	Plant Load Factor	MU	85.25	86.07	-0.82	-1.0
5	Hydel Generation	MU	247.00	299.06	-52.06	-17.4
6	Plan Target	MU	341.00	402.00	-61.00	-15.2
7	Achievement 5 as % of 6	%	72.43	74.39	-1.96	-2.6
B	**CSEB ENERGY BALANCE**					
1	THERMAL GENERATION (Ex-Bus)	MU	12123.84	12056.06	67.78	0.6
2	HYDEL GENERATION (Ex-Bus))	MU	245.18	290.68	-45.50	-15.7
3	MINI/MICRO HYDEL	MU	7.26	6.67	0.59	8.8
4	**TOTAL AVAILABILITY**	MU	12369.02	12346.74	22.28	0.2
5	INJECTION OF M/s JSPL & BALCO & OTHER CPPs	MU	8254.27	4399.30	3854.97	87.6
7	CSEB Schedule / Share in NTPC (WR)	MU	4651.86	3981.82	670.04	16.8
8	CSEB Schedule / Share in NTPC (ER) INCL HIRAKUD HEP	MU	135.61	191.59	-55.98	-29.2
9	CSEB schedule from Unrequisitioned Power of WR(VSTPS,GGPS & KGPS)	MU	0.00	0.00	0.00	
10[a]	Total Schedule/ Share (WR+ER) (Ex-ISGS)	MU	4787.47	4173.41	614.06	14.7
[b]	Total Schedule/Share (WR+ER)(Ex-CG PP.)	MU	4548.09	4002.00	546.09	13.6
	CSEB schedule from Unrequisitioned Power of WR(Ex-CG PP)	MU	0.00	0.00	0.00	
10[a]	Additional Power Purchase(Ex-WR)	MU	194.64	172.00	22.64	13.2
[b]	Additional Power Purchase(Ex-CG Ph.)	MU	184.91	172.37	12.54	7.3
11	STOA power	MU	-2529.71	-1034.00	-1495.71	144.7
12	Sale of Power	MU	-3145.57	-1873.00	-1272.57	0.0
13	**CSEB Schedule Including Power Purchase & STOA Power**	MU	-942.27	1267.37	-2209.64	-174.3
14	**CSEB Drawal from central sector**	MU	-3984.94	-247.96	-3736.98	1507.1
15	Unscheduled Interchange	MU	-2011.80	-1515.33	-496.47	32.8
16[a]	**TOTAL CSEB SUPPLY EX. AUX.**	**MU**	**16638.35**	**16498.08**	**140.27**	**0.85**
[b]	**AVERAGE DAILY SUPPLY**	**MU**	**45.58**	**45.20**	**0.38**	**0.9**
[c]	**MAXIMUM DAILY SUPPLY**	**MU**	**61.40**	**55.70**	**5.70**	**10.2**
[d]	**MINIMUM DAILY SUPPLY**	**MU**	**37.94**	**30.09**	**7.85**	**26.1**
C	**MAXIMUM DEMANDS**					
[a]	MAXIMUM MET	MW	2880	2840	40	1.4
[b]	MORNING PEAK DEMAND MET	MW	2650	2518	132	5.2
[c]	EVENING PEAK DEMAND MET	MW	2880	2840	40	1.4
[d]	UNRESTRICTED DEMAND	MW	3005	2896	109	3.8
D	**FREQUENCY PROFILE**					
a	Average Frequency	Hz	49.65	49.40	0.25	0.50
b	Maximum Instantaneous	Hz	51.08	50.95	0.13	0.26
c	Minimum Instantaneous	Hz	48.62	48.39	0.23	0.48
d	Maximum Integrated over an hour	Hz	50.68	50.55	0.13	0.26
e	Minimum Integrated over an hour	Hz	48.86	48.66	0.20	0.41
E	**PERCENTAGE OF TIME WHEN FREQUENCY**					
a	Below 48.5 Hz	%	0.000	0.000	0.00	
	Between 48.5 Hz and 48.80 Hz	%	0.120	1.290	-1.17	-91
b	Between 48.5 Hz and 49.00 Hz	%	8.80	8.26	0.54	7
d	Between 49.0 Hz and 49.5 Hz	%	23.10	44.71	-21.61	-48
e	Between 49.5 Hz and 49.8 Hz	%	33.42	26.71	6.71	25
f	Between 49.8 Hz and 50.2 Hz	%	30.29	17.62	12.67	72
g	Between 50.2 Hz and 50.5 Hz	%	2.84	2.63	0.21	8
h	Above 50.5 Hz	%	1.43	0.08	1.35	1688



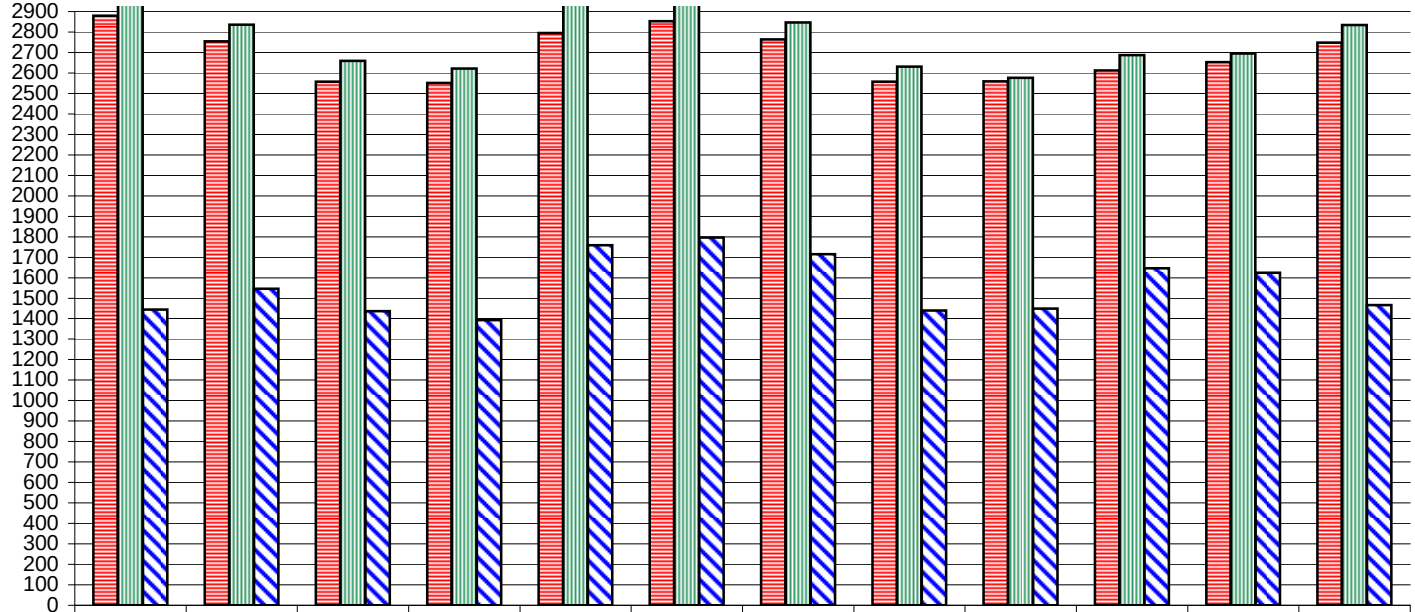
TOTAL SUPPLY - 18880MU

MONTHWISE AVAILABILITY(OWN GEN+CS SHARE+CPP+PP+PS), SUPPLY AND UNRESTRICTED REQUIREMENT YEAR 2009-10 (IN **MU**)

