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NORTHERN REGION GRID REPORT FOR THE MONTH OF SEPTEMBER 2003

A) Summary Report

1. Grid Overview during the Month

During the month of September 2003 the average system frequency was 50.06Hz and frequency remained in the normal range i.e. between 49.0 & 50.5 Hz for 89.47% of the time compared to 79.26% during the last year i.e. September 2002. The average frequency variation index during the month was 1.27. However, large gap between maximum and minimum frequencies and fluctuation in frequency from low to high and vice-versa reminds the need of implementation of free governor operation on all generating units in the region at the earliest.

Overall voltage profile in the grid during the month was satisfactory on most of the 400 kV buses., The minimum voltage recorded at 400 kV Dadri was 380 kV compared to last year i.e. 374 kV. There was no major transmission outage during September 2003.

During September 2003 there was no major grid incident. However there were some minor incident which are reported at annexure-6

2. Commissioning of New Units/Lines/Transformers During the Month :

- a) Nathpa-Jhakri #5 synchronised for the first time on 20.09.2003 at 15.20 hrs.
- b) 400 kV Mandola-Meerut ckt.-I synchronised for the first time on 29.09.2003 at 22.34 hrs.
- c) LILO of 220 kV Panki-Naubasta line at Kanpur on 29.09.2003 at 02.37 hrs.

3. Frequency Profile :

Maximum frequency	51.17	Hz	at	08.04	hours on	23.09.2003
Minimum frequency	48.52	Hz	at	22.09	hours on	20.09.2003
Average frequency	50.06	Hz				

Frequency distribution in %

Hz	< 48.5	<49.0	49.0-50.5	> 50.5
% of time	0.00	0.36	89.47	10.17

Frequency Variation Index

Monthly Average	1.27
Maximum	2.18
Minimum	0.68

4. Power Supply Position :**a. Average Energy/day (Net)**

State / U.T.	Demand met MU/Day	Requirement MU/Day	Shortage MU/Day	Shortage %
Punjab	99.44	102.36	2.92	2.85
Haryana	59.77	60.16	0.39	0.65
Rajasthan	61.99	61.99	0.00	0.00
U.P.	105.86	127.07	21.21	16.69
Uttaranchal	10.45	10.62	0.17	1.60
Delhi	59.76	60.35	0.59	0.98
H.P.	9.53	9.53	0.00	0.00
J & K *	16.64	18.50	1.86	10.05
Chandigarh	3.27	3.27	0.00	0.00
N.F.F./Rail	1.70	1.70	0.00	0.00
Total	428.41	455.55	27.14	5.96

b. Peak MW

State / U.T.	MAX. Demand met MW	MAX. Requirement MW	Shortage MW	Shortage %
	A	B	C	(C/B)*100
Punjab	4947	4947	0	0.00
Haryana	3092	3127	35	1.12
Rajasthan	3233	3233	0	0.00
U.P.	5487	6793	1306	19.23
Uttaranchal	659	709	50	7.05
Delhi	3078	3109	31	1.00
H.P.	533	533	0	0.00
J & K *	1034	1100	66	6.00
Chandigarh	187	187	0	0.00
N.F.F./Rail	70	70	0	0.00
Region	21331	22807	1476	6.47

Diversity Factor = **1.10**

* Approximate and Estimated

5. **Schedule Vs Drawal By the Constituents :**

(All figs in M.U)

State / U.T.	Schedule	Actual Drawal	OD/UD
Punjab	1235.54	1322.25	86.71
Haryana	878.69	1075.64	196.95
Rajasthan	793.00	668.22	-124.78
U.P.	1271.26	1454.42	183.16
Uttranchal	-1.49	-121.63	-120.14
Delhi	1119.42	1008.94	-110.48
H.P.	21.15	-92.91	-114.06
J & K	385.49	412.38	26.89
Chandigarh	110.16	105.90	-4.26
N.F.F./Rail	50.46	51.22	0.76

6. **Inter Regional Exchanges****Energy
M.U.****Peak
MW****Import**

a)	From WR over HVDC Vindhyachal B/B	24.03	400
b)	From WR to over 220 kV Ujjain-Kota	0	0
c)	From ER over HVDC Sasaram B/B	152.31	500
d)	From ER over 220 kV Dehri-Sahupuri	0	0

Export

d)	To WR over HVDC Vindhyachal B/B	38.41	500
e)	To WR (MP) over 220 kV Auraiya-Malanpur	6.40	25
f)	To ER (Bihar) over 220 kV/132kV lines	9.82	30
g)	To Nepal over 132 kV Tanakpur-Mahendernagar	2.93	7
h)	To ER over HVDC Sasaram B/B	0	0

B). Detailed Report**I. Details of Installed/Effective Capacity at the end of September 2003**

	<u>STATION</u>	<u>INSTALLED CAPACITY</u> (MW)		<u>EFFECTIVE CAPACITY</u>	
A	NTPC				
(a)	Badarpur TPS	3x100+2x210	720.00	3x95+2x210	705.00
(b)	Singrauli STPS	5x200+2x500	2000.00	5x200+2x500	2000.00
(c)	Rihand STPS	2x500	1000.00	2x500	1000.00
(d)	Dadri NCTPS	4x210	840.00	4x210	840.00
(e)	Unchahar TPS	2x210 + 2x210	840.00	2x210 + 2x210	840.00
(f)	Tanda TPS	4x110	440.00	4x110	440.00
(g)	Anta GPS	3x88.71+1x153.20	419.33	3x88.71+1x153.20	419.33
(h)	Auraiya GPS	4x111.19+2x109.30	663.36	4x111.19+2x109.30	663.36
(i)	Dadri GPS	4x130.19+2x154.51	829.78	4x130.19+2x154.51	829.78
(j)	Faridabad GPS	2x137.75 +1x156.07	431.57	2x137.75 +1x156.07	431.57
	Sub-Total		8184.04		8169.04
B	NHPC				
(a)	Bairasiul	3x60	180.00	3x60	180.00
(b)	Salal Stage - I	3x115	345.00	3x115	345.00
(c)	Salal Stage - II	3x115	345.00	3x115	345.00
(d)	Tanakpur HPS	3x40	120.00	3x31.4	94.20
(e)	Chamera HPS	3x180	540.00	3x180	540.00
(f)	URI	4x120	480.00	4x120	480.00
	Sub-Total		2010.00		1984.20
C.	NPC				
(a)	RAPS -A	2x220	440.00	1x100+1x200	300.00
(b)	RAPS -B	2x220	440.00	2x220	440.00
(c)	NAPS	2x235	470.00	2x220	440.00
	Sub-Total		1350.00		1180.00
D.	Nathpa-Jhakri	1x250	250.00	1x250	250.00
Total Central Sector (A + B + C)			11794.04		11583.24
2	BBMB				
(a)	Bhakra Complex				
(i)	Bhakra (L)	5x108	540.00	5x108	540.00
(ii)	Bhakra (R)	5x157	785.00	5x157	785.00
(iii)	Ganguwal	1x29.25+1x27.63+1x26.7	83.58	1x29.25+1x27.63+1x26.7	83.58
(iv)	Kotla	1x29.25+1x24.2+1x28.12	81.57	1x29.25+1x24.2+1x28.12	81.57
	Sub-Total		1490.15		1490.15
(b)	Dehar	6x165	990.00	6x165	990.00
(c)	Pong	1x60 + 5x66	390.00	1x60 + 5x66	390.00
	Total BBMB		2870.15		2870.15

contd/-

3	CHANDIGARH				
(a)	Diesel Gen Sets		2.00		1.40
4	DELHI				
	THERMAL				
(a)	Indra Prastha	3x62.5+1x60	247.50	3x62.5+1x60	247.50
(b)	Rajghat	1x15+2x67.5	150.00	1x14+2x67.5	149.00
(c)	Gas Turbines	6x30+3x34	282.00	6x30+3x34	282.00
(d)	Pragati Gas Turbines	2x108+1x114	330.00	2x108 +1x114	330.00
	Total DELHI		1009.50		1008.50
5	HARYANA				
	HYDRO				
(a)	Western Yamuna Canal (WYC)	6x8	48.00	6x8	48.00
	Total Hydro		48.00		48.00
	THERMAL				
(b)	Faridabad (New)	3x60	180.00	3x55	165.00
(c)	Panipat	4x110+2x210	860.00	4x110+2x210	860.00
	Total Thermal		1040.00		1025.00
(d)	Magnum Diesel (IPP)	4x6.3	25.20	4x6.3	25.20
	Total Haryana		1113.20		1098.20
6	HIMACHAL PRADESH				
	HYDRO				
(a)	Giri	2x30.00	60.00	2x30.00	60.00
(b)	Bassi	4x15.00	60.00	4x15.00	60.00
(c)	Binwa	2x 3.00	6.00	2x 3.00	6.00
(d)	Rongtong	4x 0.50	2.00	4x 0.50	2.00
(e)	Andhra	3x 5.65	16.95	3x 5.65	16.95
(f)	Micro Hydel+Killar+Thirot		8.75		8.75
(g)	Nogli	2x 0.25+4x0.50	2.50	2x 0.25+4x0.50	2.50
(h)	Bhabha (H)	3x40.00	120.00	3x40.00	120.00
(i)	Baner (H)	3x 4.00	12.00	3x 4.00	12.00
(j)	Gaj (H)	3x 3.50	10.50	3x 3.50	10.50
(k)	Sal -2	1x 2	2.00	1x 2	2.00
(l)	Gumma	.	3.00	3	3.00
(m)	Ghanvi	2x11.25	22.50	2x11.25	22.50
(n)	Diesel Gen. Sets		0.00		0.00
(o)	Malana (IPP)	2x43	86.00	2x43	86.00
(p)	Baspa (IPP)	3x100	300.00	3x100	300.00
	Total HP		712.20		712.20
7	J & K				
	HYDRO				
(a)	Lower Jhelum	3x35.0	105.00	3x35.0	105.00
(b)	Upper Sindh	2x11.30+3x35.0	127.60	2x11.30+3x35.0	127.60
(c)	Ganderbal	2x3+2x4.5	15.00	2x3+2x4.5	15.00
(d)	Mohra	2x4.5	9.00	2x4.5	9.00
(e)	Chenani	5x4.66 +2X1.0 +3x2.5	32.80	5x4.66 +2X1.0+3x2.5	32.80
(f)	Stakna	2x2.0 +3x1.25 +2.0	9.75	2x2.0 +3x1.25 +2.0	9.75
(g)	Small Hydel		3.54		3.54
(h)	Sewa	3x3.0	9.00	3x3.0	9.00
	Total Hydro		311.69		311.69

contd/-

J & K (Contd.)				
	GAS TURBINES			
(h)	Pampore GT St - I	3x25.0	75.00	3x25.0
	Pampore GT St - II	4x25.0	100.00	4x25.0
9h)	Total Gas		175.00	175.00
(I)	Diesel Gen. Sets		8.94	7.18
	Total J & K		495.63	493.87
8	PUNJAB			
	HYDRO			
(a)	Jogindernagar/ Shanan	4x15+1x50	110.00	4x15+1x50
(b)	Upper Behari Doab Canal (UBDC)	3x15+3x15	90.00	3x15+3x15
(c)	Mukerian	6x15+6x19.5	207.00	6x15+6x19.5
(d)	Anandpur Sahib (APS)	4x33.5	134.00	4x33.5
(e)	Ranjit Sagar HPS	4x150	600.00	4x150
(f)	Small Hydel		4.10	4.10
	Total Hydro		1145.10	1145.10
	THERMAL			
(g)	Guru Nanak Dev TPS (Bhatinda)	4x110	440.00	4x110
(h)	Guru Gobind Singh TPS (Ropar)	6x210	1260.00	6x210
(i)	Lehra Mohabbat TPS	2x210	420.00	2x210
(j)	Jhalkeri Rice Straw Fired	1x10	10.00	1x10
	Total Thermal		2130.00	2130.00
	Total Punjab		3275.10	3275.10
9	RAJASTHAN			
	HYDRO			
(a)	Mahi Bajaj Sagar	2x25+2x45	140.00	2x25+2x45
(b)	Rana Pratap Sagar (RPS)	4x43	172.00	4x43
(c)	Jawahar Sagar (JS)	3x33	99.00	3x33
(d)	Anoopgarh	6x1.5	9.00	6x1.5
(e)	Small Hydro		14.85	14.85
	Total Hydro		434.85	434.85
	THERMAL			
(f)	Kota TPS	2x110+3x210 +1x195	1045.00	2x110+3x210 +1x195
(g)	Suratgarh TPS	5x250	1250.00	5x250
(g)	Ramgarh GT	1x3	3.00	1x3
(i)	Ramgarh GT EXT.	1x35.5	35.50	1x35.5
	Total Thermal		2333.50	2333.50
(J)	Wind farm		14.01	14.01
	Total Rajasthan		2782.36	2782.36

