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NORTHERN REGION GRID REPORT FOR THE MONTH OF OCTOBER 2003

A) Summary Report

1. Grid Overview during the Month

During the month of October 2003, the power supply position in the region was satisfactory. The average energy and peak shortages were 4.01% & 6.64% compared to 9.15% and 12.24% during the last year i.e. October 2002 respectively. The average system frequency was 49.93Hz and frequency remained in the normal range i.e. between 49.0 & 50.5 Hz for 97.54% of the time compared to 83.10% during the last year i.e. October 2002. The average frequency variation index during the month was 0.88. The free governor mode of operation in the Region was implemented w.e.f 07.10.2003. After implementation of FGMO, it could be seen that % of frequency above 50.50 Hz has been considerably reduced.

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. 378 kV. There was no major transmission outage during October 2003. The month of October 2003 was incident free.

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

- (i) Chamera Stage-II, #1 synchronised for the first time on 06.10.2003 and declared under commercial operation from the same date.

3. Frequency Profile :

Maximum frequency	50.99	Hz	at	2:38	hours on	13.10.2003
Minimum frequency	48.48	Hz	at	18.33	hours on	18.10.2003
Average frequency	49.93	Hz				

Frequency distribution in %

Hz	< 48.5	<49.0	49.0-50.5	> 50.5
% of time	0.00	0.50	97.54	1.96

Frequency Variation Index

Monthly Average	0.88
Maximum	1.56
Minimum	0.34

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

State / U.T.	Demand met MU/Day	Requirement MU/Day	Shortage MU/Day	Shortage %
Punjab	77.76	80.65	2.89	3.58
Haryana	55.37	56.26	0.89	1.58
Rajasthan	73.75	73.75	0.00	0.00
U.P.	114.04	125.71	11.67	9.28
Uttaranchal	10.71	10.91	0.20	1.83
Delhi	51.46	51.83	0.37	0.71
H.P.	8.65	8.65	0.00	0.00
J & K *	18.19	19.50	1.31	6.72
Chandigarh	2.73	2.73	0.00	0.00
N.F.F./Rail	1.89	1.89	0.00	0.00
Total	414.55	431.88	17.33	4.01

b. Peak MW

State / U.T.	MAX. Demand met MW	MAX. Requirement MW	Shortage MW	Shortage %
	A	B	C	(C/B)*100
Punjab	4106	4271	165	3.86
Haryana	3031	3031	0	0.00
Rajasthan	3930	3930	0	0.00
U.P.	6134	7070	936	13.24
Uttaranchal	707	747	40	5.35
Delhi	2944	2999	55	1.83
H.P.	538	538	0	0.00
J & K *	1075	1200	125	10.42
Chandigarh	166	166	0	0.00
N.F.F./Rail	79	79	0	0.00
Region	21713	23257	1544	6.64

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	940.65	990.90	50.25
Haryana	701.59	924.01	222.42
Rajasthan	876.09	902.26	26.17
U.P.	1465.93	1554.90	88.97
Uttranchal	61.18	-4.61	-65.79
Delhi	1079.82	875.58	-204.24
H.P.	160.15	114.70	-45.45
J & K	389.17	519.38	130.21
Chandigarh	108.74	84.77	-23.97
N.F.F./Rail	54.74	58.66	3.92

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

a)	From WR over HVDC Vindhyachal B/B	6.58	500
b)	From WR to over 220 kV Ujjain-Kota	0	0
c)	From ER over HVDC Sasaram B/B	205.28	500
d)	From ER over 220 kV Dehri-Sahupuri	0	0

Export

d)	To WR over HVDC Vindhyachal B/B	112.07	500
e)	To WR (MP) over 220 kV Auraiya-Malanpur	13.88	44
f)	To ER (Bihar) over 220 kV/132kV lines	17.63	54
g)	To Nepal over 132 kV Tanakpur-Mahendernagar	3.12	9
h)	To ER over HVDC Sasaram B/B	0	0

B). Detailed Report

I. Details of Installed/Effective Capacity at the end of October 2003

	<u>STATION</u>	<u>INSTALLED CAPACITY</u>	<u>EFFECTIVE CAPACITY</u>
		(MW)	
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-I	3x180 540.00	3x180 540.00
(f)	URI	4x120 480.00	4x120 480.00
(g)	Chamera HPS-II	1x100 100.00	1x100 100.00
	Sub-Total	2110.00	2084.20
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)		11894.04	11683.24
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

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

J & K (Contd.)				
(h)	GAS TURBINES			
	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			
(a)	HYDRO			
	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
(g)	THERMAL			
	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			
(a)	HYDRO			
	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
(f)	THERMAL			
	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

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)		29856.93		29344.77

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	27.84%
NHPC	2084.20	0.00	0.00	0.00	2084.20	7.10%
SJVNL	250.00	0.00	0.00	0.00	250.00	0.85%
NPC	0.00	0.00	0.00	1180.00	1180.00	4.02%
BBMB	2870.15	0.00	0.00	0.00	2870.15	9.78%
CHANDIGARH	0.00	0.00	1.40	0.00	1.40	0.00%
DELHI	0.00	396.50	612.00	0.00	1008.50	3.44%
HARYANA	48.00	1025.00	25.20	0.00	1098.20	3.74%
HIMACHAL	712.20	0.00	0.00	0.00	712.20	2.43%
J&K	311.69	0.00	182.18	0.00	493.87	1.68%
PUNJAB	1145.10	2130.00	0.00	0.00	3275.10	11.16%
RAJASTHAN	434.85	2295.00	52.51	0.00	2782.36	9.48%
UP	529.90	3909.00	0.00	0.00	4438.90	15.13%
UTTRANCHAL	980.85	0.00	0.00	0.00	980.85	3.34%
Total	9366.94	15580.50	3217.33	1180.00	29344.77	100.00%
% of TOTAL	31.92%	53.09%	10.96%	4.02%	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 31.10.2003

Agency / Source	Run-of -the -river	Reservoir	Total
NHPC	1544.20	540.00	2084.20
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	5591.94	3775.00	9366.94
PERCENTAGE	59.70%	40.30%	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	0.03	3.44	93.96	48.61	6.01	0.00	0.00
02	0.00	0.00	0.00	3.37	82.33	71.98	17.67	0.00	0.00
03	0.00	0.00	0.00	0.97	90.94	58.92	9.06	0.00	0.00
04	0.00	0.00	0.21	7.33	98.13	44.24	1.67	0.00	0.00
05	0.00	0.00	0.00	0.90	85.07	73.37	14.93	0.00	0.00
06	0.00	0.00	0.00	8.39	95.77	41.42	4.23	0.00	0.00
07	0.00	0.00	1.53	8.54	98.44	34.32	0.03	0.00	0.00
08	0.00	0.00	0.87	16.55	99.13	23.40	0.00	0.00	0.00
09	0.00	0.03	1.56	15.35	98.33	18.99	0.10	0.00	0.00
10	0.00	0.00	0.76	7.43	99.24	16.81	0.00	0.00	0.00
11	0.00	0.00	1.18	4.72	98.51	44.25	0.31	0.00	0.00
12	0.00	0.00	0.00	3.09	100.00	56.98	0.00	0.00	0.00
13	0.00	0.00	0.00	2.26	99.48	66.89	0.52	0.00	0.00
14	0.00	0.00	0.00	2.19	100.00	53.78	0.00	0.00	0.00
15	0.00	0.00	0.24	8.87	99.76	45.03	0.00	0.00	0.00
16	0.00	0.00	0.31	11.74	99.69	23.58	0.00	0.00	0.00
17	0.00	0.00	1.27	10.76	98.73	23.36	0.00	0.00	0.00
18	0.00	0.10	1.01	9.03	98.99	39.03	0.00	0.00	0.00
19	0.00	0.00	0.00	8.75	100.00	41.63	0.00	0.00	0.00
20	0.00	0.00	0.28	8.65	99.72	30.22	0.00	0.00	0.00
21	0.00	0.00	1.18	14.62	98.82	23.96	0.00	0.00	0.00
22	0.00	0.00	0.00	5.52	100.00	29.36	0.00	0.00	0.00
23	0.00	0.00	0.00	16.56	100.00	17.78	0.00	0.00	0.00
24	0.00	0.00	2.64	18.79	97.36	16.92	0.00	0.00	0.00
25	0.00	0.03	1.25	15.90	96.81	41.88	1.94	0.00	0.00
26	0.00	0.00	0.00	2.50	96.04	66.22	3.96	0.00	0.00
27	0.00	0.00	0.00	1.60	99.83	61.88	0.17	0.00	0.00
28	0.00	0.00	0.59	5.66	99.37	39.56	0.03	0.00	0.00
29	0.00	0.00	0.00	4.20	100.00	51.94	0.00	0.00	0.00
30	0.00	0.00	0.07	2.08	99.93	45.42	0.00	0.00	0.00
31	0.00	0.00	0.52	12.78	99.48	21.22	0.00	0.00	0.00
Max	0.00	0.10	2.64	18.79	100.00	73.37	17.67	0.00	0.00
Min	0.00	0.00	0.00	0.90	82.33	16.81	0.00	0.00	0.00
Average	0.00	0.01	0.50	7.82	97.54	41.06	1.96	0.00	0.00

Frequency (Hz)				Average Frequency	Frequency Variation Index
Maximum		Minimum			
Freq	Time	Freq	Time		
50.79	07.30	48.98	18.42	50.04	0.78
50.98	16.04	49.35	18.48	50.22	1.56
50.90	08.25	49.31	13.00	50.12	0.97
50.75	18.02	48.94	22.32	49.95	0.86
50.95	16.46	49.08	00.06	50.20	1.23
50.88	08.04	49.05	21.07	49.96	1.02
50.52	04.10	48.54	22.18	49.88	0.93
50.39	08.08	48.83	05.29	49.75	1.25
50.54	08.11	48.51	18.31	49.78	1.39
50.47	18.06	48.63	14.26	49.82	0.79
50.58	17.50	48.67	22.10	49.96	0.68
50.42	7.06	49.24	0.07	50.02	0.53
50.99	13.11	49.15	18.25	50.06	0.58
50.43	16.04	49.19	18.35	50.01	0.56
50.39	17.06	48.93	18.50	49.92	0.88
50.41	21.49	48.88	17.25	49.83	0.92
50.41	08.00	48.68	18.32	49.83	0.93
50.43	13.19	48.48	18.34	49.90	0.94
50.45	08.24	49.17	19.13	49.92	0.73
50.44	18.04	48.89	15.18	49.77	0.78
50.37	06.03	48.78	00.27	49.78	1.24
50.39	18.01	49.09	07.23	49.87	0.74
50.45	07.45	49.07	15.24	49.80	0.99
50.47	17.04	48.73	18.27	49.78	0.93
50.76	16.36	48.52	18.36	49.91	1.41
50.84	17.04	49.30	00.07	50.10	0.71
50.60	17.11	49.15	18.36	50.04	0.34
50.51	08.05	48.87	18.19	49.93	0.68
50.32	22.53	49.01	07.07	49.97	0.49
50.30	02.52	48.99	18.19	49.96	0.45
50.32	08.53	48.83	18.34	49.82	0.93
50.99		49.35		50.22	1.56
50.30		48.48		49.75	0.34
50.56		48.93		49.93	0.88