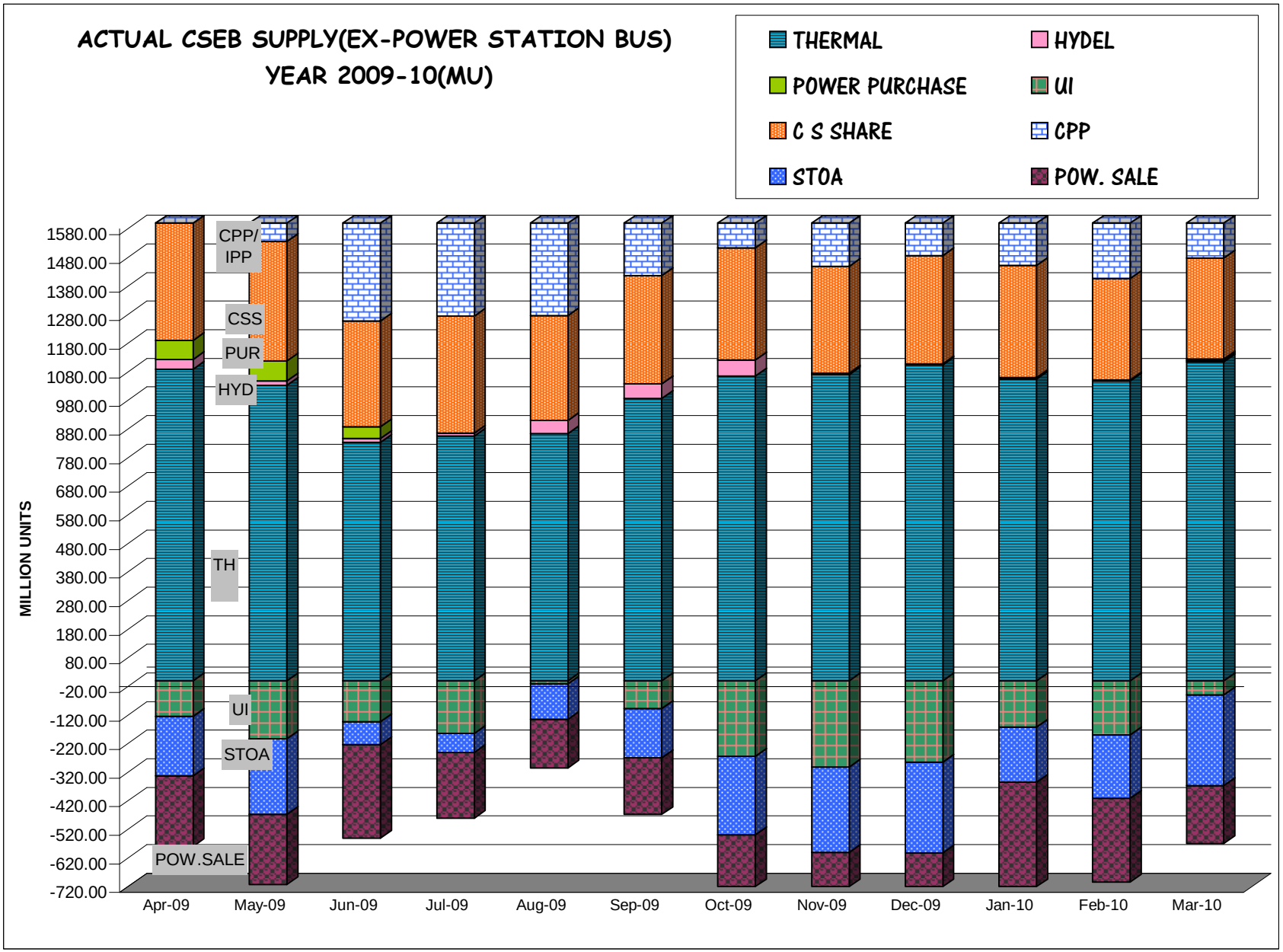


	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10
SUPPLY	2179	2059	1860	1986	2123	2305	2468	2276	2295	2366	2222	2441
UNRES.REQ.	2188	2063	1865	1992	2129	2315	2475	2282	2298	2370	2227	2449
AVAILABILITY	1918	1869	1531	1570	1677	1895	2139	2007	2052	1889	1895	2167

MONTHWISE MAX. DEMAND MET, UNRESTRICTED & MINIMUM DEMAND MW [YEAR 2009-10]



	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
DEMAND MET	2880	2754	2558	2551	2795	2853	2764	2557	2559	2612	2653	2749
UN RES.	3005	2836	2660	2621	2941	2938	2847	2631	2577	2687	2695	2835
MINIMUM	1445	1546	1436	1393	1759	1796	1715	1440	1449	1646	1624	1466


ACTUAL CSEB SUPPLY(EX-POWER STATION BUS)
YEAR 2009-10(MU)
THERMAL
HYDEL
POWER PURCHASE
UI
C S SHARE
CPP
STOA
POW. SALE
MILLION UNITS
1580.00
1480.00
1380.00
1280.00
1180.00
1080.00
980.00
880.00
780.00
680.00
580.00
480.00
380.00
280.00
180.00
80.00
-20.00
-120.00
-220.00
-320.00
-420.00
-520.00
-620.00
-720.00
CPP/
IPP
CSS
PUR
HYD
TH
UI
STOA
POW.SALE
Apr-09
May-09
Jun-09
Jul-09
Aug-09
Sep-09
Oct-09
Nov-09
Dec-09
Jan-10
Feb-10
Mar-10

