

5.1 DETAILS OF INSTALLED AND EFFECTIVE CAPACITY IN NORTHERN REGION AS ON 31.03.2002

	<u>STATION</u>	<u>INSTALLED CAPACITY</u>		<u>(MW)</u>	<u>EFFECTIVE CAPACITY</u>	
1 CENTRAL SECTOR						
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 -I TPS	2x210	=	420.00	2x210	= 420.00
(f)	Unchahar -II TPS	2x210	=	420.00	2x210	= 420.00
(g)	Tanda TPS	4x110	=	440.00	4x110	= 440.00
(h)	Anta GPS	3x88.71+1x153.20	=	419.33	3x88.71+1x153.20	= 419.33
(i)	Auraiya GPS	4x111.19+2x109.30	=	663.36	4x111.19+2x109.30	= 663.36
(j)	Dadri GPS	4x130.19+2x154.51	=	829.78	4x130.19+2x154.51	= 829.78
(k)	Faridabad GPS	2x137.75+1x156.07	=	431.57	2x137.75+1x156.07	= 431.57
	Sub-Total			<u>8184.04</u>		<u>8169.04</u>
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			<u>2010.00</u>		<u>1984.20</u>
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			<u>1350.00</u>		<u>1180.00</u>
Total Central Sector (A + B + C)				<u>11544.04</u>		<u>11333.24</u>
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			<u>1490.15</u>		<u>1490.15</u>
(b)	Dehar	6x165	=	990.00	6x165	= 990.00
(c)	Pong	4x60+2x66	=	372.00	4x60+2x66	= 372.00
	Total BBMB			<u>2852.15</u>		<u>2852.15</u>

	<u>STATION</u>	<u>INSTALLED CAPACITY</u>		<u>EFFECTIVE CAPACITY</u>	
		<u>(MW)</u>			
3	CHANDIGARH				
(a)	Diesel Gen Set	2.00		1.40	
4	DELHI				
(a)	<u>THERMAL</u> 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
	Total DELHI		<u>679.50</u>		<u>678.50</u>
5	HARYANA				
(a)	<u>HYDRO</u> Western Yamuna Canal (WYC)	6x8	= 48.00	6x8	= 48.00
	Total Hydro		<u>48.00</u>		<u>48.00</u>
(b)	<u>THERMAL</u> Faridabad (New)	3x60	= 180.00	3x55	= 165.00
(c)	Panipat	4x110+2x210	= 860.00	4x110+2x210	= 860.00
	Total Thermal		<u>1040.00</u>		<u>1025.00</u>
(d)	Magnum Diesel (IPP)	4x6.3	= 25.20	4x6.3	= 25.20
	Total HARYANA		<u>1113.20</u>		<u>1098.20</u>
6	HP				
(a)	<u>HYDRO</u> 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		9.22		8.52
(g)	Nogli	2x 0.25+4x0.50	= 2.50	2x 0.25+4x0.50	= 2.50
(h)	Bhabha	3x40.00	= 120.00	3x40.00	= 120.00
(i)	Baner	3x 4.00	= 12.00	3x 4.00	= 12.00
(j)	Gaj	3x 3.50	= 10.50	3x 3.50	= 10.50
(k)	Sal -2	1x2	= 2.00	1x2	= 2.00
(l)	Gumma	1x3	= 3.00	1x3	= 3.00
(m)	Ghanvi	2x11.25	= 22.50	2x11.25	= 22.50
(n)	Diesel Gen. Set		0.13		0.13
(o)	Malana(IPP)	2x43.00	= 86.00	2x43.00	= 86.00
	Total HP		<u>412.80</u>		<u>412.10</u>
6	J & K				
(a)	<u>HYDRO</u> 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)	Sewa	3x3.0	= 9.00	3x3.0	= 9.00
(h)	Small Hydel		3.54		3.54
	Total Hydro		<u>311.69</u>		<u>311.69</u>

	<u>STATION</u>	<u>INSTALLED CAPACITY</u>			<u>EFFECTIVE CAPACITY</u>		
				(MW)			
J & K (Contd.)							
	<u>GAS TURBINES</u>						
(h)	Pampore GT St - I	3x25.0	=	75.00	3x25.0	=	75.00
	Pampore GT St - II	4x25.0	=	100.00	4x25.0	=	100.00
	Total Gas			<u>175.00</u>			<u>175.00</u>
(I)	Diesel Gen. Set			<u>8.94</u>			<u>7.18</u>
	Total J & K			<u>495.63</u>			<u>493.87</u>
7 PUNJAB							
	<u>HYDRO</u>						
(a)	Jogindernagar/ Shanan	4x15+1x50	=	110.00	4x15+1x50	=	110.00
(b)	Upper Behari Doab Canal (UBDC)	3x15+3x15	=	90.00	3x15+3x15	=	90.00
(c)	Mukerian	6x15+6x19.5	=	207.00	6x15+6x19.5	=	207.00
(d)	Anandpur Sahib (APS)	4x33.5	=	134.00	4x33.5	=	134.00
(e)	Ranjit Sagar (Thein Dam)	4x150	=	600.00	4x150	=	600.00
(f)	Small Hydel		=	4.10		=	4.10
	Total Hydro			<u>1145.10</u>			<u>1145.10</u>
	<u>THERMAL</u>						
(g)	Guru Nanak Dev TPS (Bhatinda)	4x110	=	440.00	4x110	=	440.00
(h)	Guru Gobind Singh TPS (Ropar)	6x210	=	1260.00	6x210	=	1260.00
(i)	Lehra Mohabbat TPS	2x210	=	420.00	2x210	=	420.00
(j)	Jhalkeri Rice Straw Fired	1x10	=	10.00	1x10	=	10.00
	Total Thermal			<u>2130.00</u>			<u>2130.00</u>
	Total PUNJAB			<u>3275.10</u>			<u>3275.10</u>
8 RAJASTHAN							
	<u>HYDRO</u>						
(a)	Mahi Bajaj Sagar	2x25+2x45	=	140.00	2x25+2x45	=	140.00
(b)	Rana Pratap Sagar (RPS)	4x43	=	172.00	4x43	=	172.00
(c)	Jawahar Sagar (JS)	3x33	=	99.00	3x33	=	99.00
(d)	Anoopgarh	6x1.5	=	9.00	6x1.5	=	9.00
(e)	Small Hydro			14.86			14.86
	Total Hydro			<u>434.86</u>			<u>434.86</u>
	<u>THERMAL</u>						
(f)	Kota TPS	2x110+3x210	=	850.00	2x110+3x210	=	850.00
(g)	Suratgarh TPS	4x250	=	1000.00	4x250	=	1000.00
(g)	RAMGARH GT	1x3	=	3.00	1x3	=	3.00
(h)	RAMGARH GT EXT	1x35.5	=	35.50	1x35.5	=	35.50
	Total Thermal			<u>1888.50</u>			<u>1888.50</u>
(I)	Wind Farm			<u>14.00</u>			<u>14.00</u>
	Total RAJASTHAN			<u>2337.36</u>			<u>2337.36</u>

	<u>STATION</u>	<u>INSTALLED CAPACITY</u>			<u>EFFECTIVE CAPACITY</u>		
					<u>(MW)</u>		
9	UP						
	<u>HYDRO</u>						
(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)	Khatima	3x13.8	=	41.40	3x13.8	=	41.40
(e)	Ramganga	3x66.0	=	198.00	3x66.0	=	198.00
(f)	Ganga Canal						
	Bhola	4x.375+2x.6+			4x.375+2x.6+		
	Salara	2x1.5+			2x1.5+		
	Chitwa	2x1.5+			2x1.5+		
	Nirgazni	2x2.5+			2x2.5+		
	Mohamedpur	3x3.1+			3x3.1+		
	Pathri	3x6.8	=	43.40	3x6.8	=	43.40
(g)	Yamuna (I & IV)						
	- Dhalipur	3x17.00+			3x17.00+		
	- Dhakrani	3x11.25+			3x11.25+		
	- Kulhal	3x10.00	=	114.75	3x10.00	=	114.75
(h)	Chibro	4x60.0	=	240.00	4x60.0	=	240.00
(i)	Khodri	4x30.0	=	120.00	4x30.0	=	120.00
(j)	Chilla	4x36.0	=	144.00	4x36.0	=	144.00
(k)	Maneri Bhali	3x30.0	=	90.00	3x30.0	=	90.00
(l)	Khara	3x24.0	=	72.00	3x24.0	=	72.00
(m)	Sobla & Small Hydro	6+12.2	=	18.20	6+12.2	=	18.20
	Total Hydro			<u>1510.75</u>			<u>1510.75</u>
	<u>THERMAL</u>						
(m)	Obra	5x50	=	250.00	4x40	=	160.00
(n)	Obra Extn. - I	3x100	=	300.00	3x94	=	282.00
(o)	Obra Extn. - II	5x200	=	1000.00	5x200	=	1000.00
(p)	Panki	1x32	=	32.00	1x32	=	32.00
(q)	Panki Extn.	2x110	=	220.00	2x105	=	210.00
(r)	Harduaganj - A	3x30	=	90.00	0	=	0.00
(s)	Harduaganj - B	2x50+2x60	=	220.00	1x40+2x55	=	150.00
(t)	Harduaganj - C	2x60+1x110	=	230.00	2x60+1x105	=	225.00
(u)	Paricha	2x110	=	220.00	2x110	=	220.00
(v)	Anpara - A	3x210	=	630.00	3x210	=	630.00
(w)	Anpara - B	2x500	=	1000.00	2x500	=	1000.00
	Total Thermal			<u>4192.00</u>			<u>3909.00</u>
	Total UP			<u>5702.75</u>			<u>5419.75</u>
Total Region (1 to 9)				28414.53	27901.67		

NOTE: 1. The ownership & control of Tanda TPS (4x110 MW capacity) was transferred from erstwhile Uttar Pradesh State Electricity Board (UPSEB) to National Thermal Power Corporation (NTPC) Ltd. w.e.f. 15th January 2000.

2. Indraprastha unit # 1 (30 MW) & Panki unit # 1 (32 MW) were permanently retired during 1999-2000.

3. Installed Capacity of each unit of NAPP declared to be 235 MW instead of 220 MW.

THE SUMMARY OF EFFECTIVE GENERATING CAPACITY IN THE NORTHERN REGION

Agency/ Source	Hydro	Thermal	Gas/Diesel/W ind	Nuclear	Total	% of Total
NTPC	---	5825.00	2344.04	---	8169.04	29.28%
NHPC	1984.20	---	---	---	1984.20	7.11%
NPC	---	---	---	1180.00	1180.00	4.23%
BBMB	2852.15	---	---	---	2852.15	10.22%
CHANDIGARH	---	---	1.40	---	1.40	0.01%
DELHI	---	396.50	282.00	---	678.50	2.43%
HARYANA	48.00	1025.00	25.20	---	1098.20	3.94%
HIMACHAL	411.97	---	0.13	---	412.10	1.48%
J&K	311.69	---	182.18	---	493.87	1.77%
PUNJAB	1145.10	2130.00	---	---	3275.10	11.74%
RAJASTHAN	434.86	1850.00	52.50	---	2337.36	8.38%
UP	1510.75	3909.00	---	---	5419.75	19.42%
Total	8698.72	15135.50	2887.45	1180.00	27901.67	100.00%
% of TOTAL	31.18%	54.25%	10.35%	4.23%	100.00%	

Notes The above table doesn't take into account the shares of a state in power stations located in the neighbouring state. Details of this is as under :

- (i) Haryana has one-third share in unit Nos. 2, 3, 4 at Indraprastha power stations of DVB viz. 62.5 MW.
- (ii) HP has 25 % share in the Dhalipur, Dhakrani, Chibro and Khodri power houses of UP viz. 111.20 MW. It also has a 20 % share in the Kulhal and Khara hydro power houses viz. 20.40 MW. However, these shares are subject to actual physical drawals over designated transmission lines.
- (iii) HP has a fixed energy share every month in the Shanan power house of PSEB
- (iv) HP has 4.6 % share in Ranjit Sagar Dam Project of Punjab.
- (v) The shares of Rajasthan in Chambal and Satpura projects are as under :

CHAMBAL

PROJECTS	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 = <u>99</u>
	Total	386

Rajasthan has 50 % share in these 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 viz. 125 MW in the first five units of Satpura TPS.

If the above shares of Rajasthan are included, the regional effective generating capacity would be 27948.67 MW.

**5.2 BREAKUP OF EFFECTIVE HYDRO CAPACITY (MW) IN NORTHERN REGION
AS ON 31st March 2002**

Agency / Source	Run-of -the -river	Reservoir	Total
NHPC	1444.20	540.00	1984.20
BBMB	1155.15	1697.00	2852.15
DELHI	0.00	0.00	0.00
HARYANA	48.00	0.00	48.00
HP	411.97	0.00	411.97
J&K	311.69	0.00	311.69
PUNJAB	545.10	600.00	1145.10
RAJASTHAN	262.86	172.00	434.86
UP	1012.75	498.00	1510.75
Total	5191.72	3507.00	8698.72

5.3 GROWTH OF INSTALLED CAPACITY IN NORTHERN REGION DURING PAST DECADE

S. NO.	YEAR	THERMAL	HYDRO	GAS/DIESEL/WIND	NUCLEAR	TOTAL INSTALLED CAPACITY
1	1992-93	12027.60	6300.50	1844.00	880.00	21052.10
2	1993-94	12673.00	6463.00	2187.00	880.00	22203.00
3	1994-95	13170.60	7311.50	2377.00	880.00	23739.10
4	1995-96	13272.60	7336.50	2377.00	880.00	23866.10
5	1996-97	13358.10	7645.80	2377.50	880.00	24261.40
6	1997-98	13358.10	7782.23	2407.97	880.00	24428.30
7	1998-99	14373.30	7817.40	2407.97	880.00	25478.67
8	1999-2000	14778.00	7868.18	2693.74	1130.00	26469.92
9	2000-01	14988.00	8560.22	2841.56	1350.00	27739.78
10	2001-02	15488.00	8725.22	2851.31	1350.00	28414.53
Compound Annual Growth Rate (CAGR)%		2.85	3.68	4.96	4.87	3.39

6.1 SUMMARY OF 2001-02 POWER SUPPLY POSITION IN THE NORTHERN REGION

A. Average Energy/day (Net)

State / U.T.	Availability MU/Day	Requirement MU/Day	Shortage MU/Day	Shortage %
Chandigarh	2.89	2.89	0.00	0.09
Delhi	50.55	52.10	1.55	2.97
Haryana	47.06	48.10	1.04	2.16
H.P.	8.79	8.84	0.05	0.57
J & K	15.71	17.60	1.90	10.77
Punjab	74.05	76.92	2.87	3.73
Rajasthan	65.05	65.75	0.70	1.07
U.P.	118.81	131.82	13.01	9.87
N.F.F./Rail	1.11	1.11	0.00	0.00
Total	383.57	405.57	22.00	5.42

B. Peak MW

State / U.T.	MAX. Availability MW A	MAX. Requirement MW B	Shortage MW		Shortage %	
			ARITHMETICAL C=B-A	AT MAXM. REQUIREMENT HR. D	ARITHMETICAL (C/B)*100	AT MAXM. REQUIREMENT HR. (D/B)*100
Chandigarh	180	180	0	0	0.00	0.00
Delhi	2879	3118	239	554	7.67	17.77
Haryana	2900	2966	66	180	2.23	6.07
H.P. *	562	562	0	0	0.00	0.00
J & K	999	1209	210	210	17.37	17.37
Punjab	4936	5357	421	500	7.86	9.33
Rajasthan	3657	3657	0	0	0.00	0.00
U.P.	6887	7584	697	1243	9.19	16.39
N.F.F. *	67	67	0	0	0.00	0.00
Region	21586	22589	1003	2407	4.44	10.66

Diversity Factor = **1.12**

* Approximate and Estimated

6.2(a) MONTHWISE POWER SUPPLY POSITION (average energy in MU/day) IN NORTHERN REGION DURING 2001-02

(ALL FIGS. IN NET MU / DAY AVERAGE)

State / U.T.->	CHANDIGARH				DELHI			
Month	Demand met (MU/day)	Requirement (MU/day)	Shortage (MU/day)	Shortage %	Demand met (MU/day)	Requirement (MU/day)	Shortage (MU/day)	Shortage %
APR - 2001	2.64	2.64	0.00	0.00	45.21	47.95	2.74	5.71
MAY - 2001	3.28	3.28	0.00	0.00	54.81	56.44	1.63	2.89
JUN - 2001	3.34	3.34	0.00	0.00	56.41	57.39	0.98	1.71
JUL - 2001	3.48	3.48	0.00	0.00	58.53	60.07	1.54	2.56
AUG - 2001	3.54	3.54	0.00	0.00	57.80	59.14	1.34	2.27
SEP - 2001	3.23	3.23	0.00	0.00	56.29	58.19	1.90	3.27
OCT - 2001	2.65	2.68	0.03	1.12	48.21	49.54	1.33	2.68
NOV - 2001	2.33	2.33	0.00	0.00	44.16	44.80	0.64	1.43
DEC - 2001	2.47	2.47	0.00	0.00	45.43	46.65	1.22	2.62
JAN - 2002	2.66	2.66	0.00	0.00	48.52	51.41	2.89	5.62
FEB - 2002	2.54	2.54	0.00	0.00	46.29	48.05	1.76	3.66
MAR - 2002	2.46	2.46	0.00	0.00	44.58	45.19	0.61	1.35
2001-02	2.89	2.89	0.00	0.09	50.55	52.10	1.55	2.97