contd/-

10	UP				
	HYDRO				
(a)	Rihand	6x50.0	300.00	6x50.0	300.00
(b)	Obra	3x33.0	99.00	3x33.0	99.00
(c)	Matatilla	3x10.0	30.00	3x10.0	30.00
(d)	Ganga Canal				
	Bhola	4x.375+2x.6+		4x.375+2x.6+	
	Salara	2x1.5+		2x1.5+	
	Nirgazni	2x2.5	10.70	2x2.5	10.70
(e)	Khara	3x24.0	72.00	3x24.0	72.00
(f)	Sobla & small hydro	6 +12.2	18.20	6 +12.2	18.20
	Total Hydro		529.90		529.90
	THERMAL				
(g)	Obra	5x50	250.00	4x40	160.00
(h)	Obra Extn. - I	3x100	300.00	3x94	282.00
(i)	Obra Extn. - II	5x200	1000.00	5x200	1000.00
(j)	Panki	1x32	32.00	1x32	32.00
(k)	Panki Extn.	2x110	220.00	2x105	210.00
(l)	Harduaganj - A	3x30	90.00	0	0.00
(m)	Harduaganj - B	2x50+2x60	220.00	1x40+2x55	150.00
(n)	Harduaganj - C	2x60+1x110	230.00	2x60+1x105	225.00
(o)	Paricha	2x110	220.00	2x110	220.00
(p)	Anpara - A	3x210	630.00	3x210	630.00
(q)	Anpara - B	2x500	1000.00	2x500	1000.00
	Total Thermal		4192.00		3909.00
	Total UP		4721.90		4438.90
11	UTTRANCHAL				
	HYDRO				
(a)	Khatima	3x13.8	41.40	3x13.8	41.40
(b)	Ramganga	3x66.0	198.00	3x66.0	198.00
(c)	Ganga Canal				
	Chitwa	2x1.5+		2x1.5+	
	Mohamedpur	3x3.1+		3x3.1+	
	Pathri	3x6.8	32.70	3x6.8	32.70
(d)	Yamuna (I & IV)				
	- Dhalipur	3x17.00+		3x17.00+	
	- Dhakrani	3x11.25+		3x11.25+	
	- Kulhal	3x10.00	114.75	3x10.00	114.75
(e)	Chibro	4x60.0	240.00	4x60.0	240.00
(f)	Khodri	4x30.0	120.00	4x30.0	120.00
(g)	Chilla	4x36.0	144.00	4x36.0	144.00
(h)	Maneri Bhali	3x30.0	90.00	3x30.0	90.00
	Total Hydro		980.85		980.85
	Total Region (1 to 11)		29756.93		29244.77

SUMMARY OF THE EFFECTIVE GENERATING CAPACITY (MW)

Agency / Source	Hydro	Thermal	Gas/Diesel/Wind	Nuclear	Total	% of Total
NTPC	0.00	5825.00	2344.04	0.00	8169.04	27.93%
NHPC	1984.20	0.00	0.00	0.00	1984.20	6.78%
SJVNL	250.00	0.00	0.00	0.00	250.00	0.85%
NPC	0.00	0.00	0.00	1180.00	1180.00	4.03%
BBMB	2870.15	0.00	0.00	0.00	2870.15	9.81%
CHANDIGARH	0.00	0.00	1.40	0.00	1.40	0.00%
DELHI	0.00	396.50	612.00	0.00	1008.50	3.45%
HARYANA	48.00	1025.00	25.20	0.00	1098.20	3.76%
HIMACHAL	712.20	0.00	0.00	0.00	712.20	2.44%
J&K	311.69	0.00	182.18	0.00	493.87	1.69%
PUNJAB	1145.10	2130.00	0.00	0.00	3275.10	11.20%
RAJASTHAN	434.85	2295.00	52.51	0.00	2782.36	9.51%
UP	529.90	3909.00	0.00	0.00	4438.90	15.18%
UTTRANCHAL	980.85	0.00	0.00	0.00	980.85	3.35%
Total	9266.94	15580.50	3217.33	1180.00	29244.77	100.00%
% of TOTAL	31.69%	53.28%	11.00%	4.03%	100.00%	

Notes The above table does not take into account the shares of a state in power stations located in the neighbouring state. Such details are :

- (i) Haryana has one-third share in unit Nos. 2, 3, 4 at Indraprastha power stations of Delhi viz. 62.5 MW.
- (ii) HP has 25 % share in the Dhalipur, Dhakrani, Chibro and Khodri power houses of Uttranchal viz. 111.20 MW and 20 % share in the Kulhal and Khara hydro power houses viz. 20.40 MW. However, these shares are limited to actual physical drawals over designated transmission lines.
- (iii) HP has a fixed energy share (royalty) every month in the Shanan Power House of PSEB.
0.38 LU/Day to 2.22 LU/Day.
- (iv) HP has 4.6 % share in Ranjit Sagar Dam project of PSEB viz. 27.60 MW.
- (iv) The shares of Rajasthan in Chambal and Satpura projects are as under :

CHAMBAL

PROJECT	LOCATED	INSTALLED CAPACITY (MW)
Gandhi Sagar	M.P.	5 x 23 = 115
Rana Pratap Sagar	Rajasthan	4 x 43 = 172
Jawahar Sagar	Rajasthan	3 x 33 = 99
Total		386

Rajasthan has 50 % share in the Chambal Projects viz. 193 MW.

SATPURA

PROJECTS	LOCATED	INSTALLED CAPACITY (MW)
Satpura TPS	M.P.	5x62.5+200.0+3x210.0 = 1142.50

Rajasthan has 40 % share in the first five units of Satpura TPS viz 125 MW.

II. BREAKUP OF HYDRO CAPACITY (MW) IN NORTHERN REGION AS ON 31.09.2003

Agency / Source	Run-of -the -river	Reservoir	Total
NHPC	1444.20	540.00	1984.20
BBMB	1155.15	1715.00	2870.15
SJVNL	0.00	250.00	250.00
DELHI	0.00	0.00	0.00
HARYANA	48.00	0.00	48.00
HP *	712.20	0.00	712.20
J&K	311.69	0.00	311.69
PUNJAB	545.10	600.00	1145.10
RAJASTHAN	262.85	172.00	434.85
UP	229.90	300.00	529.90
UTTRANCHAL	782.85	198.00	980.85
TOTAL	5491.94	3775.00	9266.94
PERCENTAGE	59.26%	40.74%	100%

* Includes Malana IPP (86 MW) & Baspa IPP (300 MW)

III.

Frequency Profile

Date	% of Time Frequency								
	< 48.00	< 48.50	< 49.00	<49.50	49.0-50.5	> 50.00	> 50.50	> 51.00	>51.50
01	0.00	0.00	0.14	4.17	87.97	58.90	11.89	0.00	0.00
02	0.00	0.00	0.00	0.59	86.53	71.96	13.47	0.00	0.00
03	0.00	0.00	0.15	4.10	78.88	70.42	20.97	0.31	0.00
04	0.00	0.00	0.24	9.97	96.98	33.68	2.78	0.00	0.00
05	0.00	0.00	0.00	0.00	95.48	76.48	4.52	0.00	0.00
06	0.00	0.00	0.00	2.36	87.67	71.48	12.33	0.00	0.00
07	0.00	0.00	0.00	0.24	78.98	81.91	21.02	0.31	0.00
08	0.00	0.00	0.00	1.84	83.32	63.86	16.68	0.00	0.00
09	0.00	0.00	0.32	11.01	97.98	33.24	1.70	0.00	0.00
10	0.00	0.00	1.11	17.19	98.89	16.39	0.00	0.00	0.00
11	0.00	0.00	0.08	11.07	97.46	38.96	2.46	0.00	0.00
12	0.00	0.00	1.29	21.49	95.62	34.01	2.09	0.00	0.00
13	0.00	0.00	0.94	9.69	92.01	39.78	6.05	0.00	0.00
14	0.00	0.00	0.00	7.29	95.73	41.03	4.27	0.00	0.00
15	0.00	0.00	0.00	0.39	85.34	75.22	14.66	0.00	0.00
16	0.00	0.00	0.00	0.66	84.05	81.64	15.95	0.00	0.00
17	0.00	0.00	0.00	0.25	76.76	83.19	23.24	0.25	0.00
18	0.00	0.00	0.00	0.76	79.73	79.04	20.27	0.00	0.00
19	0.00	0.00	0.98	12.17	98.08	41.01	0.94	0.00	0.00
20	0.00	0.00	2.79	28.07	94.56	26.24	2.65	0.00	0.00
21	0.00	0.00	1.55	12.09	92.79	49.08	5.66	0.21	0.00
22	0.00	0.00	0.46	4.65	95.10	57.42	4.24	0.00	0.00
23	0.00	0.00	0.57	4.93	90.48	54.98	8.75	0.49	0.00
24	0.00	0.00	0.00	3.75	91.67	61.03	8.33	0.00	0.00
25	0.00	0.00	0.00	0.94	83.47	64.06	16.53	0.03	0.00
26	0.00	0.00	0.00	3.12	79.45	57.41	20.55	1.01	0.00
27	0.00	0.00	0.11	3.86	97.05	43.35	2.64	0.00	0.00
28	0.00	0.00	0.00	1.60	88.23	66.60	11.77	0.14	0.00
29	0.00	0.00	0.00	1.81	81.35	69.66	18.65	0.14	0.00
30	0.00	0.00	0.00	2.30	92.48	54.80	7.52	0.00	0.00
31									
Max	0.00	0.00	2.79	28.07	98.89	83.19	23.24	1.01	0.00
Min	0.00	0.00	0.00	0.00	76.76	16.39	0.00	0.00	0.00
Average	0.00	0.00	0.36	6.08	89.47	56.56	10.17	0.10	0.00

Frequency (Hz)				Average Frequency	Frequency Variation Index
Maximum		Minimum			
Freq	Time	Freq	Time		
50.95	10.06	48.85	19.22	50.09	1.33
50.89	13.01	49.25	19.22	50.17	1.08
51.03	03.07	48.93	19.28	50.16	1.73
50.75	10.07	48.84	21.29	49.90	1.02
50.93	04.12	49.59	19.19	50.16	0.73
50.81	03.57	49.20	11.30	50.16	1.14
51.06	08.06	49.34	19.18	50.28	1.56
50.95	03.08	49.16	19.25	49.92	1.19
50.89	18.35	48.74	19.11	49.89	0.98
50.32	20.33	48.53	19.12	49.83	1.42
50.88	8.05	48.98	19.26	49.88	1.11
50.78	00.00	48.72	03.02	49.82	1.72
50.76	16.20	48.80	22.11	49.92	1.26
50.98	16.07	49.11	00.13	49.96	0.95
50.88	19.04	49.33	20.37	50.22	1.27
50.93	03.45	49.18	06.51	50.25	1.46
51.04	11.09	49.26	18.49	50.30	1.63
50.91	02.03	49.29	18.49	50.23	1.44
50.92	07.30	48.81	22.07	49.89	1.35
50.90	08.14	48.52	22.09	49.76	2.18
51.08	08.05	48.85	05.23	49.97	1.46
50.90	18.32	48.84	06.32	50.03	0.80
51.17	08.04	48.86	19.05	50.05	1.07
50.97	10.25	49.15	18.50	50.08	0.94
51.01	04.06	49.28	06.58	50.18	1.33
51.13	01.56	49.09	22.07	50.12	1.76
50.80	08.28	49.32	14.50	49.97	0.68
51.04	19.57	49.06	17.41	50.14	1.15
51.04	18.05	49.10	17.39	50.19	1.39
50.89	07.43	49.04	18.22	50.06	0.90
51.17		49.59		50.30	2.18
50.32		48.52		49.76	0.68
50.92		49.03		50.06	1.27

IV.