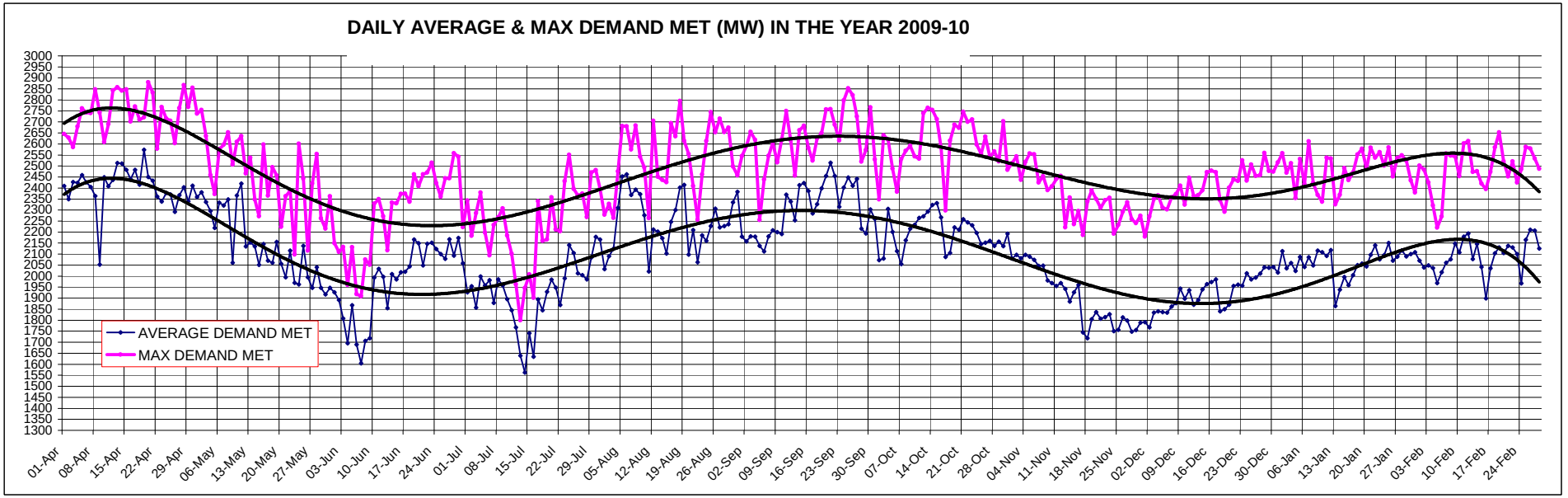
REVISED MONTHWISE ENERGY SUPPLY & CONSUMPTION FOR THE YEAR 2009-10

S. NO.	PARTICULAR	UNIT	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	COMMULATIVE FIG:
1.	GENERATION														
	KORBA EAST THERMAL	MU	289.28	263.55	188.32	210.33	183.53	209.86	262.98	270.34	280.80	281.62	257.35	236.41	2934.36
	KORBA WEST THERMAL	MU	576.06	571.76	527.71	444.79	461.07	535.85	554.73	568.19	570.97	524.89	564.51	619.09	6519.62
	KORBA EAST(2X250 MW) THERMAL	MU	326.20	299.48	202.95	289.56	305.99	336.21	349.35	333.50	357.54	349.81	323.85	364.49	3838.93
	TOTAL THERMAL	MU	1191.54	1134.79	918.98	944.68	950.60	1081.92	1167.06	1172.02	1209.31	1156.32	1145.70	1219.99	13292.91
	HASDEO BANGO HYDEL	MU	32.64	10.62	13.09	9.01	40.18	41.22	49.22	3.35	3.64	3.91	3.54	3.76	214.17
	GANGREL HYDEL	MU	1.18	3.06	0.00	0.00	4.69	5.37	4.42	0.00	0.00	0.04	0.00	0.19	18.95
	SIKASAR HYDEL	MU	0.00	0.00	0.00	0.77	1.22	2.91	1.72	0.00	0.00	0.00	0.00	0.00	6.63
	MINI-HYDEL KORBA WEST	MU	0.03	0.46	0.69	0.59	0.66	0.86	0.87	0.60	0.63	0.61	0.63	0.63	7.26
	TOTAL HYDEL	MU	33.85	14.14	13.78	10.37	46.76	50.35	56.23	3.95	4.27	4.56	4.17	4.57	247.00
	TOTAL CSEB GENERATION	MU	**1225.39**	**1148.93**	**932.76**	**955.05**	**997.36**	**1132.27**	**1223.29**	**1175.97**	**1213.58**	**1160.87**	**1149.87**	**1224.56**	**13539.91**
2.	AUX. CONSUMPTION														
	KORBA EAST THERMAL	MU	26.84	25.61	21.65	26.13	22.34	22.28	25.83	26.56	27.33	27.42	25.39	24.90	302.28
	KORBA WEST THERMAL	MU	49.68	50.69	46.72	40.23	40.64	46.72	47.98	48.56	50.23	46.23	48.05	52.68	568.41
	KORBA EAST(2X250 MW) THERMAL	MU	25.79	24.78	16.82	22.90	23.99	25.54	27.44	25.63	27.40	26.51	24.39	27.20	298.38
	TOTAL AUX.CONSUMPTION (THERMAL)	MU	**102.31**	**101.08**	**85.19**	**89.26**	**86.98**	**94.54**	**101.24**	**100.75**	**104.96**	**100.16**	**97.84**	**104.78**	**1169.07**
	HASDEO BANGO HYDEL	MU	0.12	0.14	0.14	0.14	0.12	0.10	0.11	0.08	0.10	0.09	0.00	0.12	1.27
	GANGREL HYDEL	MU	0.03	0.05	0.01	0.01	0.05	0.06	0.05	0.01	0.01	0.01	0.00	0.02	0.32
	SIKASAR HYDEL	MU	0.01	0.01	0.01	0.02	0.02	0.03	0.02	0.01	0.01	0.01	0.09	0.01	0.23
	TOTAL AUX.CONSUMPTION (HYDEL)	MU	0.15	0.20	0.16	0.17	0.19	0.19	0.19	0.10	0.12	0.11	0.09	0.14	1.82
	TOTAL AUX. CONSUMPTION	MU	**102.46**	**101.28**	**85.35**	**89.43**	**87.16**	**94.73**	**101.43**	**100.85**	**105.08**	**100.27**	**97.93**	**104.92**	**1170.89**
3.	SENT OUT GENERATION														
	KORBA EAST THERMAL	MU	262.44	237.94	166.67	184.20	161.19	187.58	237.15	243.78	253.46	254.20	231.95	211.51	2632.08
	KORBA WEST THERMAL	MU	526.38	521.07	480.99	404.56	420.43	489.13	506.75	519.63	520.74	478.66	516.46	566.41	5951.21
	KORBA EAST(2X250 MW) THERMAL	MU	300.41	274.70	186.13	266.66	282.00	310.67	321.91	307.87	330.14	323.30	299.45	337.29	3540.55
	TOTAL THERMAL	MU	1089.23	1033.71	833.79	855.42	863.62	987.38	1065.82	1071.28	1104.35	1056.16	1047.87	1115.21	12123.84
	HASDEO BANGO HYDEL	MU	32.52	10.48	12.95	8.86	40.07	41.12	49.11	3.27	3.54	3.82	3.54	3.63	212.90
	GANGREL HYDEL	MU	1.16	3.01	-0.01	-0.01	4.64	5.31	4.37	-0.01	-0.01	0.03	0.00	0.17	18.63
	SIKASAR HYDEL	MU	-0.01	-0.01	-0.01	0.76	1.20	2.88	1.70	-0.01	-0.01	-0.01	-0.09	-0.01	6.39
	TOTAL (HYDEL)	MU	33.70	13.94	13.61	10.20	46.57	50.16	56.04	3.84	4.15	4.45	4.08	4.43	245.18
	TOTAL SENT OUT OF CSEB	MU	**1122.93**	**1047.65**	**847.40**	**865.62**	**910.19**	**1037.55**	**1121.86**	**1075.12**	**1108.50**	**1060.61**	**1051.94**	**1119.64**	**12369.02**
4.	CPP INJECTIONS														
	TOTAL INJECTION 132 KV AND ABOVE	MU	**527.68**	**546.54**	**567.82**	**497.69**	**547.48**	**652.99**	**845.47**	**861.00**	**801.88**	**784.74**	**753.64**	**867.34**	8254.27
5	BI LATERAL POWER PURCHASE/IMPORT [EX-WR]														
a	JPL	MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
b	From J&K through NVVNL (SWAP)	MU	71.35	75.13	42.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.36	194.64
c	From JSWPTL (SWAP)	MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d	From PTC	MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL(5)	MU	71.35	75.13	42.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.36	194.64

S. NO.	PARTICULAR	UNIT	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	COMMULATIVE FIG:
6	BI LATERAL POWER SALE/EXPORT [EX-WR]														
a.	NVVN	MU	0.00	0.00	-4.75	-2.45	0.00	0.00	-1.43	-0.19	-0.23	0.00	0.00	0.00	-9.05
b.	PTC	MU	-204.12	-192.69	-135.49	-74.98	-53.76	-86.76	-138.04	-102.96	-73.92	-143.95	-65.78	-124.32	-1396.76
c.	NVVN Swap	MU								-43.08	-52.06	-34.93	-63.34	0.00	-193.40
	TOTAL(5)	MU	-204.12	-192.69	-140.24	-77.43	-53.76	-86.76	-139.47	-146.23	-126.22	-178.87	-129.11	-124.32	-1599.22
c.	IEX	MU	-30.85	-40.80	-172.23	-142.41	-108.86	-102.87	-95.67	-172.30	-126.16	-184.91	-150.75	-68.75	-1396.56
d.	IEX+CSEB BILT.	MU	-234.97	-233.49	-312.47	-219.84	-162.62	-189.63	-235.14	-318.53	-252.38	-363.78	-279.86	-193.07	-2995.78
7	OPEN ACCESS EXCHANGES														
1)	DSP TO BSP	MU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2)	JPAL	MU	-11.428	-12.157	-0.360	-1.905	-4.138	-6.705	-10.197	-11.420	-12.334	-6.417	-6.214	-9.264	-92.540
3)	REAL ISPAT	MU	-5.816	-1.117	-0.725	-0.924	-2.798	-2.058	-4.891	-5.976	-6.112	-1.801	-3.084	-5.397	-40.698
4)	GPIL	MU	-20.937	-19.130	-1.269	-1.530	-5.404	-4.254	-12.163	-16.722	-19.923	-0.525	-10.048	-11.835	-123.742
5)	CSPL	MU	-14.693	-14.693	-0.206	-2.446	-6.634	-4.939	-7.253	-12.011	-13.036	-3.924	-7.855	-14.237	-101.928
6)	VGL	MU	-17.140	-17.656	-1.452	-5.918	-6.201	-4.426	-11.289	-16.476	-17.725	-5.841	-6.594	-10.084	-120.800
7)	MIEL	MU	-37.407	-32.269	-15.138	-5.199	-28.029	-22.219	-36.294	-29.507	-38.069	-27.695	-29.201	-31.215	-332.243
8)	BALCO	MU	-36.564	-65.984	-43.908	-36.374	-40.326	-87.796	-100.378	-107.792	-81.378	-83.233	-80.307	-121.017	-885.057
9)	BIPL	MU	-7.970	-9.132	-0.332	-0.149	-1.415	-0.858	-4.121	-8.869	-9.295	-1.401	-4.459	-7.157	-55.157
10)	RREL	MU	-6.524	-6.384	-0.339	-0.339	-2.463	-2.718	-5.655	-6.470	-7.087	-3.655	-3.527	-6.777	-51.940
11)	SKSIP	MU	-14.693	-13.893	-3.058	-1.479	-3.897	-5.938	-13.054	-2.832	-8.379	-13.633	-11.850	-18.909	-111.615
12)	SEML	MU	-0.259	-11.850	-1.363	-1.082	0.000	-0.977	-4.359	-9.210	-7.821	-1.982	-4.764	-3.534	-47.200
13)	CIAL	MU	-7.316	-11.150	-1.355	-0.627	-3.240	-3.580	-8.820	0.000	0.000	0.000	0.000	0.000	-36.088
14)	IEEL	MU	-4.580	-4.760	-0.125	-0.187	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-9.653
15)	MSPPL	MU	-2.725	-2.833	-0.116	-0.098	-0.132	-0.720	-2.646	-2.846	-3.287	-1.595	-1.644	-1.378	-20.022
16)	SNIL	MU	-7.805	-8.111	-0.059	-0.725	-1.244	-2.161	-4.493	-6.710	-7.347	-3.925	-3.594	-6.016	-52.191
17)	RSPIL	MU	-2.678	-2.833	-0.100	-0.102	-1.869	-1.272	-1.567	-2.832	-3.043	-1.526	-1.405	-2.840	-22.067
18)	MIEL MH	MU		-12.206	-5.080	-2.751	-7.258	-10.295	-16.449	-12.719	-18.249	-14.772	-13.287	-14.853	-127.919
19)	VIL	MU	-1.491	-3.090	-0.274	-0.689	-0.696	-1.064	-2.617	-2.831	-3.206	-1.926	-1.538	-2.103	-21.525
20)	HFAL	MU		-6.189	-0.381	-0.641	-1.612	-1.109	-6.484	-9.435	-9.971	-1.355	-1.829	-2.103	-41.109
21)	AFAL	MU			-0.081	-0.484	-0.856	-0.828	-1.000	-3.406	-3.730	-1.925	-1.862	-2.982	-17.153
22)	HPSL	MU						-1.218	-6.449	-9.452	-9.971	-0.163	-1.401	-1.803	-30.457
23)	AIDCPL	MU						-0.394	-2.325	-3.680	-4.589	-0.780	-1.368	-4.180	-17.317
24)	SPEL	MU							-0.621		-3.946	-1.228	-1.724	-3.140	-10.659
25)	MSPSPL	MU								-1.643	-3.128	0.000	-1.308	-1.665	-7.744
26)	MECBL	MU								-2.053	-4.722	-1.655	-2.691	-4.894	-16.015
27)	JBIL	MU									-3.234	-0.562	-2.748	-3.899	-10.442
28)	SCPL	MU								-1.448	-2.544	-0.394	-1.053	-2.505	-7.943
29)	SSPL	MU									-2.918	-3.207	-2.791	-5.035	-13.950
30)	ISL	MU											-1.566	-1.844	-3.410
31)	UTCL	MU											-1.076	-1.268	-2.344
32)	JEGL	MU											-1.266	-0.829	-2.094
33)	GSPL	MU											-0.111	0.000	-0.111
34)	ACPCL	MU												-1.619	-1.619
	TOTAL	MU	-200.028	-255.438	-75.721	-63.649	-118.211	-165.529	-263.124	-286.340	-305.043	-185.121	-212.167	-304.383	-2434.754
7 (ii)	NSPCL Bilaterals (DD & DNH)	MU	-10.774	-24.816	-38.534	-21.666	-40.652	-13.400	-90.044	-159.278	-108.674	-151.190	-141.806	-169.453	-970.288
8	CEN. SECTOR SCHEDULED ENERGY (EX-ISGS)	MU	430.58	433.47	385.44	427.02	382.13	394.38	407.21	389.18	393.72	407.50	369.33	367.51	4787.47
9	CEN.SEC.ENERGY+POWER PURCHASE-POWER SALE +STOA (Ex-WR Ph)	MU	56.16	-5.14	1.52	121.87	60.65	25.82	-181.10	-374.96	-272.38	-292.59	-126.89	-294.04	-1281.09
10	SCHEDULE POWER INCLUDING BI-LAT. EXCHANGE (Ex-CG periphery)	MU	4.71	-61.41	-34.26	90.01	37.42	-7.50	-227.61	-427.59	-379.25	-328.76	-303.67	-335.22	-1973.14