State / U.T.->	HARYANA				HIMACHAL PRADESH			
Month	Demand met (MU/day)	Requirement (MU/day)	Shortage (MU/day)	Shortage %	Demand met (MU/day)	Requirement (MU/day)	Shortage (MU/day)	Shortage %
APR - 2001	38.20	38.45	0.25	0.65	7.89	8.45	0.56	6.63
MAY - 2001	42.04	42.62	0.58	1.36	8.54	8.54	0.00	0.00
JUN - 2001	48.67	48.74	0.07	0.14	8.95	8.95	0.00	0.00
JUL - 2001	53.43	54.26	0.83	1.53	8.76	8.77	0.01	0.11
AUG - 2001	56.18	57.22	1.04	1.82	8.46	8.46	0.00	0.00
SEP - 2001	55.15	57.40	2.25	3.92	8.69	8.69	0.00	0.00
OCT - 2001	48.16	49.89	1.73	3.47	8.46	8.46	0.00	0.00
NOV - 2001	43.37	43.85	0.48	1.09	8.85	8.85	0.00	0.00
DEC - 2001	44.24	45.91	1.67	3.64	9.40	9.44	0.04	0.42
JAN - 2002	45.20	47.35	2.15	4.54	9.49	9.49	0.00	0.00
FEB - 2002	43.22	44.57	1.35	3.03	9.15	9.15	0.00	0.00
MAR - 2002	46.39	46.43	0.04	0.09	8.85	8.85	0.00	0.00
2001-02	47.06	48.10	1.04	2.16	8.79	8.84	0.05	0.57

**6.2(a) MONTHWISE POWER SUPPLY POSITION (average energy in MU/day)
IN NORTHERN REGION DURING 2001-02**

(ALL FIGS. IN NET MU / DAY AVERAGE)

State / U.T.->	JAMMU & KASHMIR				PUNJAB			
Month	Demand met (MU/day)	Requirement (MU/day)	Shortage (MU/day)	Shortage %	Demand met (MU/day)	Requirement (MU/day)	Shortage (MU/day)	Shortage %
APR - 2001	14.13	18.40	4.27	23.21	61.63	56.02	61.21	109.26
MAY - 2001	13.65	16.58	2.93	17.67	74.87	77.05	2.18	2.83
JUN - 2001	14.40	16.03	1.63	10.17	87.73	93.33	5.60	6.00
JUL - 2001	13.94	15.28	1.34	8.77	93.29	98.89	5.60	5.66
AUG - 2001	14.23	15.78	1.55	9.82	98.44	103.81	5.37	5.17
SEP - 2001	13.84	15.94	2.10	13.17	86.29	91.43	5.14	5.62
OCT - 2001	14.38	16.18	1.80	11.12	71.26	75.76	4.50	5.94
NOV - 2001	17.14	18.11	0.97	5.36	59.97	61.36	1.39	2.27
DEC - 2001	18.77	19.88	1.11	5.58	60.96	64.29	3.33	5.18
JAN - 2002	18.44	19.92	1.48	7.43	63.32	67.01	3.69	5.51
FEB - 2002	17.83	19.69	1.86	9.45	64.00	66.49	2.49	3.74
MAR - 2002	17.84	19.60	1.76	8.98	65.88	66.44	0.56	0.84
2001-02	15.71	17.60	1.90	10.77	74.05	76.92	2.87	3.73

State / U.T.->	RAJASTHAN				UTTAR PRADESH			
Month	Demand met (MU/day)	Requirement (MU/day)	Shortage (MU/day)	Shortage %	Demand met (MU/day)	Requirement (MU/day)	Shortage (MU/day)	Shortage %
APR - 2001	60.06	61.18	1.12	1.83	110.24	128.44	18.20	14.17
MAY - 2001	60.41	61.70	1.29	2.09	113.52	124.28	10.76	8.66
JUN - 2001	61.23	61.37	0.14	0.23	114.84	125.06	10.22	8.17
JUL - 2001	53.68	53.73	0.05	0.09	115.33	131.87	16.54	12.54
AUG - 2001	57.13	58.08	0.95	1.64	115.56	133.90	18.34	13.70
SEP - 2001	65.96	66.50	0.54	0.81	124.17	137.77	13.60	9.87
OCT - 2001	66.82	66.90	0.08	0.12	122.15	132.27	10.12	7.65
NOV - 2001	72.22	72.22	0.00	0.00	122.44	131.45	9.01	6.85
DEC - 2001	71.74	72.58	0.84	1.16	124.67	136.09	11.42	8.39
JAN - 2002	69.25	71.12	1.87	2.63	122.02	135.95	13.93	10.25
FEB - 2002	71.07	71.72	0.65	0.91	118.82	128.45	9.63	7.50
MAR - 2002	71.60	72.45	0.85	1.17	121.85	135.86	14.01	10.31
2001-02	65.05	65.75	0.70	1.07	118.81	131.82	13.01	9.87

**6.2(a) MONTHWISE POWER SUPPLY POSITION (average energy in MU/day)
IN NORTHERN REGION DURING 2001-02**

(ALL FIGS. IN NET MU / DAY AVERAGE)

State / U.T.->	N.F.F./RAIL				REGION			
Month	Demand met (MU/day)	Requirement (MU/day)	Shortage (MU/day)	Shortage %	Demand met (MU/day)	Requirement (MU/day)	Shortage (MU/day)	Shortage %
APR - 2001	0.93	0.93	0.00	0.00	335.32	367.65	32.33	8.79
MAY - 2001	0.90	0.90	0.00	0.00	372.02	391.39	19.37	4.95
JUN - 2001	0.99	0.99	0.00	0.00	396.56	415.21	18.65	4.49
JUL - 2001	1.02	1.02	0.00	0.00	401.46	427.37	25.91	6.06
AUG - 2001	1.10	1.10	0.00	0.00	412.44	441.03	28.59	6.48
SEP - 2001	0.95	0.95	0.00	0.00	414.57	440.10	25.53	5.80
OCT - 2001	1.25	1.25	0.00	0.00	383.34	402.93	19.59	4.86
NOV - 2001	1.20	1.20	0.00	0.00	371.68	384.18	12.50	3.25
DEC - 2001	1.09	1.09	0.00	0.00	378.81	398.40	19.59	4.92
JAN - 2002	1.26	1.26	0.00	0.00	380.16	406.17	26.01	6.40
FEB - 2002	1.34	1.34	0.00	0.00	374.26	392.00	17.74	4.53
MAR - 2002	1.35	1.35	0.00	0.00	380.80	398.63	17.83	4.47
2001-02	1.11	1.11	0.00	0.00	383.57	405.57	22.00	5.42

6.2 (b) MONTHWISE POWER SUPPLY POSITION (Peak MW) IN NORTHERN REGION DURING 2001-02

State / U.T.->	CHANDIGARH				DELHI			
Month	Demand met MW	Requirement MW	Shortage MW	Shortage %	Demand met MW	Requirement MW	Shortage MW	Shortage %
APR - 2001	136	136	0	0.00	2392	2759	367	13.30
MAY - 2001	163	163	0	0.00	2771	2995	224	7.48
JUN - 2001	180	180	0	0.00	2779	3021	242	8.01
JUL - 2001	176	176	0	0.00	2829	3011	182	6.04
AUG - 2001	178	178	0	0.00	2879	3040	161	5.30
SEP - 2001	169	169	0	0.00	2787	2989	202	6.76
OCT - 2001	145	147	2	1.36	2509	2814	305	10.84
NOV - 2001	140	140	0	0.00	2481	2645	164	6.20
DEC - 2001	148	148	0	0.00	2584	2871	287	10.00
JAN - 2002	166	166	0	0.00	2616	3118	502	16.10
FEB - 2002	155	155	0	0.00	2793	2955	162	5.48
MAR - 2002	151	151	0	0.00	2575	2605	30	1.15
2001-02	180	180	0	0.00	2879	3118	239	7.67

State / U.T.->	HARYANA				HIMACHAL PRADESH			
Month	Demand met MW	Requirement MW	Shortage MW	Shortage %	Demand met MW	Requirement MW	Shortage MW	Shortage %
APR - 2001	2112	2200	88	4.00	483	512	29	5.66
MAY - 2001	2471	2522	51	2.02	485	485	0	0.00
JUN - 2001	2805	2805	0	0.00	496	496	0	0.00
JUL - 2001	2773	2798	25	0.89	500	500	0	0.00
AUG - 2001	2900	2966	66	2.23	502	502	0	0.00
SEP - 2001	2828	2914	86	2.95	472	472	0	0.00
OCT - 2001	2762	2762	0	0.00	504	504	0	0.00
NOV - 2001	2528	2593	65	2.51	519	519	0	0.00
DEC - 2001	2503	2726	223	8.18	562	562	0	0.00
JAN - 2002	2574	2724	150	5.51	551	551	0	0.00
FEB - 2002	2556	2660	104	3.91	508	508	0	0.00
MAR - 2002	2655	2655	0	0.00	520	520	0	0.00
2001-02	2900	2966	66	2.23	562	562	0	0.00

6.2 (b) MONTHWISE POWER SUPPLY POSITION (Peak MW) IN NORTHERN REGION DURING 2001-02

State / U.T.->	JAMMU & KASHMIR				PUNJAB			
Month	Demand met MW	Requirement MW	Shortage MW	Shortage %	Demand met MW	Requirement MW	Shortage MW	Shortage %
APR - 2001	852	1125	273	24.27	3289	3577	288	8.05
MAY - 2001	858	1061	203	19.13	4245	4245	0	0.00
JUN - 2001	941	1039	98	9.43	4656	4989	333	6.67
JUL - 2001	991	1071	80	7.47	4665	5167	502	9.72
AUG - 2001	825	1025	200	19.51	4936	5357	421	7.86
SEP - 2001	839	1042	203	19.48	4645	4979	334	6.71
OCT - 2001	791	1066	275	25.80	3927	4084	157	3.84
NOV - 2001	909	1179	270	22.90	3466	3716	250	6.73
DEC - 2001	999	1209	210	17.37	3541	3714	173	4.66
JAN - 2002	946	1207	261	21.62	3465	3635	170	4.68
FEB - 2002	962	1081	119	11.01	3780	3845	65	1.69
MAR - 2002	946	1149	203	17.67	3661	3908	247	6.32
2001-02	999	1209	210	17.37	4936	5357	421	7.86

State / U.T.->	RAJASTHAN				UTTAR PRADESH			
Month	Demand met MW	Requirement MW	Shortage MW	Shortage %	Demand met MW	Requirement MW	Shortage MW	Shortage %
APR - 2001	3253	3353	100	2.98	5626	7036	1410	20.04
MAY - 2001	3286	3286	0	0.00	6044	6717	673	10.02
JUN - 2001	3130	3130	0	0.00	6149	7039	890	12.64
JUL - 2001	2959	2959	0	0.00	6046	6983	937	13.42
AUG - 2001	3139	3139	0	0.00	5922	6910	988	14.30
SEP - 2001	3195	3314	119	3.59	6341	7584	1243	16.39
OCT - 2001	3524	3524	0	0.00	6420	7200	780	10.83
NOV - 2001	3603	3603	0	0.00	6887	7492	605	8.08
DEC - 2001	3540	3559	19	0.53	6400	7339	939	12.79
JAN - 2002	3590	3590	0	0.00	6210	7295	1085	14.87
FEB - 2002	3574	3587	13	0.36	6451	7160	709	9.90
MAR - 2002	3657	3657	0	0.00	6399	6977	578	8.28
2001-02	3657	3657	0	0.00	6887	7584	697	9.19

6.2 (b) MONTHWISE POWER SUPPLY POSITION (Peak MW) IN NORTHERN REGION DURING 2001-02

State / U.T.->	N.F.F.				REGION			
Month	Demand met MW	Requirement MW	Shortage MW	Shortage %	Demand met MW	Requirement MW	Shortage MW	Shortage %
APR - 2001	51	51	0	0.00	16947	19832	2885	14.55
MAY - 2001	51	51	0	0.00	19436	20874	1438	6.89
JUN - 2001	50	50	0	0.00	20122	21873	1751	8.01
JUL - 2001	54	54	0	0.00	20216	21559	1343	6.23
AUG - 2001	60	60	0	0.00	20533	22442	1909	8.51
SEP - 2001	57	57	0	0.00	21586	22589	1003	4.44
OCT - 2001	62	62	0	0.00	20346	21545	1199	5.57
NOV - 2001	59	59	0	0.00	20072	21733	1661	7.64
DEC - 2001	58	58	0	0.00	19748	21828	2080	9.53
JAN - 2002	67	67	0	0.00	19787	21452	1665	7.76
FEB - 2002	66	66	0	0.00	19714	21390	1676	7.84
MAR -2002	66	66	0	0.00	19937	21481	1544	7.19
2001-02	67	67	0	0.00	21586	22589	1003	4.44

6.3 (a) MONTHWISE MAXIMUM AND MINIMUM ENERGY CONSUMPTION WITH CORRESPONDING DATES IN NORTHERN REGION DURING 2001-02

State / U.T.->	CHANDIGARH				DELHI			
Month	Max. Consumption MU/Day	Date	Min. Consumption MU/Day	Date	Max. Consumption MU/Day	Date	Min. Consumption MU/Day	Date
APR - 2001	3.30	30.04.2001	1.98	01.04.2001	51.88	30.04.2001	39.47	01.04.2001
MAY - 2001	3.80	30.05.2001	2.60	20.05.2001	60.58	25.05.2001	47.84	20.05.2001
JUN - 2001	3.93	29.06.2001	2.79	22.06.2001	61.83	22.06.2001	47.29	05.06.2001
JUL - 2001	3.80	06.07.2001	2.99	08.07.2001	61.99	13.07.2001	51.33	15.07.2001
AUG - 2001	3.85	29.08.2001	2.82	15.08.2001	60.85	24.08.2001	48.37	15.08.2001
SEP - 2001	3.66	24.09.2001	2.49	16.09.2001	59.72	12.09.2001	52.71	30.09.2001
OCT - 2001	3.14	03.10.2001	2.15	24.10.2001	54.16	01.10.2001	43.05	26.10.2001
NOV - 2001	2.52	02.11.2001	1.98	04.11.2001	48.43	02.11.2001	42.23	18.11.2001
DEC - 2001	3.07	31.12.2001	2.16	08.12.2001	49.59	31.12.2001	43.39	02.12.2001
JAN - 2002	2.99	01.01.2002	2.06	18.01.2002	50.42	02.01.2002	43.98	26.01.2002
FEB - 2002	2.80	11.02.2002	2.31	24.02.2002	50.36	08.02.2002	42.62	24.02.2002
MAR - 2002	2.72	27.03.2002	1.90	17.03.2002	47.93	21.03.2002	39.43	29.03.2002
2001-02	3.93	29.06.2001	1.90	17.03.2002	61.99	13.07.2001	39.43	29.03.2002

State / U.T.->	HARYANA				HIMACHAL PRADESH			
Month	Max. Consumption MU/Day	Date	Min. Consumption MU/Day	Date	Max. Consumption MU/Day	Date	Min. Consumption MU/Day	Date
APR - 2001	42.16	03.04.2001	31.19	17.04.2001	8.31	28.04.2001	6.97	20.04.2001
MAY - 2001	51.94	14.05.2001	33.43	29.05.2001	9.18	19.05.2001	7.37	08.05.2001
JUN - 2001	57.22	29.06.2001	36.38	05.06.2001	9.47	29.06.2001	8.40	02.06.2001
JUL - 2001	57.53	05.07.2001	49.44	16.07.2001	9.24	20.07.2001	7.72	08.07.2001
AUG - 2001	60.13	04.08.2001	44.55	14.08.2001	9.59	03.08.2001	7.56	14.08.2001
SEP - 2001	61.04	02.09.2001	50.11	29.09.2001	9.04	11.09.2001	7.97	12.09.2001
OCT - 2001	54.55	25.10.2001	42.72	13.10.2001	8.94	31.10.2001	7.82	10.10.2001
NOV - 2001	47.48	14.11.2001	39.05	17.11.2001	9.33	23.11.2001	7.92	15.11.2001
DEC - 2001	46.61	09.12.2001	37.80	28.12.2001	10.12	14.12.2001	8.95	25.12.2001
JAN - 2002	48.70	24.01.2002	40.91	15.01.2002	9.95	13.01.2002	8.56	27.01.2002
FEB - 2002	48.76	10.02.2002	37.27	25.02.2002	9.84	22.02.2002	8.30	03.02.2002
MAR - 2002	51.13	19.03.2002	41.36	04.03.2002	10.13	01.03.2002	7.61	29.03.2002
2001-02	61.04	02.09.2001	31.19	17.04.2001	10.13	01.03.2002	6.97	20.04.2002