Voltage Profile

Date	400 KV Dadri Voltage (kV)				400 KV Kanpur Voltage (kV)				220 KV BTPS Voltage (kV)				400 KV Moga Voltage (kV)			
	Maximum		Minimum		Maximum		Minimum		Maximum		Minimum		Maximum		Minimum	
	Voltage	Time	Voltage	Time	Voltage	Time	Voltage	Time	Voltage	Time	Voltage	Time	Voltage	Time	Voltage	Time
01	415	07.14	389	19.21	411	07.15	392	19.21	207	04.02	192	15.26	409	03.36	390	19.20
02	416	08.04	389	19.18	413	04.04	391	11.52	207	04.00	191	19.18	410	08.07	387	19.18
03	417	07.29	388	19.30	412	03.03	391	19.31	209	03.03	192	19.32	407	07.52	391	19.31
04	416	05.06	389	19.11	412	07.57	392	18.46	209	05.07	192	19.10	410	05.08	394	14.20
05	417	03.51	391	11.21	412	04.07	393	12.14	210	04.07	192	10.53	408	03.50	392	19.19
06	416	03.05	395	11.31	409	02.37	393	06.53	210	03.55	197	11.30	409	03.04	390	15.16
07	418	03.07	397	11.08	412	18.28	394	11.03	210	03.06	202	20.46	408	03.07	395	20.46
08	416	03.02	404	00.20	409	01.59	398	00.08	209	03.02	204	00.00	401	03.20	393	00.08
09	418	08.04	387	19.22	412	08.07	388	19.12	209	03.02	204	00.00	404	08.04	382	19.12
10	414	07.43	396	19.12	415	07.40	388	15.24	203	02.40	191	19.12	402	07.31	386	19.12
11	419	08.04	397	12.23	415	08.04	394	16.00	206	23.45	194	12.25	406	08.05	390	19.10
12	416	00.00	395	19.13	412	00.00	388	19.16	206	01.55	192	19.13	402	05.04	390	19.12
13	418	04.04	393	10.42	409	04.04	389	10.18	208	03.40	194	12.42	408	07.08	388	19.32
14	416	16.07	397	11.47	415	08.45	394	12.14	209	08.08	198	19.26	407	16.06	391	00.01
15	415	03.43	392	11.55	414	21.54	388	12.18	209	03.13	195	11.20	405	03.42	388	11.36
16	416	03.09	390	19.10	414	03.21	387	18.48	211	03.07	194	19.12	406	07.12	390	15.54
17	415	03.16	390	18.51	412	03.16	385	19.20	211	03.08	196	18.51	407	08.02	390	18.48
18	412	03.59	387	18.48	411	02.42	389	18.47	210	02.05	193	19.16	406	03.01	389	18.49
19	412	07.27	385	18.59	411	07.29	389	19.09	207	02.42	191	19.06	409	07.06	388	18.54
20	414	08.11	387	18.58	417	08.04	387	22.11	207	04.01	191	15.46	407	08.04	390	14.17
21	416	08.05	393	19.30	415	08.05	388	19.23	208	08.06	197	19.23	412	08.03	392	19.27
22	415	08.05	386	14.57	412	08.06	389	14.35	207	03.59	188	14.53	409	08.05	390	09.08
23	415	04.00	388	11.42	413	17.00	390	19.04	208	03.56	189	15.48	409	16.57	387	11.44
24	414	04.04	388	18.50	413	04.10	393	13.47	208	04.01	192	19.16	408	04.06	391	18.50
25	416	04.01	390	10.26	415	04.06	388	11.41	210	04.06	193	10.32	416	04.06	390	18.53
26	415	04.01	386	19.24	410	04.03	385	13.53	211	02.50	194	19.23	405	00.08	384	19.26
27	410	08.02	386	18.46	412	08.28	386	18.47	209	03.51	195	18.57	409	08.25	386	18.47
28	414	16.53	393	10.37	410	08.08	388	18.51	209	17.03	198	19.28	412	16.54	394	19.13
29	417	03.33	386	11.10	412	03.39	385	14.18	212	03.32	194	19.09	412	02.44	384	18.46
30	413	04.00	380	10.37	407	04.04	385	11.00	210	03.59	193	11.02	409	16.11	386	09.33
31																
Max	419		404		417		398		212		204		416		395	
Min	410		380		407		385		203		188		401		382	

V. Regional Power Supply Position

(All Figs In MUs)

Date	Availability (Gross) MW	Peak Hrs. Requirement MW	Shortage/ Restriction MW	Availability (Gross) MW	Off Peak Hrs. Requirement MW	Shortage/ Restriction*	Regional Availability MU
01	21062	22658	1596	19856	20441	585	443.86
02	21331	22807	1476	19918	19918	585	448.78
03	20564	22440	1876	19630	19915	285	447.84
04	19854	21685	1831	19138	20128	990	430.76
05	20137	22067	1930	18952	19537	585	437.89
06	20380	22310	1930	18539	19124	585	432.19
07	20079	21362	1283	18506	19096	590	420.24
08	20461	21815	1354	17688	18578	890	430.16
09	20629	22016	1387	19188	20078	890	439.37
10	20627	22242	1615	19337	19702	365	438.91
11	20528	22116	1588	19044	19387	343	430.87
12	20900	22488	1588	18110	18770	660	432.00
13	20805	22392	1587	18839	19431	592	436.37
14	20476	21788	1312	18939	19524	585	430.94
15	20880	22068	688	18934	19394	460	438.84
16	21260	22376	1116	18469	19154	685	430.83
17	21309	22211	902	18650	19335	685	431.76
18	21257	22625	1368	18620	18780	160	436.14
19	21220	21676	1457	19724	20009	285	442.45
20	20734	22138	1404	19930	20737	807	441.17
21	21077	22317	1440	19720	20623	903	441.86
22	20131	22015	1081	19478	20268	790	445.14
23	20513	22046	1533	19166	20028	862	435.43
24	20676	22233	1557	18574	19411	837	427.08
25	20359	21963	1604	18163	18753	590	417.94
26	20770	21925	1155	17819	18118	299	425.47
27	21037	22217	1180	18683	18973	290	431.59
28	19837	20836	999	18904	19579	675	422.38
29	21041	22015	974	17640	18225	585	421.85
30	20733	21770	1037	18115	18700	585	424.94
31							
Maximum	21331	22807	1930	19930	20737	990	448.78
Minimum	19837	20836	688	17640	18118	160	417.94
Average	20689	22087	1395	18876	19457	601	433.84

Note: * Shortage / Restriction figures are as given by the constituents.

VI. Daily Peak/Off-Peak Demand Met By Constituents (Sheet 1 of 2)

State	Punjab		Haryana		Rajasthan		Delhi		Uttar Pradesh	
Date	Peak	Off Peak	Peak	Off Peak	Peak	Off Peak	Peak	Off Peak	Peak	Off Peak
01	4789	4544	2992	2874	2607	2507	3032	2399	4646	5062
02	4662	4570	2914	3039	2849	2397	3034	2495	4838	4964
03	4231	4612	2639	2803	2808	2545	3002	2458	4490	5165
04	3795	4556	2576	2735	2907	2437	3015	2311	4704	5123
05	4544	4677	2665	2460	2857	2594	3078	2244	4051	4182
06	4544	4677	2665	2460	2857	2594	2937	2263	4051	4382
07	4550	4496	2716	2617	2729	2419	2786	2217	4668	4513
08	4395	4340	2786	2460	2624	2170	2921	2003	4244	5019
09	4609	4659	2356	2411	2807	2519	3019	2295	4334	4543
10	4424	4803	2499	2707	3035	2551	2966	2298	3997	4685
11	5100	4735	2640	2734	2832	2419	2912	2250	4156	4494
12	4483	5130	2687	2590	3016	1898	2940	2038	4310	4613
13	4372	4699	2558	2585	2747	2684	2966	2035	4537	4927
14	4243	4618	2727	2413	2949	2712	2778	2283	4330	4800
15	4565	4489	2784	2804	2998	2627	2926	2086	4522	4914
16	4397	4681	2914	2672	3019	2530	2947	2078	4581	4726
17	4524	5259	2901	2658	3035	2498	2926	1978	4782	4457
18	4569	4734	2917	2605	2951	2516	2969	1969	4364	4932
19	4466	4858	2865	2836	3107	2622	3019	2122	4881	4775
20	4457	4791	2593	2860	2988	2680	3015	2283	4580	4925
21	4535	4346	2814	2903	3023	2620	2974	2379	4580	5070
22	4482	4288	2979	2875	2622	3199	3003	2427	4220	5284
23	4320	4535	2718	2877	3125	2768	3073	2361	4231	4719
24	4182	4264	2760	2773	3079	2732	2961	2276	4494	4639
25	3962	4102	2748	2668	3135	2711	2907	2102	4747	4451
26	3987	3891	2854	2619	3147	2568	2896	1936	4686	4822
27	3978	3936	2849	2771	3216	2779	2918	2043	4701	5146
28	3343	3943	2869	2800	3082	2775	2788	2121	4647	5284
29	4046	3335	2819	2328	3233	2642	2898	2068	4784	4847
30	3662	3630	2960	2528	3068	2720	2882	2003	4857	4961
31										
Maximum	5100	5259	2992	3039	3233	3199	3078	2495	4881	5284
Minimum	3343	3335	2356	2328	2607	1898	2778	1936	3997	4182
Average	4341	4473	2759	2682	2948	2581	2950	2194	4500	4814

VI. Daily Peak/Off-Peak demand Met By Constituents (Sheet 2 of 2)

State	Uttaranchal		Chandigarh		Himachal Pradesh		Jammu & Kashmir	
Date	Peak	Off Peak	Peak	Off Peak	Peak	Off Peak	Peak	Off Peak
01	623	464	187	127	492	350	943	614
02	600	400	164	135	505	348	995	569
03	600	426	172	104	533	331	888	818
04	527	395	162	120	486	346	842	558
05	586	422	166	117	527	274	972	553
06	586	422	166	117	527	274	972	553
07	632	425	150	107	487	302	953	619
08	631	493	169	110	523	329	860	625
09	633	473	174	118	489	323	975	610
10	596	445	174	110	503	336	856	554
11	603	422	173	100	486	326	977	582
12	583	494	168	95	502	335	982	619
13	644	463	168	110	491	341	941	557
14	641	451	150	114	478	332	969	590
15	639	484	155	115	493	333	944	604
16	643	422	171	112	499	330	1034	617
17	640	442	152	107	505	481	1010	768
18	567	404	167	106	521	316	936	748
19	608	419	174	113	510	317	927	729
20	630	440	175	118	510	307	1013	719
21	630	462	160	127	489	319	1017	623
22	591	407	170	123	496	313	887	650
23	615	389	176	116	493	309	861	601
24	537	396	167	109	488	308	882	509
25	597	360	165	109	481	309	1030	570
26	619	377	164	99	492	289	958	571
27	563	410	157	96	507	301	1011	588
28	639	418	142	99	528	315	949	586
29	629	414	165	99	506	308	1018	675
30	626	384	159	99	454	302	1024	650
31								
Maximum	644	494	187	135	533	481	1034	818
Minimum	527	360	142	95	454	274	842	509
Average	609	427	165	111	500	323	954	621

VII Daily Energy Consumption By Constituents

(All Figs In MUs)

Date	Punjab	Haryana	Rajasthan	Delhi	UP	Uttaranchal	Chandigarh	HP	J & K	NFF/RAIL	Total
01	104.653	63.623	55.642	64.173	104.467	11.320	3.703	9.988	17.202	1.645	436.416
02	104.866	64.703	57.278	64.365	108.847	10.589	3.554	9.923	16.323	1.578	442.027
03	101.369	60.357	60.193	63.747	114.153	10.058	3.272	9.467	16.172	1.539	440.326
04	99.422	57.047	61.615	62.519	108.998	9.954	3.383	9.881	16.024	1.644	430.488
05	108.369	58.633	62.725	62.725	102.266	10.696	3.275	9.798	17.096	1.532	437.116
06	103.929	59.776	61.528	60.230	101.526	10.401	3.275	9.673	15.965	1.397	427.700
07	101.619	58.062	58.178	55.060	98.962	10.192	2.753	9.477	15.773	1.684	411.760
08	102.069	58.799	59.000	58.568	105.906	10.794	3.344	9.685	16.050	1.557	425.773
09	104.659	58.834	60.985	61.237	106.540	11.009	3.512	9.578	16.562	1.836	434.753
10	105.550	58.753	61.847	61.379	105.239	10.922	3.552	9.289	16.480	1.613	434.625
11	103.690	58.168	57.818	59.574	97.831	10.020	3.421	9.547	17.365	1.608	419.042
12	104.848	57.022	61.237	57.939	101.926	11.014	3.423	9.787	17.091	1.702	425.990
13	104.106	57.602	63.593	57.397	105.225	11.263	3.255	9.521	16.229	1.757	429.948
14	102.311	59.064	61.116	57.143	105.446	11.047	2.984	9.313	15.866	1.832	426.122
15	105.294	59.389	63.321	58.503	105.392	10.820	3.434	9.662	16.583	1.644	434.042
16	104.372	59.457	61.430	57.572	101.143	10.451	3.357	9.373	17.316	1.642	426.113
17	105.232	59.153	58.948	57.701	103.281	10.165	3.280	9.419	16.929	1.723	425.831
18	104.561	61.676	61.296	59.051	107.701	10.408	3.373	9.294	17.246	1.687	436.292
19	104.150	62.701	63.297	61.341	104.254	10.668	3.458	9.429	17.596	1.634	438.528
20	101.948	60.861	64.348	61.341	103.648	9.623	3.431	9.525	17.546	1.579	433.851
21	97.869	63.313	64.890	60.969	110.447	11.091	3.078	9.524	17.693	1.682	440.555
22	98.914	63.165	65.472	63.329	103.305	10.573	3.477	9.582	17.669	1.668	437.154
23	97.388	61.528	66.327	62.579	104.382	9.579	3.327	9.334	16.456	1.711	432.612
24	94.646	59.085	61.797	60.620	103.630	9.756	3.338	9.364	14.193	1.822	418.251
25	90.020	58.776	62.158	57.743	105.151	9.804	3.203	9.383	13.451	1.871	411.560
26	89.134	60.058	63.444	58.049	107.633	10.121	3.089	9.368	15.964	1.755	418.616
27	87.526	61.120	65.819	58.071	112.354	10.263	2.900	9.132	16.924	1.942	426.051
28	84.370	60.302	64.727	55.294	111.826	10.238	2.631	9.449	17.691	1.929	418.458
29	82.779	54.507	64.993	56.930	111.195	10.345	3.059	9.580	17.926	1.963	413.277
30	83.545	57.618	64.635	57.794	113.120	10.286	2.987	9.417	17.744	1.935	419.080
31											
Maximum	108.369	64.703	66.327	64.365	114.153	11.320	3.703	9.988	17.926	1.963	442.027
Minimum	82.779	54.507	55.642	55.060	97.831	9.579	2.631	9.132	13.451	1.397	411.560
Average	99.440	59.772	61.989	59.765	105.860	10.449	3.271	9.525	16.638	1.704	428.412
Month Total	2983.208	1793.155	1859.660	1792.943	3175.794	313.470	98.128	285.762	499.125	51.111	12852.355