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	416	02.08	395	18.48	416	08.07	387	18.48	212	04.03	201	18.44	410	04.04	388	18.48
02	412	03.23	384	11.21	403	03.10	383	11.19	210	03.07	196	10.43	408	01.10	386	09.24
03	412	03.23	384	11.21	403	03.10	383	11.19	210	03.07	196	10.43	408	01.10	386	09.24
04	411	04.19	385	18.50	404	04.18	387	12.26	210	04.19	196	18.46	410	04.19	386	18.50
05	414	16.44	395	10.47	408	16.43	394	10.22	209	01.39	192	20.09	412	01.39	389	18.44
06	412	03.07	382	12.33	409	04.02	389	11.40	211	03.59	194	18.55	411	00.38	387	10.45
07	409	03.06	384	18.30	406	08.02	387	22.18	211	04.01	192	18.30	409	04.06	388	18.35
08	405	08.02	381	09.36	399	08.03	388	00.08	207	03.11	190	11.08	409	04.04	385	09.35
09	408	08.05	380	14.25	405	07.37	386	14.24	206	00.00	193	18.44	414	01.48	390	18.41
10	410	03.17	385	12.49	399	01.27	386	12.51	207	02.30	196	18.37	413	00.59	390	18.41
11	410	03.17	385	12.49	399	01.27	386	12.51	207	02.30	196	18.37	413	00.59	390	18.41
12	411	04.15	391	11.05	401	08.12	391	12.19	209	04.01	198	18.55	414	04.02	393	18.31
13	413	04.15	381	11.16	403	04.15	385	11.06	211	03.56	191	18.43	416	04.02	388	18.25
14	410	01.47	380	12.22	400	02.11	386	12.15	210	04.05	192	18.40	415	04.13	387	18.35
15	413	04.10	385	18.47	406	13.28	390	18.47	211	04.07	191	18.56	415	04.04	388	18.27
16	412	04.52	389	18.47	404	04.52	390	18.47	211	04.07	191	18.56	414	04.56	389	15.48
17	411	04.02	384	18.31	402	04.22	388	18.28	209	04.10	191	18.28	416	03.24	385	18.29
18	410	07.08	386	11.09	401	04.06	390	11.09	208	04.06	197	11.50	413	08.20	389	18.48
19	410	07.08	386	11.09	401	04.06	390	11.09	208	04.06	197	11.50	413	08.20	389	18.48
20	410	02.37	383	18.43	400	04.21	387	18.40	208	02.05	193	18.20	418	08.02	387	17.25
21	408	3.16	383	18.19	401	04.29	387	19.21	208	02.05	193	18.20	411	03.46	384	17.41
22	409	03.06	381	18.36	401	03.05	386	18.39	208	03.10	190	18.34	414	03.56	386	18.34
23	412	03.09	384	18.23	402	04.21	387	10.26	209	02.55	193	18.28	411	00.00	386	17.22
24	413	16.18	389	18.18	405	17.05	388	18.18	210	14.18	196	18.22	409	22.52	388	18.17
25	411	01.28	386	18.42	403	16.14	388	18.38	210	08.33	197	18.42	412	01.31	386	17.38
26	411	04.11	385	18.35	404	04.18	388	18.15	210	03.36	195	18.47	413	04.29	387	14.36
27	411	04.11	385	18.35	404	04.18	388	18.15	210	03.36	195	18.47	413	04.29	387	14.36
28	406	08.03	382	18.22	400	07.58	385	18.19	207	01.37	193	18.21	409	08.03	386	17.09
29	408	08.00	384	18.30	403	07.29	386	18.29	207	00.02	194	18.23	411	08.02	387	17.54
30	409	02.26	386	18.19	400	23.54	388	18.14	209	02.55	194	18.17	413	23.33	389	17.54
31	412	03.03	385	18.33	402	03.36	385	18.27	209	01.57	193	18.28	415	08.08	388	17.49
Max	416		395		416		394		212		201		418		393	
Min	405		380		399		383		206		190		408		384	

V. Regional Power Supply Position

(All Figs In MUs)

Date	Availability (Gross)	Peak Hrs. Requirement	Shortage/ Restriction	Availability (Gross)	Off Peak Hrs. Requirement	Shortage/ Restriction*	Regional Availability
	MW	MW	MW	MW	MW	MW	MU
01	19770	20810	1040	17374	18119	745	419.07
02	19314	20272	958	17597	18382	785	398.22
03	20475	21459	984	16912	17497	585	414.17
04	20749	21204	455	18025	18310	285	425.22
05	20094	20543	449	17932	18422	490	411.23
06	20493	21181	688	16878	17168	290	414.25
07	20102	21307	1205	18100	18390	290	415.71
08	20368	21840	1472	18068	18658	590	420.12
09	20341	22069	1728	17964	18660	696	416.27
10	20810	21866	1056	18039	18629	590	423.74
11	20498	21470	972	17932	18747	815	427.69
12	20137	21178	1041	17486	17991	505	413.15
13	20548	21606	1058	16880	17165	285	414.39
14	20467	21794	1327	17140	17725	585	414.64
15	21002	22414	1412	17305	18195	890	418.29
16	20430	21765	1335	17568	18533	965	419.37
17	20745	22184	1439	17872	18508	636	423.60
18	21010	22595	1585	18180	18965	785	427.07
19	20637	21786	1149	18255	19195	940	420.08
20	19940	21548	1608	17959	18457	498	417.83
21	20858	22171	1313	17786	18426	640	421.99
22	21073	22440	1367	18047	18762	715	424.19
23	21363	23043	1680	18159	19174	1015	412.86
24	21713	23063	1175	18163	18903	740	436.93
25	21552	23257	1680	18745	19485	740	435.73
26	21682	22694	1012	18669	19304	635	424.37
27	21109	22221	1112	17502	18087	585	422.83
28	21209	23218	2009	18211	18796	585	431.00
29	21400	22850	1450	18095	18680	585	428.11
30	20765	22273	1508	17962	18547	585	421.72
31	20544	22167	1623	17768	18353	585	416.31
Maximum	21713	23257	2009	18745	19485	1015	436.93
Minimum	19314	20272	449	16878	17165	285	398.22
Average	20684	21945	1255	17825	18459	634	420.33

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	3738	3310	2876	2612	3229	2668	2822	1954	4854	5236
02	3466	3367	2357	2435	2576	2805	2435	2006	4605	5124
03	3866	3385	2417	2388	2585	2706	2893	1786	4899	5046
04	3568	3544	2815	2412	3196	2710	2710	1926	5316	5328
05	4122	3424	2681	2476	3070	2782	2314	1863	5112	4875
06	3732	3214	2751	2312	3263	2616	2868	1760	4823	5007
07	3440	3350	2762	2518	3251	2787	2814	1908	4952	5182
08	3793	3423	2398	2523	2841	2823	2944	1937	4719	5619
09	3692	3497	2326	2487	2867	2928	2747	1925	4752	5208
10	3934	3377	2133	2138	3013	3018	2850	1949	5096	5247
11	3948	3337	2160	2027	2735	3105	2745	1799	4985	5686
12	3535	3185	2385	2363	2916	2824	2640	1712	4862	5379
13	3839	2952	2563	2342	3225	2832	2839	1664	4930	4984
14	3706	3134	2838	2396	3492	3012	2642	1694	4958	4916
15	4565	3108	2723	2423	3628	3053	2696	1674	4960	4991
16	3666	3303	2409	2357	3241	3173	2821	1673	4595	5079
17	3897	3516	2426	2418	3266	3232	2894	1614	4725	5147
18	3862	3696	2330	2366	3293	3314	2787	1696	4906	5157
19	3758	3518	2431	2323	3267	3308	2635	1610	4922	5138
20	3273	3435	2351	2318	3482	3192	2782	1593	4964	5191
21	3790	3332	2390	2251	3347	3276	2819	1558	4750	5101
22	3862	3438	2482	2361	3377	3448	2761	1531	4893	4953
23	3499	3234	2472	2379	3475	3462	2850	1526	5262	5182
24	3829	3145	2572	2383	3523	3480	2865	1620	5209	5219
25	3621	3101	2755	2619	3577	3533	2763	1698	5255	5283
26	4031	3103	2490	2543	3352	3591	2515	1829	5303	5729
27	3997	3177	2518	2411	3439	3239	2716	1539	4991	5220
28	3971	3344	2473	2352	3517	3418	2822	1557	4824	5149
29	3955	3193	2465	2416	3542	3475	2785	1536	5168	5023
30	3702	3090	2482	2403	3602	3501	2690	1545	5006	5247
31	3594	3101	2348	2331	3554	2474	2721	1506	5727	5229
Maximum	4565	3696	2876	2619	3628	3591	2944	2006	5727	5729
Minimum	3273	2952	2133	2027	2576	2474	2314	1506	4595	4875
Average	3782	3301	2503	2390	3250	3090	2748	1716	4978	5190

Remarks: Peak - 1900 hrs offpeak - 0300 hrs

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	622	403	159	99	422	287	952	516
02	609	365	132	87	490	290	840	601
03	640	380	152	81	463	271	888	818
04	592	393	134	81	496	273	842	589
05	597	393	134	82	496	262	994	621
06	558	379	146	82	470	279	955	608
07	580	395	155	84	492	295	979	619
08	540	398	151	88	489	285	1010	625
09	685	385	151	86	440	289	898	610
10	660	387	153	110	498	295	931	554
11	607	361	148	100	488	288	1015	582
12	613	375	128	95	277	270	1057	739
13	624	386	145	110	498	289	980	726
14	620	384	147	83	498	311	931	741
15	636	358	147	82	507	262	960	758
16	601	365	155	81	513	285	982	728
17	630	370	148	79	514	292	991	768
18	619	392	151	77	508	291	1062	748
19	598	360	137	77	496	301	959	729
20	530	347	157	72	508	267	700	719
21	596	360	153	73	538	262	987	713
22	612	369	158	74	441	265	973	761
23	659	359	154	76	496	289	923	729
24	671	354	144	78	465	265	1010	711
25	677	412	124	77	507	273	922	715
26	640	429	118	68	468	230	973	724
27	663	392	146	70	495	241	916	736
28	631	378	152	72	502	268	918	760
29	636	388	150	75	506	252	968	671
30	603	377	147	73	503	260	833	684
31	668	372	143	73	491	269	915	799
Maximum	685	429	159	110	538	311	1062	818
Minimum	530	347	118	68	277	230	700	516
Average	620	380	146	82	483	276	944	690