S. NO.	PARTICULAR	UNIT	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	COMMULATIVE FIG:
11	NET DRAWL FROM CENTRAL SECTOR INCL BI-LATERALS.	MU	-119.59	-263.79	-177.97	-94.37	26.53	-104.24	-492.34	-729.13	-660.47	-490.99	-493.55	-385.03	-3984.94
a	Actual metered Injection (import)	MU	528.04	464.39	445.25	622.53	665.13	614.13	500.68	340.24	384.63	521.11	415.93	453.95	5956.01
b	Actual metered (export)	MU	-647.63	-728.18	-623.22	-716.90	-638.60	-718.37	-993.02	-1069.37	-1045.10	-1012.10	-909.48	-838.98	-9940.95
12 a	OD/UD (+ / -) [11 - 10]	MU	-124.30	-202.38	-143.71	-184.38	-10.89	-96.74	-264.73	-301.54	-281.22	-162.23	-189.88	-49.81	-2011.80
13	CG SUPPLY EXCL.AUX.CONS.	MU	2178.66	2058.58	1860.47	1985.84	2122.80	2304.67	2468.01	2276.36	2295.01	2366.46	2221.51	2440.92	26579.30
14	CG SUPPLY EXCL.AUX.CONS.														
	PER DAY AVERAGE (AS PER 13)	MU	72.62	68.62	62.02	66.19	70.76	76.82	82.27	75.88	76.50	78.88	79.34	78.74	74.05
	PER DAY MAX.	MU	51.72	53.80	52.40	49.77	52.27	61.40	57.20	57.26	57.26	57.27	57.27	57.27	61.40
	PER DAY MIN.	MU	41.08	39.00	39.50	38.91	37.94	46.40	44.60	40.34	44.05	44.34	48.94	45.60	37.94
15	CG CONSUMPTION [CONVEYED BY T&C]	MU	2086.65	2003.27	1812.04	1936.33	2047.76	2188.00	2385.34	2215.30	2247.22	2289.03	2137.02	2323.59	25671.55
16	TRANSMISSION LOSS OF CG SYSTEM	MU	92.01	55.31	48.43	49.51	75.04	116.67	82.67	61.06	47.79	77.43	84.49	117.33	907.75
		%	4.22	2.69	2.60	2.49	3.54	5.06	3.35	2.68	2.08	3.27	3.80	4.81	3.42
17	LOAD SHEDDING	MU	8.90	4.23	4.68	6.07	5.98	9.84	7.47	6.05	3.21	3.62	5.48	8.19	73.72
18	CG UNRESTRICTED REQUIREMENT	MU	2187.56	2062.81	1865.16	1991.91	2128.78	2314.51	2475.48	2282.41	2298.22	2370.08	2226.99	2449.11	26653.02
12	MAXIMUM DEMANDS														
a	MAX.DEMAND MET	MW	2880	2754	2558	2551	2795	2853	2764	2557	2559	2612	2653	2749	2880
	DATE		20.04.09	02.05.09	28.06.09	24.07.09	18.08.09	28.09.09	13.10.09	05.11.09	28.12.09	07.01.10	19.02.10	19.03.10	20.04.09
	TIME (HRS)		20:00	20:00	20:00	21:00	20:00	20:00	21:00	19:00	19:00	19:00	19:00	19:00	20:00
b	MORNING PEAK MET	MW	2650	2422	2267	2207	2594	2572	2406	2147	2446	2378	2319	2439	2650
	DATE		19.04.09	06.05.09	12.06.09	31.07.09	19.08.09	19.09.09	01.10.09	06.11.09	11.12.09	25.01.10	12.02.10	27.03.10	19.04.09
c	OFF-PEAK	MW	2755	2606	2351	2463	2604	2638	2556	2420	2380	2277	2299	2469	2755
	DATE		13.04.09	02.05.09	26.06.09	24.07.09	19.08.09	22.09.09	14.10.09	01.11.09	11.12.09	24.01.10	25.02.10	23.03.10	13.04.09
d	EVENING PEAK MET	MW	2880	2754	2558	2551	2795	2853	2764	2557	2559	2612	2653	2749	2880
	DATE		20.04.09	02.05.09	28.06.09	24.07.09	18.08.09	28.09.09	13.10.09	05.11.09	28.12.09	07.01.10	19.02.10	19.03.10	20.04.09
e	UN-RESTRICTED	MW	3005	2836	2660	2621	2941	2938	2847	2631	2577	2687	2695	2835	3005
	DATE		28.04.09	02.05.09	28.06.09	24.07.09	07.08.09	25.09.09	13.10.09	06.11.09	28.12.09	23.01.10	19.02.10	19.03.10	28.04.09
	TIME (HRS)		19:00	19:00	20:00	21:00	20:00	20:00	19:00	19:00	19:00	20:00	19:00	19:00	19:00
f	AVERAGE DEMAND	MW	3168	2903	2703	2789	2970	3332	3454	3195	3226	3315	3118	3422	3168
13	FREQUENCY (Hz)														
a	MAX (INSTANTANEOUS)	Hz	50.27	50.82	50.59	50.46	50.14	50.49	50.50	50.50	50.41	50.60	50.41	50.69	50.82
b	MIN (INSTANTANEOUS)	Hz	48.94	49.03	48.69	48.62	48.89	48.65	48.70	49.11	49.15	49.06	49.32	48.80	49.32
c	MONTHLY AVERAGE	Hz	49.45	49.68	49.51	49.41	49.41	49.59	49.66	49.94	49.86	49.80	49.85	49.61	49.94
14	CENTRAL SECTOR POWER SCHEDULED BY CSEB AS PER MONTHLY REA OF WRPC														
a	KSTPS	MU	169.91	171.37	144.24	159.23	129.87	145.88	161.39	151.36	157.71	159.71	142.43	141.69	1834.82
b	VSTPS-Stage-1	MU	15.21	15.24	16.90	11.72	9.32	8.60	8.89	7.44	6.74	6.77	5.95	0.00	112.79
c	VSTPS-Stage-2	MU	13.78	15.28	14.32	8.24	5.55	7.32	7.91	6.95	5.68	5.47	5.15	0.00	95.66
d	VSTPS-Stage-3	MU	86.03	81.60	54.62	87.50	85.43	82.56	82.46	77.78	79.69	82.77	75.11	77.25	952.79
e	KAKRAPAR	MU	1.51	1.65	1.58	0.98	0.93	0.90	0.68	0.43	0.36	0.40	0.46	0.00	9.89
f	KGPS(GAS)	MU	2.75	2.13	1.79	1.27	0.58	0.57	0.57	0.38	0.00	0.00	0.00	0.00	10.04
	KGPS(LIQUID)	MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	KGPS(RLNG)	MU	5.22	5.45	5.55	3.44	2.02	1.71	1.74	0.65	0.00	0.00	0.00	0.00	25.78
g	GGPS(GAS)	MU	3.31	3.98	3.11	2.44	1.34	0.82	1.12	0.68	0.00	0.00	0.00	0.00	16.79
	GGPS(RLNG)	MU	5.73	4.46	5.48	3.50	1.69	0.62	1.34	0.75	0.00	0.00	0.00	0.00	23.57
h	TAPS 3 & 4	MU	24.59	24.10	19.04	20.87	22.84	24.97	25.99	21.69	21.88	21.18	20.92	22.38	270.44
i	Share of ER (including infirm	MU	18.56	19.54	8.99	6.75	5.25	4.80	5.19	5.34	10.60	11.26	11.18	12.67	120.13
j	Hirakud HEP	MU	1.27	1.31	1.28	1.31	1.30	1.27	1.31	1.28	1.32	1.32	1.19	1.32	15.48
K	Sipat	MU	82.71	87.36	108.54	119.75	116.01	114.36	108.61	114.45	109.74	118.63	106.94	112.20	1299.29
	TOTAL (19)	MU	430.58	433.47	385.44	427.02	382.13	394.38	407.21	389.18	393.72	407.50	369.33	367.51	4787.47

NOTE: (I) All the demands in MW are inclusive of auxiliary consumption at power stations.
2)The figures of CSEB consumption ,CPP/IPP injection & Transmission Line Loss are to be received from the office of CE (T&C).