VIII. Schedule VS Actual Drawals of Northern Regional Constituents (Sheet 1 of 2)

Date	Punjab		Haryana		Rajasthan		Delhi		Uttar Pradesh		Uttaranchal	
	Schedule	Actual	Schedule	Actual	Schedule	Actual	Schedule	Actual	Schedule	Actual	Schedule	Actual
1-Sep-2003	45675	47072	33056	40950	25568	16101	43958	38311	42670	55699	-745	-2988
2-Sep-2003	45224	47805	34614	40172	26367	17427	43297	38541	41886	53153	-915	-3361
3-Sep-2003	45183	48267	32820	38362	27530	21537	39360	38476	44361	50227	458	-4503
4-Sep-2003	41618	45713	30607	35530	24902	21155	38049	37285	43303	48833	2000	1120
5-Sep-2003	42825	46527	31945	34744	26050	23390	40771	36098	40261	48545	579	-4320
6-Sep-2003	47146	55163	29651	33330	26471	22175	40021	33623	39821	45143	-223	-2996
7-Sep-2003	46123	53967	29329	32449	25493	21965	36423	28141	39694	45820	-978	-4920
8-Sep-2003	42124	44665	30043	34258	25979	19008	36289	32575	40136	45913	-133	-4350
9-Sep-2003	41771	41515	28410	35716	25883	18957	35721	35340	39676	53725	49	-4253
10-Sep-2003	41569	42619	29216	34440	25853	19422	34803	34745	39606	52905	-23	-4338
11-Sep-2003	42263	45431	32858	36262	25824	20035	35065	32156	39314	48662	-265	-4183
12-Sep-2003	42725	42381	31074	33056	26475	29625	35831	30992	39585	48717	-107	-3491
13-Sep-2003	43108	41152	30112	34606	28066	26885	37581	31460	39595	50183	446	-2159
14-Sep-2003	43203	41364	30817	37479	27799	25473	35266	31072	39967	52059	157	-3978
15-Sep-2003	41484	43541	33161	36111	27274	23205	35713	32629	40540	50343	343	-4100
16-Sep-2003	41566	46890	29861	34415	26972	26037	36372	31572	41312	42328	-231	-4487
17-Sep-2003	40786	46937	27679	34379	27032	22668	36139	31672	42014	44576	-651	-5485
18-Sep-2003	40570	46952	27783	35286	27575	23278	36149	33039	44794	45311	-942	-5233
19-Sep-2003	39667	43564	27963	34914	27529	21643	31687	34730	41865	45507	-535	-4549
20-Sep-2003	38693	41234	26800	36247	27013	21475	35289	35758	41275	45175	242	-4556
21-Sep-2003	38680	39469	29780	37736	26785	23470	34180	35819	41858	45387	-43	-3835
22-Sep-2003	39901	41192	30245	37919	27456	23031	39194	38005	44978	50484	465	-4127
23-Sep-2003	41732	43651	28888	37034	27542	20884	39806	37346	46182	55546	288	-5237
24-Sep-2003	42199	48047	27349	37493	26716	19408	39320	34526	45636	51913	-596	-6153
25-Sep-2003	36334	41128	26071	36734	25664	22656	36930	31873	42725	46983	-942	-5644
26-Sep-2003	38256	41716	26549	38411	25696	22186	36314	32163	45010	45425	-817	-4525
27-Sep-2003	37089	38953	26432	38705	25874	22649	36285	30748	44449	44433	161	-4359
28-Sep-2003	36484	37932	25437	35506	25752	24197	36128	29188	44425	44337	104	-3864
29-Sep-2003	35574	38270	25126	30794	25610	23995	40376	30667	46712	48433	448	-3399
30-Sep-2003	35965	39136	25012	32599	24248	24279	37108	30390	47606	48658	919	-3362
Total MU	1235.537	1322.253	878.688	1075.637	792.998	668.216	1119.425	1008.940	1271.256	1454.423	-1.487	-121.635
Max. MWH	47146	55163	34614	40950	28066	29625	43958	38541	47606	55699	2000	1120
Min MWH	35574	37932	25012	30794	24248	16101	31687	28141	39314	42328	-978	-6153
Avg. MWH	41185	44075	29290	35855	26433	22274	37314	33631	42375	48481	-50	-4055

VIII. Schedule vs Actual Drawals of Northern Regional Constituents (Sheet 2 of 2)

Date	Himachal Pradesh		Jammu & Kashmir		Chandigarh		NFF		Railways	
	Schedule	Actual	Schedule	Actual	Schedule	Actual	Schedule	Actual	Schedule	Actual
1-Sep-2003	-2260	-4261	12664	14647	3935	3972	480	127	892	1518
2-Sep-2003	-2148	-3948	12496	13437	3925	3864	480	134	914	1444
3-Sep-2003	980	-4360	12951	13265	3910	3565	480	124	1283	1415
4-Sep-2003	1642	-2842	12923	13060	3838	3654	480	126	1312	1518
5-Sep-2003	1747	1068	12043	13851	3682	3649	480	132	1325	1400
6-Sep-2003	-1787	-4113	12327	12970	3710	3485	480	-30	1351	1427
7-Sep-2003	-686	-4580	12097	12756	3636	3014	480	45	1071	1639
8-Sep-2003	2527	-4810	12030	13079	3689	3615	480	125	1053	1542
9-Sep-2003	2485	-4811	11775	13246	3670	3775	480	127	1086	1709
10-Sep-2003	1495	-4878	12389	13264	3579	3816	480	114	1126	1499
11-Sep-2003	-297	-3971	11823	14369	3631	3696	480	118	1652	1490
12-Sep-2003	-916	-3734	11888	13783	3567	3667	480	133	1605	1569
13-Sep-2003	-1366	-2873	12087	12907	3576	3498	480	146	1374	1611
14-Sep-2003	-292	-4338	12367	12630	3587	3242	480	151	1470	1681
15-Sep-2003	1052	-4813	12603	13497	3610	3707	480	158	1642	1486
16-Sep-2003	1300	-4696	12666	14280	3699	3621	480	168	1109	1474
17-Sep-2003	2367	-3826	13334	14452	3745	3566	480	168	913	1555
18-Sep-2003	2371	-3511	14080	14482	3775	3611	480	176	1156	1511
19-Sep-2003	2507	-3467	13940	14886	3728	3727	480	172	1146	1462
20-Sep-2003	2056	-3237	13642	14813	3598	3708	480	140	1011	1439
21-Sep-2003	649	-4347	13799	14935	3634	3338	480	139	1552	1543
22-Sep-2003	-222	-4396	13797	14934	3661	3740	480	206	1679	1462
23-Sep-2003	-1092	-4691	13662	13827	3690	3561	480	231	1027	1480
24-Sep-2003	-960	-4478	13248	11634	3659	3605	480	289	887	1533
25-Sep-2003	1502	-2181	11990	10727	3575	3449	480	311	1155	1560
26-Sep-2003	1307	-462	14409	13411	3543	3349	480	324	974	1431
27-Sep-2003	1661	205	13452	14251	3529	3151	480	333	924	1609
28-Sep-2003	1709	739	12779	14601	3540	2821	480	345	1338	1584
29-Sep-2003	1869	1314	13153	15058	3541	3234	480	345	1119	1618
30-Sep-2003	1949	1391	13074	15325	3695	3204	480	344	913	1591
Total MU	21.149	-92.907	385.488	412.377	110.157	105.904	14.400	5.421	36.059	45.800
Max. MWH	2527	1391	14409	15325	3935	3972	480	345	1679	1709
Min MWH	-2260	-4878	11775	10727	3529	2821	480	-30	887	1400
Avg. MWH	705	-3097	12850	13746	3672	3530	480	181	1202	1527

IX Schedule vs Actual Injection of ISGS (Sheet 1 of 4)

Date	Singrauli		Rihand		Dadri(T)		Unchahar-I		Unchahar-II		Dadri GPS	
	Schedule	Actual	Schedule	Actual	Schedule	Actual	Schedule	Actual	Schedule	Actual	Schedule	Actual
1-Sep-2003	33360	33413	21645	21606	14865	15364	8976	8853	838	492	12958	13310
2-Sep-2003	33360	33392	20705	20729	15719	15692	8981	8857	50	35	13258	13311
3-Sep-2003	33090	33134	21110	20941	15704	15593	8940	8758	4078	3900	13485	13441
4-Sep-2003	32940	33288	18743	18935	15740	16158	8947	8986	4336	4492	13477	14292
5-Sep-2003	32785	32836	10594	10623	17892	17867	9104	9039	4476	4462	14980	15167
6-Sep-2003	29213	29311	12650	12754	15690	15714	8953	8871	4414	4383	14920	15070
7-Sep-2003	33077	33151	10514	10499	10708	10646	8851	8697	4318	4312	13146	13192
8-Sep-2003	32586	32771	10482	10501	11868	11819	8797	8739	4285	4331	13141	13705
9-Sep-2003	32117	32671	10538	10726	11871	12212	8864	9051	4309	4499	13235	15190
10-Sep-2003	31294	31648	10800	10923	11886	12807	8958	9053	4419	4539	13441	14999
11-Sep-2003	31326	31391	10525	10646	13298	13400	9074	9086	4489	4535	14010	15085
12-Sep-2003	32415	32499	10815	10915	13365	13532	9078	9053	4491	4522	14508	15719
13-Sep-2003	32628	32718	10815	10808	12230	12345	9078	9081	4470	4522	14773	15633
14-Sep-2003	32880	32956	10800	10907	11528	11828	8996	9048	4388	4492	14727	15758
15-Sep-2003	33240	33271	10800	10825	12487	12414	8990	8920	4405	4429	13988	14199
16-Sep-2003	33071	33205	10800	10781	12300	12205	8225	8142	4276	4309	13347	13404
17-Sep-2003	36117	36161	10620	10596	10885	10814	8751	8669	3562	3062	13136	13225
18-Sep-2003	42880	43063	10529	10491	10660	10641	8698	8747	7155	6846	12967	12992
19-Sep-2003	37059	37753	10595	10849	9638	9652	8789	8978	8567	8261	13590	14572
20-Sep-2003	33360	33449	10800	10912	12671	12760	9072	9087	9048	9071	14267	15724
21-Sep-2003	33348	33394	10920	10929	12882	13041	9013	9092	9031	9154	14583	15559
22-Sep-2003	39880	39999	10895	10899	16527	16704	9008	9104	8982	9084	14367	14985
23-Sep-2003	44040	44142	10920	10929	15985	15996	9024	9078	9053	9135	14087	15122
24-Sep-2003	43553	43639	10920	10899	16797	17003	8017	7963	9069	9093	13563	14056
25-Sep-2003	39960	40031	10920	10863	15717	15923	5671	5758	9009	9032	13687	13830
26-Sep-2003	39670	39862	10646	10479	14987	14842	8801	8923	8727	8904	13167	13943
27-Sep-2003	39624	39953	10458	10546	14770	15513	8815	8907	8663	8799	13164	14247
28-Sep-2003	39624	39984	10458	10590	14267	14381	9033	9059	8949	9005	13578	13882
29-Sep-2003	39602	39767	18777	18587	14267	14323	8933	8982	8834	8919	13324	13453
30-Sep-2003	39508	39789	21449	21626	14691	15020	8965	9053	8818	9040	13336	14492
Total MU	1067.607	1072.641	381.243	382.314	411.895	416.209	263.402	263.634	179.509	179.659	412.210	431.557
Max. MWH	44040	44142	21645	21626	17892	17867	9104	9104	9069	9154	14980	15758
Min MWH	29213	29311	10458	10479	9638	9652	5671	5758	50	35	12958	12992
Avg. MWH	35587	35755	12708	12744	13730	13874	8780	8788	5984	5989	13740	14385