6.3 (a) MONTHWISE MAXIMUM AND MINIMUM ENERGY CONSUMPTION WITH CORRESPONDING DATES IN NORTHERN REGION DURING 2001-02

State / U.T.->	JAMMU & KASHMIR				PUNJAB			
Month	Max. Consumption MU/Day	Date	Min. Consumption MU/Day	Date	Max. Consumption MU/Day	Date	Min. Consumption MU/Day	Date
APR - 2001	15.76	13.04.2001	11.87	03.04.2001	61.89	27.04.2001	51.18	18.04.2001
MAY - 2001	15.12	30.05.2001	10.82	09.05.2001	86.26	27.05.2001	56.27	08.05.2001
JUN - 2001	16.96	18.06.2001	12.44	03.06.2001	97.75	29.06.2001	74.44	05.06.2001
JUL - 2001	15.18	20.07.2001	11.69	11.07.2001	97.74	02.07.2001	81.08	17.07.2001
AUG - 2001	15.10	12.08.2001	12.15	31.08.2001	102.88	12.08.2001	91.89	15.08.2001
SEP - 2001	14.65	30.09.2001	11.64	14.09.2001	101.67	02.09.2001	71.93	24.09.2001
OCT - 2001	16.39	25.10.2001	11.91	12.10.2001	74.10	20.10.2001	64.85	31.10.2001
NOV - 2001	19.29	30.11.2001	13.59	03.11.2001	66.22	02.11.2001	47.67	15.11.2001
DEC - 2001	20.84	17.12.2001	16.66	28.12.2001	65.84	08.12.2001	54.06	12.12.2001
JAN - 2002	20.35	26.01.2002	16.03	16.01.2002	66.85	31.01.2002	59.55	03.01.2002
FEB - 2002	19.81	15.02.2002	10.48	08.02.2002	67.75	19.02.2002	57.69	14.02.2002
MAR - 2002	18.91	02.03.2002	15.30	25.03.2002	74.05	16.03.2002	54.31	02.03.2002
2001-02	20.84	17.12.2001	10.48	08.02.2002	102.88	12.08.2001	47.67	15.11.2001

State / U.T.->	RAJASTHAN				UTTAR PRADESH			
Month	Max. Consumption MU/Day	Date	Min. Consumption MU/Day	Date	Max. Consumption MU/Day	Date	Min. Consumption MU/Day	Date
APR - 2001	67.08	01.04.2001	52.06	19.04.2001	118.23	23.04.2001	101.14	21.04.2001
MAY - 2001	68.00	15.05.2001	50.06	02.05.2001	126.64	24.05.2001	89.38	16.05.2001
JUN - 2001	67.34	03.06.2001	52.08	17.06.2001	121.19	10.06.2001	101.65	04.06.2001
JUL - 2001	61.59	31.07.2001	46.03	03.07.2001	123.24	11.07.2001	104.44	28.07.2001
AUG - 2001	65.86	31.08.2001	49.31	16.08.2001	128.04	17.08.2001	99.45	01.08.2001
SEP - 2001	68.57	02.09.2001	63.40	09.09.2001	131.24	16.09.2001	114.33	01.09.2001
OCT - 2001	71.81	24.10.2001	58.68	12.10.2001	128.34	26.10.2001	112.07	13.10.2001
NOV - 2001	75.74	14.11.2001	67.69	17.11.2001	131.52	14.11.2001	110.47	07.11.2001
DEC - 2001	74.43	12.12.2001	67.57	19.12.2001	130.92	14.12.2001	110.05	11.12.2001
JAN - 2002	75.58	31.01.2002	51.06	09.01.2002	129.06	07.01.2002	105.28	16.01.2002
FEB - 2002	73.97	07.02.2002	59.87	11.02.2002	127.50	04.02.2002	87.66	11.02.2002
MAR - 2002	73.88	24.03.2002	63.39	29.03.2002	128.45	06.03.2002	115.14	30.03.2002
2001-02	75.74	14.11.2001	46.03	03.07.2001	131.52	14.11.2001	87.66	11.02.2002

6.3 (a) MONTHWISE MAXIMUM AND MINIMUM ENERGY CONSUMPTION WITH CORRESPONDING DATES IN NORTHERN REGION DURING 2001-02

State / U.T.->	N.F.F./RAIL				REGION			
Month	Max. Consumption MU/Day	Date	Min. Consumption MU/Day	Date	Max. Consumption MU/Day	Date	Min. Consumption MU/Day	Date
APR - 2001	1.21	01.04.2001	0.75	22.04.2001	351.40	27.04.2001	313.10	17.04.2001
MAY - 2001	1.22	02.05.2001	0.76	25.05.2001	407.60	25.05.2001	338.51	04.05.2001
JUN - 2001	1.19	29.06.2001	0.84	05.06.2001	422.06	29.06.2001	355.73	05.06.2001
JUL - 2001	1.28	30.07.2001	0.88	18.07.2001	419.49	20.07.2001	382.95	17.07.2001
AUG - 2001	1.43	30.08.2001	0.93	17.08.2001	433.24	30.08.2001	387.23	14.08.2001
SEP - 2001	1.35	01.09.2001	0.75	12.09.2001	439.04	11.09.2001	392.33	27.09.2001
OCT - 2001	1.49	01.10.2001	1.08	15.10.2001	402.64	25.10.2001	358.77	13.10.2001
NOV - 2001	1.41	30.11.2001	1.00	24.11.2001	384.01	14.11.2001	354.16	17.11.2001
DEC - 2001	1.37	01.12.2001	0.88	14.12.2001	390.98	31.12.2001	366.82	12.12.2001
JAN - 2002	1.61	29.01.2002	1.00	01.01.2002	398.52	31.01.2002	359.84	12.01.2002
FEB - 2002	1.57	01.02.2002	1.23	10.02.2002	395.25	05.02.2002	330.92	11.02.2002
MAR -2002	1.57	27.03.2002	0.98	11.03.2002	400.06	23.03.2002	364.32	30.03.2002
2001-02	1.61	29.01.2002	0.75	22.04.2001	439.04	11.09.2001	313.10	17.04.2001

6.3(b) MONTHWISE MAXIMUM AND MINIMUM ENERGY REQUIREMENT WITH CORRESPONDING DATES IN NORTHERN REGION DURING 2001-02

State / U.T.->	CHANDIGARH				DELHI			
Month	Max.Requirement MU/Day	Date	Min. Requirement MU/Day	Date	Max.Requirement MU/Day	Date	Min. Requirement MU/Day	Date
APR - 2001	3.30	30.04.2001	1.98	01.04.2001	56.50	30.04.2001	40.78	01.04.2001
MAY - 2001	3.80	30.05.2001	2.60	20.05.2001	62.93	10.05.2001	47.94	20.05.2001
JUN - 2001	3.93	29.06.2001	2.79	22.06.2001	63.57	13.06.2001	47.91	05.06.2001
JUL - 2001	3.80	06.07.2001	2.99	08.07.2001	63.65	06.07.2001	51.83	15.07.2001
AUG - 2001	3.85	29.08.2001	2.82	15.08.2001	62.54	24.08.2001	48.52	15.08.2001
SEP - 2001	3.66	24.09.2001	2.49	16.09.2001	62.10	13.09.2001	53.38	30.09.2001
OCT - 2001	3.14	03.10.2001	2.23	14.10.2001	55.67	01.10.2001	43.09	26.10.2001
NOV - 2001	2.54	01.11.2001	2.04	15.11.2001	48.92	02.11.2001	42.40	18.11.2001
DEC - 2001	3.07	31.12.2001	2.16	08.12.2001	51.86	31.12.2001	43.78	09.12.2001
JAN - 2002	2.99	01.01.2002	2.06	18.01.2002	53.67	11.01.2002	44.92	26.01.2002
FEB - 2002	2.80	11.02.2002	2.31	24.02.2002	52.59	08.02.2002	43.71	24.02.2002
MAR - 2002	2.72	27.03.2002	1.90	17.03.2002	48.07	27.03.2002	39.44	29.03.2002
2001-02	3.93	29.06.2001	1.90	17.03.2002	63.65	06.07.2001	39.44	29.03.2002

State / U.T.->	HARYANA				HIMACHAL PRADESH			
Month	Max.Requirement MU/Day	Date	Min. Requirement MU/Day	Date	Max.Requirement MU/Day	Date	Min. Requirement MU/Day	Date
APR - 2001	42.16	03.04.2001	31.19	17.04.2001	8.98	08.04.2001	7.47	20.04.2001
MAY - 2001	52.24	14.05.2001	33.43	29.05.2001	9.18	19.05.2001	7.37	08.05.2001
JUN - 2001	57.22	29.06.2001	36.38	05.06.2001	9.63	23.06.2001	8.40	02.06.2001
JUL - 2001	63.65	06.07.2001	51.83	15.07.2001	9.40	02.07.2001	7.72	08.07.2001
AUG - 2001	61.82	31.08.2001	44.55	14.08.2001	9.59	03.08.2001	7.56	14.08.2001
SEP - 2001	62.55	01.09.2001	53.45	14.09.2001	9.04	11.09.2001	7.97	12.09.2001
OCT - 2001	54.55	25.10.2001	46.50	28.10.2001	8.94	31.10.2001	7.82	10.10.2001
NOV - 2001	47.66	14.11.2001	40.48	17.11.2001	9.33	23.11.2001	7.92	15.11.2001
DEC - 2001	48.73	31.12.2001	42.38	13.12.2001	10.12	14.12.2001	8.96	25.12.2001
JAN - 2002	51.57	12.01.2002	41.67	15.01.2002	9.95	13.01.2002	8.56	27.01.2002
FEB - 2002	50.67	06.02.2002	37.27	25.02.2002	9.84	22.02.2002	8.30	03.02.2002
MAR - 2002	51.13	19.03.2002	41.36	04.03.2002	10.13	01.03.2002	7.61	29.03.2002
2001-02	63.65	06.07.2001	31.19	17.04.2001	10.13	01.03.2002	7.37	08.05.2001

6.3(b) MONTHWISE MAXIMUM AND MINIMUM ENERGY REQUIREMENT WITH CORRESPONDING DATES IN NORTHERN REGION DURING 2001-02

State / U.T.->	JAMMU & KASHMIR				PUNJAB			
Month	Max.Requirement MU/Day	Date	Min. Requirement MU/Day	Date	Max.Requirement MU/Day	Date	Min. Requirement MU/Day	Date
APR - 2001	19.46	02.04.2001	17.37	03.04.2001	68.39	07.04.2001	51.18	18.04.2001
MAY - 2001	17.17	03.05.2001	14.82	09.05.2001	86.96	26.05.2001	66.85	20.05.2001
JUN - 2001	16.96	18.06.2001	15.67	11.06.2001	110.15	29.06.2001	78.19	05.06.2001
JUL - 2001	15.97	19.07.2001	14.69	11.07.2001	107.38	23.07.2001	86.35	19.07.2001
AUG - 2001	16.17	04.08.2001	15.15	31.08.2001	107.76	12.08.2001	96.29	15.08.2001
SEP - 2001	16.15	30.09.2001	15.60	04.09.2001	105.39	01.09.2001	81.43	24.09.2001
OCT - 2001	16.57	29.10.2001	15.50	11.10.2001	80.79	16.10.2001	67.05	31.10.2001
NOV - 2001	19.29	30.11.2001	16.59	03.11.2001	66.82	02.11.2001	47.97	15.11.2001
DEC - 2001	20.84	17.12.2001	19.03	12.12.2001	68.99	08.12.2001	58.24	14.12.2001
JAN - 2002	21.06	05.01.2002	18.53	16.01.2002	70.64	24.01.2002	60.50	14.01.2002
FEB - 2002	20.52	11.02.2002	19.13	18.02.2002	71.90	01.02.2002	57.69	14.02.2002
MAR - 2002	20.27	15.03.2002	17.80	25.03.2002	75.37	20.03.2002	54.31	02.03.2002
2001-02	21.06	05.01.2002	14.69	11.07.2001	107.76	12.08.2001	47.97	15.11.2002

State / U.T.->	RAJASTHAN				UTTAR PRADESH			
Month	Max.Requirement MU/Day	Date	Min. Requirement MU/Day	Date	Max.Requirement MU/Day	Date	Min. Requirement MU/Day	Date
APR - 2001	68.58	03.04.2001	52.06	19.04.2001	142.67	29.04.2001	110.74	17.04.2001
MAY - 2001	68.84	15.05.2001	52.90	22.05.2001	136.99	25.05.2001	94.98	16.05.2001
JUN - 2001	68.02	03.06.2001	52.08	17.06.2001	137.35	12.06.2001	109.00	04.06.2001
JUL - 2001	61.59	31.07.2001	46.03	03.07.2001	139.51	06.07.2001	119.87	15.07.2001
AUG - 2001	65.86	31.08.2001	49.31	16.08.2001	141.59	12.08.2001	125.80	14.08.2001
SEP - 2001	69.03	04.09.2001	64.98	17.09.2001	145.74	24.09.2001	124.54	02.09.2001
OCT - 2001	71.81	24.10.2001	58.68	12.10.2001	137.22	13.10.2001	121.05	02.10.2001
NOV - 2001	75.74	14.11.2001	67.69	17.11.2001	137.96	14.11.2001	115.25	07.11.2001
DEC - 2001	74.61	12.12.2001	67.57	19.12.2001	140.63	26.12.2001	127.38	11.12.2001
JAN - 2002	75.58	31.01.2002	51.06	09.01.2002	142.42	05.01.2002	111.75	16.01.2002
FEB - 2002	75.48	08.02.2002	59.87	11.02.2002	141.59	05.02.2002	92.12	11.02.2002
MAR - 2002	75.14	19.03.2002	63.39	29.03.2002	141.08	23.03.2002	129.08	03.03.2002
2001-02	75.74	14.11.2001	46.03	03.07.2001	145.74	24.09.2001	92.12	11.02.2002

6.3(b) MONTHWISE MAXIMUM AND MINIMUM ENERGY REQUIREMENT WITH CORRESPONDING DATES IN NORTHERN REGION DURING 2001-02

State / U.T.->	N.F.F./RAIL				REGION			
Month	Max.Requirement MU/Day	Date	Min. Requirement MU/Day	Date	Max.Requirement MU/Day	Date	Min. Requirement MU/Day	Date
APR - 2001	1.21	01.04.2001	0.75	22.04.2001	393.04	29.04.2001	324.79	17.04.2001
MAY- 2001	1.22	02.05.2001	0.76	25.05.2001	440.89	25.05.2001	372.17	17.05.2001
JUN - 2001	1.19	29.06.2001	0.84	05.06.2001	463.47	29.06.2001	382.70	05.06.2001
JUL - 2001	1.28	30.07.2001	0.88	18.07.2001	450.14	06.07.2001	401.27	16.07.2001
AUG - 2001	1.43	30.08.2001	0.93	17.08.2001	461.32	31.08.2001	402.75	14.08.2001
SEP - 2001	1.35	01.09.2001	0.75	12.09.2001	454.52	11.09.2001	420.42	30.09.2001
OCT - 2001	1.49	01.10.2001	1.08	15.10.2001	402.64	25.10.2001	358.77	13.10.2001
NOV - 2001	1.41	30.11.2001	1.00	24.11.2001	384.01	14.11.2001	354.16	17.11.2001
DEC - 2001	1.37	01.12.2001	0.88	14.12.2001	390.98	31.12.2001	366.82	12.12.2001
JAN - 2002	1.61	29.01.2002	1.00	01.01.2002	398.52	31.01.2002	359.84	12.01.2002
FEB - 2002	1.57	01.02.2002	1.23	10.02.2002	395.25	05.02.2002	330.92	11.02.2002
MAR -2002	1.57	27.03.2002	0.98	11.03.2002	400.06	23.03.2002	364.32	30.03.2002
2001-02	1.61	29.01.2002	0.75	22.04.2001	463.47	29.06.2001	324.79	17.04.2001

6.4 MONTHWISE PEAK DEMAND MET (MW) AND REQUIREMENT (MW) WITH CORRESPONDING DATES IN NORTHERN REGION DURING 2000-01

State / U.T.->	CHANDIGARH				DELHI			
Month	Peak Met MW	Date	Peak Req MW	Date	Peak Met MW	Date	Peak Req MW	Date
APR - 2001	136	11.04.2001	136	11.04.2001	2392	29.04.2001	2759	12.04.2001
MAY - 2001	183	10.05.2001	183	10.05.2001	2771	14.05.2001	2995	11.05.2001
JUN - 2001	180	29.06.2001	180	29.06.2001	2779	22.06.2001	3021	12.06.2001
JUL - 2001	176	19.07.2001	176	19.07.2001	2829	13.07.2001	3011	06.07.2001
AUG - 2001	178	29.08.2001	178	29.08.2001	2879	23.08.2001	3040	30.08.2001
SEP - 2001	169	04.09.2001	169	04.09.2001	2787	11.09.2001	2989	13.09.2001
OCT - 2001	145	03.10.2001	147	30.10.2001	2509	01.10.2001	2814	10.10.2001
NOV - 2001	140	02.11.2001	140	02.11.2001	2481	01.11.2001	2645	01.11.2001
DEC - 2001	148	21.12.2001	148	21.12.2001	2584	24.12.2001	2871	31.12.2001
JAN - 2002	166	01.01.2002	166	01.01.2002	2616	31.01.2002	3118	11.01.2002
FEB - 2002	155	11.02.2002	155	11.02.2002	2793	13.02.2002	2955	04.02.2002
MAR - 2002	151	27.03.2002	151	27.03.2002	2575	01.03.2002	2605	05.03.2002
2001-02	183	10.05.2001	183	10.05.2001	2879	13.07.2001	3118	11.01.2002