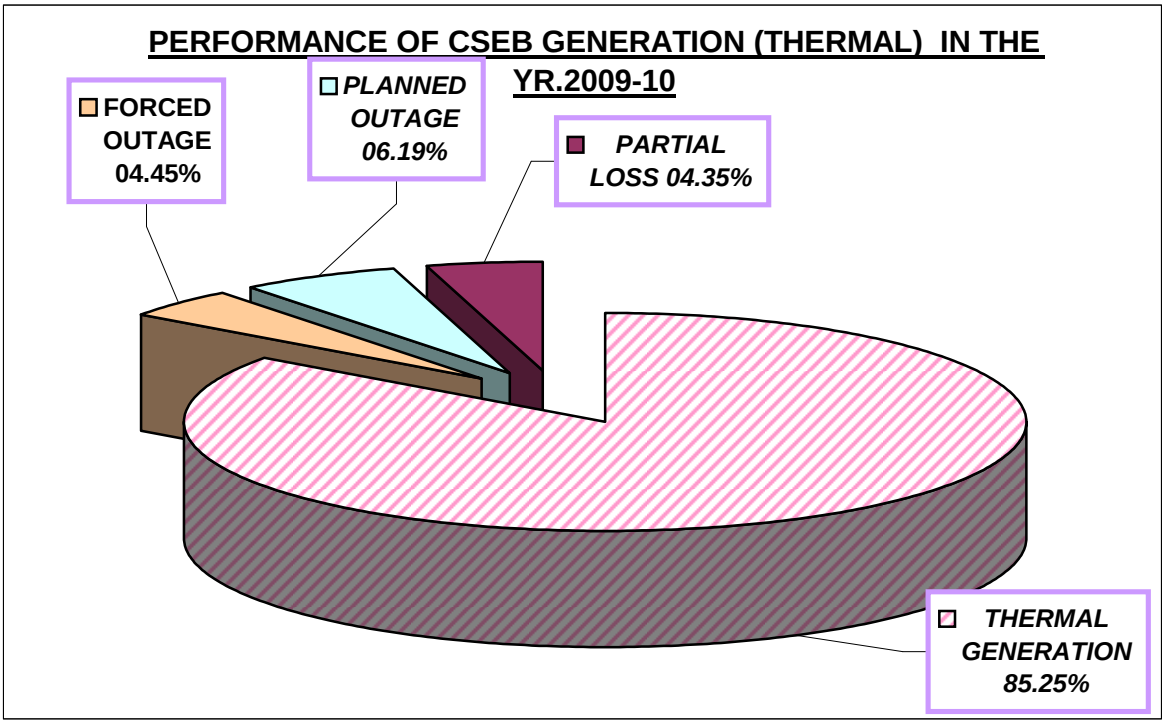

DAILY AVERAGE & MAX DEMAND MET (MW) IN THE YEAR 2009-10
AVERAGE DEMAND MET
MAX DEMAND MET
3000
2950
2900
2850
2800
2750
2700
2650
2600
2550
2500
2450
2400
2350
2300
2250
2200
2150
2100
2050
2000
1950
1900
1850
1800
1750
1700
1650
1600
1550
1500
1450
1400
1350
1300
01-Apr
08-Apr
15-Apr
22-Apr
29-Apr
06-May
13-May
20-May
27-May
03-Jun
10-Jun
17-Jun
24-Jun
01-Jul
08-Jul
15-Jul
22-Jul
29-Jul
05-Aug
12-Aug
19-Aug
26-Aug
02-Sep
09-Sep
16-Sep
23-Sep
30-Sep
07-Oct
14-Oct
21-Oct
28-Oct
04-Nov
11-Nov
18-Nov
25-Nov
02-Dec
09-Dec
16-Dec
23-Dec
30-Dec
06-Jan
13-Jan
20-Jan
27-Jan
03-Feb
10-Feb
17-Feb
24-Feb

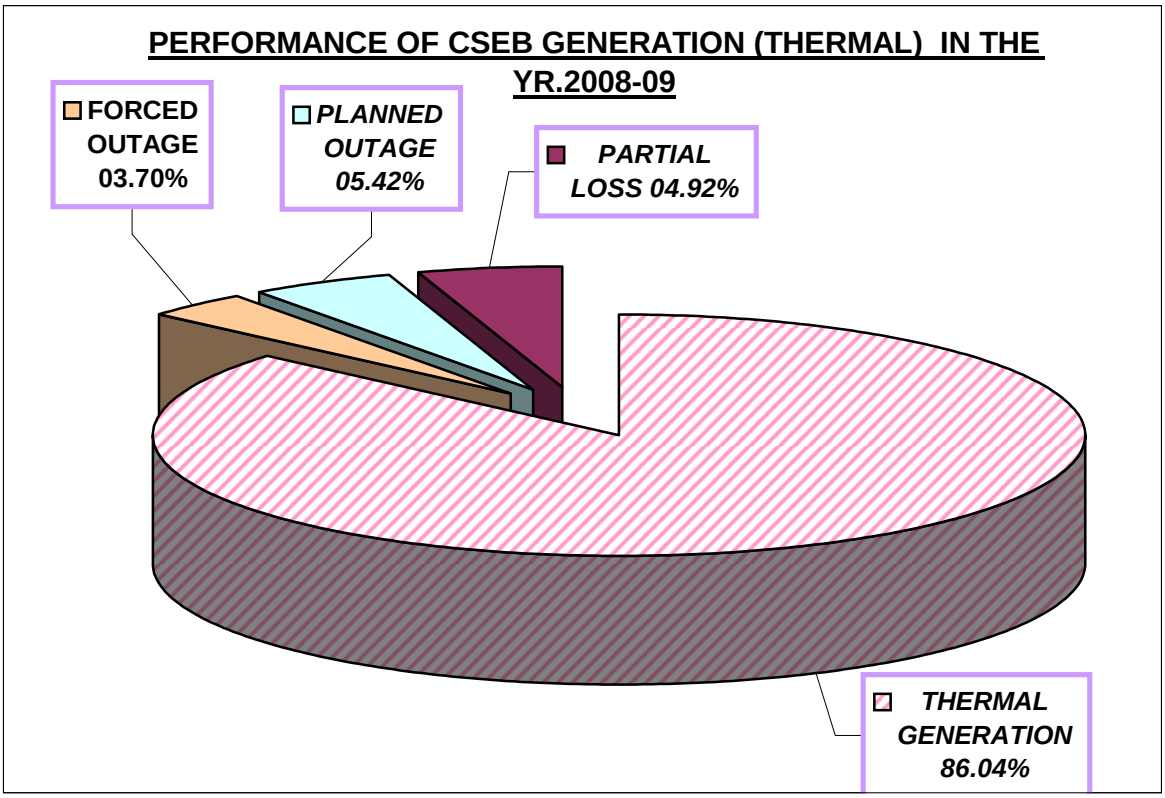
Planned / Actual Maintenance of Thermal/Hydel Units