IX. Schedule vs Actual Injection of ISGS (Sheet 2 of 4)

Date	Anta GPS		Auraiya GPS		NAPS		RAPS-B		Bairasiul		Salal	
	Schedule	Actual	Schedule	Actual	Schedule	Actual	Schedule	Actual	Schedule	Actual	Schedule	Actual
1-Sep-2003	3352	3420	11156	11625	7608	7464	6120	6351	1860	1924	16332	16629
2-Sep-2003	3404	3459	11284	11416	7560	7597	6120	6366	1950	2014	16320	16608
3-Sep-2003	3425	3410	11454	11679	7584	7493	6120	6372	1515	1630	16320	16579
4-Sep-2003	3385	3530	11312	12281	7608	7435	6120	6324	405	436	16278	16512
5-Sep-2003	3696	3762	12542	12794	7560	7561	6120	6388	2715	2904	16200	16433
6-Sep-2003	3647	3663	12317	12410	7560	7592	6120	6428	2760	2826	16220	16429
7-Sep-2003	4009	3908	11103	11106	7560	7569	6120	6420	2265	2353	16050	16352
8-Sep-2003	4044	4061	11501	11660	7560	7509	6120	6383	2505	2595	14985	15207
9-Sep-2003	3393	3599	11641	12450	7560	7486	6360	6365	2610	2721	14040	14193
10-Sep-2003	3572	3851	11681	12962	7560	7561	6120	6367	2310	2385	15520	15915
11-Sep-2003	3694	3855	12047	12694	7560	7608	6120	6328	1635	1708	13665	13935
12-Sep-2003	3664	3795	12131	12995	7632	7624	6120	6360	1800	1877	13725	13904
13-Sep-2003	3522	3591	12415	13159	7680	7579	6120	6359	2445	2519	14360	14697
14-Sep-2003	3361	3462	12162	12689	7680	7572	6120	6359	1920	2030	15446	15814
15-Sep-2003	5668	5524	11674	11798	7656	7499	6120	6374	2040	2108	15490	15722
16-Sep-2003	7269	7222	11121	11195	7632	7513	6120	6367	1875	1941	15433	15704
17-Sep-2003	6823	6947	10915	10979	7207	6777	6120	6355	1785	1849	14925	15139
18-Sep-2003	6773	6710	11199	11248	4800	4089	6120	6373	1635	1699	14230	14757
19-Sep-2003	6451	7232	11316	12109	4344	4088	6120	6303	1620	1692	13918	14418
20-Sep-2003	7352	8326	12508	13380	4344	4103	6120	6296	1470	1559	13575	14046
21-Sep-2003	7272	7892	12171	12873	6022	5928	6120	6335	1305	1368	13831	14263
22-Sep-2003	7139	7779	12124	12462	7440	7653	6120	6350	1665	1723	13620	14050
23-Sep-2003	7284	8036	11821	12404	7608	7708	6120	6373	1710	1777	13260	13645
24-Sep-2003	7322	7970	11805	12246	7704	7648	4658	4758	1725	1780	12395	12886
25-Sep-2003	7265	7342	11544	11780	7728	7644	3000	2957	1515	1587	8150	8545
26-Sep-2003	6808	7306	11076	11441	7704	7649	3240	2961	1440	1529	12765	13334
27-Sep-2003	6973	7703	11417	11847	7704	7605	4100	4016	1320	1404	11266	11400
28-Sep-2003	7108	7179	11603	11894	7704	7621	5224	5319	1260	1330	9380	9674
29-Sep-2003	6296	6332	11377	11506	7704	7664	4464	3102	1200	1296	8843	9076
30-Sep-2003	5652	5768	11760	12241	7704	7726	3120	3109	1170	1224	7743	8011
Total MU	159.623	166.634	350.177	363.323	217.277	214.565	168.806	172.518	53.430	55.788	414.285	423.877
Max. MWH	7352	8326	12542	13380	7728	7726	6360	6428	2760	2904	16332	16629
Min MWH	3352	3410	10915	10979	4344	4088	3000	2957	405	436	7743	8011
Avg. MWH	5321	5554	11673	12111	7243	7152	5627	5751	1781	1860	13810	14129

IX. Schedule & Actual Injection of ISGS (Sheet 3 of 4)

Date	Tanakpur		Chamera		Uri		Bhakra Complex		Dehar		Pong	
	Schedule	Actual	Schedule	Actual	Schedule	Actual	Schedule	Actual	Schedule	Actual	Schedule	Actual
1-Sep-2003	2166	2292	12816	12973	6340	6621	23539	23915	14535	13861	1085	2438
2-Sep-2003	1386	1366	12816	12990	6418	6772	23339	23678	14535	13655	2633	3574
3-Sep-2003	2232	2304	11570	11760	6615	6999	23339	23781	14535	13703	3911	1349
4-Sep-2003	2232	2312	9345	9545	7108	7370	23658	23581	14535	13156	0	355
5-Sep-2003	2232	2329	9078	9282	6801	6955	23658	23752	14215	13909	415	1408
6-Sep-2003	2207	1972	9078	9318	7251	7395	23658	23749	14215	13787	1476	2448
7-Sep-2003	2114	2140	8099	8292	7161	7617	23658	23922	14215	13700	3108	3403
8-Sep-2003	2232	2269	8544	8755	7810	8274	23658	23834	14290	13623	3831	3841
9-Sep-2003	2232	2252	8099	8371	8402	8831	23658	23819	14300	13703	3626	3595
10-Sep-2003	2232	2265	8099	8503	8831	8751	23658	23713	14000	13626	3235	3224
11-Sep-2003	2232	2189	8099	8526	8932	9287	23802	22616	14000	13689	3235	3186
12-Sep-2003	1110	1120	8099	8496	9005	9238	22102	21888	14000	13907	3235	4457
13-Sep-2003	1172	1200	7476	7734	9071	9230	22102	22160	14000	13887	4749	4465
14-Sep-2003	2232	2332	7476	7670	8772	9018	22102	22092	13998	13790	4499	4530
15-Sep-2003	2199	2306	7476	7679	8673	8520	22102	22037	13998	13757	4731	4614
16-Sep-2003	2232	2340	9212	9395	8065	8162	22102	21921	13998	13853	4469	4625
17-Sep-2003	2232	2314	8767	8937	7716	7872	22141	21756	13998	13752	4476	4268
18-Sep-2003	2092	2212	7298	7530	7330	7750	22149	21823	13998	13769	4028	4120
19-Sep-2003	2199	2205	8099	8312	6985	7303	22149	22016	13998	13718	4476	4645
20-Sep-2003	2232	2306	5963	6192	6845	7049	22141	21731	13998	13697	4476	3966
21-Sep-2003	2232	2310	5963	6117	6682	6798	22141	22057	13998	13773	4012	3987
22-Sep-2003	2232	2312	5029	5198	6411	6484	22141	21950	14023	13570	4012	3670
23-Sep-2003	2150	2258	5029	5268	6238	6316	21849	21443	13856	13586	2190	2131
24-Sep-2003	2199	2309	5029	5260	6041	6091	21649	21174	13836	13446	1816	2196
25-Sep-2003	1927	2110	4317	4557	7000	7502	21649	21676	13836	14005	2207	3456
26-Sep-2003	2150	2250	1869	2011	9510	9787	21649	22130	13836	13940	3635	3622
27-Sep-2003	2232	2355	1869	1952	8226	8787	22249	21974	13844	11304	3725	3611
28-Sep-2003	2232	2326	1869	1962	8009	8569	22249	20981	12033	11354	3725	3700
29-Sep-2003	2232	2324	3560	3770	8498	8891	20605	20361	11013	10206	3411	2653
30-Sep-2003	2232	2351	4762	4897	8667	9449	20605	20368	10025	8884	2732	2671
Total MU	63.015	64.930	214.805	221.252	229.413	237.688	675.501	671.898	413.661	398.610	97.159	100.208
Max. MWH	2232	2355	12816	12990	9510	9787	23802	23922	14535	14005	4749	4645
Min MWH	1110	1120	1869	1952	6041	6091	20605	20361	10025	8884	0	355
Avg. MWH	2101	2164	7160	7375	7647	7923	22517	22397	13789	13287	3239	3340

IX. Schedule & Actual Injection of ISGS (Sheet 4 of 4)

Date	Nathpa-Jhakri HEP	
	Schedule	Actual
1-Sep-2003		
2-Sep-2003		
3-Sep-2003		
4-Sep-2003		
5-Sep-2003		
6-Sep-2003		
7-Sep-2003		
8-Sep-2003		
9-Sep-2003		
10-Sep-2003		
11-Sep-2003		
12-Sep-2003		
13-Sep-2003		
14-Sep-2003		
15-Sep-2003	0	0
16-Sep-2003	0	0
17-Sep-2003	0	0
18-Sep-2003	0	0
19-Sep-2003	0	0
20-Sep-2003	0	32
21-Sep-2003	0	0
22-Sep-2003	0	0
23-Sep-2003	0	0
24-Sep-2003	0	0
25-Sep-2003	0	228
26-Sep-2003	0	0
27-Sep-2003	0	0
28-Sep-2003	0	938
29-Sep-2003	0	7
30-Sep-2003	0	792
Total MU	0.000	1.997
Max. MWH	0	938
Min MWH	0	0
Avg. MWH	0	125

X. Daily Generation Details of State Sector Stations

(All Figs In MUs)

Date	Punjab(T)	Punjab(H)	Haryana(T)	Haryana(H)	Rajasthan(T)	Rajasthan(H)	UP (T)	UP (H)	Uttaranchal(H)	Delhi	HP	J & K	Total
01	43.38	13.23	14.00	0.95	35.99	0.19	38.58	7.36	14.31	13.85	14.25	2.56	201.05
02	40.43	15.17	15.90	0.97	36.51	0.01	46.89	6.27	13.95	13.97	13.87	2.89	208.52
03	37.70	14.17	13.52	0.98	35.44	0.18	53.98	7.21	14.56	13.16	13.83	2.91	209.82
04	40.02	12.52	13.22	0.88	37.33	0.08	44.88	6.51	8.83	13.03	12.72	2.96	194.91
05	38.94	12.84	16.50	0.96	37.31	0.10	42.90	7.13	15.02	14.49	8.73	3.25	199.95
06	33.16	14.18	17.74	0.78	35.82	0.37	41.96	7.25	13.40	14.78	13.79	3.00	197.90
07	33.36	14.25	17.00	0.99	32.85	0.00	43.21	6.91	15.11	15.42	14.06	3.02	197.27
08	39.96	14.97	15.62	1.01	36.04	0.00	47.57	7.85	15.14	14.36	14.50	2.97	210.79
09	43.88	16.82	14.06	1.07	38.35	0.27	40.17	7.79	15.26	14.07	14.39	3.32	210.07
10	43.65	16.24	15.69	1.01	39.23	0.17	40.67	7.80	15.26	14.58	14.17	3.22	213.21
11	41.91	15.28	14.43	0.92	38.89	0.00	39.89	7.77	14.20	15.32	13.52	3.00	206.57
12	42.75	16.62	15.41	0.94	28.36	0.27	42.33	8.03	14.51	14.78	13.52	3.31	201.85
13	43.42	15.96	14.94	0.89	34.49	0.13	43.52	7.83	13.42	12.63	12.39	3.32	204.16
14	41.29	15.96	13.14	0.81	32.42	0.17	41.33	8.06	15.03	14.31	13.65	3.24	200.85
15	42.76	15.54	14.63	0.75	36.29	0.24	43.83	7.71	14.92	14.15	14.48	3.09	209.86
16	40.13	14.89	16.02	0.83	31.44	0.72	46.33	7.92	14.94	14.32	14.07	3.04	206.65
17	40.29	14.50	15.88	0.85	32.82	0.60	46.10	7.83	15.65	14.44	13.25	2.48	207.98
18	40.33	13.99	17.46	0.90	33.79	1.23	46.85	7.87	15.64	13.85	12.81	2.76	209.26
19	42.24	15.66	17.11	1.03	37.24	1.23	46.26	7.82	15.22	14.21	12.90	2.71	214.93
20	42.27	14.58	15.07	1.06	39.67	0.00	48.49	8.02	14.18	13.39	12.76	2.73	207.88
21	40.23	12.84	15.72	1.06	37.40	0.69	49.78	7.80	14.93	13.06	13.87	2.76	211.64
22	39.55	13.25	15.67	1.05	38.58	0.99	44.92	7.57	14.82	13.24	13.98	2.74	195.28
23	37.72	12.56	14.90	1.03	40.78	1.23	33.92	7.07	14.82	12.96	14.03	2.63	193.93
24	35.44	10.57	13.31	1.02	37.03	1.94	36.91	7.95	15.91	13.21	13.84	2.56	191.71
25	34.09	12.03	13.47	1.02	34.80	1.49	44.48	7.63	15.45	13.26	11.56	2.72	195.34
26	33.48	11.65	12.93	1.04	36.51	1.82	49.99	8.06	14.65	13.11	9.83	2.55	197.35
27	34.70	12.07	13.35	1.05	37.98	2.00	52.46	7.72	14.62	13.20	9.34	2.67	202.78
28	32.94	11.42	15.85	1.05	35.74	1.81	52.17	8.04	14.10	12.70	8.71	3.09	198.63
29	31.12	11.42	14.85	1.05	36.01	2.23	49.98	8.07	13.74	13.71	8.27	2.87	194.51
30	31.52	10.46	15.45	1.06	36.04	1.92	50.75	8.17	13.65	13.49	8.03	2.42	194.36
31													
Maximum	43.88	16.82	17.74	1.07	40.78	2.23	53.98	8.17	15.91	15.42	14.50	3.32	214.93
Minimum	31.12	10.46	12.93	0.75	28.36	0.00	33.92	6.27	8.83	12.63	8.03	2.42	191.71
Average	38.76	13.85	15.09	0.97	36.04	0.74	45.04	7.63	14.51	13.84	12.64	2.89	202.97
Month Total	1162.66	415.64	452.79	29.00	1081.13	22.09	1351.10	229.02	435.22	415.06	379.08	86.75	6089.02