Remarks: Peak - 1900 hrs offpeak - 0300 hrs

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	79.333	60.324	65.089	56.206	113.400	10.682	3.006	8.715	17.403	1.855	416.013
02	77.517	56.654	66.030	46.946	109.162	10.540	2.530	8.395	17.280	1.989	397.043
03	81.972	57.604	65.166	53.957	108.549	10.703	2.867	8.594	18.533	2.040	409.986
04	80.977	57.386	71.546	52.351	116.253	10.839	2.550	8.419	18.404	1.989	420.714
05	78.448	55.025	65.042	47.802	114.577	10.915	2.467	8.243	18.219	2.004	402.741
06	77.497	55.662	65.692	53.809	114.266	10.607	2.930	8.642	17.504	1.922	408.532
07	76.423	56.330	67.595	55.607	114.568	10.679	3.082	8.807	17.968	1.918	412.977
08	78.628	56.154	69.573	56.312	115.582	10.585	3.119	8.674	18.108	1.737	418.472
09	79.790	55.146	70.663	56.335	111.994	10.612	3.097	9.556	16.520	1.923	415.636
10	80.476	56.454	71.059	55.491	116.308	10.560	2.917	9.120	18.122	1.933	422.441
11	78.456	54.641	72.019	53.372	124.797	10.690	2.789	8.720	17.876	1.832	425.193
12	74.109	55.463	70.554	49.261	120.562	10.480	2.401	8.405	18.047	2.010	411.291
13	77.053	56.396	70.834	52.257	112.776	10.662	2.760	8.763	17.848	1.975	411.324
14	77.448	55.450	71.660	52.007	111.988	10.465	2.767	8.892	17.958	1.975	410.610
15	77.360	55.033	72.913	51.941	112.466	10.407	2.791	8.692	18.388	1.954	411.945
16	78.033	53.456	74.142	52.225	112.079	10.964	2.806	9.293	17.784	1.942	412.725
17	80.256	54.686	75.444	53.256	113.371	10.807	2.786	8.637	18.471	1.731	419.445
18	81.510	54.015	77.408	52.264	114.734	10.883	2.730	8.973	18.579	1.885	422.981
19	76.885	52.986	77.119	48.932	114.370	10.341	2.449	8.842	19.163	2.043	413.130
20	75.814	53.138	75.734	50.580	113.497	10.137	2.733	8.599	17.142	1.902	409.276
21	77.911	53.973	76.227	50.698	112.203	10.286	2.812	8.499	19.242	1.945	413.796
22	78.693	54.305	78.737	50.472	110.179	10.287	2.796	8.623	18.911	1.763	414.766
23	76.237	56.815	75.678	51.789	115.996	10.813	2.839	8.837	18.388	1.797	419.187
24	74.248	59.329	81.468	53.616	114.092	11.134	2.794	9.137	19.100	1.849	426.767
25	72.468	59.584	78.917	48.748	115.688	11.237	2.398	8.286	19.623	1.976	418.924
26	79.390	54.582	77.399	45.116	104.868	10.962	2.156	7.599	17.421	1.749	401.242
27	80.534	54.582	77.399	47.768	114.247	10.826	2.603	8.109	18.822	1.901	416.791
28	79.444	53.350	80.763	49.540	114.138	10.702	2.694	8.485	18.491	1.693	419.300
29	76.055	53.510	81.497	49.470	115.717	11.053	2.694	8.387	18.819	1.790	418.992
30	74.785	53.037	81.689	49.026	115.234	10.845	2.684	8.752	17.582	1.833	415.467
31	72.759	51.522	81.058	48.182	117.626	11.146	2.722	8.485	18.263	1.822	413.586
Maximum	81.972	60.324	81.689	56.335	124.797	11.237	3.119	9.556	19.623	2.043	426.767
Minimum	72.468	51.522	65.042	45.116	104.868	10.137	2.156	7.599	16.520	1.693	397.043
Average	77.758	55.374	73.746	51.462	114.042	10.705	2.734	8.651	18.193	1.893	414.558
Month Total	2410.509	1716.591	2286.116	1595.336	3535.287	331.849	84.769	268.179	563.979	58.677	12851.292

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-Oct-2003	32770	39141	23541	32429	23851	23407	33252	30261	51034	53821	1129	-2533
2-Oct-2003	31337	36076	21919	30190	22328	26012	26956	22104	46557	51712	1749	-2827
3-Oct-2003	32019	37224	22661	30767	23940	23979	33987	29674	49333	54174	860	-2521
4-Oct-2003	32207	36935	22962	32420	24089	23214	28740	28895	50770	53350	2667	-1956
5-Oct-2003	31990	36722	22924	30496	24892	23706	28884	23097	49757	52670	2659	-1844
6-Oct-2003	31950	35242	22814	33226	25439	24840	30481	29178	48596	51130	2574	-1456
7-Oct-2003	32583	36570	23169	32556	26790	28675	34968	30800	47872	52201	2238	-1630
8-Oct-2003	32252	35449	23458	30982	28452	33415	37815	32983	47784	52861	2478	-1873
9-Oct-2003	32194	32385	23584	31760	28870	30543	39690	34337	47662	53607	1189	-1210
10-Oct-2003	32253	30184	23529	29637	29196	32552	40412	33425	47672	55502	1514	-703
11-Oct-2003	31765	31701	23206	29817	28921	32650	39947	30323	47223	51129	1278	-813
12-Oct-2003	31689	31557	23139	27439	28950	35763	39190	27633	46934	49610	1291	-818
13-Oct-2003	31465	33544	22999	27866	29053	30020	40240	31291	47328	49315	1444	-790
14-Oct-2003	31663	32558	22957	29039	29305	28934	40377	31825	45488	49564	1310	-397
15-Oct-2003	31916	32196	23140	28230	29550	29434	39727	31628	47215	51968	1599	851
16-Oct-2003	31189	28756	22454	27569	28855	30118	38324	30288	43816	50300	1151	-289
17-Oct-2003	31116	29213	22383	28188	28800	29053	38107	30357	44038	48724	1207	477
18-Oct-2003	30667	27033	22126	28537	28491	29139	35683	31493	44454	49771	2461	-239
19-Oct-2003	30611	30429	22080	27254	28403	30182	34439	28187	43735	48003	2399	103
20-Oct-2003	27615	30309	22055	30053	28907	28908	35692	29543	44908	47794	2985	329
21-Oct-2003	27920	29586	21953	29461	29123	29046	35044	29069	45138	45990	2381	844
22-Oct-2003	27445	28988	21972	29056	28938	29752	34651	27166	48581	49958	2788	526
23-Oct-2003	27220	30344	21910	29562	29459	30718	34960	27361	48775	47809	2079	664
24-Oct-2003	27324	30226	21980	30829	29276	29997	35134	28806	48865	47863	1990	1081
25-Oct-2003	29094	31320	23159	31680	30741	30178	34356	23395	50021	55359	2095	1505
26-Oct-2003	27900	35919	22444	29373	30134	28646	33833	21438	47119	46839	2071	1623
27-Oct-2003	28758	31607	22375	29535	30201	27778	32783	25038	47315	46293	1991	1460
28-Oct-2003	28877	30247	22460	28309	30470	29822	32380	26287	49792	47489	2030	1815
29-Oct-2003	28852	28481	22350	28535	30502	31363	32065	24294	46670	44997	2142	1916
30-Oct-2003	29028	26836	22513	29846	30800	29633	29260	22825	46949	46816	2105	1907
31-Oct-2003	26983	24119	21374	29371	29369	30785	28440	22576	44529	48285	3326	2183
Total MU	940.652	990.897	701.590	924.012	876.095	902.262	1079.817	875.577	1465.930	1554.904	61.180	-4.615
Max. MWH	32770	39141	23584	33226	30800	35763	40412	34337	51034	55502	3326	2183
Min MWH	26983	24119	21374	27254	22328	23214	26956	21438	43735	44997	860	-2827
Avg. MWH	30344	31964	22632	29807	28261	29105	34833	28244	47288	50158	1974	-149

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

Figs. In MWH

Date	Himachal Pradesh		Jammu & Kashmir		Chandigarh		NFF		Railways	
	Schedule	Actual	Schedule	Actual	Schedule	Actual	Schedule	Actual	Schedule	Actual
1-Oct-2003	4855	1711	13517	15138	3653	3006	480	347	984	1508
2-Oct-2003	5350	1772	13331	15244	3567	2530	480	360	1117	1629
3-Oct-2003	4588	1878	13142	15635	3610	2867	480	361	1380	1679
4-Oct-2003	5074	1613	13117	16048	3404	2550	480	375	877	1614
5-Oct-2003	4873	1541	12933	15988	3432	2467	480	386	1086	1618
6-Oct-2003	5019	1806	12694	15407	3428	2930	480	379	1147	1543
7-Oct-2003	5046	2289	12564	15624	3443	3082	480	340	1259	1578
8-Oct-2003	4087	1996	12403	15612	3503	3119	480	301	1523	1436
9-Oct-2003	4002	2416	12389	14305	3529	3097	480	315	1514	1608
10-Oct-2003	4187	2850	12434	16668	3558	2917	480	314	1576	1619
11-Oct-2003	4085	2701	11960	16841	3517	2789	480	369	1817	1463
12-Oct-2003	4038	2710	11774	17001	3556	2401	480	381	1307	1629
13-Oct-2003	4050	3331	11767	16847	3542	2760	480	377	1095	1598
14-Oct-2003	4195	3401	11686	17539	3524	2767	480	323	933	1634
15-Oct-2003	4436	3078	11529	17006	3553	2791	480	378	1018	1576
16-Oct-2003	4352	3500	11054	17081	3430	2806	480	394	1148	1548
17-Oct-2003	4344	3933	10920	17259	3405	2786	480	296	1334	1435
18-Oct-2003	4912	3875	10881	16870	3409	2730	480	362	1367	1523
19-Oct-2003	4938	3988	10864	17090	3437	2449	480	384	1326	1659
20-Oct-2003	6031	4485	12698	15300	3515	2733	480	268	1358	1634
21-Oct-2003	6060	5160	12639	17166	3493	2812	480	336	1172	1609
22-Oct-2003	6284	5437	12909	17367	3502	2796	480	381	1679	1382
23-Oct-2003	6144	5701	12628	17251	3516	2839	480	297	1418	1500
24-Oct-2003	6300	5619	12609	17674	3547	2794	480	313	1514	1536
25-Oct-2003	6922	5235	13060	18188	3648	2398	480	353	1795	1623
26-Oct-2003	6001	4328	12804	17212	3552	2156	480	361	1451	1388
27-Oct-2003	5974	5169	14192	17601	3518	2603	480	365	1267	1536
28-Oct-2003	6171	5568	14161	17981	3514	2694	480	377	1006	1316
29-Oct-2003	6027	5671	13773	18137	3492	2694	480	383	1134	1407
30-Oct-2003	6159	6038	13917	17966	3558	2684	480	381	1309	1452
31-Oct-2003	5645	5897	12820	18332	3385	2722	480	367	950	1455
Total MU	160.149	114.697	389.169	519.378	108.740	84.769	14.880	10.924	39.861	47.735
Max. MWH	6922	6038	14192	18332	3653	3119	480	394	1817	1679
Min MWH	4002	1541	10864	14305	3385	2156	480	268	877	1316
Avg. MWH	5166	3700	12554	16754	3508	2734	480	352	1286	1540