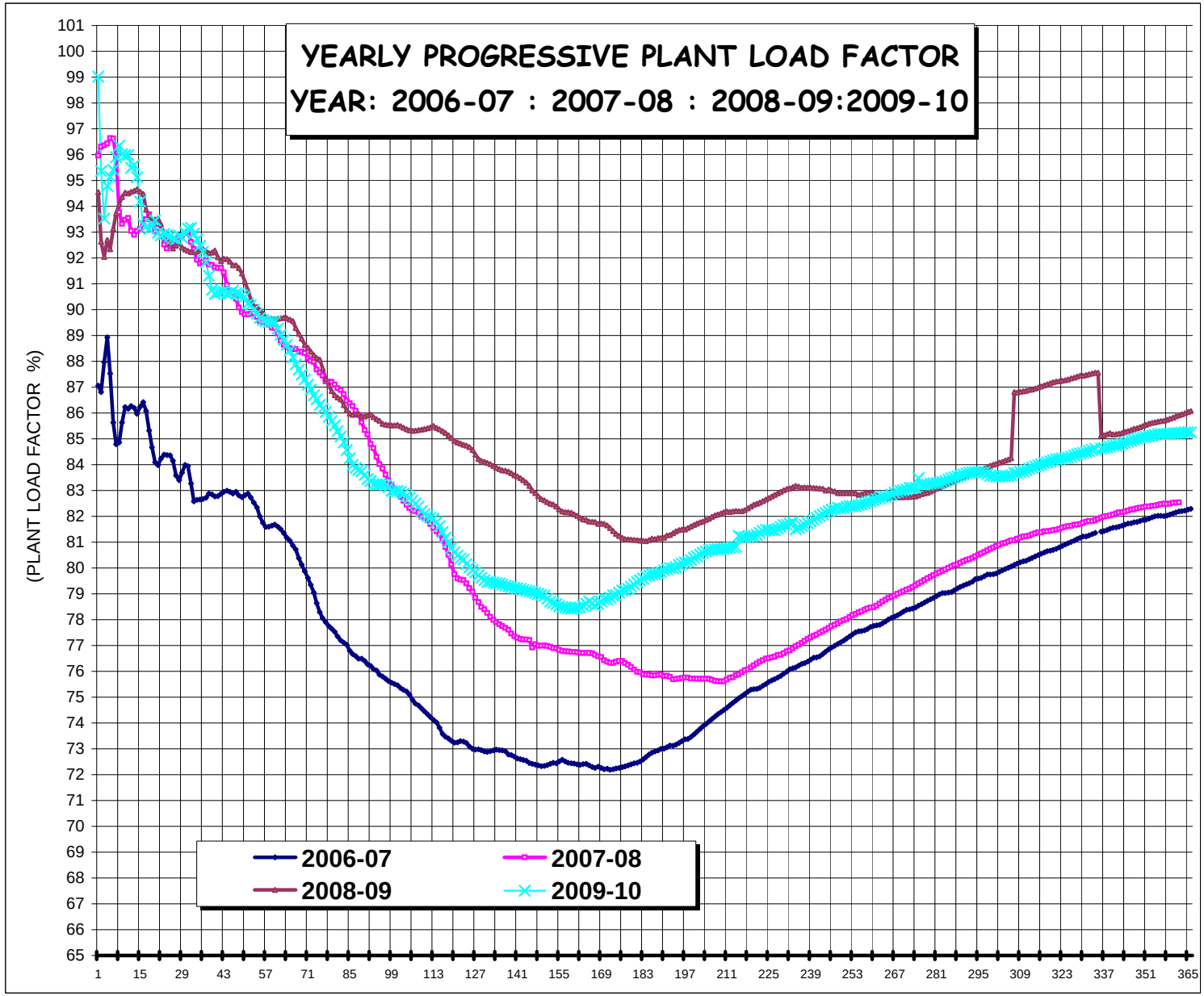
Year : 2009-10

CSEB GENERATING UNITS

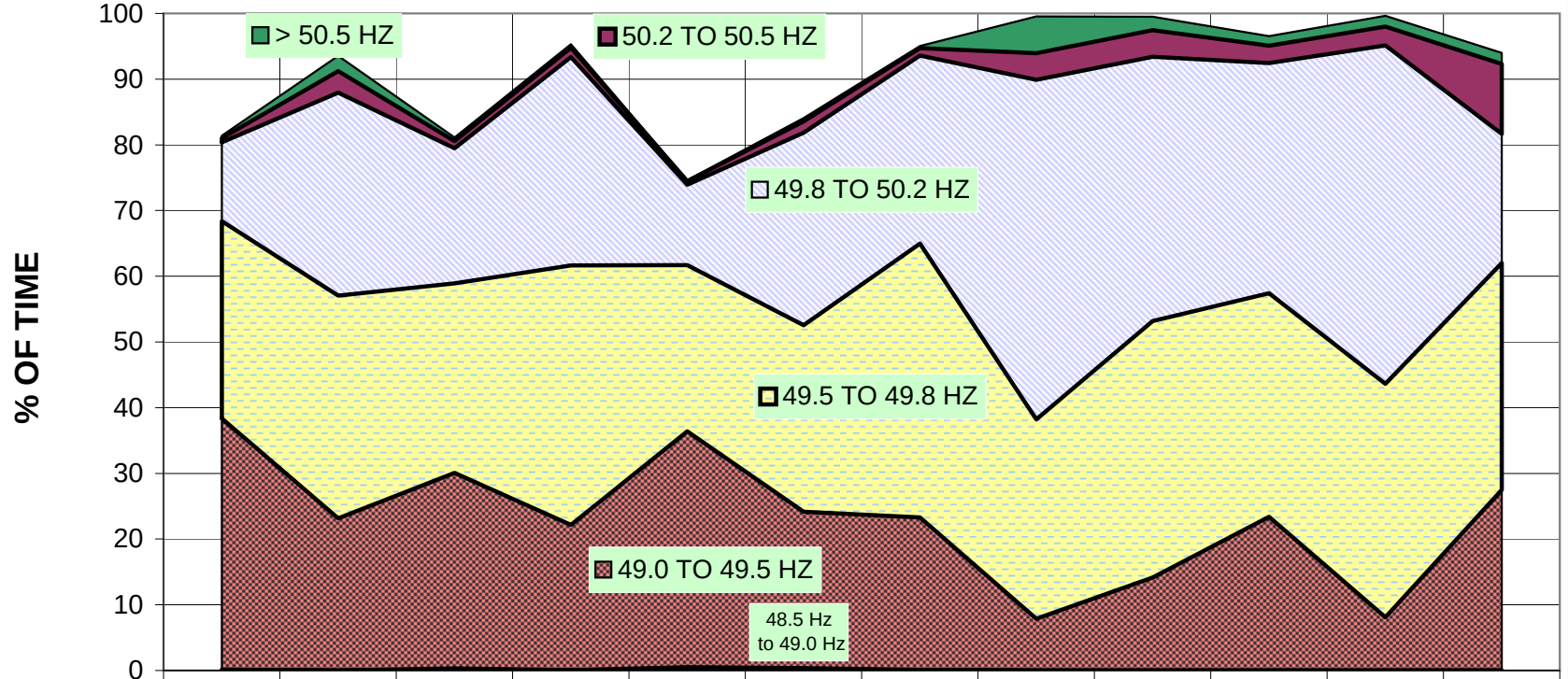
S No.	Station Name	Unit No.	Boiler No.	AOH Period				No. of Days	REMARK
				From		To			
				DATE	TIME	DATE	TIME		
1	KORBA EAST TPS	1	3198	24-May-09	18:00	06-Jun-09	17:50	14	AOH
2		2	3210	05-Dec-09	22:00	11-Dec-09	05:20	7	SHORT PLANNED OUTAGE
3		3	3216	04-Sep-09	07:54	21-Sep-09	08:28	18	AOH
4		4	3224	20-Sep-09	13:25	06-Oct-09	04:12	16	AOH
5		5	4297	07-Jun-09	09:30	29-Jun-09	19:15	23	AOH
6		6	3434	13-Aug-09	05:05	04-Sep-09	07:40	23	AOH
7	KORBA WEST TPS	1	3530	23-Oct-09	00:45	07-Nov-09	00:43	15	AOH
8		2	3555	21-Jun-09	11:40	08-Jul-09	20:56	18	AOH
9		3	3657	10-Jul-09	10:35	21-Aug-09	14:00	43	COH
10		4	3656	21-Aug-09	09:20	09-Sep-09		20	AOH
14	DSPM	1	358	30-May-09	22:53	21-Jun-09	06:39	22	AOH
15		2	359	23-Jul-09	00:30	09-Aug-09	19:15	19	AOH


PERFORMANCE OF CSEB GENERATION (THERMAL) IN THE YR.2009-10
FORCED OUTAGE 04.45%
PLANNED OUTAGE 06.19%
PARTIAL LOSS 04.35%
THERMAL GENERATION 85.25%


PERFORMANCE OF CSEB GENERATION (THERMAL) IN THE YR.2008-09
FORCED OUTAGE 03.70%
PLANNED OUTAGE 05.42%
PARTIAL LOSS 04.92%
THERMAL GENERATION 86.04%