XI. Performance Of Generating Stations

S.No.	Power Station	Effective Capacity MW	Energy Generated during		Cummulative from 01.04.2003 (Ex-bus MU)
			Sept, 2003	(Ex Bus MU)	
1	CENTRAL SECTOR				
A	NTPC (Thermal)				
(a)	Badarpur TPS	705.00	379.78		2416.70
(b)	Singrauli STPS	2000.00	1072.64		6954.76
(c)	Rihand STPS	1000.00	382.31		3672.60
(d)	Dadri NCTPS	840.00	416.21		2659.90
(e)	Unchahar-I TPS	420.00	263.63		1539.61
(f)	Unchahar-II TPS	420.00	179.66		1299.62
(g)	Tanda TPS	440.00	194.50		1143.29
(h)	Anta GPS	419.33	166.63		1277.27
(i)	Auraiya GPS	663.36	363.23		2163.57
(j)	Dadri GPS	829.78	431.56		2399.02
(k)	Faridabad GPS	431.57	232.55		1364.33
	Total NTPC	8169.04	4082.70		26890.67
B	NHPC				
(a)	Bairasiul	180.00	55.83		500.68
(b)	Salal	690.00	433.99		2640.06
(c)	Tanakpur HPS	94.20	64.95		330.49
(d)	Chamera HPS	540.00	221.44		1987.64
(e)	Uri HPS	480.00	237.19		1789.61
(f)	Chamera2 HPS	300.00	0.00		0.00
	Total NHPC	2284.20	1013.40		7248.47
C	Nathpa-Jhakri	250.00	1.99		1.99
D	NPC				
(a)	RAPS -A	300.00	75.20		584.26
(b)	RAPS -B	440.00	172.55		1261.05
(c)	NAPS	440.00	214.60		1247.53
	Total NPC	1180.00	462.35		3092.84
2	JOINTLY OWNED (BBMB)				
(a)	Bhakra Complex	1490.15	671.90		3880.11
(b)	Dehar	990.00	398.61		2416.30
(c)	Pong	390.00	100.21		449.84
	Total BBMB	2870.15	1170.72		6746.25
3	DELHI				
(a)	Indra Prastha	247.50	56.68		278.43
(b)	Rajghat	149.00	45.11		302.24
(c)	Gas Turbines	282.00	100.71		526.95
(d)	Pragati Gas	330.00	212.66		1117.18
	Total DELHI	1008.50	415.16		2224.79
4	HARYANA				
(a)	WYC	48.00	29.29		160.44
(b)	Faridabad (New)	165.00	49.37		368.72
(c)	Panipat	860.00	453.05		2357.76
(d)	Magnum Diesel(IPP)	25.20	0.00		26.32
	Total Haryana	1098.20	531.71		2913.24

contd/-

5	HP			
(a)	Giri	60.00	21.79	98.54
(b)	Bassi	60.00	35.49	240.60
(c)	Binwa	6.00	4.13	22.98
(d)	Rongtong	15.25	2.61	12.59
	(+Nogli+Micro+Thirot+Sal-2)			
(e)	Andhra	16.95	11.30	50.38
(f)	Bhabha (H)	120.00	79.60	465.37
(g)	Baner (H)	12.00	4.87	28.91
(h)	Gaj (H)	10.50	6.54	33.76
(i)	Gumma	3.00	1.86	11.57
(j)	Ghanvi	22.50	8.54	43.21
(k)	Malana (IPP)	86.00	45.78	292.07
(l)	Baspa (IPP)	300.00	202.35	882.64
	Total HP	712.20	424.86	2182.60
6	J & K			
(a)	Lower Jhelum	105.00	45.26	317.45
(b)	Upper Sindh	127.60	11.52	159.15
(c)	Ganderbal	15.00	1.94	10.24
(d)	Mohra	9.00	0.00	0.00
(e)	Chenani	32.80	7.46	39.91
(f)	Stakna	9.75	0.00	0.00
(g)	Small Hydel	3.54	0.00	0.00
(h)	Sewa	9.00	0.00	0.00
(i)	Diesel gen set	7.18	0.00	0.00
(j)	Pampore GT St - I	75.00	0.00	0.00
(k)	Pampore GT St - II	100.00	0.00	0.00
	Total J & K	493.87	66.19	526.74
7	PUNJAB			
(a)	Jogindernagar/ Shanan	110.00	62.66	429.21
(b)	UBDC	90.00	41.88	226.24
(c)	Mukerian	207.00	91.81	467.59
(d)	Anandpur Sahib (APS)	134.00	90.34	477.71
(e)	Ranjit Sagar HPS	600.00	130.32	1146.88
(f)	Small Hydel	4.10	0.00	2.32
(g)	GNDTPS (Bhatinda)	440.00	221.35	1190.91
(h)	GGSTPS (Ropar)	1260.00	678.21	3688.99
(i)	Jhalkeri Rice Straw Fired	10.00	0.00	0.00
(j)	Lehra Mohabbat TPS	420.00	258.66	1521.29
	Total Punjab	3275.10	1575.23	9151.13
8	RAJASTHAN			
(a)	Mahi Bajaj Sagar	140.00	15.05	17.47
(b)	Rana Pratap Sagar (RPS)	172.00	0.00	24.38
(c)	Jawahar Sagar (JS)	99.00	7.74	40.09
(d)	Anoopgarh	9.00	0.00	0.88
(e)	Small Hydro	14.85	0.85	5.44
(f)	Kota TPS	1045.00	481.91	2665.39
(g)	RAMGARH GT	3.00	0.00	
(h)	RAMGARH GT EXT	35.50	16.64	107.12
(i)	Suratgarh TPS	1250.00	590.51	2982.18
(j)	Wind Farm	14.01	11.79	72.78
(k)	Others (KPTL bio-mass)		4.07	4.07
	Total Rajasthan	2782.36	1128.56	5919.79

contd/-

9	U.P.			
	<u>HYDRO</u>			
(a)	Rihand	300.00	116.40	470.77
(b)	Obra	99.00	40.96	196.07
(c)	Matatilla	30.00	20.21	35.00
(d)	Ganga Canal	10.70	0.00	0.00
(e)	Small hydro	18.20	0.00	0.00
(f)	Khara	72.00	51.67	257.86
	Total U.P. (Hydro)	529.90	229.23	959.69
	<u>THERMAL</u>			
(e)	Obra	1442.00	420.67	2766.78
(f)	Panki	242.00	92.43	384.25
(g)	Harduaganj	375.00	56.31	225.27
(h)	Paricha	220.00	33.05	237.80
(i)	Anpara	1630.00	738.79	4875.78
	Total U.P. (Thermal)	3909.00	1341.24	8489.88
	Total U.P.	4438.90	1570.47	9449.58
10	UTTRANCHAL			
(a)	Khatima	41.40	21.90	102.97
(b)	Ramganga	198.00	0.00	21.16
(c)	Ganga Canal	32.70	13.63	67.30
(d)	Yamuna (I & IV)	114.75	67.12	365.74
(e)	Chibro	240.00	102.13	585.77
(f)	Khodri	120.00	45.97	270.50
(g)	Chilla	144.00	91.25	439.15
(h)	Maneri Bhali	90.00	1.47	268.86
	Total Uttranchal	980.85	343.46	2121.44
11	CHANDIGARH			
	Diesel gen set	1.40		
	Total Region	29544.77	12786.80	78469.53

Notes : 1. The ex-bus generations are either actual values or based on the following assumptions in respect of auxiliary consumption

-----Hydro and diesel/gas power stations in open cycle-----1.0%

-----Gas power stations in combined cycle-----3.0%

-----Coal fired power stations

IP ----12% Rajghat---11% Faridabad---13.5% Suratgarh-----10.0%

Panipat---12.0% RTP---7.5% GNDTP---10.5% Tanda---12.5%

Lehra Mohabbat---10.5% KTPS---10% UP---12.5%

XII. DETAILS OF ENERGY EXCHANGES THROUGH BILATERAL AGREEMENTS (INTRA-REGIONAL) DURING SEPTEMBER**(ALL FIGS IN MWH)**

FROM / TO	PUNJAB	HARYANA	RAJASTHAN	DELHI	UP	UTTRANCHAL	HP	J & K	CHANDIGARH
PUNJAB	-	-	-	23900 *	-	16900 ***	10938 *** 18175 *	33000 ***	-
HARYANA	-	-	-	18250 **	-	-	14325 **	-	-
RAJASTHAN	-	-	-	-	-	-	-	-	-
DELHI	-	-	-	-	45075 **	62738 *	1563535 **	-	-
UP	-	-	-	-	-	-	-	-	-
UTTRANCHAL	-	-	-	-	-	-	-	-	-
HP	-	-	-	-	-	-	-	-	-
J & K	-	-	-	-	-	-	-	-	-
CHANDIGARH	-	-	-	-	-	-	-	-	-

* Through PTC

** Through Mutual

*** Through Banking

REMARKS : Figures are provisional and indicative only.

XIII. DETAILS OF ENERGY EXCHANGES THROUGH BILATERAL AGREEMENTS (INTER-REGIONAL) DURING SEPTEMBER 2003

(ALL FIGS IN MWH)

FROM / TO	GOA	MP	WBPCL	DVC	NEEPCO	MSEB	GEB
PUNJAB	-	-	-	-	-		-
HARYANA	-	-	-	-	32400 *		-
RAJASTHAN	-	-	-	-	-		-
DELHI	27676 **	-	60060 *	-	-		-
UTTRANCHAL	-	-	-	-	-	-1200 *	-17363 *

* Through PTC

(+) Import

** Through Global Energy Limited

(-) Export

REMARKS : Figures are provisional and indicative only

XIV. Inter Regional Exchanges During September 2003 (Sheet 1 of 2)

1 OF 2

Date	With WR Over Vindhyachal HVDC B/B {Export (-)/Import(+)}							With WR Over Auraiya - Malanpur {Export(-)/Import(+)}						
	Peak MW	Off Peak MW	Max Import	Max Export	Energy Import	Energy Export	Net (MU)	Peak MW	Off Peak MW	Max Import	Max Export	Energy Import	Energy Export	Net (MU)
01	50	200	400	50	2.04	0.04	2.00	-24	-22	0	25	0.00	-0.47	-0.47
02	50	200	400	100	1.11	0.58	0.53	-24	-22	0	25	0.00	-0.56	-0.56
03	25	25	75	350	0.28	1.53	-1.25	-24	-22	0	25	0.00	-0.51	-0.51
04	50	25	250	0	1.35	0.00	1.35	-24	-22	0	25	0.00	-0.49	-0.49
05	-50	50	150	100	1.04	0.16	0.88	-24	-22	0	25	0.00	-0.51	-0.51
06	50	50	100	150	0.98	0.28	0.70	-25	-20	0	25	0.00	-0.47	-0.47
07	-500	50	100	500	0.52	3.02	-2.52	-25	-20	0	25	0.00	-0.44	-0.44
08	-450	-500	0	500	0.00	10.48	-10.48	-25	-22	0	25	0.00	-0.45	-0.45
09	-50	-100	0	200	0.00	1.46	-1.46	-24	-22	0	25	0.00	-0.51	-0.51
10	-75	50	300	200	0.97	0.58	0.39	-24	-22	0	25	0.00	-0.47	-0.47
11	-100	0	100	200	0.05	1.15	-1.10	-24	-22	0	25	0.00	-0.47	-0.47
12	-100	0	50	150	0.00	0.88	-0.88	-25	-25	0	25	0.00	-0.52	-0.52
13	50	50	150	250	0.40	0.89	-0.49	-25	-25	0	25	0.00	-0.54	-0.54
14	-50	50	100	350	0.29	2.05	-1.76	0	0	0	0	0.00	0.00	0.00
15	-300	50	50	350	0.20	3.10	-2.90	0	0	0	0	0.00	0.00	0.00
16	50	-250	50	450	0.19	3.54	-3.35	0	0	0	0	0.00	0.00	0.00
17	50	-350	50	450	0.33	2.32	-1.99	0	0	0	0	0.00	0.00	0.00
18	50	0	0	200	0.00	1.93	-1.93	0	0	0	0	0.00	0.00	0.00
19	0	0	172	150	1.09	0.22	0.87	0	0	0	0	0.00	0.00	0.00
20	0	0	173	100	1.63	0.24	1.39	0	0	0	0	0.00	0.00	0.00
21	73	123	225	300	1.63	0.50	1.13	0	0	0	0	0.00	0.00	0.00
22	63	57	113	0	1.49	0.00	1.49	0	0	0	0	0.00	0.00	0.00
23	63	57	113	0	1.49	0.10	1.39	0	0	0	0	0.00	0.00	0.00
24	25	0	114	25	0.88	0.06	0.82	0	0	0	0	0.00	0.00	0.00
25	64	0	200	114	1.23	0.25	0.98	0	0	0	0	0.00	0.00	0.00
26	68	50	400	100	2.02	0.30	1.72	0	0	0	0	0.00	0.00	0.00
27	64	350	350	114	2.55	0.06	2.49	0	0	0	0	0.00	0.00	0.00
28	-100	64	114	100	0.28	0.40	-0.11	0	0	0	0	0.00	0.00	0.00
29	-200	0	50	350	0.00	1.85	-1.85	0	0	0	0	0.00	0.00	0.00
30	0	0	100	200	0.00	0.45	-0.45	0	0	0	0	0.00	0.00	0.00
31														
Maximum	73	350	400	500	2.55	10.48	2.49	0	0	0	25	0.00	0.00	0.00
Minimum	-500	-500	0	0	0.00	0.00	-10.48	-25	-25	0	0	0.00	-0.56	-0.56
Average	-38	10	148	203	0.80	1.28	-0.48	-11	-10	0	11	0.00	-0.21	-0.21
Total					24.03	38.41	-14.38					0.00	-6.40	-6.40