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-Oct-2003	43988	44097	21840	21882	15172	15413	8955	9059	8798	9024	13195	14022
2-Oct-2003	33399	33482	20893	21160	14191	14421	8784	8869	8677	8793	13177	13543
3-Oct-2003	39564	39790	21448	21626	14269	14353	8929	9033	8846	8952	13541	13539
4-Oct-2003	43398	43860	21209	21759	14457	14666	8875	9148	8721	9096	12988	13318
5-Oct-2003	43668	43948	21378	21489	14220	14403	8891	8988	8797	8963	13331	13448
6-Oct-2003	43708	44007	21393	21714	14975	15349	6764	6897	8854	8781	13273	14235
7-Oct-2003	43708	44004	21393	21827	16378	16809	4403	4583	8808	9107	13522	14576
8-Oct-2003	44040	44232	21600	21903	17444	17611	4477	4610	8917	9261	13809	15407
9-Oct-2003	44040	44203	21600	21826	17478	18227	4480	4631	8938	9308	13574	15278
10-Oct-2003	44040	44194	21840	21919	17478	17958	4479	4684	8952	9345	14009	15690
11-Oct-2003	44040	44165	21840	21937	17429	17426	4478	4601	8924	9147	14262	15011
12-Oct-2003	44040	44157	21673	21690	16335	16339	4478	4537	8927	8953	13598	13986
13-Oct-2003	44040	44102	21840	21876	17307	17007	4478	4473	8919	8866	13208	13632
14-Oct-2003	44025	44153	21825	21890	17080	17170	4511	4567	8970	8947	12513	13861
15-Oct-2003	43422	43697	21692	21886	16869	17136	4526	4573	9015	8989	14799	15956
16-Oct-2003	40077	40341	21692	21874	16754	17339	4526	4553	9015	9051	12195	13290
17-Oct-2003	40140	40414	21321	21534	16839	17943	4528	4573	9034	9037	12158	12715
18-Oct-2003	40405	40512	21840	21904	16536	16986	4507	4540	8971	9010	11886	12257
19-Oct-2003	40498	40589	21840	21901	15405	16894	4503	4503	9006	9037	11667	12336
20-Oct-2003	40320	40423	21840	21906	17065	17325	5037	4941	9128	9101	12089	12393
21-Oct-2003	40845	40963	21840	21880	17120	18090	4942	4818	9064	9141	12124	12783
22-Oct-2003	43551	43669	21840	21888	17137	17836	8747	8621	9064	9091	14510	15189
23-Oct-2003	44040	44164	21840	21875	17034	17824	9112	9191	9064	9109	14000	15259
24-Oct-2003	43838	43899	21840	21890	17034	18099	9136	9134	9064	9112	14390	15990
25-Oct-2003	44040	44117	21840	21818	15820	16920	8490	8182	8968	8975	14784	15730
26-Oct-2003	44040	44097	21840	21799	15516	16084	9066	9026	8968	8907	12935	13767
27-Oct-2003	44040	44145	21840	21893	16458	16531	9136	9142	9128	9054	12613	12957
28-Oct-2003	44040	44122	21840	21865	16581	17146	9136	9115	9128	9055	13858	14871
29-Oct-2003	44040	44167	20489	20174	15901	15843	9136	9168	9136	9074	13217	15063
30-Oct-2003	44040	44168	20419	20475	12596	12666	9136	9176	9128	9117	13641	14454
31-Oct-2003	44040	44160	10784	10853	12292	12485	9136	9177	9128	9127	13473	16755
Total MU	1325.114	1330.041	658.409	661.913	497.170	510.299	209.782	211.113	278.057	280.530	412.339	441.311
Max. MWH	44040	44232	21840	21937	17478	18227	9136	9191	9136	9345	14799	16755
Min MWH	33399	33482	10784	10853	12292	12485	4403	4473	8677	8781	11667	12257
Avg. MWH	42746	42905	21239	21352	16038	16461	6767	6810	8970	9049	13301	14236

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-Oct-2003	6781	7605	11553	11994	7704	7733	3120	3145	1065	1121	7503	7741
2-Oct-2003	6686	7026	10622	10841	7704	7719	3120	3142	1275	1330	7020	7217
3-Oct-2003	6780	7241	11531	11877	7728	7669	3120	3157	1020	1096	6530	6688
4-Oct-2003	6608	7612	11272	12106	7728	7862	3120	2952	1170	1220	6705	6802
5-Oct-2003	6928	6894	10619	10792	7728	7828	3120	2852	930	1018	6375	6461
6-Oct-2003	6843	7808	10900	11612	7848	7714	3965	3785	1125	1206	6335	6436
7-Oct-2003	6957	7926	11494	12315	7848	7606	3120	2863	1125	1167	6420	6556
8-Oct-2003	7131	8167	11570	12873	7824	7510	5858	6309	1050	1078	6399	6524
9-Oct-2003	7145	7298	11581	12894	7680	7593	6240	6404	1110	1131	6593	6725
10-Oct-2003	7470	7826	11468	12972	7584	7749	6240	6409	1020	1041	6612	6706
11-Oct-2003	7085	7309	11660	12309	7656	7734	6240	6443	945	964	5953	6029
12-Oct-2003	6986	7373	11444	11849	7776	7839	6360	6463	1020	1041	5770	5869
13-Oct-2003	7016	7050	10987	11053	7752	7705	6360	6448	1050	1077	5400	5494
14-Oct-2003	7470	7628	10165	10291	7824	7348	6360	6481	990	1017	5221	5307
15-Oct-2003	7960	8497	11488	11642	7656	7414	6360	6444	990	1014	5068	5177
16-Oct-2003	7966	8090	11253	12619	7536	7614	6360	6453	990	1015	5335	5437
17-Oct-2003	8126	8470	11326	12602	7536	7644	6360	6470	960	983	5220	5325
18-Oct-2003	7426	7992	11600	12394	7560	7656	6360	6452	960	982	5200	5306
19-Oct-2003	7200	8305	11277	12259	7704	7757	6360	6445	900	919	5020	5122
20-Oct-2003	7901	8536	11800	12774	7704	7553	6360	6462	930	955	4990	5087
21-Oct-2003	7408	8341	12068	13400	7704	7576	6360	6516	825	848	4800	4895
22-Oct-2003	7412	8514	11775	12931	4446	4290	6360	6575	885	905	4800	4881
23-Oct-2003	7412	8271	11492	12971	3360	3224	6580	6806	795	813	4390	4465
24-Oct-2003	7212	7843	11356	12977	3360	3476	6984	7028	900	924	4668	4762
25-Oct-2003	7486	8098	11878	12960	7680	7712	6960	7030	810	829	4618	4700
26-Oct-2003	7065	7613	10474	10970	7680	7659	7032	7093	810	828	4356	4434
27-Oct-2003	7469	7746	10492	10946	7680	7628	7032	7060	750	769	4467	4565
28-Oct-2003	7541	8311	11798	12636	7680	7665	7488	7056	750	769	4088	4171
29-Oct-2003	7253	8105	10895	11744	7680	7515	7488	7036	825	845	3862	3959
30-Oct-2003	7302	7870	11067	11855	7680	7668	7488	6961	720	739	4227	4306
31-Oct-2003	7403	8767	11321	13014	7680	7613	7560	6953	795	816	3756	3830
Total MU	225.428	244.132	350.226	376.472	226.710	225.273	181.835	181.693	29.490	30.460	167.701	170.977
Max. MWH	8126	8767	12068	13400	7848	7862	7560	7093	1275	1330	7503	7741
Min MWH	6608	6894	10165	10291	3360	3224	3120	2852	720	739	3756	3830
Avg. MWH	7272	7875	11298	12144	7313	7267	5866	5861	951	983	5410	5515

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-Oct-2003	2232	2299	4005	4229	9263	9760	16731	16776	8521	8618	2733	2959
2-Oct-2003	2232	2304	3516	3768	9520	9582	16731	16864	8521	8251	2733	3516
3-Oct-2003	2239	2343	3516	3687	9283	9453	16731	16747	8028	8355	4009	4220
4-Oct-2003	2245	2317	3026	3151	9073	9187	16722	16619	7026	7231	4545	4497
5-Oct-2003	2280	2345	3026	3111	8759	8826	16722	16607	7026	6980	4545	4533
6-Oct-2003	2280	2348	2670	2773	8300	8422	16722	16530	7026	7597	4545	4910
7-Oct-2003	2280	2244	2670	2780	8016	8220	16548	16603	7800	8489	4785	4627
8-Oct-2003	2267	2331	2670	2730	7559	7559	16548	16552	7800	8047	4785	4998
9-Oct-2003	2280	2333	2670	2721	7114	7507	16548	16493	7800	7407	4298	4361
10-Oct-2003	2280	2331	2670	2716	7299	7578	16548	16351	7403	7410	4785	4862
11-Oct-2003	570	514	2670	2755	7013	7168	16563	16723	7411	7100	5029	4960
12-Oct-2003	950	1026	2670	2632	6598	6901	16563	16451	7411	6709	4781	4887
13-Oct-2003	2280	2398	2670	2723	6501	6718	16563	16467	6749	6542	5011	4824
14-Oct-2003	2280	2360	2670	2736	6478	6580	16563	16498	6495	6330	5156	5099
15-Oct-2003	2280	2375	2670	2733	6202	6297	16563	16647	6495	6553	4968	5320
16-Oct-2003	1214	1249	2670	2768	6128	6203	16563	16428	6495	6687	5185	5488
17-Oct-2003	2066	2116	2670	2733	5767	5871	16578	16138	6495	6753	5185	5194
18-Oct-2003	2014	2028	2670	2715	5544	5652	16370	16254	6116	6263	4964	5155
19-Oct-2003	2010	2035	2670	2737	5477	5587	16254	15898	6116	5890	4965	4882
20-Oct-2003	1964	1971	2670	2744	5154	4672	16254	16273	5899	6012	4905	4936
21-Oct-2003	1893	1927	2670	2736	5072	5125	16254	16237	5899	5533	5190	4923
22-Oct-2003	1813	1844	2670	2738	5008	5106	16254	16464	5581	4864	5194	4849
23-Oct-2003	1798	1814	3738	3820	4700	4834	16254	16577	5455	5489	5160	5007
24-Oct-2003	1750	1767	4806	4925	4290	4360	16458	16586	5748	5330	4738	4275
25-Oct-2003	1698	1722	5429	5533	4253	4339	16458	16580	7280	6057	4609	5073
26-Oct-2003	1673	1693	2670	2728	3998	4078	16785	16107	5601	4460	4891	4934
27-Oct-2003	1660	1676	2670	2738	3708	3774	16785	16500	5248	5309	5147	5643
28-Oct-2003	1613	1636	2670	2732	3848	3916	16797	16663	5533	4978	5535	5245
29-Oct-2003	1589	1611	2670	2756	3408	3481	17493	16732	4999	4752	5286	5615
30-Oct-2003	1555	1567	3249	3332	3309	3378	17565	17197	4910	4547	5594	5380
31-Oct-2003	1523	1559	3249	3357	3207	3252	17565	18900	4910	4955	5285	5175
Total MU	58.808	60.083	93.630	96.337	189.849	193.386	516.053	514.462	203.797	199.498	148.541	150.347
Max. MWH	2280	2398	5429	5533	9520	9760	17565	18900	8521	8618	5594	5643
Min MWH	570	514	2670	2632	3207	3252	16254	15898	4910	4460	2733	2959
Avg. MWH	1897	1938	3020	3108	6124	6238	16647	16596	6574	6435	4792	4850