State / U.T.->	HARYANA				HIMACHAL PRADESH			
Month	Peak Met MW	Date	Peak Req MW	Date	Peak Met MW	Date	Peak Req MW	Date
APR - 2001	2112	06.04.2001	2200	10.04.2001	483	28.04.2001	512	28.04.2001
MAY - 2001	2471	14.05.2001	2522	13.05.2001	485	02.05.2001	485	02.05.2001
JUN - 2001	2805	20.06.2001	2805	20.06.2001	496	29.06.2001	496	29.06.2001
JUL - 2001	2773	05.07.2001	2798	24.07.2001	500	19.07.2001	500	19.07.2001
AUG - 2001	2900	29.08.2001	2966	31.08.2001	502	03.08.2001	502	03.08.2001
SEP - 2001	2828	01.09.2001	2914	01.09.2001	472	11.09.2001	472	11.09.2001
OCT - 2001	2762	25.10.2001	2762	25.10.2001	504	18.10.2001	504	18.10.2001
NOV - 2001	2528	03.11.2001	2593	02.11.2001	519	23.11.2001	519	23.11.2001
DEC - 2001	2503	25.12.2001	2726	31.12.2001	562	14.12.2001	562	14.12.2001
JAN - 2002	2574	21.01.2002	2724	21.01.2002	551	01.01.2002	551	01.01.2002
FEB - 2002	2556	07.02.2002	2660	19.02.2002	508	01.02.2002	508	01.02.2002
MAR - 2002	2655	20.03.2002	2655	20.03.2002	520	01.03.2002	520	01.03.2002
2001-02	2900	29.08.2001	2966	31.08.2001	562	14.12.2001	562	14.12.2001

6.4 MONTHWISE PEAK DEMAND MET (MW) AND REQUIREMENT (MW) WITH CORRESPONDING DATES IN NORTHERN REGION DURING 2000-01

State / U.T.->	JAMMU & KASHMIR				PUNJAB			
Month	Peak Met MW	Date	Peak Reqt MW	Date	Peak Met MW	Date	Peak Reqt MW	Date
APR - 2001	852	06.04.2001	1125	20.04.2001	3289	27.04.2001	3577	08.04.2001
MAY- 2001	858	26.05.2001	1061	01.05.2001	4245	27.05.2001	4245	27.05.2001
JUN - 2001	941	18.06.2001	1039	18.06.2001	4656	28.06.2001	4989	30.06.2001
JUL - 2001	991	30.07.2001	1071	26.07.2001	4665	25.07.2001	5167	02.07.2001
AUG - 2001	825	12.08.2001	1025	22.08.2001	4936	04.08.2001	5357	23.08.2001
SEP - 2001	839	06.09.2001	1042	13.09.2001	4645	02.09.2001	4979	02.09.2001
OCT - 2001	791	25.10.2001	1066	25.10.2001	3927	26.10.2001	4084	26.10.2001
NOV - 2001	909	07.11.2001	1179	20.11.2001	3466	02.11.2001	3716	02.11.2001
DEC - 2001	999	13.12.2001	1209	13.12.2001	3541	06.12.2001	3714	06.12.2001
JAN - 2002	946	26.01.2002	1207	01.01.2002	3679	23.01.2002	3758	23.01.2002
FEB - 2002	962	15.02.2002	1081	07.02.2002	3780	11.02.2002	3845	11.02.2002
MAR -2002	946	09.03.2002	1149	28.03.2002	3661	23.03.2002	3908	23.03.2002
2001-02	999	13.12.2001	1209	13.12.2001	4936	04.08.2001	5357	23.08.2001

State / U.T.->	RAJASTHAN				UTTAR PRADESH			
Month	Peak Met MW	Date	Peak Reqt MW	Date	Peak Met MW	Date	Peak Reqt MW	Date
APR - 2001	3253	01.04.2001	3353	01.04.2001	5626	09.04.2001	7036	28.04.2001
MAY- 2001	3286	15.05.2001	3286	15.05.2001	6044	25.05.2001	6717	22.05.2001
JUN - 2001	3130	03.06.2001	3130	03.06.2001	6149	10.06.2001	7039	08.06.2001
JUL - 2001	2959	31.07.2001	2959	31.07.2001	6046	19.07.2001	6983	18.07.2001
AUG - 2001	3139	30.08.2001	3139	30.08.2001	5922	17.08.2001	6910	01.08.2001
SEP - 2001	3195	14.09.2001	3314	10.09.2001	6341	16.09.2001	7584	24.09.2001
OCT - 2001	3524	29.10.2001	3524	29.10.2001	6420	25.10.2001	7200	25.10.2001
NOV - 2001	3603	13.11.2001	3603	13.11.2001	6887	14.11.2001	7492	14.11.2001
DEC - 2001	3540	12.12.2001	3559	25.12.2001	6400	31.12.2001	7339	21.12.2001
JAN - 2002	3590	27.01.2002	3590	27.01.2002	6210	08.01.2002	7295	05.01.2002
FEB - 2002	3574	19.02.2002	3587	10.02.2002	6451	13.02.2002	7160	07.02.2002
MAR -2002	3657	22.03.2002	3657	22.03.2002	6399	02.03.2002	6977	06.03.2002
2001-02	3657	22.03.2002	3657	22.03.2002	6887	14.11.2001	7584	24.09.2001

6.4 MONTHWISE PEAK DEMAND MET (MW) AND REQUIREMENT (MW) WITH CORRESPONDING DATES IN NORTHERN REGION DURING 2000-01

State / U.T.->	N.F.F.				REGION			
Month	Peak Met MW	Date	Peak Reqt MW	Date	Peak Met MW	Date	Peak Reqt MW	Date
APR - 2001	51	01.04.2001	51	01.04.2001	16947	03.04.2001	19832	28.04.2001
MAY - 2001	51	02.05.2001	51	02.05.2001	19436	14.05.2001	20874	14.05.2001
JUN - 2001	50	29.06.2001	50	29.06.2001	20122	29.06.2001	21873	29.06.2001
JUL - 2001	54	30.07.2001	54	30.07.2001	20216	07.07.2001	21559	05.07.2001
AUG - 2001	60	30.08.2001	60	30.08.2001	20533	29.08.2001	22442	29.08.2001
SEP - 2001	57	01.09.2001	57	01.09.2001	21586	11.09.2001	22589	13.09.2001
OCT - 2001	62	30.10.2001	62	30.10.2001	20346	25.10.2001	21545	25.10.2001
NOV - 2001	59	03.11.2001	59	03.11.2001	20072	14.11.2001	21733	14.11.2001
DEC - 2001	58	01.12.2001	58	01.12.2001	19748	31.12.2001	21828	31.12.2001
JAN - 2002	67	29.01.2002	67	29.01.2002	19787	30.01.2002	21452	30.01.2002
FEB - 2002	66	01.02.2002	66	01.02.2002	19714	05.02.2002	21390	05.02.2002
MAR - 2002	66	27.03.2002	66	27.03.2002	19937	23.03.2002	21481	23.03.2002
2001-02	67	29.01.2002	67	29.01.2002	21586	11.09.2001	22589	13.09.2001

6.5 MONTHWISE MINIMUM DEMAND MET (MW) WITH CORRESPONDING DATES OF MAJOR STATES IN NORTHERN REGION DURING 2001-02

State / U.T.->	DELHI			HARYANA			PUNJAB		
Month	Minimum Demand Met MW	Date	Time	Minimum Demand Met MW	Date	Time	Minimum Demand Met MW	Date	Time
APR - 2001	1340	01.04.2001	03:00	937	19.04.2001	13:00	1748	19.04.2001	13:00
MAY - 2001	1419	01.05.2001	15:00	1110	01.05.2001	16:00	2099	29.05.2001	01:00
JUN - 2001	1610	05.06.2001	06:00	1062	05.06.2001	05:00	2632	05.06.2001	04:00
JUL - 2001	1800	28.07.2001	04:00	1757	16.07.2001	12:00	2984	17.07.2001	18:00
AUG - 2001	1714	15.08.2001	14:00	1585	14.08.2001	19:00	3514	22.08.2001	18:00
SEP - 2001	1752	25.09.2001	13:00	1260	14.09.2001	16:00	2653	23.09.2001	18:00
OCT - 2001	1349	02.10.2001	15:00	1393	30.10.2001	16:00	2238	26.10.2001	07:00
NOV - 2001	1199	08.11.2001	02:00	1341	17.11.2001	10:00	1561	15.11.2001	14:00
DEC - 2001	1147	20.12.2001	03:00	1161	13.12.2001	03:00	1606	13.12.2001	03:00
JAN - 2002	1183	15.01.2002	02:00	1371	01.01.2002	11:00	1900	17.01.2002	01:00
FEB - 2002	1149	25.02.2002	03:00	1005	25.02.2002	01:00	1839	23.02.2002	03:00
MAR - 2002	1170	04.03.2002	02:00	1245	19.03.2002	09:00	1810	10.03.2002	04:00
2001-02	1147	20.12.2001	03:00	937	19.04.2001	13:00	1561	15.11.2001	14:00

State / U.T.->	RAJASTHAN			UTTAR PRADESH			REGION		
Month	Minimum Demand Met MW	Date	Time	Minimum Demand Met MW	Date	Time	Minimum Demand Met MW	Date	Time
APR - 2001	2087	17.04.2001	03:00	4054	21.04.2001	14:00	12740	18.04.2001	04:00
MAY - 2001	1529	02.05.2001	01:00	3249	03.05.2001	19:00	13649	08.05.2001	04:00
JUN - 2001	1915	17.06.2001	18:00	3955	04.06.2001	16:00	15019	05.06.2001	07:00
JUL - 2001	1774	04.07.2001	09:00	4156	27.07.2001	18:00	16106	16.07.2001	09:00
AUG - 2001	1932	24.08.2001	16:00	3645	12.08.2001	18:00	16071	14.08.2001	11:00
SEP - 2001	2547	17.09.2001	18:00	4372	20.09.2001	11:00	16841	26.09.2001	10:00
OCT - 2001	2451	12.10.2001	18:00	4212	08.10.2001	15:00	15273	13.10.2001	09:00
NOV - 2001	2579	15.11.2001	14:00	4155	07.11.2001	13:00	13922	15.11.2001	15:00
DEC - 2001	2764	18.12.2001	11:00	4529	10.12.2001	13:00	14570	29.12.2001	01:00
JAN - 2002	2234	14.01.2002	17:00	3961	16.01.2002	06:00	13554	16.01.2002	04:00
FEB - 2002	2308	10.02.2002	16:00	3496	12.02.2002	05:00	12876	12.02.2002	03:00
MAR - 2002	2402	30.03.2002	18:00	4324	16.03.2002	21:00	14670	29.03.2002	17:00
2001-02	1529	02.05.2001	01:00	3249	03.05.2001	19:00	12740	18.04.2001	04:00

6.6 AVERAGE ENERGY REQUIREMENT/DEMAND MET (MU/DAY) OF STATES IN THE NORTHERN REGION DURING THE PAST DECADE

(ALL FIGS. IN MU/DAY AVERAGE)

SL. NO.	YEAR	CHANDIGARH		DELHI		HARYANA		H.P.		J & K		PUNJAB		RAJASTHAN		U.P.	
		REQT.	AVAIL.	REQT.	AVAIL.	REQT.	AVAIL.	REQT.	AVAIL.	REQT.	AVAIL.	REQT.	AVAIL.	REQT.	AVAIL.	REQT.	AVAIL.
1	1992-93	1.71	1.71	27.66	27.59	30.48	29.81	4.20	4.20	9.70	7.93	48.75	46.99	38.77	38.30	89.79	80.82
2	1993-94	1.83	1.83	30.02	29.76	31.56	28.74	4.25	4.25	10.07	8.14	50.78	49.16	43.22	40.93	93.91	84.79
3	1994-95	1.95	1.95	32.98	32.69	31.15	30.01	5.11	5.09	10.95	8.77	53.75	51.95	45.70	43.50	101.80	89.48
4	1995-96	2.11	2.11	35.53	35.22	34.31	33.59	6.00	5.94	12.00	9.02	54.83	53.62	51.77	49.90	106.20	93.99
5	1996-97	2.33	2.33	38.13	37.22	37.14	34.92	6.54	6.49	12.92	10.53	58.99	58.04	53.63	49.98	112.99	97.24
6	1997-98	2.49	2.49	40.63	40.02	35.35	34.77	7.07	7.06	14.12	13.78	60.32	59.93	55.72	54.82	112.58	98.88
7	1998-99	2.85	2.85	44.36	43.53	36.99	36.34	7.86	7.85	15.42	14.48	66.02	65.00	62.33	60.90	115.08	103.91
8	1999-2000	2.70	2.70	47.20	45.89	42.08	41.15	8.25	8.22	16.46	13.13	70.44	69.92	66.86	63.86	121.25	105.65
9	2000-01	2.78	2.78	49.95	47.57	45.76	44.38	8.42	8.24	16.88	14.35	74.38	72.02	66.97	64.99	126.40	109.76
10	2001-02	2.89	2.89	52.10	50.55	48.10	47.06	8.84	8.79	17.60	15.71	76.92	74.05	65.75	65.05	131.82	118.81
RATE OF GROWTH C		6.01	6.00	7.29	6.96	5.20	5.20	8.62	8.55	6.85	7.89	5.20	5.18	6.05	6.06	4.36	4.37
(%PER ANNUM) A		7.67	7.65	9.82	9.25	6.42	6.43	12.28	12.14	9.05	10.90	6.42	6.40	7.73	7.76	5.20	5.22

C: COMPOUND A: AVERAGE

6.7 PEAK REQUIREMENT / DEMAND MET (MW) OF STATES IN THE NORTHERN REGION DURING THE PAST DECADE

(ALL FIGS. IN MW)

SL. NO.	YEAR	CHANDIGARH		DELHI		HARYANA		H.P.		J & K		PUNJAB		RAJASTHAN		U.P.	
		REQT.	AVAIL.	REQT.	AVAIL.	REQT.	AVAIL.	REQT.	AVAIL.	REQT.	AVAIL.	REQT.	AVAIL.	REQT.	AVAIL.	REQT.	AVAIL.
1	1992-93	120	120	1632	1568	1850	1811	325	325	632	572	3600	3172	2325	2278	5830	4970
2	1993-94	135	135	1850	1639	2050	1843	365	365	668	550	3600	3484	2600	2476	6238	5227
3	1994-95	140	140	1884	1869	2025	1947	450	450	748	846	4200	3548	2700	2585	6676	5296
4	1995-96	147	147	2123	2000	2150	2012	506	506	825	600	3925	3820	2950	2818	6793	5420
5	1996-97	166	166	2234	2078	2187	2090	525	525	900	750	3868	3864	3145	2972	6833	5873
6	1997-98	179	179	2448	2355	2273	2273	593	593	1076	1035	4371	4371	3262	3229	6616	5666
7	1998-99	197	197	2710	2491	2449	2331	585	585	1150	973	4559	4559	3718	3589	6864	5926
8	1999-2000	180	180	2854	2591	2575	2575	618	618	1207	1004	5013	5013	3672	3672	7017	5960
9	2000-01	171	171	3077	2670	2709	2709	585	585	1172	974	4997	4897	3754	3663	7311	6119
10	2001-02	180	180	3118	2879	2966	2900	562	562	1209	999	5357	4936	3657	3657	7584	6887
RATE OF GROWTH C		4.61	4.61	7.46	6.98	5.38	5.37	6.27	6.27	7.47	6.39	4.52	5.04	5.16	5.40	2.97	3.69
(%PER ANNUM) A		5.56	5.56	10.12	9.29	6.70	6.68	8.10	8.10	10.14	8.29	5.42	6.18	6.37	6.73	3.34	4.29

C: COMPOUND A: AVERAGE

6.8 DEMAND MET / REQUIREMENT OF ENERGY AND PEAK POWER IN NORTHERN REGION DURING PAST DECADE

SL. NO.	YEAR	ENERGY IN MU (NET)			PEAK POWER IN MW		
		DEMAND MET	REQUIREMENT	% SHORTAGE	DEMAND MET	REQUIREMENT	% SHORTAGE
1	1992-93	86763.00	91746.22	5.43	13772	15040	8.43
2	1993-94	90525.00	97135.00	6.80	13714	15633	12.28
3	1994-95	96323.50	103623.50	7.04	14296	16375	12.70
4	1995-96	103834.20	110938.26	6.40	15804	17729	10.86
5	1996-97	108504.70	117906.00	7.97	16109	18201	11.49
6	1997-98	113929.91	119962.88	5.03	17091	19016	10.12
7	1998-99	122300.02	128168.04	4.58	18372	20183	8.97
8	1999-2000	128366.54	137412.29	6.58	19341	21083	8.26
9	2000-01	133389.65	143433.09	7.00	19860	21479	7.54
10	2001-02	140003.11	148033.72	5.42	21586	22589	4.44
COMPOUND ANNUAL GROWTH RATE (CAGR) %		5.46	5.46		5.12	4.62	