XIV. Inter Regional Exchanges During September 2003 (Sheet 2 of 2)

2 of 2

Date	With WR Over Ujjain - Kota {Export(-)/Import(+)}							With ER {Export(-)/Import(+)}						
	Peak MW MW	Off Peak MW MW	Max Import MW	Max Export MW	Energy Import MU	Energy Export MU	Net MU	Peak MW MW	Off Peak MW MW	Max Import MW	Max Export MW	Energy Import MU	Energy Export MU	Net MU
01	0	0	0	0	0.00	0.00	0.00	359	359	360	0	8.44	0.00	8.44
02	0	0	0	0	0.00	0.00	0.00	359	359	359	0	8.72	0.00	8.72
03	0	0	0	0	0.00	0.00	0.00	369	288	369	0	7.33	0.00	7.33
04	0	0	0	0	0.00	0.00	0.00	303	294	303	0	7.28	0.00	7.28
05	0	0	0	0	0.00	0.00	0.00	374	373	444	0	9.02	0.00	9.02
06	0	0	0	0	0.00	0.00	0.00	374	374	444	0	8.98	0.00	8.98
07	0	0	0	0	0.00	0.00	0.00	372	373	422	0	9.02	0.00	9.02
08	0	0	0	0	0.00	0.00	0.00	372	372	472	0	8.87	0.00	8.87
09	0	0	0	0	0.00	0.00	0.00	272	372	472	0	8.11	0.00	8.11
10	0	0	0	0	0.00	0.00	0.00	273	272	273	0	5.26	0.00	5.26
11	0	0	0	0	0.00	0.00	0.00	368	372	500	0	8.82	0.00	8.82
12	0	0	0	0	0.00	0.00	0.00	373	371	422	0	8.98	0.00	8.98
13	0	0	0	0	0.00	0.00	0.00	374	373	500	0	9.16	0.00	9.16
14	0	0	0	0	0.00	0.00	0.00	340	341	491	0	9.06	0.00	9.06
15	0	0	0	0	0.00	0.00	0.00	311	339	441	0	8.55	0.00	8.55
16	0	0	0	0	0.00	0.00	0.00	237	207	311	0	5.12	0.00	5.12
17	0	0	0	0	0.00	0.00	0.00	247	247	247	0	5.97	0.00	5.97
18	0	0	0	0	0.00	0.00	0.00	218	217	218	0	5.26	0.00	5.26
19	0	0	0	0	0.00	0.00	0.00	0	78	228	0	0.84	0.00	0.84
20	0	0	0	0	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00
21	0	0	0	0	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00
22	0	0	0	0	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00
23	0	0	0	0	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00
24	0	0	0	0	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00
25	0	0	0	0	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00
26	0	0	0	0	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00
27	0	0	0	0	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00
28	0	0	0	0	0.00	0.00	0.00	98	0	118	0	2.10	0.00	2.10
29	0	0	0	0	0.00	0.00	0.00	170	231	269	0	5.14	0.00	5.14
30	0	0	0	0	0.00	0.00	0.00	95	90	99	0	2.28	0.00	2.28
31														
Maximum	0	0	0	0	0.00	0.00	0.00	374	374	500	0	9.16	0.00	9.16
Minimum	0	0	0	0	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00
Average	0	0	0	0	0.00	0.00	0.00	209	210	259	0	5.08	0.00	5.08
Total					0.00	0.00	0.00					152.31	0.00	152.31

XV. Progress Of Installation Of Shunt Capacitors As On 31.09.2003

(ALL FIGS IN MVAR)

CONSTITUENT	REQUIREMENT AT THE END OF Mar-04	CAPACITORS AS ON 31.03.2003	CAPACITORS ADDITION DURING		BALANCE TO BE INSTALLED DURING 2003-04
		INSTALLED	2002-03	2003 - 04	
Chandigarh	150	92	0	0	58
Delhi	3364	2755	122	95	514
Haryana	3435	2685	333	124	626
H.P.	347	278	73	17	52
J & K	892	147	0	0	745
Punjab	4874	4706	76	11	157
Rajasthan	2863	2698	221	53	112
U.P.	5495	4965	274	47	483
Uttaranchal	344	123	0	2	219
BBMB	381	381	0	0	0
TOTAL	22145	18830	1099	349	2966

SOURCE: Minutes of 345th OCC meeting of NREB held on 10th October, 2003.

XVI. Hydraulic Data For Reservoirs During September 2003

Item	Bhakra	Pong	Rihand	R.P.S.	Gandhi Sagar (M.P.)
Full Reservoir Level (m) (FRL) (ft)	514.50 1688.00	433.12 1421.00	268.22 880.00	352.65 1157.00	402.64 1321.00
Min. Draw Down Level (m) (MDDL) (ft)	445.62 1462.00	384.05 1260.00	252.98 830.00	342.90 1125.00	381.00 1250.00
Level on last day of September 2003 (m)	509.03 1670.05	416.41 1366.19	265.60 871.40	347.61 1140.44	388.28 1273.90
Level on last day of September 2002 (m)	505.14 1657.28	408.36 1339.76	263.90 865.81	345.45 1133.37	383.26 1257.42
Live Capacity as on (mhmt) last day of september 2003 (maft)	0.63 5.07	0.48 3.86	0.44 3.55	0.06 0.52	0.17 1.38
Live Capacity as on (mhmt) last day of September 2002(maft)	0.55 4.42	0.44 3.56	0.41 3.30	0.00 0.00	0.04 0.33
Energy content as on last day of September 2003 (MU)	2550.00	720.00	850.00	120.00	450.00
Energy content as on last day of September 2002 (MU)	2200.00	440.00	695.00	59.00	110.00
Maximum level (m) (ft) (date)	509.18 1670.55 27.09.2003	416.44 1366.27 27.09.2003	265.60 871.40 30.09.2003	347.61 1140.44 30.09.2003	388.28 1273.90 30.09.2003
Minimum level (m) (ft) (date)	505.95 1659.94 01.09.2003	413.21 1355.68 01.09.2003	259.32 850.80 01.09.2003	347.00 1138.44 01.09.2003	384.97 1263.01 01.09.2003

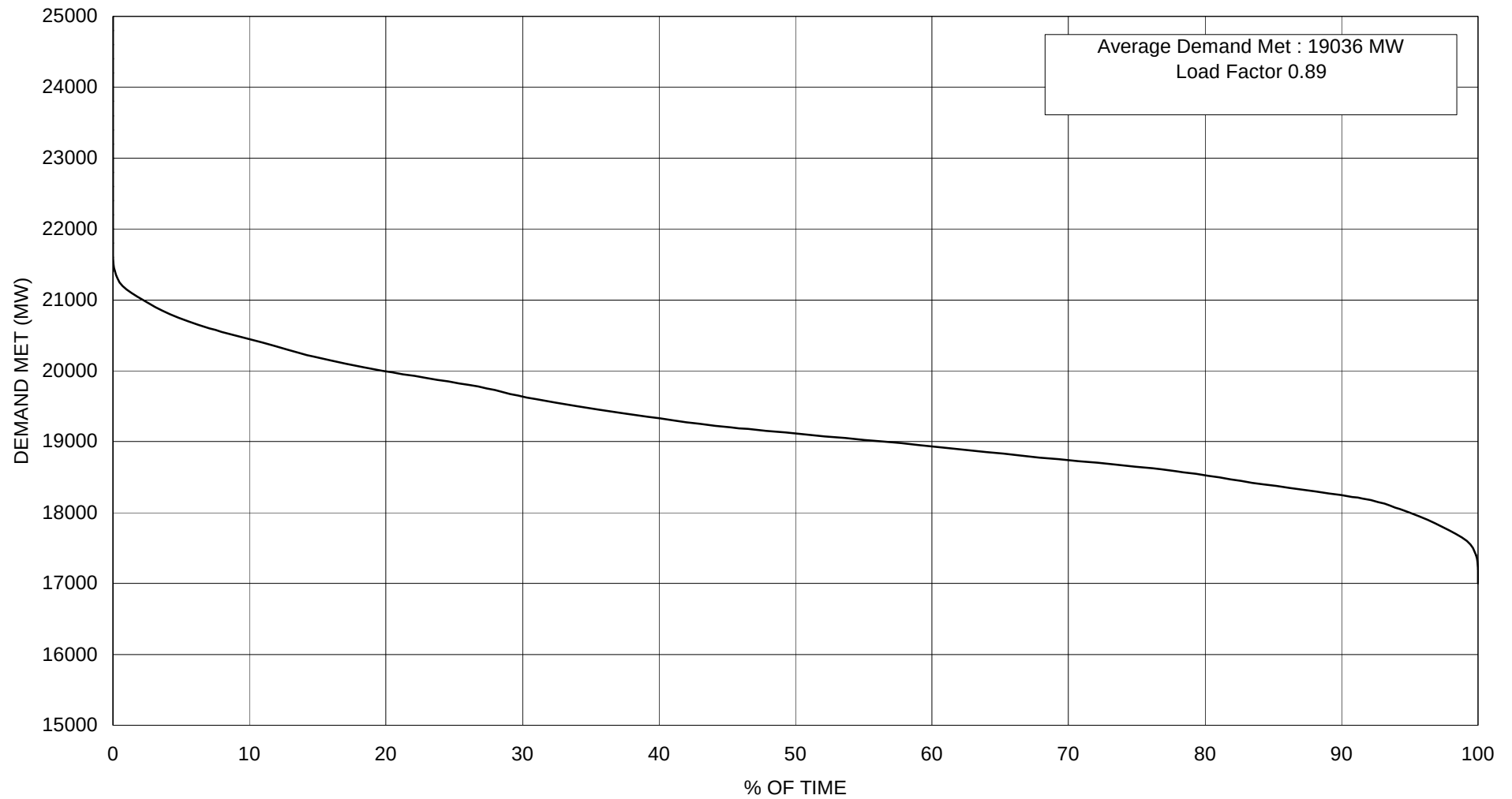
Energy content of Bhakra : Total Energy content at Bhakra, Ganguwal and Kotla power stations

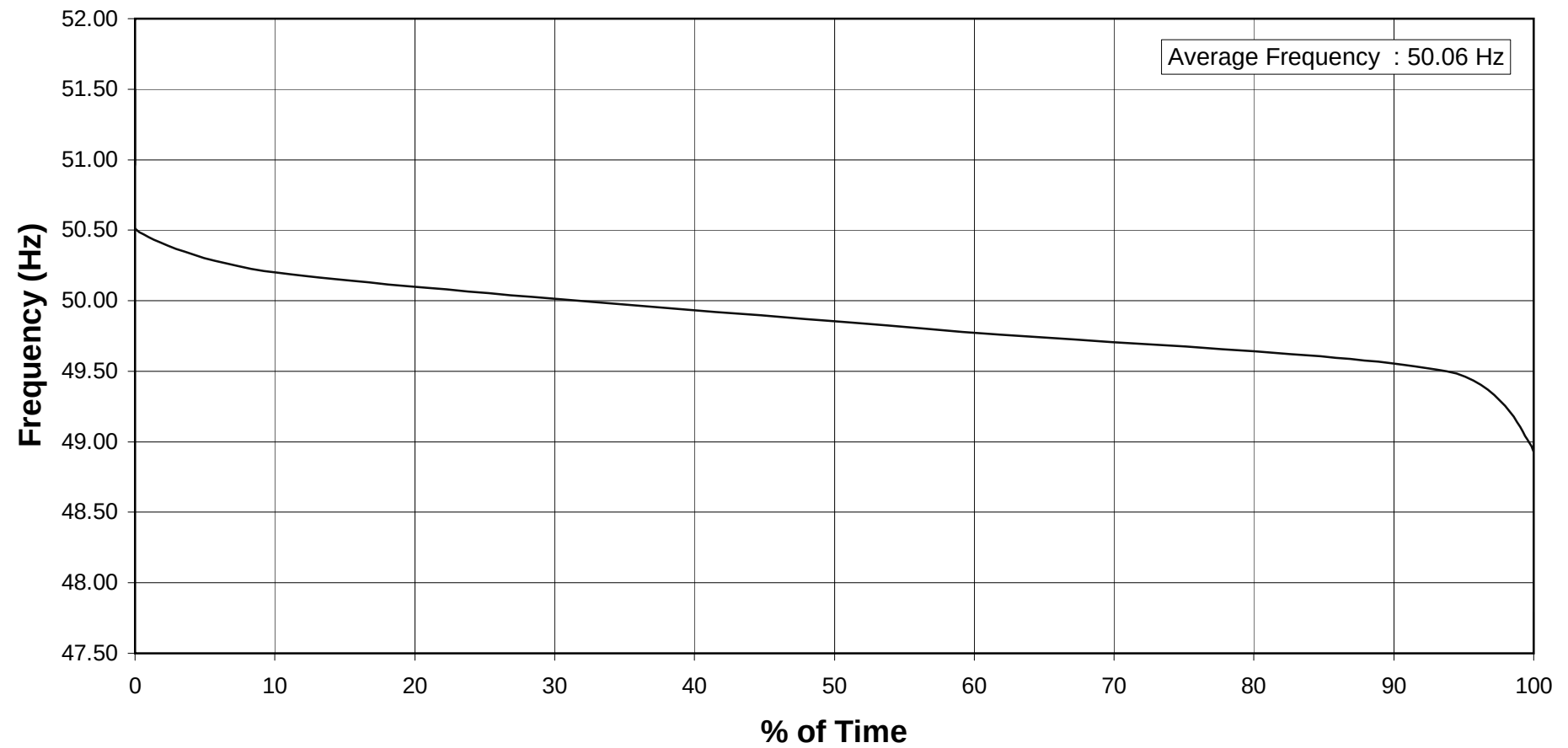
Energy content of Rihand : Total Energy content at Rihand & Obra power stations

Energy content of RPS : Total Energy content of Rana Pratap Sagar and Jawahar Sagar Power Stations.