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

Date	Nathpa-Jhakri HEP		Chamera stage-II	
	Schedule	Actual	Schedule	Actual
1-Oct-2003	0	4781	0	0
2-Oct-2003	0	5798	0	0
3-Oct-2003	0	6501	0	0
4-Oct-2003	0	2602	0	0
5-Oct-2003	0	0	0	0
6-Oct-2003	1500	1591	0	0
7-Oct-2003	6000	6288	0	0
8-Oct-2003	4400	4255	0	0
9-Oct-2003	5744	5663	0	0
10-Oct-2003	6000	6040	0	0
11-Oct-2003	5688	5661	0	0
12-Oct-2003	6000	5804	0	0
13-Oct-2003	6000	6031	0	0
14-Oct-2003	6000	6083	0	0
15-Oct-2003	6000	6108	0	0
16-Oct-2003	6000	6082	0	0
17-Oct-2003	6000	6052	0	-6
18-Oct-2003	6000	6017	0	0
19-Oct-2003	6000	6070	0	0
20-Oct-2003	5688	5608	0	239
21-Oct-2003	6000	6072	0	221
22-Oct-2003	4938	4371	0	51
23-Oct-2003	6000	6039	0	122
24-Oct-2003	4688	4589	0	27
25-Oct-2003	6000	6084	0	2
26-Oct-2003	6000	6057	0	-2
27-Oct-2003	6000	6033	0	0
28-Oct-2003	5000	4996	0	14
29-Oct-2003	6000	6074	0	134
30-Oct-2003	6000	6066	0	508
31-Oct-2003	6000	6064	0	1623
Total MU	145.646	165.480	0.000	2.933
Max. MWH	6000	6501	0	1623
Min MWH	0	0	0	-6
Avg. MWH	4698	5338	0	95

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	28.57	9.45	17.25	1.07	36.35	2.00	48.81	8.02	12.75	12.90	7.49	2.48	187.14
02	32.02	6.90	17.12	1.07	34.93	1.82	46.09	7.89	12.68	12.55	7.12	2.58	182.75
03	32.65	9.95	18.23	1.04	36.88	0.99	46.12	7.92	12.89	12.93	7.13	2.35	189.07
04	31.55	10.48	16.25	1.00	37.87	7.50	49.92	7.50	12.37	12.81	7.30	2.42	196.96
05	30.97	8.61	15.27	1.07	36.70	1.66	51.36	6.76	12.18	12.81	7.14	2.57	187.09
06	31.16	9.95	13.29	1.08	36.75	1.63	50.61	6.61	11.76	13.20	7.20	2.51	185.74
07	30.72	9.92	14.93	1.00	35.09	1.37	50.99	6.94	11.99	13.96	6.89	2.58	186.38
08	32.52	10.41	16.44	0.95	32.11	1.41	49.55	6.79	11.93	13.83	7.14	2.90	185.97
09	36.89	10.53	17.14	1.05	33.58	1.35	49.57	7.76	11.12	11.24	6.54	1.71	188.46
10	33.34	10.15	16.91	1.04	34.39	1.41	61.94	7.76	11.08	9.58	6.41	1.50	205.52
11	33.34	10.15	16.91	1.04	34.39	1.41	61.94	7.76	11.08	9.73	6.41	1.47	206.64
12	31.46	9.33	19.14	1.07	30.55	0.96	60.15	7.97	10.78	9.12	6.18	1.60	200.31
13	32.28	9.48	19.46	0.95	37.60	0.92	53.01	7.86	10.93	7.46	5.95	1.55	200.46
14	34.69	8.30	16.82	0.97	40.09	0.00	50.28	7.75	10.54	7.06	5.94	1.44	197.89
15	33.43	9.92	17.16	1.01	40.16	0.00	48.58	6.80	9.16	7.23	6.05	1.25	195.76
16	36.83	10.01	16.73	1.01	40.57	0.11	50.68	7.70	10.63	8.98	6.24	1.48	206.97
17	37.65	10.99	16.15	1.01	44.59	0.00	54.91	6.93	10.57	9.02	5.63	1.38	215.83
18	36.11	8.53	16.57	0.98	43.24	0.00	55.41	6.77	10.00	8.66	5.29	1.40	210.96
19	36.11	8.53	16.57	0.98	43.24	0.00	55.41	6.77	10.00	9.06	5.29	1.00	211.95
20	37.04	6.91	14.13	0.96	44.53	0.00	54.36	6.48	9.62	9.54	4.45	1.14	209.16
21	39.05	7.87	15.54	0.98	44.28	0.09	54.28	6.48	9.31	9.09	3.87	1.19	213.02
22	40.41	8.08	16.40	0.96	44.75	0.25	51.80	3.71	9.61	10.95	3.74	1.47	214.14
23	37.35	7.81	18.48	0.91	39.99	1.02	56.34	6.45	9.75	12.11	3.80	1.53	218.55
24	33.68	6.71	18.50	0.80	43.31	1.66	56.15	6.49	9.70	12.32	3.60	1.58	218.48
25	33.65	8.15	17.39	0.82	43.29	1.60	56.75	7.09	9.70	12.97	3.75	1.51	221.67
26	37.53	8.81	15.61	0.86	44.31	1.12	54.00	7.56	9.70	12.51	3.67	1.57	223.25
27	37.53	8.81	15.61	0.86	44.31	1.12	54.00	7.56	9.70	11.16	3.67	1.65	222.98
28	39.21	9.29	16.51	0.81	44.80	1.96	56.42	6.84	8.84	11.16	3.59	1.60	229.02
29	37.08	9.00	16.44	0.81	44.63	1.23	58.59	7.23	8.78	13.42	3.46	1.60	231.27
30	36.65	8.71	14.67	0.78	44.66	3.34	56.50	7.55	8.61	13.66	3.37	1.52	230.02
31	35.23	9.72	14.10	0.72	43.15	3.27	55.72	7.56	8.46	14.04	3.32	1.51	227.80
Maximum	40.41	10.99	19.46	1.08	44.80	7.50	61.94	8.02	12.89	14.04	7.49	2.90	231.27
Minimum	28.57	6.71	13.29	0.72	30.55	0.00	46.09	3.71	8.46	7.06	3.32	1.00	182.75
Average	34.73	9.08	16.51	0.96	39.84	1.33	53.56	7.14	10.52	11.13	5.41	1.74	206.49
Month Total	1076.71	281.49	511.73	29.64	1235.09	41.17	1660.25	221.26	326.17	345.04	167.64	54.02	6401.20

XI. Performance Of Generating Stations

S.No.	Power Station	Effective Capacity MW	Energy Generated during	Cummulative from 01.04.2003
			Oct, 2003 (Ex Bus MU)	(Ex-bus MU)
1	CENTRAL SECTOR			
A	NTPC (Thermal)			
(a)	Badarpur TPS	705.00	388.73	2805.44
(b)	Singrauli STPS	2000.00	1330.04	8284.80
(c)	Rihand STPS	1000.00	661.91	4334.51
(d)	Dadri NCTPS	840.00	510.30	3170.20
(e)	Unchahar-I TPS	420.00	211.11	1750.72
(f)	Unchahar-II TPS	420.00	280.53	1580.15
(g)	Tanda TPS	440.00	245.44	1388.73
(h)	Anta GPS	419.33	244.13	1521.40
(i)	Auraiya GPS	663.36	376.47	2540.04
(j)	Dadri GPS	829.78	441.31	2840.33
(k)	Faridabad GPS	431.57	238.39	1602.72
	Total NTPC	8169.04	4928.36	31819.04
B	NHPC			
(a)	Bairasiul	180.00	30.46	531.14
(b)	Salal	690.00	170.98	2811.04
(c)	Tanakpur HPS	94.20	60.08	390.57
(d)	Chamera HPS	540.00	95.41	2083.05
(e)	Uri HPS	480.00	193.39	1983.00
(f)	Chamera2 HPS	300.00	2.93	2.93
	Total NHPC	2284.20	553.25	7801.72
C	Nathpa-Jhakri	250.00	165.48	167.47
D	NPC			
(a)	RAPS -A	300.00	87.25	671.51
(b)	RAPS -B	440.00	181.69	1442.74
(c)	NAPS	440.00	225.27	1472.80
	Total NPC	1180.00	494.21	3587.05
2	JOINTLY OWNED (BBMB)			
(a)	Bhakra Complex	1490.15	514.46	4394.57
(b)	Dehar	990.00	199.50	2615.80
(c)	Pong	390.00	150.35	600.19
	Total BBMB	2870.15	864.31	7610.56
3	DELHI			
(a)	Indra Prastha	247.50	46.20	324.63
(b)	Rajghat	149.00	34.34	336.58
(c)	Gas Turbines	282.00	118.34	645.29
(d)	Pragati Gas	330.00	146.04	1263.22
	Total DELHI	1008.50	344.92	2569.71
4	HARYANA			
(a)	WYC	48.00	29.95	190.39
(b)	Faridabad (New)	165.00	38.58	407.30
(c)	Panipat	860.00	523.54	2881.30
(d)	Magnum Diesel(IPP)	25.20	0.00	26.32
	Total Haryana	1098.20	592.07	3505.31

contd/-

5	HP			
(a)	Giri	60.00	19.01	117.55
(b)	Bassi	60.00	17.97	258.57
(c)	Binwa	6.00	2.11	25.09
(d)	Rongtong (+Nogli+Micro+Thirot+Sal-2)	15.25	2.33	14.92
(e)	Andhra	16.95	6.41	56.79
(f)	Bhabha (H)	120.00	30.25	495.62
(g)	Baner (H)	12.00	2.19	31.10
(h)	Gaj (H)	10.50	2.85	36.61
(i)	Gumma	3.00	1.03	12.60
(j)	Ghanvi	22.50	7.85	51.06
(k)	Malana (IPP)	86.00	17.39	309.46
(l)	Baspa (IPP)	300.00	76.33	958.97
	Total HP	712.20	185.72	2368.32
6	J & K			
(a)	Lower Jhelum	105.00	27.91	345.36
(b)	Upper Sindh	127.60	17.58	176.73
(c)	Ganderbal	15.00	1.27	11.51
(d)	Mohra	9.00	0.00	0.00
(e)	Chenani	32.80	4.89	44.80
(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	0.88	0.88
	Total J & K	493.87	52.53	579.27
7	PUNJAB			
(a)	Jogindernagar/ Shanan	110.00	30.42	459.63
(b)	UBDC	90.00	27.82	254.06
(c)	Mukerian	207.00	94.87	562.46
(d)	Anandpur Sahib (APS)	134.00	50.23	527.94
(e)	Ranjit Sagar HPS	600.00	83.50	1230.38
(f)	Small Hydel	4.10	0.00	2.32
(g)	GNDTPS (Bhatinda)	440.00	201.34	1392.25
(h)	GGSTPS (Ropar)	1260.00	600.60	4289.59
(i)	Jhalkeri	10.00	1.66	1.66
	Peda & Sugarmill		6.71	0.00
(j)	Lehra Mohabbat TPS	420.00	274.81	1796.10
	Total Punjab	3275.10	1371.96	10516.38
8	RAJASTHAN			
(a)	Mahi Bajaj Sagar	140.00	20.54	38.01
(b)	Rana Pratap Sagar (RPS)	172.00	8.39	32.77
(c)	Jawahar Sagar (JS)	99.00	6.36	46.45
(d)	ACW	9.00	1.30	2.18
(e)	MMH	14.85	0.47	5.91
(f)	Kota TPS	1045.00	511.05	3176.44
(g)	RAMGARH GT	3.00	0.00	
(h)	RAMGARH GT EXT	35.50	16.35	123.47
(i)	Suratgarh TPS	1250.00	719.47	3701.65
(j)	Wind Farm	14.01	3.08	75.86
(k)	Others (KPTL bio-mass)		1.77	5.84
	Total Rajasthan	2782.36	1288.78	7208.57