6.9 MONTHWISE ENTITLEMENT VIS -A -VIS ACTUAL IMPORT BY CONSTITUENTS FROM NORTHERN GRID DURING 2001-02

All figs. in MU

State / U.T.->	CHANDIGARH			DELHI (Excl. BTPS)		
Month	ENTITLEMENT	ACTUAL	O/D(+)/U/D(-)	ENTITLEMENT	ACTUAL	O/D(+)/U/D(-)
APR - 2001	74.15	79.35	5.20	810.76	847.65	36.89
MAY- 2001	93.88	101.83	7.95	1010.22	1073.34	63.12
JUN - 2001	106.98	100.12	-6.86	1054.13	1077.36	23.23
JUL - 2001	116.82	107.83	-8.99	1181.96	1168.82	-13.14
AUG - 2001	115.65	109.63	-6.02	1220.47	1170.41	-50.06
SEP - 2001	101.74	97.00	-4.74	1044.31	1053.81	9.50
OCT - 2001	98.48	82.12	-16.36	973.32	861.06	-112.26
NOV - 2001	80.95	69.84	-11.11	819.20	744.23	-74.97
DEC - 2001	84.58	76.56	-8.02	886.98	751.69	-135.29
JAN - 2002	82.47	82.32	-0.15	895.29	818.58	-76.71
FEB - 2002	75.62	71.22	-4.40	800.40	753.62	-46.78
MAR -2002	93.20	76.30	-16.90	931.64	858.14	-73.50
2001-02	1124.52	1054.12	-70.40	11628.68	11178.71	-449.97

State / U.T.->	HARYANA			HIMACHAL PRADESH		
Month	ENTITLEMENT	ACTUAL	O/D(+)/U/D(-)	ENTITLEMENT	ACTUAL	O/D(+)/U/D(-)
APR - 2001	584.21	570.82	-13.39	166.72	189.50	22.78
MAY- 2001	741.01	784.09	43.08	154.73	154.85	0.12
JUN - 2001	812.78	893.89	81.11	103.11	106.75	3.64
JUL - 2001	923.83	1097.19	173.36	80.70	80.02	-0.68
AUG - 2001	928.05	1017.44	89.39	88.84	79.58	-9.26
SEP - 2001	825.63	913.92	88.29	136.42	140.24	3.82
OCT - 2001	719.36	769.95	50.59	162.89	191.52	28.63
NOV - 2001	626.40	642.35	15.95	206.92	215.08	8.16
DEC - 2001	700.61	767.78	67.17	243.78	249.43	5.65
JAN - 2002	649.11	696.61	47.50	253.39	256.18	2.79
FEB - 2002	576.59	617.93	41.34	213.57	214.27	0.70
MAR -2002	684.38	727.53	43.15	207.21	193.11	-14.10
2001-02	8771.96	9499.50	727.54	2018.28	2070.53	52.25

NOTE:- The above figures are based on operational data available at NRLDC.

6.9 MONTHWISE ENTITLEMENT VIS -A -VIS ACTUAL IMPORT BY CONSTITUENTS FROM NORTHERN GRID DURING 2001-02

All figs. in MU

State / U.T.->	JAMMU & KASHMIR			PUNJAB		
Month	ENTITLEMENT	ACTUAL	O/D(+)/U/D(-)	ENTITLEMENT	ACTUAL	O/D(+)/U/D(-)
APR - 2001	350.83	359.04	8.21	655.09	684.60	29.51
MAY- 2001	423.72	352.24	-71.48	965.91	955.05	-10.86
JUN - 2001	381.23	359.08	-22.15	1094.98	1093.31	-1.67
JUL - 2001	378.88	364.03	-14.85	1231.95	1176.61	-55.34
AUG - 2001	368.24	374.23	5.99	1224.35	1233.12	8.77
SEP - 2001	325.39	370.88	45.49	1055.23	1022.89	-32.34
OCT - 2001	359.54	421.16	61.62	797.52	773.43	-24.09
NOV - 2001	467.19	490.73	23.54	591.79	546.42	-45.37
DEC - 2001	498.45	556.72	58.27	521.27	465.94	-55.33
JAN - 2002	467.46	541.53	74.07	533.23	486.69	-46.54
FEB - 2002	442.77	467.11	24.34	553.57	527.98	-25.59
MAR -2002	539.50	503.58	-35.92	811.59	778.08	-33.51
2001-02	5003.20	5160.33	157.13	10036.48	9744.12	-292.36

State / U.T.->	RAJASTHAN			UTTAR PRADESH		
Month	ENTITLEMENT	ACTUAL	O/D(+)/U/D(-)	ENTITLEMENT	ACTUAL	O/D(+)/U/D(-)
APR - 2001	873.18	865.71	-7.47	1519.91	1481.27	-38.64
MAY- 2001	977.76	1088.84	111.08	1566.35	1463.18	-103.17
JUN - 2001	929.51	966.73	37.22	1504.16	1417.24	-86.92
JUL - 2001	970.78	891.20	-79.58	1602.81	1629.64	26.83
AUG - 2001	1024.03	1032.81	8.78	1593.20	1571.32	-21.88
SEP - 2001	961.54	952.35	-9.19	1597.49	1535.69	-61.80
OCT - 2001	947.65	969.09	21.44	1606.86	1639.57	32.71
NOV - 2001	1009.18	1087.63	78.45	1508.90	1549.02	40.12
DEC - 2001	1108.62	1152.00	43.38	1669.43	1723.75	54.32
JAN - 2002	939.94	989.61	49.67	1649.52	1619.98	-29.54
FEB - 2002	937.69	929.80	-7.89	1258.85	1308.93	50.08
MAR -2002	1071.61	1140.59	68.98	1514.56	1628.47	113.91
2001-02	11751.49	12066.36	314.87	18592.04	18568.06	-23.98

NOTE:- The above figures are based on operational data available at NRLDC.

6.10 INTER REGIONAL EXCHANGES DURING 2001-02

(All figs. in MU)

	WR					ER		NEPAL
IR EXCHG VIA -->	VINDHYACHAL HVDC B/B		220kV AURIYA MALANPUR EXPORT	M.P. TO RAJASTHAN IMPORT	RAJASTHAN TO M.P. EXPORT	BIHAR TO U.P. (IMPORT)	U.P. TO BIHAR (EXPORT)	TANAKPUR TO MAHENDRAGARH (EXPORT)
Month	IMPORT	EXPORT						
APR - 2001	35.62	7.47	12.87	0.00	0.00	30.94	0.00	5.54
MAY - 2001	28.44	43.41	12.50	0.00	0.00	36.58	3.56	1.41
JUN - 2001	34.22	45.54	10.00	0.00	0.00	103.85	10.81	1.05
JUL - 2001	32.66	46.09	12.49	0.00	0.00	156.79	0.87	1.10
AUG - 2001	88.17	6.92	13.37	0.00	0.00	202.31	1.40	1.13
SEP - 2001	23.84	24.15	13.99	0.00	0.00	140.32	1.04	3.93
OCT - 2001	41.57	15.48	13.86	0.00	0.00	150.94	0.84	6.75
NOV - 2001	5.49	77.79	13.11	0.00	0.00	141.39	1.95	6.00
DEC - 2001	11.85	28.94	14.48	0.00	0.00	185.81	1.86	6.58
JAN - 2002	27.59	5.70	14.91	0.00	0.00	203.37	0.22	4.32
FEB - 2002	16.08	17.86	11.93	0.00	0.00	175.14	0.00	4.31
MAR -2002	10.33	85.61	14.76	0.00	0.00	171.86	0.00	5.17
2001-02	355.86	404.96	158.27	0.00	0.00	1699.30	22.55	47.29
2000-01	450.69	385.71	124.65	149.58	0.00	446.00	15.08	70.04
1999-2000	587.30	215.11	110.13	31.28	0.00	418.29	26.47	13.47

6.11 UTILISATION OF VINDHYACHAL HVDC B/B STATION (500 MW) DURING PAST DECADE

Sl. No.	Year	Vindhyachal HVDC B/B		Utilisation Factor (%)
		Import (MU)	Export (MU)	
1	1992-93	187.78	271.12	10.48
2	1993-94	1281.99	20.05	29.73
3	1994-95	578.37	53.64	14.43
4	1995-96	189.02	301.05	11.16
5	1996-97	252.05	151.61	9.22
6	1997-98	472.83	352.78	18.85
7	1998-99	442.96	587.30	23.52
8	1999-2000	587.30	215.11	18.27
9	2000-01	450.69	385.71	19.10
10	2001-02	355.86	404.96	17.37

7.1 PERFORMANCE OF GENERATING STATIONS IN THE NORTHERN REGION DURING 2001-2002

MONTH -- SL. NO.	Power Station	Effective Capacity MW	Apr'01	May'01	Jun'01	Jul'01	Aug'01	Sep'01	Oct'01	Nov'01	Dec'01	Jan'02	Feb'02	Mar'02	2001-02	
			Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Ex bus MU
1	CENTRAL SECTOR															
A	NTPC															
(a)	Badarpur TPS	705.00	356.74	475.70	451.39	473.58	460.10	477.75	464.34	399.06	493.84	506.01	356.04	362.86	5277.41	4804.19
(b)	Singrauli STPS	2000.00	1144.40	1277.52	1102.07	1226.62	1210.05	1263.86	1444.56	1252.44	1422.81	1470.14	1299.83	1366.63	15480.93	14454.46
(c)	Rihand STPS	1000.00	674.36	656.30	686.96	689.02	551.17	448.10	433.12	714.20	734.70	730.40	642.50	698.96	7659.77	7072.21
(d)	Dadri NCTPS	840.00	455.92	594.00	559.88	525.31	544.16	553.96	612.42	558.54	611.18	603.78	513.59	547.97	6680.70	6147.77
(e)	Unchahar - I TPS	420.00	302.10	290.51	257.82	247.76	176.02	251.04	236.02	293.63	289.69	311.04	272.09	281.16	3208.89	2928.24
(f)	Unchahar - II TPS	420.00	235.21	242.48	282.17	296.63	290.59	294.25	303.60	254.48	312.81	313.02	261.59	280.79	3367.61	3069.22
(g)	Tanda TPS	440.00	130.12	116.00	122.42	107.06	180.49	201.96	238.08	216.01	191.01	193.52	157.44	254.22	2108.31	1844.84
(h)	Anta GPS	419.33	264.12	259.88	260.83	261.26	265.00	247.37	271.93	279.92	265.73	208.74	203.66	271.40	3059.82	2997.65
(i)	Auraiya GPS	663.36	422.50	428.17	413.25	451.42	421.76	417.86	446.27	350.52	376.70	317.19	261.26	372.22	4679.11	4609.99
(j)	Dadri GPS	829.78	503.84	530.92	470.55	444.09	421.30	539.21	558.53	540.56	484.11	403.85	342.73	488.71	5728.39	5581.50
(k)	Faridabad GPS	431.57	275.19	236.33	254.93	176.40	288.18	265.22	278.25	216.73	182.79	255.72	205.32	231.50	2866.56	2793.52
	Total NTPC	8169.04	4764.50	5107.81	4862.27	4899.14	4808.82	4960.57	5287.10	5076.09	5365.35	5313.40	4516.03	5156.41	60117.48	56303.59
B	NHPC															
(a)	Bairasiul	180.00	62.69	70.23	61.18	99.36	92.68	40.86	25.46	21.56	16.73	15.67	20.78	67.83	595.03	576.81
(b)	Salal	690.00	172.37	385.91	436.97	469.59	489.81	329.01	154.76	98.90	82.14	73.97	75.45	163.42	2932.31	2907.80
(c)	Tanakpur HPS	94.20	16.47	35.16	50.26	61.77	59.67	62.36	38.16	24.63	18.76	10.86	16.27	20.40	414.76	410.18
(d)	Chamera HPS	540.00	123.54	234.49	304.69	378.01	350.98	157.96	70.01	53.57	57.40	47.03	50.79	126.25	1954.72	1948.55
(e)	Uri HPS	480.00	245.46	320.30	212.54	182.89	199.36	120.26	81.83	101.95	79.94	102.48	148.55	304.68	2100.23	2073.01
	Total NHPC	1984.20	620.54	1046.09	1065.64	1191.61	1192.50	710.45	370.21	300.61	254.97	250.01	311.84	682.59	7997.06	7916.35
C	NPC															
(a)	RAPS -A	300.00	127.85	105.34	125.48	148.34	76.11	89.54	132.98	146.14	122.24	134.02	203.80	215.58	1627.41	1489.95
(b)	RAPS -B	440.00	236.61	260.11	146.72	193.50	239.06	296.52	255.12	249.85	337.77	190.75	308.25	325.87	3040.13	2753.17
(c)	NAPS	440.00	227.43	123.81	255.76	304.62	315.91	268.63	302.66	260.06	315.46	321.55	305.20	330.97	3332.05	3008.23
	Total NPC	1180.00	591.89	489.26	527.96	646.45	631.08	654.69	690.76	656.05	775.47	646.31	817.25	872.42	7999.59	7251.34
2	JOINTLY OWNED (BBMB)															
(a)	Bhakra Complex	1490.15	232.78	371.71	487.97	514.40	566.04	583.93	492.59	474.82	474.08	436.58	390.25	433.13	5458.28	5431.89
(b)	Dehar	990.00	156.42	350.62	422.39	444.72	457.95	345.35	171.20	112.51	97.89	83.64	94.80	211.95	2949.44	2943.50
(c)	Pong	372.00	32.91	39.12	67.90	75.05	146.72	218.56	138.93	137.61	138.70	139.66	128.52	90.11	1353.79	1349.83
	Total BBMB	2852.15	422.11	761.45	978.26	1034.17	1170.71	1147.84	802.72	724.94	710.67	659.88	613.57	735.19	9761.51	9725.22

7.1 PERFORMANCE OF GENERATING STATIONS IN THE NORTHERN REGION DURING 2001-2002

MONTH -- SL. NO.	Power Station	Effective Capacity MW	Apr'01	May'01	Jun'01	Jul'01	Aug'01	Sep'01	Oct'01	Nov'01	Dec'01	Jan'02	Feb'02	Mar'02	2001-02	
			Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Ex bus MU
3	DVB															
(a)	Indra Prastha	247.50	78.89	77.16	72.08	59.86	57.74	75.90	81.55	75.16	71.31	56.05	52.88	54.17	812.75	715.22
(b)	Rajghat	149.00	38.29	25.31	40.74	48.92	33.21	46.62	68.75	79.89	65.09	87.87	87.68	83.71	706.08	628.41
(c)	Gas Turbines	282.00	85.86	110.29	110.25	123.53	123.81	94.27	79.65	79.92	88.21	98.95	92.27	73.83	1160.84	1126.02
	Total DVB	678.50	203.04	212.76	223.07	232.31	214.75	216.79	229.95	234.98	224.61	242.87	232.83	211.71	2679.67	2469.64
4	HARYANA															
(a)	WYC	48.00	14.72	18.61	20.71	22.01	20.81	28.83	22.96	15.04	13.63	12.69	14.83	24.32	229.16	226.87
(b)	Faridabad (New)	165.00	64.46	35.89	51.92	74.52	78.05	82.57	59.76	57.87	58.06	81.86	74.89	87.67	807.50	698.48
(c)	Panipat	860.00	247.07	272.01	282.43	322.75	380.58	407.62	396.88	405.09	384.35	397.98	344.66	427.67	4269.08	3756.79
(d)	Magnum Diesel (IPP)	25.20	5.61	5.32	4.93	9.69	7.72	10.50	11.23	9.45	12.82	12.48	5.36	7.69	102.80	101.87
	Total HARYANA (Hydro)	48.00	14.72	18.61	20.71	22.01	20.81	28.83	22.96	15.04	13.63	12.69	14.83	24.32	229.16	226.87
	Total HARYANA (thermal)	1050.20	317.14	313.22	339.28	406.96	466.34	500.68	467.87	472.41	455.23	492.32	424.91	523.02	5179.37	4557.15
	Total HARYANA	1098.20	331.86	331.83	359.99	428.97	487.15	529.51	490.83	487.45	468.86	505.01	439.74	547.35	5408.53	4784.01
5	HP															
(a)	Giri	60.00	8.06	16.70	16.82	37.76	37.05	17.73	10.36	7.60	7.33	7.82	11.58	22.12	200.93	199.80
(b)	Bassi	60.00	18.26	36.35	38.30	40.92	40.01	21.55	12.20	9.53	7.99	7.04	7.46	18.98	258.58	257.50
(c)	Binwa	6.00	2.47	2.11	2.16	3.04	0.00	0.95	1.71	1.24	1.04	1.05	1.38	3.39	20.53	20.39
(d)	Rongtong (+ Nogli + Micro+Thirot)	13.02	1.74	2.17	2.35	2.60	2.57	2.66	2.32	1.37	1.91	1.72	1.48	1.76	24.63	24.34
(e)	Andhra	16.95	3.41	6.74	6.80	9.74	9.98	6.82	3.92	2.45	1.91	1.54	1.59	5.40	60.28	59.98
(f)	Bhabha (H)	120.00	6.79	33.78	83.76	80.76	83.84	61.39	30.71	21.06	17.74	14.62	13.37	18.48	466.30	464.98
(g)	Baner (H)	12.00	2.74	3.58	3.54	5.77	3.49	2.91	1.77	1.18	0.99	0.80	1.34	2.68	30.77	30.64
(h)	Gaj (H)	10.50	2.79	4.36	4.35	6.73	6.85	4.44	2.03	1.24	1.00	0.96	1.28	2.83	38.86	38.63
(i)	Gumma	3.00	0.74	0.59	0.87	1.73	0.50	0.84	0.72	0.46	0.36	0.32	0.40	0.80	8.31	8.23
(j)	Ghanvi	22.50	0.24	4.61	4.61	5.33	0.00	2.87	5.84	3.98	2.98	2.39	2.47	6.04	41.34	41.12
	Total HP	323.97	47.24	110.99	163.55	194.36	184.29	122.15	71.57	50.09	43.24	38.25	42.33	82.47	1150.53	1145.62
6	J & K															
(a)	Lower Jhelum	105.00	36.43	38.14	36.85	35.53	39.30	23.46	11.98	11.86	15.69	19.08	21.64	32.84	322.80	319.57
(b)	Upper Sindh	127.60	21.19	23.03	26.31	19.16	18.05	13.21	7.05	6.98	5.93	7.21	5.32	11.78	165.21	163.55
(c)	Ganderbal	15.00	2.04	2.23	2.48	3.33	1.91	2.94	3.17	3.14	1.38	1.68	2.09	2.28	28.67	28.38
(d)	Mohra	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(e)	Chenani	32.80	7.68	8.77	7.77	7.47	8.56	4.97	2.69	2.66	2.08	2.53	3.33	2.81	61.31	60.70
(f)	Stakna	9.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(g)	Small Hydel	3.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(h)	Pampore GT St - I Pampore GT St - II } Total J & K(hydro) Total J & K(thermal)	175.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total J & K	477.69	67.35	72.17	73.40	65.49	67.81	44.58	24.88	24.65	25.08	30.50	32.38	49.71	577.98	572.20