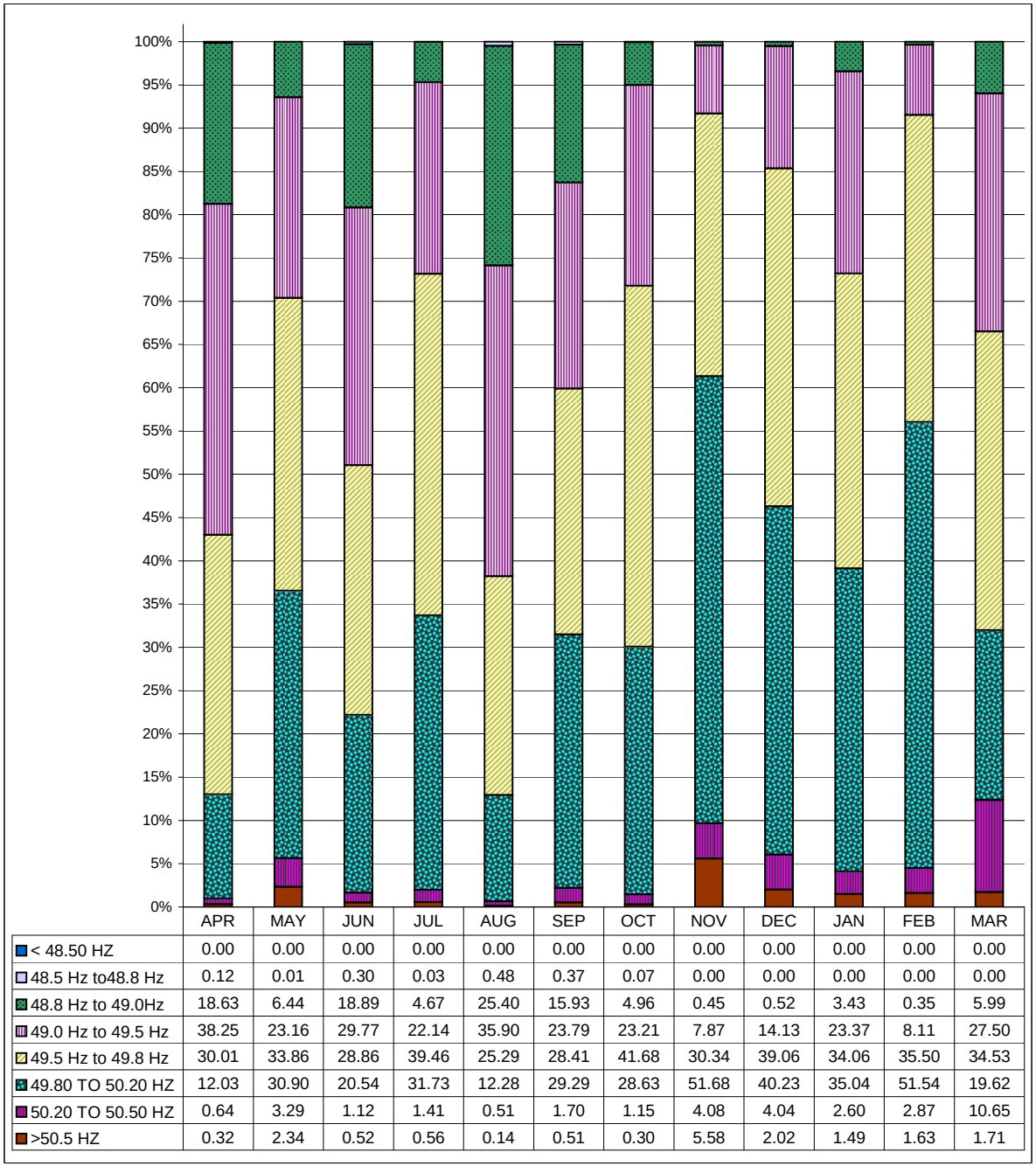

YEARLY PROGRESSIVE PLANT LOAD FACTOR
YEAR: 2006-07 : 2007-08 : 2008-09:2009-10
(PLANT LOAD FACTOR %)
101
100
99
98
97
96
95
94
93
92
91
90
89
88
87
86
85
84
83
82
81
80
79
78
77
76
75
74
73
72
71
70
69
68
67
66
65
1
15
29
43
57
71
85
99
113
127
141
155
169
183
197
211
225
239
253
267
281
295
309
323
337
351
365
2006-07
2007-08
2008-09
2009-10

MONTHWISE FREQUENCY REGIME YEAR : 2009-10



	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
> 50.5 HZ	0.32	2.34	0.52	0.56	0.14	0.51	0.30	5.58	2.02	1.49	1.63	1.71
50.2 TO 50.5 HZ	0.64	3.29	1.12	1.41	0.51	1.70	1.15	4.08	4.04	2.60	2.87	10.65
49.8 TO 50.2 HZ	12.03	30.90	20.54	31.73	12.28	29.29	28.63	51.68	40.23	35.04	51.54	19.62
49.5 TO 49.8 HZ	30.01	33.86	28.86	39.46	25.29	28.41	41.68	30.34	39.06	34.06	35.50	34.53
49.0 TO 49.5 HZ	38.25	23.16	29.77	22.14	35.90	23.79	23.21	7.87	14.13	23.37	8.11	27.50
48.5 TO 49.0 HZ	0.12	0.01	0.30	0.03	0.48	0.37	0.07	0.00	0.00	0.00	0.00	0.00
< 48.5 HZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WR FREQUENCY REGIME YEAR 2009-10



	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
< 48.50 HZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48.5 Hz to48.8 Hz	0.12	0.01	0.30	0.03	0.48	0.37	0.07	0.00	0.00	0.00	0.00	0.00
48.8 Hz to 49.0Hz	18.63	6.44	18.89	4.67	25.40	15.93	4.96	0.45	0.52	3.43	0.35	5.99
49.0 Hz to 49.5 Hz	38.25	23.16	29.77	22.14	35.90	23.79	23.21	7.87	14.13	23.37	8.11	27.50
49.5 Hz to 49.8 Hz	30.01	33.86	28.86	39.46	25.29	28.41	41.68	30.34	39.06	34.06	35.50	34.53
49.80 TO 50.20 HZ	12.03	30.90	20.54	31.73	12.28	29.29	28.63	51.68	40.23	35.04	51.54	19.62
50.20 TO 50.50 HZ	0.64	3.29	1.12	1.41	0.51	1.70	1.15	4.08	4.04	2.60	2.87	10.65
>50.5 HZ	0.32	2.34	0.52	0.56	0.14	0.51	0.30	5.58	2.02	1.49	1.63	1.71

MAX.DAILY SCHEDULED LOAD RELIEF & UNSCHEDULED LOAD SHEDDING IN THE YEAR 2009-10(IN MU)