contd/-

9	U.P.			
	<u>HYDRO</u>			
(a)	Rihand	300.00	120.06	590.83
(b)	Obra	99.00	44.09	240.16
(c)	Matatilla	30.00	15.86	50.86
(d)	Ganga Canal	10.70	0.00	0.00
(e)	Small hydro	18.20	0.00	0.00
(f)	Khara	72.00	42.66	300.52
	Total U.P. (Hydro)	529.90	222.67	1182.36
	<u>THERMAL</u>			
(e)	Obra	1442.00	452.12	3218.90
(f)	Panki	242.00	88.09	472.34
(g)	Harduaganj	375.00	69.90	295.16
(h)	Paricha	220.00	39.49	277.29
(i)	Anpara	1630.00	985.70	5861.48
	Total U.P. (Thermal)	3909.00	1635.29	10125.17
	Total U.P.	4438.90	1857.96	11307.53
10	UTTRANCHAL			
(a)	Khatima	41.40	18.26	121.23
(b)	Ramganga	198.00	0.63	21.79
(c)	Ganga Canal	32.70	5.69	72.99
(d)	Yamuna (I & IV)	114.75	58.12	423.86
(e)	Chibro	240.00	66.89	652.66
(f)	Khodri	120.00	32.30	302.80
(g)	Chilla	144.00	80.49	519.64
(h)	Maneri Bhali	90.00	62.93	331.79
	Total Uttranchal	980.85	325.31	2446.75
11	CHANDIGARH			
	Diesel gen set	1.40		
	Total Region	29544.77	13024.86	91487.69

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 OCTOBER 2003

(ALL FIGS IN MWH)

FROM / TO	PUNJAB	HARYANA	RAJASTHAN	DELHI	UP	UTTARANCHAL	HP	J & K	CHANDIGARH
PUNJAB	-	-	-	11750 *	-	-	-	-	-
HARYANA	-	-	-	-	-	-	-	-	-
RAJASTHAN	-	-	-	-	-	-	-	-	-
DELHI	-	-	-	-	-	27746 *	24885 **	-	-
UP	-	-	-	-	-	-	-	-	-
UTTARANCHAL	-	-	-	-	-	-	-	-	-
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 OCTOBER 2003

(ALL FIGS IN MWH)

FROM / TO	GRIDCO	MP	WBPCL	DVC	NEEPCO	CSEB	GEB
PUNJAB	-	-	-	-	-		-
HARYANA	-	-	-	-	-		-
RAJASTHAN	-	-	-	-	-		-
DELHI	15525 *	-22000 *	69255 *	-	-	-9750 *	-
UTTRANCHAL	-	-25950 *	-	-	-	-	-35777 *

* Through PTC

(+)

Import

(-)

Export

** Through Global Energy Limited

REMARKS : Figures are provisional and indicative only

XIV. Inter Regional Exchanges During October 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	0	0	0	150	0.00	1.50	-1.50	0	0	0	0	0.00	0.00	0.00
02	0	0	50	150	0.15	1.51	-1.36	0	0	0	0	0.00	0.00	0.00
03	-100	-135	100	135	0.02	2.06	-2.04	0	0	0	0	0.00	0.00	0.00
04	-50	0	400	100	1.92	0.74	1.18	0	0	0	0	0.00	0.00	0.00
05	-100	75	175	200	0.48	1.31	-0.83	0	0	0	0	0.00	0.00	0.00
06	-100	-85	300	200	1.18	1.55	-0.37	0	0	0	0	0.00	0.00	0.00
07	-100	100	350	100	0.51	1.14	-0.63	0	0	0	0	0.00	0.00	0.00
08	-100	500	500	100	2.13	1.21	0.92	0	0	0	0	0.00	0.00	0.00
09	0	0	25	150	0.05	1.55	-1.50	0	0	0	0	0.00	0.00	0.00
10	100	100	25	335	0.03	1.86	-1.83	0	0	0	0	0.00	0.00	0.00
11	-100	-100	150	250	0.04	2.38	-2.34	0	0	0	0	0.00	0.00	0.00
12	-100	-50	0	150	0.00	1.90	-1.90	0	0	0	0	0.00	0.00	0.00
13	-100	-100	0	250	0.00	2.23	-2.23	0	0	0	0	0.00	0.00	0.00
14	-100	-300	0	300	0.00	3.68	-3.68	0	0	0	0	0.00	0.00	0.00
15	-100	-400	0	500	0.00	4.24	-4.24	-20	-25	0	25	0.00	0.57	-0.57
16	-100	-450	0	500	0.00	5.01	-5.01	-25	-25	0	25	0.00	0.60	-0.60
17	-100	-300	0	400	0.00	2.72	-2.72	-26	-30	0	26	0.00	0.57	-0.57
18	0	0	0	400	0.00	3.64	-3.64	-26	-30	0	26	0.00	0.50	-0.50
19	-100	-300	0	500	0.00	6.37	-6.37	-29	-30	0	36	0.00	0.53	-0.53
20	-50	-300	0	350	0.00	3.99	-3.99	-29	-30	0	36	0.00	0.52	-0.52
21	-100	-350	200	350	0.07	4.38	-4.31	-29	-30	0	36	0.00	0.33	-0.33
22	-100	-350	0	350	0.00	4.71	-4.71	-32	-41	0	56	0.00	0.98	-0.98
23	-100	-400	0	450	0.00	5.52	-5.52	-55	-45	0	56	0.00	1.11	-1.11
24	-150	-300	50	450	0.00	4.76	-4.76	-50	-50	0	50	0.00	1.10	-1.10
25	0	0	50	450	0.00	5.36	-5.36	-50	-50	0	50	0.00	0.98	-0.98
26	0	0	0	450	0.00	6.10	-6.10	-50	-48	0	50	0.00	0.93	-0.93
27	-150	-450	0	450	0.00	6.63	-6.63	-50	-48	0	50	0.00	0.97	-0.97
28	-150	-450	0	450	0.00	6.75	-6.75	-50	-50	0	50	0.00	1.06	-1.06
29	-150	-450	0	450	0.00	6.22	-6.22	-60	-46	0	60	0.00	1.12	-1.12
30	-150	-450	0	450	0.00	6.73	-6.73	-30	-49	0	57	0.00	0.83	-0.83
31	-150	-450	0	450	0.00	4.32	-4.32	-95	-50	0	95	0.00	1.17	-1.17
Maximum	100	500	500	500	2.13	6.75	1.18	0	0	0	95	0.00	1.17	0.00
Minimum	-150	-450	0	100	0.00	0.74	-6.75	-95	-50	0	0	0.00	0.00	-1.17
Average	-81	-174	77	322	0.21	3.62	-3.40	-23	-22	0	25	0.00	0.45	-0.45
Total					6.58	112.07	-105.50					0.00	13.88	-13.88

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

2 of 2

Date	With WR Over Ujjain - Kota {Export(-)/Import(+)}							With ER {Export(-)/Import(+)}						
	Peak MW	Off Peak MW	Max Import	Max Export	Energy Import	Energy Export	Net	Peak MW	Off Peak MW	Max Import	Max Export	Energy Import	Energy Export	Net
	MW	MW	MW	MW	MU	MU	MU	MW	MW	MW	MW	MU	MU	MU
01	0	0	0	0	0.00	0.00	0.00	0	0	89	0	1.63	0.00	1.63
02	0	0	0	0	0.00	0.00	0.00	81	61	81	0	1.60	0.00	1.60
03	0	0	0	0	0.00	0.00	0.00	217	221	221	0	5.28	0.00	5.28
04	0	0	0	0	0.00	0.00	0.00	79	79	329	0	2.35	0.00	2.35
05	0	0	0	0	0.00	0.00	0.00	50	129	129	0	1.91	0.00	1.91
06	0	0	0	0	0.00	0.00	0.00	300	57	500	0	3.90	0.00	3.90
07	0	0	0	0	0.00	0.00	0.00	196	500	500	0	7.30	0.00	7.30
08	0	0	0	0	0.00	0.00	0.00	167	500	500	0	7.07	0.00	7.07
09	0	0	0	0	0.00	0.00	0.00	0	0	500	0	6.28	0.00	6.28
10	0	0	0	0	0.00	0.00	0.00	348	173	500	0	6.43	0.00	6.43
11	0	0	0	0	0.00	0.00	0.00	348	174	500	0	6.29	0.00	6.29
12	0	0	0	0	0.00	0.00	0.00	348	297	348	0	6.11	0.00	6.11
13	0	0	0	0	0.00	0.00	0.00	354	164	500	0	6.74	0.00	6.74
14	0	0	0	0	0.00	0.00	0.00	401	364	500	0	8.50	0.00	8.50
15	0	0	0	0	0.00	0.00	0.00	-100	-400	500	0	7.55	0.00	7.55
16	0	0	0	0	0.00	0.00	0.00	218	500	500	0	6.96	0.00	6.96
17	0	0	0	0	0.00	0.00	0.00	371	450	500	0	5.71	0.00	5.71
18	0	0	0	0	0.00	0.00	0.00	371	450	500	0	7.60	0.00	7.60
19	0	0	0	0	0.00	0.00	0.00	372	474	500	0	10.51	0.00	10.51
20	0	0	0	0	0.00	0.00	0.00	372	472	472	0	9.26	0.00	9.26
21	0	0	0	0	0.00	0.00	0.00	374	388	500	0	7.47	0.00	7.47
22	0	0	0	0	0.00	0.00	0.00	286	402	500	0	8.09	0.00	8.09
23	0	0	0	0	0.00	0.00	0.00	398	207	500	0	7.53	0.00	7.53
24	0	0	0	0	0.00	0.00	0.00	450	500	500	0	9.43	0.00	9.43
25	0	0	0	0	0.00	0.00	0.00	450	500	500	0	9.43	0.00	9.43
26	0	0	0	0	0.00	0.00	0.00	447	500	500	0	8.96	0.00	8.96
27	0	0	0	0	0.00	0.00	0.00	395	250	395	0	7.54	0.00	7.54
28	0	0	0	0	0.00	0.00	0.00	340	345	392	0	7.76	0.00	7.76
29	0	0	0	0	0.00	0.00	0.00	395	251	396	0	6.35	0.00	6.35
30	0	0	0	0	0.00	0.00	0.00	402	261	402	0	6.86	0.00	6.86
31	0	0	0	0	0.00	0.00	0.00	401	261	401	0	6.88	0.00	6.88
Maximum	0	0	0	0	0.00	0.00	0.00	450	500	500	0	10.51	0.00	10.51
Minimum	0	0	0	0	0.00	0.00	0.00	-100	-400	81	0	1.60	0.00	1.60
Average	0	0	0	0	0.00	0.00	0.00	285	275	424	0	6.62	0.00	6.62
Total					0.00	0.00	0.00					205.28	0.00	205.28

XV. Progress Of Installation Of Shunt Capacitors As On 31.10.2003

(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	161	448
Haryana	3435	2685	333	124	626
H.P.	347	278	73	17	52
J & K	892	147	0	0	745
Punjab	4874	4706	76	14	154
Rajasthan	2863	2698	221	134	31
U.P.	5495	4965	274	47	483
Uttaranchal	344	123	0	2	219
BBMB	381	381	0	0	0
TOTAL	22145	18830	1099	499	2816

SOURCE: Minutes of 346th OCC meeting of NREB held on 14th November, 2003.