7.1 PERFORMANCE OF GENERATING STATIONS IN THE NORTHERN REGION DURING 2001-2002

MONTH -- SL. NO.	Power Station	Effective Capacity MW	Apr'01	May'01	Jun'01	Jul'01	Aug'01	Sep'01	Oct'01	Nov'01	Dec'01	Jan'02	Feb'02	Mar'02	2001-02	
			Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Ex bus MU
7	PUNJAB															
(a)	Jogindernagar/ Shanan	110.00	35.43	70.46	71.80	76.02	69.33	37.97	21.93	16.83	13.37	12.17	12.74	35.07	473.11	471.48
(b)	UBDC	90.00	2.94	35.20	53.39	37.83	51.81	31.01	36.43	26.48	32.82	12.59	0.00	0.00	320.49	318.75
(c)	Mukerian	207.00	29.95	51.84	87.68	83.22	120.00	144.26	35.49	112.39	132.36	133.73	131.52	104.14	1166.58	1162.40
(d)	Anandpur Sahib (APS)	134.00	0.00	26.22	84.71	65.82	67.72	68.14	30.40	34.20	32.00	24.25	28.38	48.27	510.12	508.26
(e)	Ranjit Sagar HPS	600.00	10.49	314.41	150.18	129.27	182.16	100.84	151.11	99.82	104.36	58.54	30.43	81.75	1413.36	1409.99
(f)	Small Hydel	4.10	0.17	0.72	1.00	0.93	0.98	0.97	0.84	0.82	0.59	0.86	0.73	0.87	9.47	9.39
(g)	GNDTPS (Bhatinda)	440.00	200.56	230.40	255.01	268.79	273.09	229.72	209.55	189.20	207.20	220.33	238.53	241.19	2763.57	2501.75
(h)	GGSTPS (Ropar)	1260.00	646.42	649.70	689.20	872.70	868.89	772.61	751.57	616.27	751.22	819.77	723.78	690.93	8853.06	8130.42
(i)	Jhalkeri Rice Straw Fired	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(k)	Lehra Mohabbat TPS	420.00	153.35	280.85	254.62	309.58	311.54	293.86	311.96	249.66	254.92	305.48	193.23	155.51	3074.55	2790.57
	Total PUNJAB (hydro)	1145.10	78.98	498.85	448.75	393.09	492.00	383.20	276.19	290.55	315.50	242.13	203.80	270.11	3893.13	3880.28
	Total PUNJAB (thermal)	2130.00	1000.33	1160.95	1198.83	1451.07	1453.52	1296.19	1273.08	1055.13	1213.34	1345.58	1155.54	1087.63	14691.18	13422.74
	Total PUNJAB	3275.10	1079.30	1659.80	1647.58	1844.16	1945.51	1679.39	1549.27	1345.68	1528.84	1587.72	1359.34	1357.74	18584.30	17303.03
8	RAJASTHAN															
(a)	Mahi Bajaj Sagar	140.00	0.00	0.01	0.00	0.00	0.00	4.08	19.82	10.65	16.83	9.11	5.34	2.63	68.46	68.46
(b)	Rana Pratap Sagar (RPS)	172.00	1.61	2.78	4.65	0.09	5.41	31.23	29.99	57.69	66.33	55.18	4.42	0.05	259.42	258.97
(c)	Jawahar Sagar (JS)	99.00	1.36	2.43	7.13	13.00	12.93	20.02	19.72	36.80	43.36	38.47	3.23	0.50	198.92	198.38
(d)	Anoopgarh	9.00	0.10	0.00	0.00	0.00	0.00	0.15	0.54	0.00	1.49	0.00	0.57	1.12	3.97	3.97
(e)	Small Hydro	14.86	0.01	0.45	1.17	0.00	0.00	0.33	2.03	0.00	2.21	1.81	0.50	0.38	8.88	8.88
(f)	Kota TPS	850.00	537.20	466.34	495.41	428.79	463.64	607.81	629.60	577.46	529.07	539.52	501.44	570.89	6347.16	5735.09
(g)	RAMGARH GT	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(h)	RAMGARH GT EXT	35.50	9.75	16.64	16.76	17.88	18.98	20.58	18.50	0.00	0.00	0.00	0.00	0.00	119.09	119.09
(i)	Suratgarh TPS	1000.00	350.60	259.22	310.94	242.32	234.25	347.02	359.23	339.07	406.34	507.07	464.93	405.74	4226.73	3832.71
(j)	Wind farm	14.00	0.67	0.00	0.00	0.00	0.00	1.36	0.83	0.86	0.85	0.70	1.20	1.24	7.70	7.70
	Total RAJ (hydro)	434.86	3.09	5.67	12.94	13.09	18.33	55.81	72.10	105.13	130.21	104.57	14.05	4.67	539.65	538.65
	Total RAJ (thermal)	1902.50	897.55	742.20	823.10	688.99	716.87	975.41	1007.33	916.53	935.41	1046.59	966.37	976.63	10692.98	9686.89
	Total RAJASTHAN	2323.36	900.64	747.87	836.05	702.08	735.20	1031.22	1079.43	1021.66	1065.62	1151.15	980.42	981.30	11232.63	10225.54

7.1 PERFORMANCE OF GENERATING STATIONS IN THE NORTHERN REGION DURING 2001-2002

MONTH -- SL. NO.	Power Station	Effective Capacity MW	Apr'01	May'01	Jun'01	Jul'01	Aug'01	Sep'01	Oct'01	Nov'01	Dec'01	Jan'02	Feb'02	Mar'02	2001-02	
			Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Gross MU	Ex bus MU
9	UP															
	<u>HYDRO</u>															
(a)	Rihand	300.00	32.33	27.63	53.08	110.63	133.03	113.50	110.93	108.05	100.76	93.77	64.07	91.13	1038.93	1028.54
(b)	Obra	99.00	12.15	10.28	23.05	49.06	49.65	45.15	41.10	39.22	37.33	35.20	24.81	35.91	402.91	398.88
(c)	Matatilla	30.00	-	1.52	1.30	14.30	22.94	19.40	9.22	22.73	16.85	16.15	7.48	12.11	143.98	142.54
(d)	Khatima	41.40	12.15	18.47	17.24	18.70	20.39	19.43	17.74	13.98	10.20	9.38	8.26	5.98	171.93	170.21
(e)	Ramganga	198.00	41.93	39.42	21.89	0.00	0.00	0.00	0.00	3.77	69.57	46.67	14.34	35.69	273.28	270.54
(f)	Ganga Canal	43.40	14.14	13.87	15.34	14.10	14.73	12.92	9.92	12.20	14.27	12.89	12.36	13.31	160.05	158.45
(g)	Yamuna (I & IV)	114.75	24.42	41.11	51.59	66.62	63.65	61.22	36.16	22.86	19.33	15.91	16.17	14.72	433.76	429.42
(h)	Chibro	240.00	37.67	65.27	88.96	123.44	118.52	76.33	43.48	31.48	27.44	24.36	32.49	73.29	742.70	735.28
(i)	Khodri	120.00	18.76	32.34	42.76	57.17	54.97	36.63	21.02	15.19	13.76	12.48	16.53	37.38	358.98	355.39
(j)	Chilla	144.00	31.32	49.64	56.24	70.22	73.39	63.09	61.36	38.94	30.02	26.12	26.00	33.19	559.54	553.94
(k)	Maneri Bhali	90.00	13.44	56.02	64.27	1.92	0.00	34.90	55.57	35.16	28.63	24.22	22.34	36.29	372.74	369.01
(l)	Khara	72.00	21.36	28.72	35.71	44.83	44.31	41.54	25.29	17.35	15.42	12.84	11.98	10.53	309.87	306.77
	Total UP (Hydro)	1492.55	259.67	384.28	471.44	570.98	595.58	524.13	431.78	360.93	383.57	329.97	256.83	399.51	4968.67	4918.98
	<u>THERMAL</u>															
(m)	Obra	160.00	28.32	9.92	8.90	12.35	18.18	17.07	17.87	32.42	30.09	38.84	40.25	49.69	303.90	265.91
(n)	Obra Extn. - I	282.00	25.91	46.89	50.27	33.61	54.43	60.07	67.76	52.11	50.99	67.85	50.17	60.81	620.85	543.25
(o)	Obra Extn. - II	1000.00	339.77	442.78	363.99	273.10	352.21	400.27	364.39	409.13	429.46	523.08	434.38	427.15	4759.69	4164.73
(p)	Panki	32.00	} 101.10	80.76	98.10	92.40	98.47	88.12	91.68	92.16	94.83	37.82	19.89	51.53	946.85	828.49
(q)	Panki Extn.	210.00														
(r)	Harduaganj - A	0.00	} 55.68	54.25	49.13	28.02	27.05	37.78	45.97	63.24	79.90	78.63	73.06	88.49	681.19	596.04
(s)	Harduaganj - B	150.00														
(t)	Harduaganj - C	225.00														
(u)	Paricha	220.00	36.30	81.95	63.99	73.36	99.15	102.79	87.42	86.59	100.48	111.11	86.37	97.45	1026.96	898.59
(v)	Anpara - A	630.00	376.96	368.70	321.04	335.69	338.14	329.97	355.27	405.93	404.61	422.90	354.05	374.09	4387.35	3838.93
(w)	Anpara - B	1000.00	699.17	701.73	708.66	622.49	453.76	673.06	694.93	661.35	631.86	624.71	654.86	603.40	7729.98	6763.73
	Total UP (Thermal)	3909.00	1663.21	1786.98	1664.06	1471.01	1441.39	1709.12	1725.28	1802.92	1822.21	1904.95	1713.03	1752.61	20456.77	17899.67
	Total UP	5401.55	1922.88	2171.26	2135.50	2041.99	2036.97	2233.25	2157.05	2163.85	2205.79	2234.92	1969.86	2152.12	25425.44	22818.65
10	Total Region	27323.76	10951.34	12711.28	12873.27	13280.71	13474.80	13330.43	12753.77	12086.03	12668.48	12660.02	11315.58	12829.00	150934.71	140515.20

Notes :

- 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% Nuclear stations-----12.5%
 - 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%
 - Lehra Mohabbat-----10.5% KTPS-----10% UPSEB-----12.5%
- Generation at small hydro & Sobla in UP and at small diesel Gen. Sets in UT Chandigarh, H.P. & J&K has been neglected.

7.2 SUMMARY OF REGIONAL ENERGY GENERATION DURING 2001-2002

Sr. No.	Constituent	Gross MU					Ex-bus MU				
		Hydro	Thermal	Gas / Diesel	Nuclear	Total	Hydro	Thermal	Gas / Diesel	Nuclear	Total
1	NTPC	---	43783.61	16333.87	---	60117.48	---	40320.93	15982.67	---	56303.59
2	NHPC	7997.06	---	---	---	7997.06	7916.35	---	---	---	7916.35
3	NPC	---	---	---	7999.59	7999.59	---	---	---	7251.34	7251.34
4	BBMB	9761.51	---	---	---	9761.51	9725.22	---	---	---	9725.22
5	DELHI	---	1518.83	1160.84	---	2679.67	---	1343.63	1126.02	---	2469.64
6	HARYANA	229.16	5076.58	102.80	---	5408.53	226.87	4455.27	101.87	---	4784.01
7	HP	1150.53	---	---	---	1150.53	1145.62	---	---	---	1145.62
8	J&K	577.98	---	0.00	---	577.98	572.20	---	0.00	---	572.20
9	PUNJAB	3893.13	14691.18	---	---	18584.30	3880.28	13422.74	---	---	17303.03
10	RAJASTHAN	539.65	10573.89	119.09	---	11232.63	538.65	9567.80	119.09	---	10225.54
11	UP	4968.67	20456.77	---	---	25425.44	4918.98	17899.67	---	---	22818.65
	Region	29117.68	96100.84	17716.60	7999.59	150934.71	28924.17	87010.04	17329.64	7251.34	140515.20

INTER-REGIONAL EXCHANGES

A Import into the region MU

- (i) from Western Grid over HVDC back-to-back at Vindhyachal **355.86**
- (ii) supply from M.P. to Rajasthan on 200 kV Ujjain - Kota **0.00**
- (iii) supply from M.P. to Rajasthan (Unmetered and assumed as 0.15 MU/day) **54.75**
- (iv) from Eastern Grid **1699.30**

Total Import **2109.91**

B Export from the region MU

- (i) to Western Grid over HVDC back-to-back at Vindhyachal **404.96**
- (ii) 220 kV Auraiya - Malanpur (M.P.) **158.27**
- (iii) to Bihar **22.55**
- (iv) Rajasthan to MP **0.00**
- (v) Tanakpur to Mahendragarh (NEPAL) **47.29**

Total Export **633.07**

Net Regional energy consumption (including transmission losses) = **141992.04 MU**

7.3 SOURCE WISE CONTRIBUTION TO MONTHLY GENERATION IN 2001-2002

(All Figs. In MU/day, Gross)

Month	Hydro	Thermal		Total	Nuclear	Total	% age Contribution			
		Coal fired	Gas Fired				Hydro	Thermal	Nuclear	Total
APR - 2001	50.46	242.63	52.04	294.67	19.73	364.86	13.83	80.76	5.41	100.00
MAY - 2001	93.49	249.56	51.04	300.60	15.78	409.87	22.81	73.34	3.85	100.00
JUN - 2001	107.82	252.64	50.89	303.52	17.60	428.94	25.14	70.76	4.10	100.00
JUL - 2001	112.41	247.26	47.57	294.83	20.85	428.10	26.26	68.87	4.87	100.00
AUG - 2001	120.71	243.71	49.65	293.35	20.36	434.42	27.79	67.53	4.69	100.00
SEP - 2001	100.57	268.79	52.82	321.61	21.82	444.00	22.65	72.43	4.92	100.00
OCT - 2001	66.85	268.59	53.33	321.92	22.28	411.05	16.26	78.32	5.42	100.00
NOV - 2001	62.40	269.37	48.92	318.29	21.87	402.55	15.50	79.07	5.43	100.00
DEC - 2001	60.54	277.61	45.08	322.69	25.02	408.25	14.83	79.04	6.13	100.00
JAN - 2002	53.81	291.90	41.43	333.33	20.85	407.99	13.19	81.70	5.11	100.00
FEB - 2002	53.20	282.08	39.47	321.55	29.19	403.94	13.17	79.60	7.23	100.00
MAR -2002	72.53	266.54	46.38	312.91	28.14	413.59	17.54	75.66	6.80	100.00
2001-02	79.77	263.29	48.26	311.55	21.92	413.24	19.30	75.39	5.30	100.00

7.4 MONTHWISE PLANT LOAD FACTORS OF THERMAL /NUCLEAR UNITS DURING 2001-2002

(ALL FIGS. IN %)