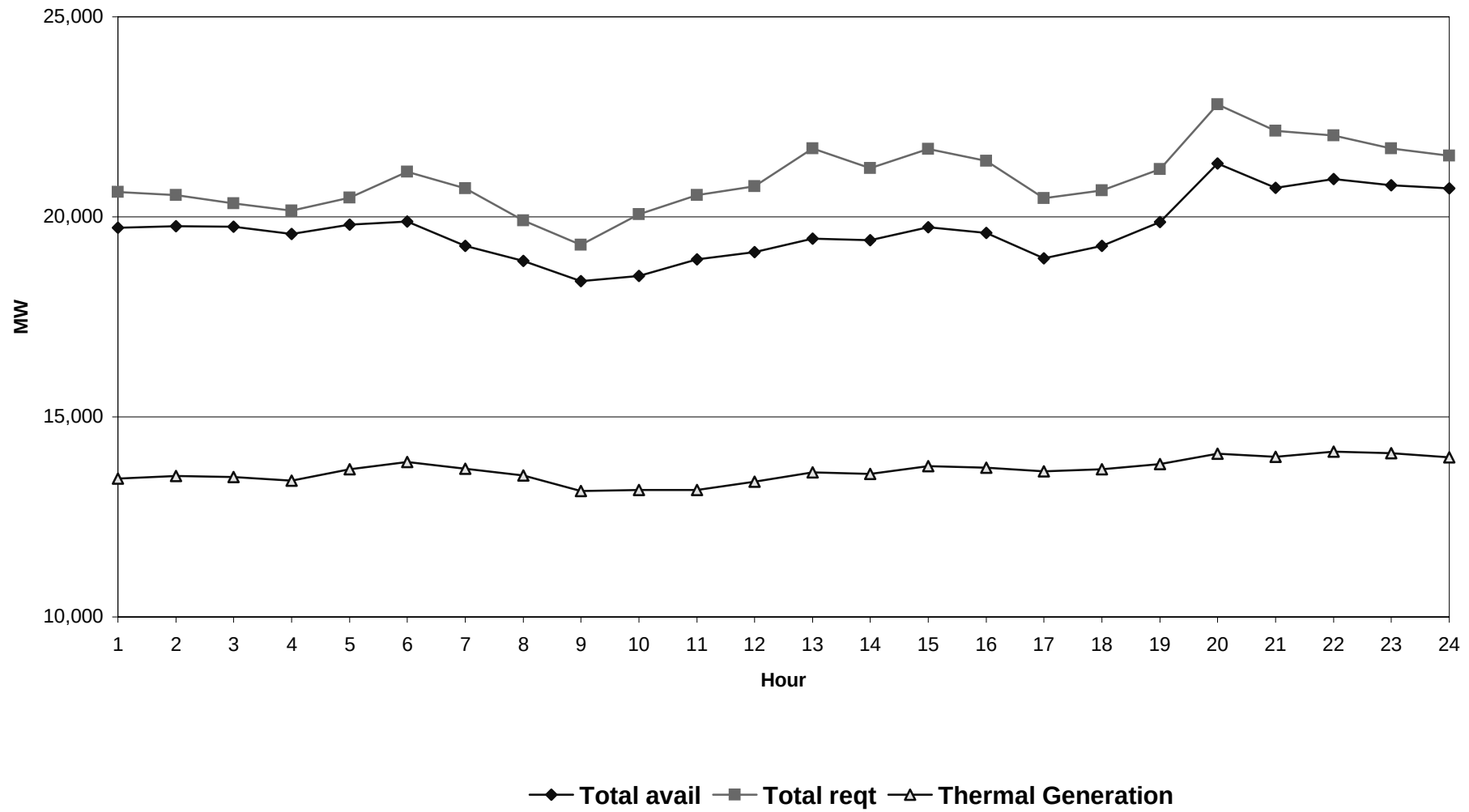
Energy Content of G. Sagar : Total Energy content at Gandhi Sagar, RP Sagar and Jawahar Sagar Power Stations.

Load Duration Curve For Northern Region For September 2003

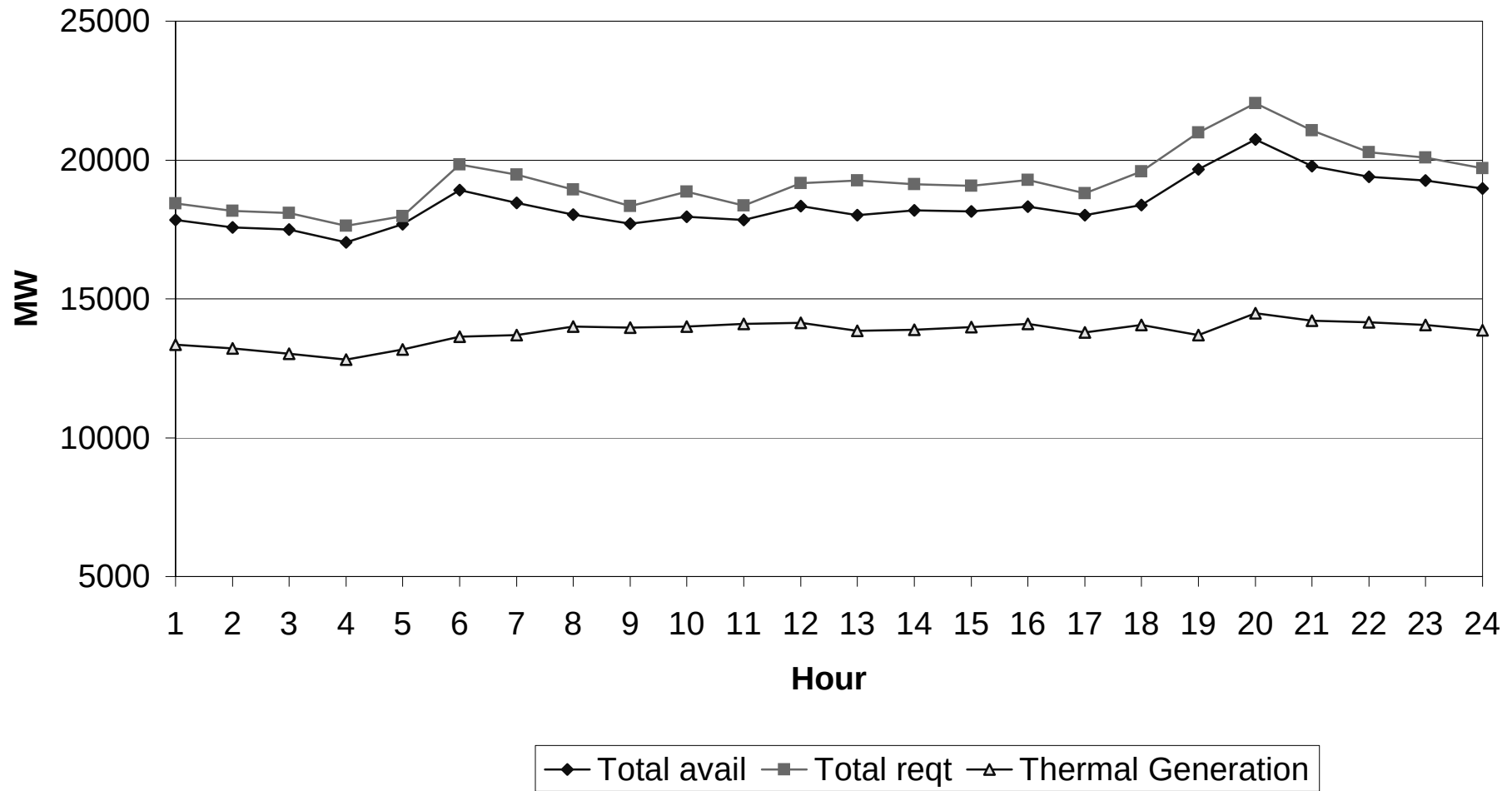


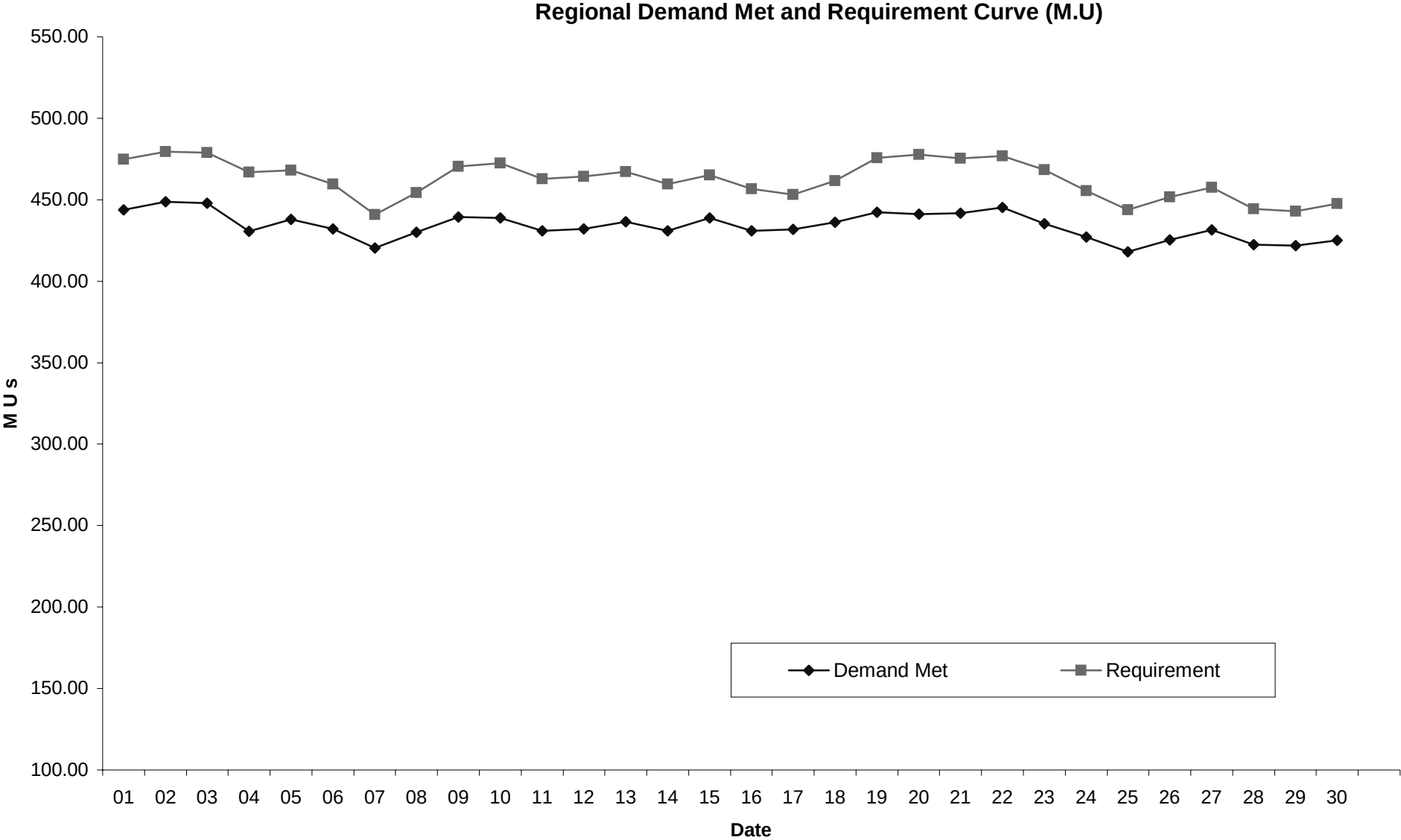
Frequency Duration Curve For Northern Region For September 2003

**Load Curve Of Northern Region For Maximum Demand Met Day
(2nd September 2003)**



Load Curve Of Northern Region For Minimum Demand Met Day (29th September 2003)





Grid Incident during September 2003

Date	Time	Incident
12.09.2003	03.03	All the five running units at Suratgarh tripped due to evacuation problem caused by tripping of 400 kV Suratgarh-Ratangarh D/C lines. The problem was initiated due to tripping of 220 kV Bikaner-Nagaur line and Subsequently 220 kV Ratangarh-Sikar D/C line and 220 kV Ratangarh-Reengus line tripped on power swing. The system was restored by 04.30 hrs.