XVI. Hydraulic Data For Reservoirs During October 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 October 2003 (m)	506.42 1661.49	413.80 1357.62	265.42 870.80	348.46 1143.25	387.79 1272.27
Level on last day of October 2002 (m)	501.40 1645.00	407.29 1336.26	263.44 864.30	345.77 1134.42	383.37 1257.77
Live Capacity as on (mhmt) last day of October 2003 (maft)	0.58 4.69	0.49 3.96	0.42 3.42	0.08 0.65	0.12 1.00
Live Capacity as on (mhmt) last day of October 2002(maft)	0.49 4.00	0.27 2.16	0.35 2.85	0.03 0.28	0.04 0.33
Energy content as on last day of October 2003 (MU)	2350.00	600.00	825.00	145.00	370.00
Energy content as on last day of October 2002 (MU)	2020.00	380.00	675.00	80.00	72.00
Maximum level (m) (ft) (date)	508.97 1669.85 01.10.2003	416.41 1366.19 01.10.2003	265.48 871.00 29.10.2003	348.46 1143.25 31.10.2003	388.62 1275.00 01.10.2003
Minimum level (m) (ft) (date)	506.42 1661.49 31.10.2003	413.80 1357.62 31.10.2003	265.08 869.70 24.10.2003	347.62 1140.47 01.10.2003	387.79 1272.27 01.10.2003

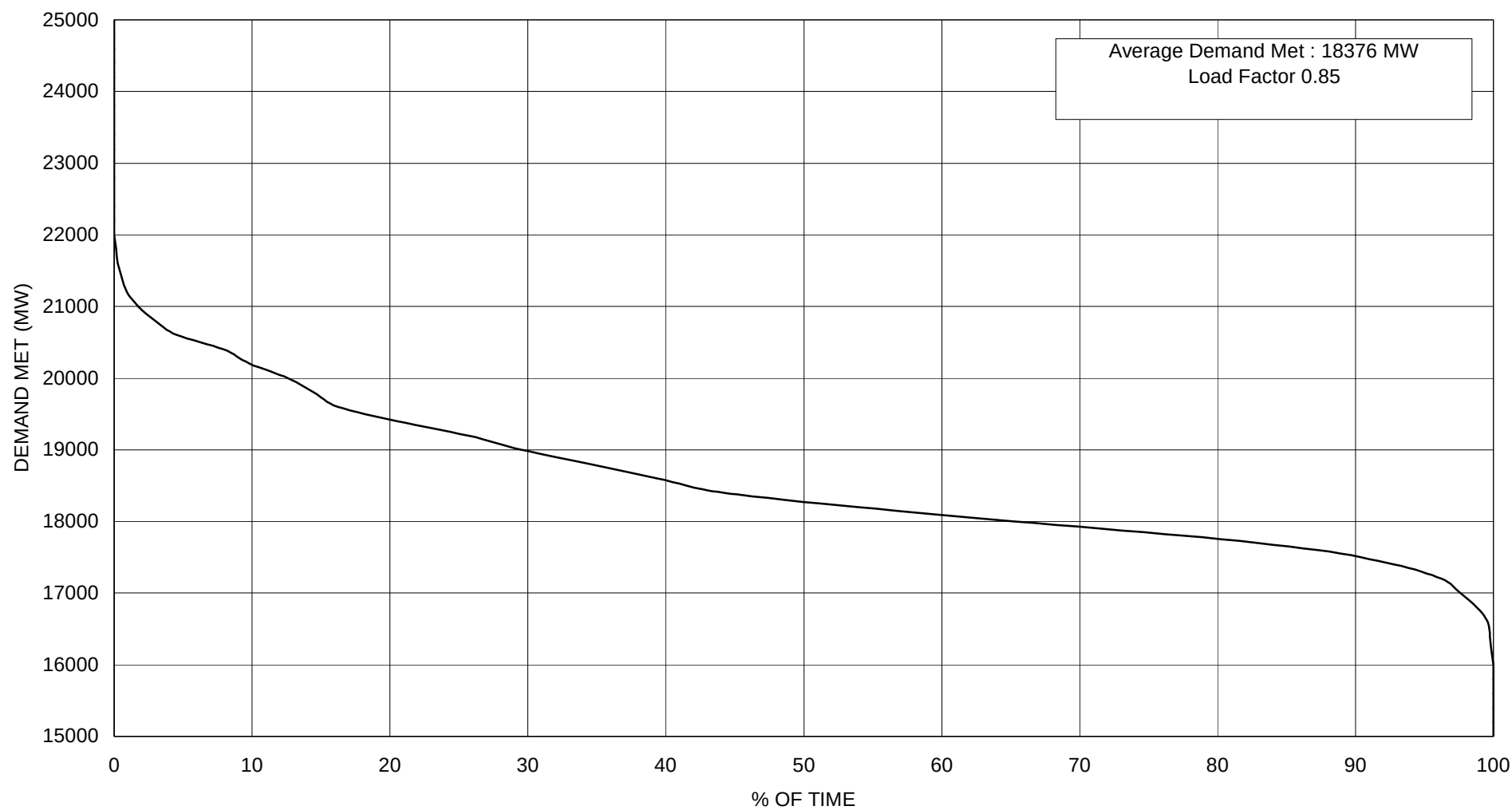
Energy content of Bhakra : Total Energy content at Bhakra, Ganguwal and Kotla power stations

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

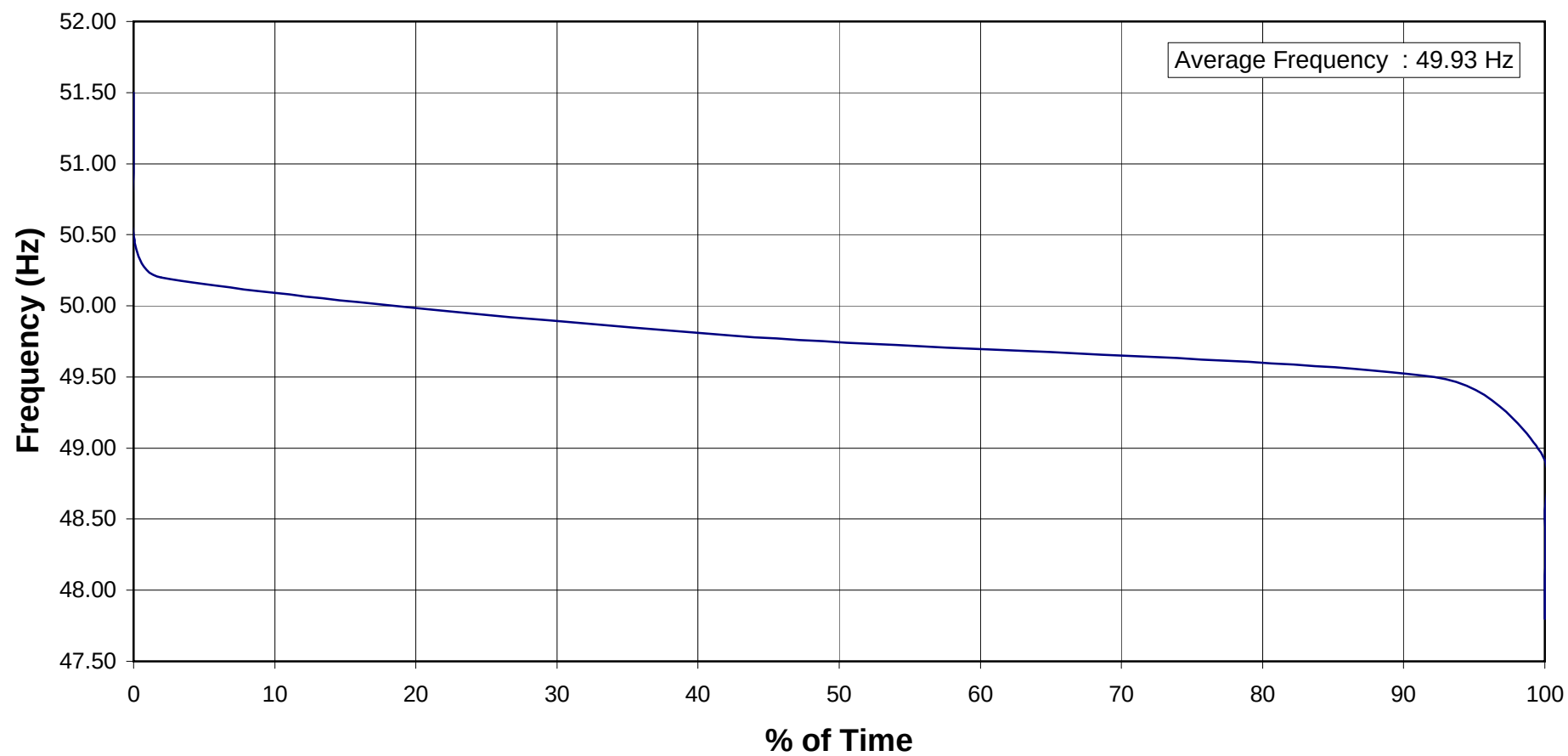
Energy content of RPS : Total Energy content of Rana Pratap Sagar and Jawahar Sagar Power Stations.