S.No.	Power Station	Effective Capacity MW	APR - 01	MAY - 01	JUN - 01	JUL - 01	AUG - 01	SEP - 01	OCT - 01	NOV - 01	DEC - 01	JAN - 02	FEB - 02	MAR - 02	2001-02
A CENTRAL SECTOR (CS)															
1	NTPC														
(a)	Badarpur TPS	705.00	70.28	90.69	88.93	90.29	87.72	94.12	88.53	78.62	94.15	96.47	75.15	69.18	85.45
(b)	Singrauli STPS	2000.00	79.47	85.85	76.53	82.43	81.32	87.77	97.08	86.98	95.62	98.80	96.71	91.84	88.36
(c)	Rihand STPS	1000.00	93.66	88.21	95.41	92.61	74.08	62.24	58.21	99.19	98.75	98.17	95.61	93.95	87.44
(d)	Dadri NCTPS	840.00	75.38	95.05	92.57	84.05	87.07	91.59	97.99	92.35	97.80	96.61	90.98	87.68	90.79
(e)	Unchahar TPS -I	420.00	99.90	92.97	85.26	79.29	56.33	83.02	75.53	97.10	92.71	99.54	96.40	89.98	87.22
(f)	Unchahar TPS -II	420.00	77.78	77.60	93.31	94.93	93.00	97.31	97.16	84.15	100.10	100.17	92.68	89.86	91.53
(g)	Tanda TPS	440.00	41.07	35.43	38.64	32.70	55.14	63.75	72.73	68.18	58.35	59.12	53.25	77.66	54.70
	Total NTPC (Coal) CS (coal)	5825.00	78.66	84.28	82.56	82.28	78.74	83.24	86.12	87.94	93.59	95.25	89.49	87.51	85.80
(h)	Anta GPS	419.33	87.48	83.30	86.39	83.74	84.94	81.93	87.16	92.71	85.17	66.91	72.27	86.99	83.30
(i)	Auraiya GPS	663.36	88.46	86.75	86.52	91.47	85.46	87.49	90.42	73.39	76.33	64.27	58.61	75.42	80.52
(j)	Dadri GPS	829.78	84.33	86.00	78.76	71.93	68.24	90.25	90.47	90.48	78.42	65.42	61.46	79.16	78.81
(k)	Faridabad GPS	431.57	88.56	73.60	82.04	54.94	89.75	85.35	86.66	69.75	56.93	79.64	70.80	72.10	75.82
	Total NTPC (Gas) CS (gas)	2344.04	86.84	83.45	82.93	76.44	80.06	87.08	89.16	82.23	75.08	67.98	64.31	78.20	79.55
	Total NTPC	8169.04	81.01	84.04	82.67	80.61	79.12	84.34	86.99	86.30	88.28	87.42	82.27	84.84	84.01
2	NPC														
(a)	RAPS -A	300.00	59.19	47.20	58.09	66.46	34.10	41.45	59.58	67.66	54.76	60.05	101.09	96.59	61.93
(b)	RAPS -B	440.00	74.69	79.46	46.31	59.11	73.03	93.60	77.93	78.87	103.18	58.27	104.25	99.54	78.87
(c)	NAPS	440.00	71.79	37.82	80.73	93.05	96.50	84.79	92.45	82.09	96.36	98.22	103.22	101.10	86.45
	Total NPC	1180.00	69.67	55.73	62.14	73.63	71.88	77.06	78.68	77.22	88.33	73.62	103.06	99.37	77.39
Total Central Sector (CS)		9349.04	79.57	80.47	80.08	79.73	78.21	83.42	85.94	85.16	88.28	85.68	84.89	86.67	83.17

7.4 MONTHWISE PLANT LOAD FACTORS OF THERMAL /NUCLEAR UNITS DURING 2001-2002

(ALL FIGS. IN %)

S.No.	Power Station	Effective Capacity MW	APR - 01	MAY - 01	JUN - 01	JUL - 01	AUG - 01	SEP - 01	OCT - 01	NOV - 01	DEC - 01	JAN - 02	FEB - 02	MAR - 02	2001-02
B STATE SECTOR															
1	DELHI														
(a)	Indra Prastha	247.50	44.27	41.90	40.45	32.51	31.35	42.59	44.29	42.18	38.73	30.44	31.80	29.42	37.49
(b)	Rajghat	149.00	35.69	22.83	37.98	44.13	29.96	43.46	62.02	74.47	58.72	79.26	87.57	75.51	54.10
	Total DELHI (coal fired)	396.50	41.05	34.74	39.52	36.87	30.83	42.92	50.95	54.31	46.24	48.79	52.75	46.74	43.73
(c)	DVB GT	282.00	42.29	52.57	54.30	58.88	59.01	46.43	37.96	39.36	42.04	47.16	48.69	35.19	46.99
	Total DELHI	678.50	41.56	42.15	45.66	46.02	42.54	44.38	45.55	48.10	44.49	48.11	51.07	41.94	45.08
2	HARYANA														
(a)	Faridabad (New)	165.00	54.26	29.24	43.70	60.70	63.58	69.50	48.68	48.71	47.29	66.68	67.54	71.41	55.87
(b)	Panipat	860.00	52.79	56.25	60.35	52.08	59.48	65.83	62.03	65.42	60.07	62.20	59.64	66.84	60.51
	Total HARYANA	1025.00	53.09	50.78	56.98	53.51	60.14	66.42	59.88	62.73	58.01	62.92	60.91	67.58	59.72
3	J & K														
(a)	Pampore GT	175.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total J & K	175.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	PUNJAB														
(a)	GNDTPS (Bhatinda)	440.00	63.31	70.38	80.50	82.11	83.42	72.51	64.01	59.72	63.29	67.31	80.67	73.68	71.70
(b)	GGSTPS (Ropar)	1260.00	71.25	69.31	75.97	93.09	92.69	85.16	80.17	67.93	80.14	87.45	85.48	73.70	80.21
(c)	Lehra Mohabbat TPS	420.00	50.71	89.88	84.20	99.07	99.70	97.18	99.83	82.56	81.58	97.76	68.46	49.77	83.57
	Total PUNJAB	2120.00	65.53	73.60	78.54	92.00	92.15	84.92	80.71	69.13	76.93	85.31	81.11	68.96	79.11
5	RAJASTHAN														
(a)	Kota TPS	850.00	87.78	73.74	80.95	67.80	73.31	99.32	99.56	94.36	83.66	85.31	87.79	90.27	85.24
(b)	RAMGARH GT	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(c)	RAMGARH GT EXT	35.50	38.14	63.00	65.56	67.70	71.86	80.53	70.05	0.00	0.00	0.00	0.00	0.00	38.29
(d)	Suratgarh TPS	1000.00	97.39	69.68	86.37	65.14	62.97	96.39	96.57	94.19	78.75	90.87	92.25	67.62	82.78
	Total RAJASTHAN	1888.50	89.78	71.85	82.33	66.69	69.39	97.57	97.51	91.68	79.47	85.85	87.77	77.45	82.96

7.4 MONTHWISE PLANT LOAD FACTORS OF THERMAL /NUCLEAR UNITS DURING 2001-2002

(ALL FIGS. IN %)

S.No.	Power Station	Effective Capacity MW	APR - 01	MAY - 01	JUN - 01	JUL - 01	AUG - 01	SEP - 01	OCT - 01	NOV - 01	DEC - 01	JAN - 02	FEB - 02	MAR - 02	2001-02
6	UP														
(a)	Obra	160.00	24.59	8.34	7.72	10.37	15.27	14.82	15.01	28.14	25.28	32.62	37.44	41.74	21.68
(b)	Obra Extn. - I	282.00	12.76	22.35	24.76	16.02	25.94	29.58	32.29	25.66	24.30	32.34	26.48	28.98	25.13
(c)	Obra Extn. - II	1000.00	47.19	59.51	50.55	36.71	47.34	55.59	48.98	56.82	57.72	70.31	64.64	57.41	54.33
(d)	Panki	32.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(e)	Panki Extn.	210.00	66.86	51.69	64.88	59.14	63.03	58.28	58.68	60.95	60.69	24.21	14.09	32.98	51.47
(f)	Harduaganj - A	0.00													
(g)	Harduaganj - B	150.00													
(h)	Harduaganj - C	225.00	20.62	19.44	18.20	10.04	9.70	13.99	16.48	23.42	28.64	28.18	28.99	31.72	20.74
(i)	Paricha	220.00	22.92	50.07	40.40	44.82	60.58	64.89	53.41	54.66	61.39	67.88	58.42	59.54	53.29
(j)	Anpara - A	630.00	83.10	78.66	70.78	71.62	72.14	72.74	75.79	89.49	86.32	90.22	83.63	79.81	79.50
(k)	Anpara - B	1000.00	97.11	94.32	98.43	83.67	60.99	93.48	93.40	91.85	84.93	83.97	97.45	81.10	88.24
	Total UP	3909.00	59.09	61.44	59.13	50.58	49.56	60.73	59.32	64.06	62.66	65.50	65.21	60.26	59.74
	State Sector (gas fired)	495.50	26.80	34.43	35.60	38.36	38.73	32.19	26.63	22.40	23.93	26.84	27.71	20.03	29.49
	State Sector (coal fired)	9300.50	58.68	59.84	61.53	59.09	59.69	66.69	64.68	63.97	61.92	65.55	64.62	59.99	62.18
	State Sector (total)	9796.00	56.94	58.46	60.11	57.98	58.57	64.85	62.65	61.76	59.94	63.54	62.70	57.92	60.44
	Region (coal fired)	15125.50	66.75	69.72	70.03	68.34	67.28	73.28	73.22	73.52	74.37	77.18	74.36	70.72	71.57
	Region (gas fired)	2839.54	76.37	74.89	74.67	69.80	72.85	77.50	78.25	71.79	66.15	60.80	57.92	68.05	70.81
	Region (nuclear)	1180.00	69.67	55.73	62.14	73.63	71.88	77.06	78.68	77.22	88.33	73.62	103.06	99.37	77.39
	Region (Coal+Gas+Thermal)	19145.04	68.42	69.62	70.24	68.90	68.42	74.16	74.33	73.49	74.00	74.50	73.68	72.11	71.82

Notes:

The following have been considered while working out Plant Load Factor (PLF):

- (i) The effective capacity in MW not the Installed capacity.
- (ii) Actual generation and not deemed generation.
- (iii) Effective capacity of new generating units has been considered from their respective synchronisation dates.

7.5 GROWTH OF ENERGY GENERATION AND P.L.F. IN NORTHERN REGION DURING PAST DECADE

S. NO.	YEAR	THERMAL (MU)	HYDRO (MU)	GAS / DIESEL (MU)	NUCLEAR (MU)	TOTAL ENERGY GENERATION (MU)	ANNUAL P.L.F. (THERMAL + NUCLEAR)
1	1992-93	58417.71	25151.04	7501.37	2623.06	93693.18	55.35
2	1993-94	63075.36	23980.30	8172.89	1517.13	96745.68	55.30
3	1994-95	62324.00	27672.30	8894.52	1312.40	100203.22	52.49
4	1995-96	71042.68	28952.06	11057.94	2740.40	113793.08	59.49
5	1996-97	73875.52	29363.53	11399.28	2809.70	117448.03	60.43
6	1997-98	76206.33	30760.98	12307.33	3932.40	123207.04	65.24
7	1998-99	78351.64	36830.65	13179.48	4545.56	132907.33	65.26
8	1999-2000	86265.92	31735.87	15513.19	5329.07	138844.06	69.02
9	2000-01	91566.77	29072.65	16979.93	6668.12	144287.47	70.00
10	2001-02	96100.84	29117.68	17716.60	7999.59	150934.71	71.82
COMPOUND ANNUAL GROWTH RATE (CAGR %)		5.69	1.64	10.02	13.19	5.44	

8.1 HOURLY GENERATION / LOAD FOR THE REGIONAL PEAK DEMAND MET DAY IN APRIL 2001

DATE : 28.04.2001

HOUR	GENERATION					INTER REGIONAL EXCHANGE Export(+)/Import(-) 'I'	TOTAL DEMAND MET 'P' = 'A' - 'I'	FREQ. 'F'	FREQUENCY CORRECTED DEMAND 'P _f ' =PI/(1+0.03(F-50))	LOAD SHEDDING 'L _s '	REQUIREMENT	
	HYDRO	THERMAL			TOTAL 'A'						WITHOUT FREQ. CORRECTION	WITH FREQ. CORRECTION
		NUCLEAR	COAL FIRED	GAS FIRED							'P+L _s '	'P _f +L _s '
											(MW)	(MW)
1	2938	596	10271	1959	15764	-78	15842	48.84	16413	1903	17745	18316
2	2750	595	10310	1995	15650	-78	15728	49.00	16214	1963	17691	18177
3	2449	595	10286	1995	15325	-78	15403	48.68	16038	1775	17178	17813
4	2537	598	10278	1964	15377	-84	15461	48.32	16282	1505	16966	17787
5	2794	596	10301	2017	15708	-83	15791	48.60	16483	1661	17452	18144
6	2798	592	10332	2018	15740	-79	15819	49.64	15992	1710	17529	17702
7	2723	596	10389	2032	15740	-74	15814	48.80	16405	1197	17011	17602
8	2508	595	10124	2012	15239	-74	15313	49.16	15709	1234	16547	16943
9	2270	594	10131	2006	15001	-77	15078	49.32	15392	1602	16680	16994
10	2349	593	10103	1930	14975	-152	15127	48.64	15770	1513	16640	17283
11	2217	592	10042	1972	14823	-257	15080	49.48	15319	1275	16355	16594
12	2141	596	10034	1978	14749	-352	15101	49.68	15247	1561	16662	16808
13	2262	592	10216	1958	15028	-301	15329	49.40	15610	1102	16431	16712
14	2304	593	10081	1954	14932	-199	15131	49.04	15580	1392	16523	16972
15	2247	594	10308	1936	15085	-144	15229	48.72	15837	1143	16372	16980
16	2379	593	10296	1933	15201	-144	15345	48.32	16159	1023	16368	17182
17	2416	588	10490	2108	15602	-74	15676	49.16	16081	893	16569	16974
18	2522	594	10785	2203	16104	-72	16176	49.76	16293	1125	17301	17418
19	2730	588	10684	2199	16201	-67	16268	49.40	16566	2194	18462	18760
20	3363	558	10733	2206	16860	-76	16936	49.36	17268	2407	19343	19675
21	3321	557	10783	2209	16870	-86	16956	48.68	17655	2311	19267	19966
22	3145	573	10795	2244	16757	-88	16845	48.92	17409	2022	18867	19431
23	3262	573	10595	2284	16714	-82	16796	49.04	17294	2325	19121	19619
24	2897	577	10600	2304	16378	-88	16466	49.12	16912	2083	18549	18995

8.1 HOURLY GENERATION / LOAD FOR THE REGIONAL PEAK DEMAND MET DAY IN MAY 2001

DATE : 25.05.2001

HOUR	GENERATION					INTER REGIONAL EXCHANGE Export(+)/Import(-) 'I'	TOTAL DEMAND MET 'P' = 'A' - 'I'	FREQ. 'F'	FREQUENCY CORRECTED DEMAND 'P _f ' =P/(1+0.03(F-50))	LOAD SHEDDING 'L _s '	REQUIREMENT	
	HYDRO	THERMAL			TOTAL 'A'						WITHOUT FREQ.	WITH FREQ.
		NUCLEAR	COAL FIRED	GAS FIRED							'P+L _s '	'P _f +L _s '
											(MW)	(MW)
1	4099	763	11147	2201	18210	-254	18464	49.32	18849	395	18859	19244
2	4050	747	11166	2274	18237	-249	18486	49.64	18688	275	18761	18963
3	4146	774	11248	2308	18476	-249	18725	49.96	18747	275	19000	19022
4	4089	778	11165	2302	18334	-249	18583	49.72	18740	280	18863	19020
5	4286	772	11355	2304	18717	-254	18971	49.40	19319	527	19498	19846
6	4157	779	11409	2315	18660	-149	18809	49.72	18968	789	19598	19757
7	3848	826	11207	2304	18185	-70	18255	49.48	18544	447	18702	18991
8	3869	763	11257	2309	18198	-70	18268	50.16	18181	697	18965	18878
9	3597	778	11409	2305	18089	-190	18279	50.60	17956	698	18977	18654
10	3501	779	11407	2120	17807	-389	18196	50.40	17980	647	18843	18627
11	3702	773	11286	2081	17842	-383	18225	49.92	18269	482	18707	18751
12	3770	761	11052	2201	17784	-283	18067	49.24	18489	593	18660	19082
13	4041	759	11018	2187	18005	-383	18388	50.00	18388	739	19127	19127
14	3846	739	11153	2185	17923	-534	18457	49.56	18704	814	19271	19518
15	3844	743	11321	2174	18082	-429	18511	49.16	18990	790	19301	19780
16	3813	738	11249	2149	17949	-484	18433	49.32	18817	806	19239	19623
17	4018	738	11391	2091	18238	-502	18740	50.04	18718	837	19577	19555
18	3810	741	11409	2112	18072	-512	18584	50.72	18191	652	19236	18843
19	3911	743	11015	2109	17778	-496	18274	50.88	17804	964	19238	18768
20	5171	755	11160	2075	19161	-146	19307	49.00	19904	1088	20395	20992
21	5173	766	11276	2113	19328	-71	19399	49.36	19779	1197	20596	20976
22	4854	758	11220	2147	18979	-66	19045	50.24	18909	1382	20427	20291
23	4764	758	11057	2150	18729	-71	18800	49.88	18868	1277	20077	20145
24	4508	767	11096	2149	18520	-40	18560	49.36	18923	764	19324	19687