DAY	Apr-09		May-09		Jun-09		Jul-09		Aug-09		Sep-09		Oct-09		Nov-09		Dec-09		Jan-10		Feb-10		Mar-10	
	SCH	UN-SCH	SCH	UN-SCH	SCH	UN-SCH	SCH	UN-SCH	SCH	UN-SCH	SCH	UN-SCH	SCH	UN-SCH	SCH	UN-SCH	SCH	UN-SCH	SCH	UN-SCH	SCH	UN-SCH	SCH	UN-SCH
1	0.297	0.000	0.297	0.000	0.297	0.000	0.254	0.000	0.207	0.000	0.198	0.000	0.277	0.000	0.277	0.000	0.107	0.000	0.1072	0.000	0.1924	0.000	0.237	0.000
2	0.297	0.000	0.297	0.000	0.084	0.000	0.254	0.000	0.207	0.000	0.198	0.000	0.277	0.000	0.277	0.000	0.107	0.000	0.1072	0.000	0.1924	0.000	0.237	0.000
3	0.297	0.000	0.297	0.000	0.084	0.000	0.254	0.000	0.297	0.000	0.198	0.000	0.277	0.000	0.277	0.000	0.107	0.000	0.1072	0.000	0.1924	0.000	0.237	0.000
4	0.297	0.000	0.174	0.000	0.084	0.000	0.254	0.000	0.201	0.913	0.198	0.000	0.277	0.000	0.277	0.000	0.107	0.000	0.1072	0.000	0.1924	0.000	0.237	0.000
5	0.297	0.000	0.174	0.000	0.084	0.000	0.254	0.000	0.201	0.202	0.198	0.000	0.277	0.000	0.277	0.000	0.107	0.000	0.1072	0.000	0.1924	0.000	0.237	0.000
6	0.297	0.000	0.174	0.000	0.084	0.000	0.292	0.000	0.201	0.117	0.198	0.000	0.231	0.000	0.277	0.000	0.107	0.000	0.1072	0.000	0.1924	0.000	0.237	0.000
7	0.297	0.000	0.174	0.000	0.084	0.000	0.292	0.000	0.201	0.721	0.321	0.000	0.231	0.000	0.277	0.000	0.107	0.000	0.1072	0.000	0.1924	0.000	0.237	0.000
8	0.297	0.000	0.174	0.000	0.084	0.000	0.292	0.000	0.201	1.177	0.321	0.000	0.231	0.000	0.222	0.000	0.107	0.000	0.1072	0.000	0.1924	0.000	0.237	0.000
9	0.297	0.000	0.174	0.000	0.145	0.000	0.292	0.000	0.201	0.154	0.321	0.000	0.231	0.000	0.222	0.000	0.107	0.000	0.1072	0.000	0.1728	0.000	0.224	0.000
10	0.297	0.000	0.174	0.000	0.145	0.000	0.292	0.000	0.201	0.060	0.321	0.000	0.231	0.000	0.222	0.000	0.107	0.000	0.1072	0.000	0.1728	0.000	0.224	0.000
11	0.297	0.000	0.118	0.000	0.145	0.000	0.292	0.000	0.201	0.094	0.321	0.000	0.231	0.000	0.222	0.000	0.107	0.000	0.1072	0.000	0.1728	0.000	0.224	0.000
12	0.297	0.000	0.118	0.000	0.145	0.000	0.292	0.000	0.201	0.525	0.321	0.000	0.231	0.000	0.222	0.000	0.107	0.000	0.1072	0.000	0.1728	0.000	0.224	0.000
13	0.297	0.000	0.118	0.000	0.145	0.000	0.090	0.000	0.201	0.681	0.321	0.558	0.277	0.000	0.222	0.000	0.107	0.000	0.1072	0.000	0.1728	0.000	0.224	0.000
14	0.297	0.000	0.118	0.000	0.145	0.000	0.090	0.000	0.201	0.738	0.413	0.203	0.277	0.000	0.222	0.000	0.107	0.000	0.1072	0.000	0.1728	0.000	0.224	0.000
15	0.297	0.000	0.118	0.000	0.145	0.000	0.090	0.000	0.201	0.000	0.413	0.000	0.277	0.000	0.222	0.000	0.107	0.000	0.1072	0.000	0.1728	0.000	0.224	0.000
16	0.297	0.000	0.118	0.000	0.145	0.000	0.090	0.000	0.201	0.000	0.413	0.000	0.277	0.000	0.222	0.000	0.107	0.000	0.1072	0.000	0.2164	0.000	0.331	0.000
17	0.297	0.000	0.118	0.000	0.145	0.000	0.090	0.000	0.191	0.190	0.413	0.000	0.277	0.000	0.222	0.000	0.107	0.000	0.1072	0.000	0.2164	0.000	0.331	0.000
18	0.297	0.000	0.098	0.000	0.145	0.000	0.090	0.000	0.191	0.000	0.413	0.000	0.277	0.000	0.222	0.000	0.107	0.000	0.1072	0.000	0.2164	0.000	0.331	0.000
19	0.297	0.000	0.098	0.000	0.145	0.000	0.090	0.000	0.191	0.000	0.413	0.000	0.277	0.000	0.150	0.000	0.107	0.000	0.1072	0.000	0.2164	0.000	0.331	0.000
20	0.297	0.000	0.098	0.000	0.145	0.000	0.156	0.000	0.191	0.000	0.413	0.000	0.231	0.000	0.150	0.000	0.107	0.000	0.1072	0.000	0.2164	0.000	0.331	0.000
21	0.297	0.000	0.098	0.000	0.145	0.000	0.156	0.000	0.191	0.000	0.384	0.000	0.231	0.000	0.150	0.000	0.107	0.000	0.1480	0.000	0.2164	0.000	0.331	0.000
22	0.297	0.000	0.098	0.000	0.200	0.000	0.156	0.000	0.191	0.000	0.384	0.000	0.231	0.000	0.150	0.000	0.107	0.000	0.1480	0.000	0.2164	0.000	0.331	0.000
23	0.297	0.000	0.098	0.000	0.200	0.000	0.156	0.000	0.191	0.000	0.384	0.000	0.231	0.000	0.150	0.000	0.107	0.000	0.1480	0.192	0.2024	0.000	0.268	0.000
24	0.297	0.000	0.098	0.000	0.200	0.000	0.156	0.000	0.191	0.000	0.384	0.000	0.231	0.000	0.150	0.000	0.107	0.000	0.1480	0.000	0.2024	0.000	0.268	0.000
25	0.297	0.000	0.087	0.000	0.200	0.000	0.156	0.000	0.191	0.000	0.384	0.000	0.231	0.000	0.150	0.000	0.107	0.000	0.1480	0.000	0.2024	0.000	0.268	0.000
26	0.297	0.000	0.087	0.000	0.200	0.000	0.156	0.000	0.191	0.000	0.384	0.000	0.231	0.000	0.150	0.000	0.107	0.000	0.1480	0.000	0.2024	0.000	0.268	0.000
27	0.297	0.000	0.087	0.000	0.200	0.000	0.207	0.000	0.191	0.000	0.384	0.000	0.231	0.000	0.150	0.000	0.107	0.000	0.1480	0.000	0.2024	0.000	0.268	0.000
28	0.297	0.000	0.087	0.000	0.200	0.000	0.207	0.000	0.191	0.000	0.277	0.000	0.231	0.000	0.107	0.000	0.107	0.000	0.1480	0.000	0.2024	0.000	0.268	0.000
29	0.297	0.000	0.087	0.000	0.254	0.000	0.207	0.000	0.191	0.000	0.277	0.000	0.231	0.000	0.107	0.000	0.107	0.000	0.1480	0.000			0.268	0.000
30	0.297	0.000	0.087	0.000	0.254	0.000	0.207	0.000	0.191	0.000	0.277	0.000	0.231	0.000	0.107	0.000	0.107	0.000	0.1480	0.000			0.268	0.000
31			0.087	0.000			0.207	0.000	0.198	0.000			0.231	0.000			0.107	0.000	0.1480	0.000			0.268	0.000
Tot.	8.90	0.00	4.23	0.00	4.68	0.00	6.07	0.00	6.19	5.57	9.85	0.76	7.71	0.00	6.05	0.00	3.32	0.00	3.77	0.19	5.48	0.00	8.19	0.00

Note: The above figures of load shedding are as per the Load Relief conveyed by the respective Sub-stations telephonically.

Monthly Details of Load Shedding in the year 2009-10				
Month	**Scheduled Relief (MU)**	**Unscheduled LS (MU)**	**Total LS (MU)**	**MAX LS (MW)**
Apr-09	8.90	0.00	8.90	49
May-09	4.23	0.00	4.23	49
Jun-09	4.68	0.00	4.68	49
Jul-09	6.07	0.00	6.07	49
Aug-09	6.19	5.57	11.76	445
Sep-09	9.85	0.76	10.61	306
Oct-09	7.71	0.00	7.71	49
Nov-09	6.05	0.00	6.05	46
Dec-09	3.32	0.00	3.32	18
Jan-10	3.77	0.19	3.96	67
Feb-10	5.48	0.00	5.48	29
Mar-10	8.19	0.00	8.19	55
TOTAL/ MAX	**74.44**	**6.52**	**80.96**	**445**

TOTAL LOAD RELIEF DUE TO BACKING DOWN OF GEN. UINTS

IN THE YEAR 2009-10(IN MU)

DAY	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.130	1.162	4.175
2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.163	0.000	3.560
3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.983	0.000	0.000
4	0.000	0.273	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.876	0.000	0.000
5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	0.942	0.000	0.296	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	0.000	0.000	0.000	0.115	0.000	0.000	0.000	0.000	0.000	0.099	0.951	0.000
8	0.179	0.000	0.000	0.000	0.000	0.000	0.000	0.091	0.000	0.734	3.828	0.000
9	2.081	0.000	0.000	1.374	0.000	0.000	0.061	0.140	0.000	0.000	0.457	0.000
10	0.000	0.000	0.000	0.549	0.000	0.000	0.000	0.362	0.000	0.000	1.251	0.000
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.474	0.000	0.000	0.000	0.000
12	0.000	0.000	0.590	2.681	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.218
13	0.000	0.718	0.000	1.767	0.000	0.000	0.000	0.000	0.000	0.545	0.000	2.930
14	0.000	0.000	0.000	0.992	0.002	0.000	0.000	0.000	0.000	1.339	0.168	0.000
15	0.000	0.000	0.000	0.000	0.040	0.000	0.000	1.646	0.000	1.928	0.121	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.812	0.000	0.000
17	0.000	0.261	0.000	0.000	0.000	0.416	0.000	0.000	0.000	1.012	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.410	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.663	0.000	0.000	0.010	0.000
20	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.291	0.000	0.000	0.000	0.000
21	0.384	0.000	0.000	0.000	0.000	0.000	0.000	0.874	0.000	0.000	0.000	0.000
22	0.412	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.043	0.104	0.000
23	1.645	0.800	0.000	0.000	0.000	0.000	0.000	0.058	0.000	0.000	0.000	0.000
24	0.000	2.813	0.000	0.000	0.000	0.000	0.000	0.000	0.041	0.000	0.000	0.000
25	0.000	7.465	0.107	0.000	0.000	0.112	0.000	0.000	0.000	0.060	0.000	0.000
26	0.000	2.680	0.000	0.000	0.000	0.000	0.000	0.438	0.000	0.500	0.000	0.000
27	0.000	0.000	0.163	0.000	0.000	0.000	0.000	0.000	0.000	0.682	0.000	0.000
28	0.000	0.000	0.196	0.000	0.000	0.000	0.000	0.000	0.000	0.109	0.637	0.000
29	0.000	0.148	0.000	0.000	0.000	0.000	0.000	0.457	0.000	0.375		0.000
30	0.000	0.000	0.000	0.000	0.000	0.245	0.000	0.944	0.441	0.617		0.000
31		0.889		0.000	0.000		0.000		0.206	1.487		0.000
Tot.	5.64	16.09	1.35	7.48	0.04	1.18	0.06	8.44	0.69	16.49	8.69	10.88

Note: The above figures of load Relief due to Backing down are as per the DPR