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

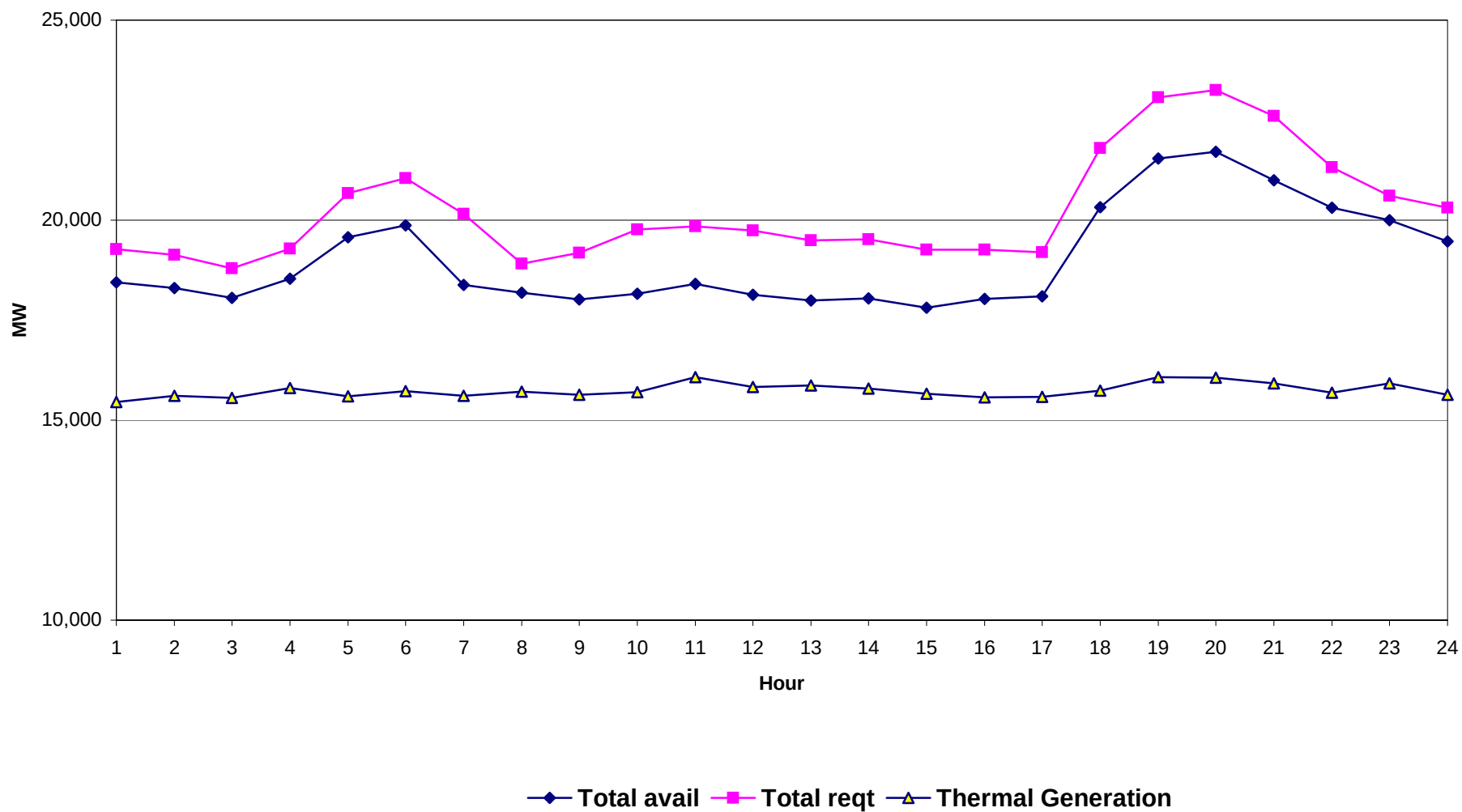
Load Duration Curve For Northern Region For October 2003



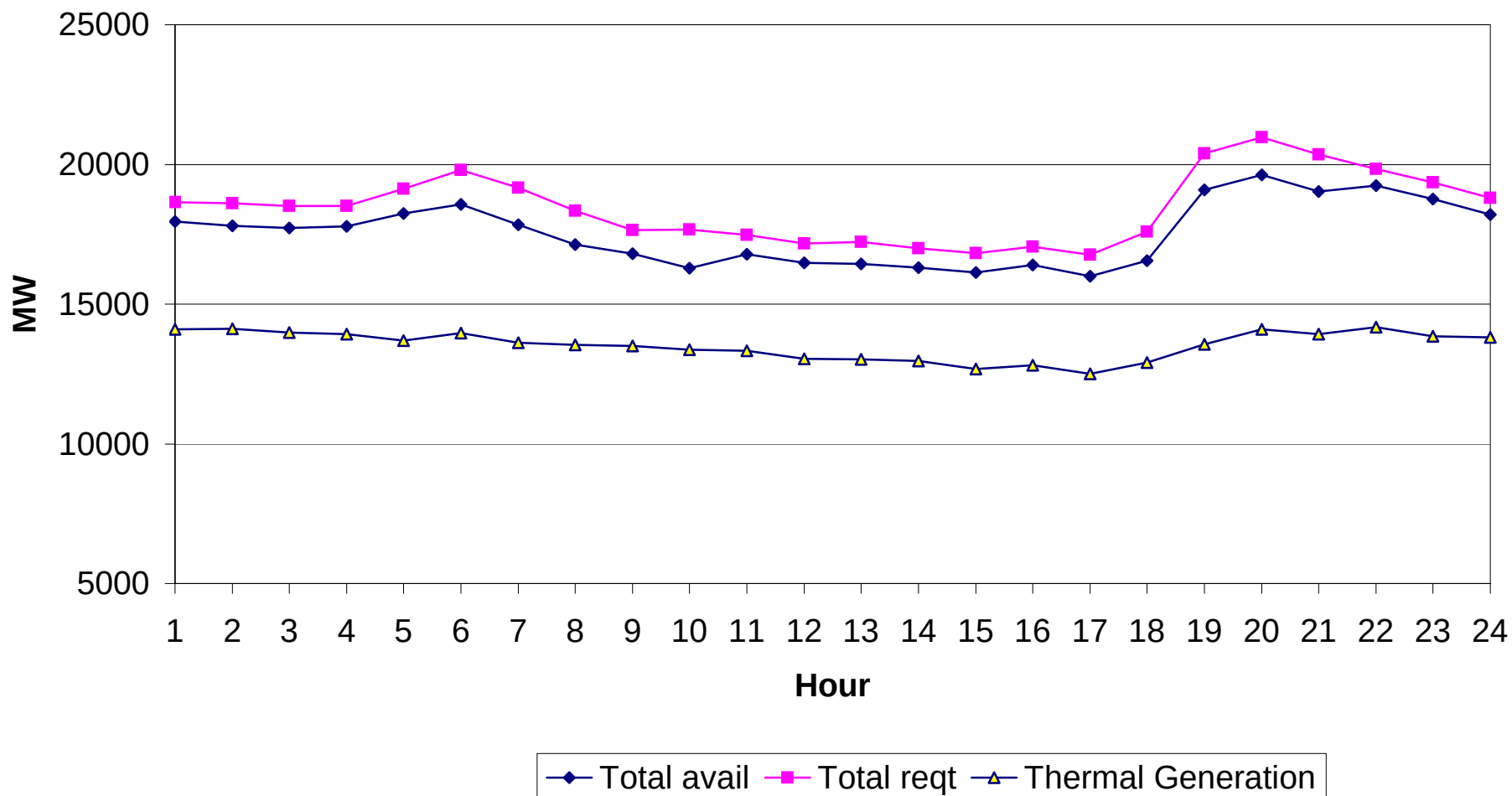
Frequency Duration Curve For Northern Region For October 2003

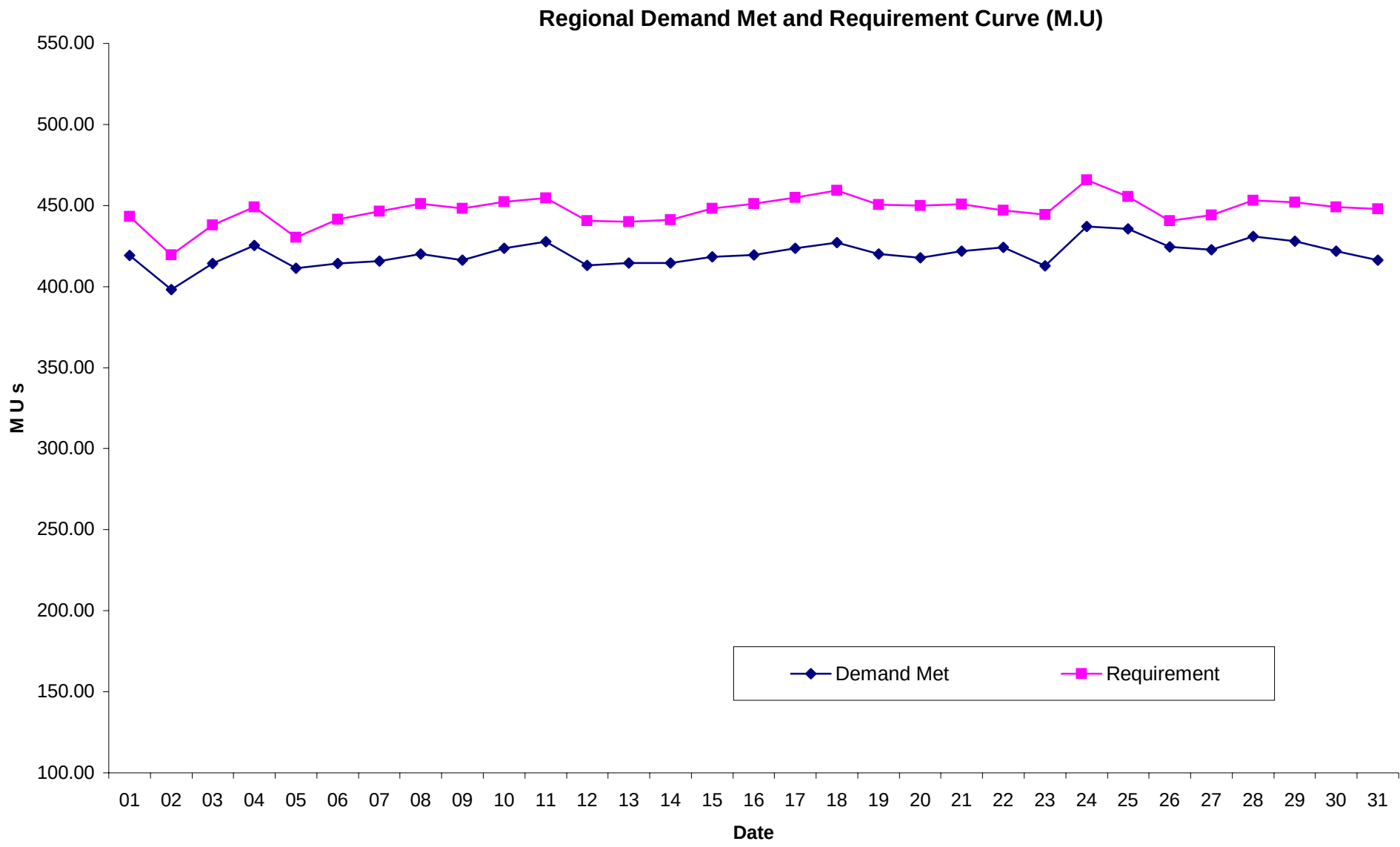


**Load Curve Of Northern Region For Maximum Demand Met Day
(24th October 2003)**



Load Curve Of Northern Region For Minimum Demand Met Day (2nd October 2003)





Grid Incident during October 2003

Date	Time	Incident
		-----NIL-----