8.1 HOURLY GENERATION / LOAD FOR THE REGIONAL PEAK DEMAND MET DAY IN JUNE 2001

DATE : 29.06.2001

DATE: 12/03/2022

HOUR	GENERATION					INTER REGIONAL EXCHANGE Export(+)/Import(-) 'I'	TOTAL DEMAND MET 'P' = 'A' - 'I'	FREQ. 'F'	FREQUENCY CORRECTED DEMAND 'P _f ' =P/(1+0.03(F-50))	LOAD SHEDDING 'L _s '	REQUIREMENT	
	HYDRO	THERMAL			TOTAL 'A'						WITHOUT FREQ.	WITH FREQ.
		NUCLEAR	COAL FIRED	GAS FIRED							'P+L _s '	'P _f +L _s '
											(MW)	(MW)
1	5020	804	11111	2344	19279	-55	19334	49.24	19785	1190	20524	20975
2	4869	804	11109	2345	19127	-54	19181	49.12	19701	775	19956	20476
3	5038	803	11069	2395	19305	-27	19332	50.44	19080	725	20057	19805
4	4791	808	11103	2401	19103	-38	19141	49.84	19233	775	19916	20008
5	4909	807	11097	2374	19187	-40	19227	49.52	19508	425	19652	19933
6	4899	808	11061	2373	19141	-41	19182	49.24	19630	245	19427	19875
7	4931	792	11050	2374	19147	65	19082	49.72	19244	455	19537	19699
8	4786	796	11122	2366	19070	158	18912	49.80	19026	475	19387	19501
9	4486	743	11247	2366	18842	161	18681	50.16	18592	872	19553	19464
10	4490	746	11021	2368	18625	152	18473	49.52	18743	932	19405	19675
11	4330	740	11010	2326	18406	66	18340	49.00	18907	1056	19396	19963
12	4348	744	10966	2316	18374	69	18305	49.48	18595	1189	19494	19784
13	4657	791	11187	2329	18964	55	18909	50.28	18751	1120	20029	19871
14	4623	789	11184	2320	18916	54	18862	49.64	19068	1157	20019	20225
15	4566	788	11150	2305	18809	39	18770	49.04	19327	907	19677	20234
16	4767	799	11190	2295	19051	44	19007	49.68	19191	1040	20047	20231
17	5116	797	11013	2326	19252	40	19212	50.08	19166	1096	20308	20262
18	4789	808	10967	2336	18900	40	18860	50.00	18860	891	19751	19751
19	4618	795	10992	2107	18512	46	18466	50.08	18422	1222	19688	19644
20	5710	794	11039	2372	19915	42	19873	50.92	19339	1513	21386	20852
21	5876	799	10943	2317	19935	48	19887	49.12	20426	1605	21492	22031
22	5870	793	11142	2370	20175	53	20122	49.96	20146	1771	21893	21917
23	5522	793	11096	2321	19732	48	19684	49.72	19851	1887	21571	21738
24	5463	793	10655	2306	19217	54	19163	49.08	19707	2195	21358	21902

8.1 HOURLY GENERATION / LOAD FOR THE REGIONAL PEAK DEMAND MET DAY IN JULY 2001

DATE : 07.07.2001

DATE: 1-03-2022

HOUR	GENERATION					INTER REGIONAL EXCHANGE Export(+)/Import(-) 'I'	TOTAL DEMAND MET 'P' = 'A' - 'I'	FREQ. 'F'	FREQUENCY CORRECTED DEMAND 'P _f ' =P/(1+0.03(F-50))	LOAD SHEDDING 'L _s '	REQUIREMENT	
	HYDRO	THERMAL			TOTAL 'A'						WITHOUT FREQ.	WITH FREQ.
		NUCLEAR	COAL FIRED	GAS FIRED							CORRECTION	CORRECTION
											'P+L _s '	'P _f +L _s '
(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	
1	4908	997	10755	2320	18980	-10	18990	49.08	19529	1561	20551	21090
2	4808	997	10763	2322	18890	-10	18900	48.96	19509	1719	20619	21228
3	4755	998	10765	2321	18839	-10	18849	48.96	19456	1379	20228	20835
4	4898	998	10773	2301	18970	-10	18980	49.24	19423	1379	20359	20802
5	5107	998	10794	2342	19241	-10	19251	49.64	19461	753	20004	20214
6	4782	998	10780	2344	18904	115	18789	48.84	19466	766	19555	20232
7	4818	991	10815	2353	18977	315	18662	49.32	19051	623	19285	19674
8	4635	991	10910	2358	18894	420	18474	49.64	18676	1101	19575	19777
9	4568	988	10909	2335	18800	320	18480	49.40	18819	854	19334	19673
10	4514	989	10909	2317	18729	45	18684	49.36	19050	684	19368	19734
11	4557	990	10883	2294	18724	40	18684	49.40	19026	519	19203	19545
12	4485	991	10888	2269	18633	115	18518	49.56	18766	622	19140	19388
13	4540	992	10963	2166	18661	65	18596	50.28	18441	601	19197	19042
14	4524	992	10950	2372	18838	65	18773	50.32	18594	316	19089	18910
15	4430	991	10972	2391	18784	65	18719	50.76	18302	290	19009	18592
16	4362	992	11012	2367	18733	65	18668	50.08	18623	286	18954	18909
17	4029	991	10958	2371	18349	65	18284	50.20	18175	240	18524	18415
18	4150	991	10980	2372	18493	215	18278	50.44	18040	234	18512	18274
19	4474	993	10983	2272	18722	315	18407	50.64	18060	853	19260	18913
20	5784	991	11072	2409	20256	118	20138	51.08	19506	1088	21226	20594
21	5812	990	11125	2407	20334	118	20216	50.08	20168	939	21155	21107
22	5531	990	10865	2402	19788	118	19670	49.72	19837	915	20585	20752
23	5188	993	10516	2392	19089	118	18971	49.36	19342	684	19655	20026
24	4814	995	10630	2392	18831	118	18713	49.80	18826	728	19441	19554

8.1 HOURLY GENERATION / LOAD FOR THE REGIONAL PEAK DEMAND MET DAY IN AUGUST 2001

DATE : 29.08.2001

DATE: 12/08/2022

HOUR	GENERATION					INTER REGIONAL EXCHANGE Export(+)/Import(-) 'I'	TOTAL DEMAND MET 'P' = 'A' - 'I'	FREQ. 'F'	FREQUENCY CORRECTED DEMAND 'P _f ' =P/(1+0.03(F-50))	LOAD SHEDDING 'L _s '	REQUIREMENT	
	HYDRO	THERMAL			TOTAL 'A'						WITHOUT FREQ. CORRECTION 'P+L _s '	WITH FREQ. CORRECTION 'P _f +L _s '
		NUCLEAR	COAL FIRED	GAS FIRED								
(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	
1	4758	630	10746	2194	18328	-55	18383	48.44	19286	1403	19786	20689
2	4690	625	10742	2186	18243	-105	18348	48.64	19128	1213	19561	20341
3	4873	625	10772	2205	18475	-105	18580	48.48	19468	1033	19613	20501
4	4860	624	10772	2196	18452	-105	18557	48.44	19468	1063	19620	20531
5	5058	625	10814	2179	18676	-105	18781	48.92	19410	1103	19884	20513
6	5049	630	10851	2214	18744	-105	18849	49.76	18986	1240	20089	20226
7	4461	629	10279	2220	17589	-105	17694	50.16	17609	1535	19229	19144
8	4536	632	10497	2211	17876	-105	17981	50.08	17938	1632	19613	19570
9	4441	630	10528	2211	17810	20	17790	49.24	18205	817	18607	19022
10	4414	628	10699	2189	17930	-30	17960	48.64	18724	675	18635	19399
11	4397	626	10462	2185	17670	-103	17773	49.56	18011	905	18678	18916
12	4533	628	10633	2181	17975	-105	18080	49.76	18211	1001	19081	19212
13	4513	675	10655	2178	18021	-205	18226	50.12	18161	1377	19603	19538
14	4535	701	11045	2152	18433	-105	18538	49.48	18832	1030	19568	19862
15	4617	716	11266	2164	18763	-105	18868	49.60	19097	1745	20613	20842
16	4650	718	11306	2170	18844	-105	18949	49.28	19367	2025	20974	21392
17	4706	778	11345	2165	18994	-105	19099	50.20	18985	1479	20578	20464
18	4895	776	11342	2173	19186	-105	19291	50.60	18950	1289	20580	20239
19	5656	790	11349	2169	19964	-5	19969	50.24	19826	1295	21264	21121
20	6165	790	11382	2191	20528	-5	20533	50.24	20386	1909	22442	22295
21	6049	793	11441	2214	20497	-5	20502	50.04	20477	1646	22148	22123
22	5663	796	11449	2219	20127	-5	20132	50.04	20108	1684	21816	21792
23	5421	809	11477	2208	19915	-55	19970	49.52	20262	1172	21142	21434
24	5047	811	11423	2158	19439	-105	19544	49.64	19757	1049	20593	20806

8.1 HOURLY GENERATION / LOAD FOR THE REGIONAL PEAK DEMAND MET DAY IN SEPTEMBER 2001

DATE : 11.09.2001

DATE: 1-11-2001

HOUR	GENERATION					INTER REGIONAL EXCHANGE Export(+)/Import(-) 'I'	TOTAL DEMAND MET 'P' = 'A' - 'I'	FREQ. 'F'	FREQUENCY CORRECTED DEMAND 'P _f ' =P/(1+0.03(F-50))	LOAD SHEDDING 'L _s '	REQUIREMENT	
	HYDRO	THERMAL			TOTAL 'A'						WITHOUT FREQ.	WITH FREQ.
		NUCLEAR	COAL FIRED	GAS FIRED							'P+L _s '	'P _f +L _s '
											(MW)	(MW)
1	4514	1006	11897	2163	19580	-178	19758	49.28	20194	700	20458	20894
2	4466	1006	11861	2143	19476	-178	19654	49.28	20088	700	20354	20788
3	4459	1009	11900	2143	19511	-178	19689	49.72	19856	500	20189	20356
4	4541	1018	11684	2140	19383	-178	19561	49.96	19585	550	20111	20135
5	4798	1024	11737	2143	19702	-178	19880	50.00	19880	300	20180	20180
6	5043	1025	11794	2241	20103	-178	20281	50.68	19876	210	20491	20086
7	4612	1006	11809	2232	19659	-53	19712	49.80	19831	200	19912	20031
8	4447	1001	11916	2229	19593	-150	19743	50.60	19394	510	20253	19904
9	4270	1007	12041	2220	19538	-100	19638	50.24	19498	610	20248	20108
10	4156	1005	12025	2218	19404	-45	19449	50.28	19287	550	19999	19837
11	4226	1002	12018	2209	19455	0	19455	49.60	19691	620	20075	20311
12	4300	1022	12043	2216	19581	105	19476	50.72	19064	653	20129	19717
13	4259	997	11805	2203	19264	55	19209	50.20	19094	525	19734	19619
14	4229	995	12010	2238	19472	-45	19517	50.04	19494	608	20125	20102
15	4216	1010	11942	2228	19396	-45	19441	50.08	19394	849	20290	20243
16	4178	1012	11953	2229	19372	-45	19417	50.12	19347	787	20204	20134
17	4220	1008	11945	2234	19407	-45	19452	50.16	19359	798	20250	20157
18	4290	1005	11962	2235	19492	-45	19537	50.28	19374	731	20268	20105
19	5526	1025	12007	2234	20792	-228	21020	50.16	20920	991	22011	21911
20	6006	1018	12011	2234	21269	-230	21499	49.32	21947	1084	22583	23031
21	6053	1013	12052	2238	21356	-230	21586	49.92	21638	926	22512	22564
22	5763	1015	11980	2245	21003	-226	21229	50.20	21102	763	21992	21865
23	5196	1019	11876	2284	20375	-200	20575	49.24	21055	728	21303	21783
24	4818	1010	11836	2249	19913	-200	20113	49.52	20407	565	20678	20972

8.1 HOURLY GENERATION / LOAD FOR THE REGIONAL PEAK DEMAND MET DAY IN OCTOBER 2001

DATE : 25.10.2001

DATE : 23/10/2001

HOUR	GENERATION					INTER REGIONAL EXCHANGE Export(+)/Import(-) 'I'	TOTAL DEMAND MET 'P' = 'A' - 'I'	FREQ. 'F'	FREQUENCY CORRECTED DEMAND 'P _f ' =P/(1+0.03(F-50))	LOAD SHEDDING 'L _s '	REQUIREMENT	
	HYDRO	THERMAL			TOTAL 'A'						WITHOUT FREQ. CORRECTION	WITH FREQ. CORRECTION
		NUCLEAR	COAL FIRED	GAS FIRED							'P+L _s '	'P _f +L _s '
											(MW)	(MW)
1	2236	1062	12153	2275	17726	-206	17932	49.80	18040	200	18132	18240
2	2185	1067	12117	2272	17641	-226	17867	49.90	17921	200	18067	18121
3	1984	1063	12025	2273	17345	-206	17551	50.06	17519	200	17751	17719
4	2163	1061	12021	2277	17522	-206	17728	50.10	17675	200	17928	17875
5	2569	1058	12345	2282	18254	-206	18460	49.77	18588	200	18660	18788
6	3330	1058	12324	2279	18991	-206	19197	49.60	19430	205	19402	19635
7	2806	1063	12307	2207	18383	-206	18589	49.76	18724	215	18804	18939
8	1888	1059	12281	2138	17366	-136	17502	49.90	17555	465	17967	18020
9	1792	1056	12225	2136	17209	-146	17355	50.60	17048	315	17670	17363
10	1959	1051	12222	2143	17375	-136	17511	50.38	17314	215	17726	17529
11	1943	1051	12169	2091	17254	-156	17410	49.60	17621	214	17624	17835
12	2153	1059	12130	2071	17413	-61	17474	49.70	17633	364	17838	17997
13	2359	1044	12143	2054	17600	-51	17651	49.55	17893	419	18070	18312
14	2358	1050	12181	1977	17566	9	17557	49.80	17663	320	17877	17983
15	2278	1047	12256	1983	17564	-1	17565	49.50	17832	220	17785	18052
16	2153	1046	12261	2012	17472	-151	17623	49.85	17703	214	17837	17917
17	2466	1038	12122	2091	17717	-221	17938	49.75	18074	392	18330	18466
18	3353	1048	12130	2117	18648	-246	18894	49.76	19031	1230	20124	20261
19	4596	1053	12079	2195	19923	-206	20129	49.72	20300	1416	21545	21716
20	4721	1048	12148	2223	20140	-206	20346	49.45	20687	1170	21516	21857
21	4304	1049	11966	2184	19503	-246	19749	49.65	19959	1070	20819	21029
22	3311	1053	11875	2233	18472	-246	18718	49.65	18917	1511	20229	20428
23	3070	1048	12000	2237	18355	-206	18561	49.50	18844	863	19424	19707
24	2819	1050	12087	2243	18199	-206	18405	49.65	18600	230	18635	18830

8.1 HOURLY GENERATION / LOAD FOR THE REGIONAL PEAK DEMAND MET DAY IN NOVEMBER 2001

DATE : 14.11.2001

DATE: 1-11-2001

HOUR	GENERATION					INTER REGIONAL EXCHANGE Export(+)/Import(-) 'I'	TOTAL DEMAND MET 'P' = 'A' - 'I'	FREQ. 'F'	FREQUENCY CORRECTED DEMAND 'P _f ' =PI/(1+0.03(F-50))	LOAD SHEDDING 'L _s '	REQUIREMENT	
	HYDRO	THERMAL			TOTAL 'A'						WITHOUT FREQ.	WITH FREQ.
		NUCLEAR	COAL FIRED	GAS FIRED							'P+L _s '	'P _f +L _s '
											(MW)	(MW)
1	1873	1063	11419	2021	16376	-112	16488	48.84	17082	150	16638	17232
2	1837	1062	11437	2020	16356	-112	16468	49.00	16977	150	16618	17127
3	1818	1061	11395	2019	16293	-132	16425	48.68	17102	150	16575	17252
4	1886	1061	11352	2024	16323	-151	16474	48.32	17348	156	16630	17504
5	2462	1056	11721	2026	17265	-120	17385	48.60	18147	156	17541	18303
6	3258	1058	11663	2120	18099	-183	18282	49.64	18482	611	18893	19093
7	3130	1046	11616	2113	17905	-210	18115	48.80	18791	150	18265	18941
8	2644	1048	11328	2057	17077	-211	17288	49.16	17735	570	17858	18305
9	2315	1057	11671	2061	17104	-210	17314	49.32	17675	343	17657	18018
10	1976	1062	11695	2106	16839	-210	17049	48.64	17774	153	17202	17927
11	1854	1067	11471	2099	16491	-202	16693	49.48	16958	153	16846	17111
12	1785	1062	11375	1995	16217	-184	16401	49.68	16560	153	16554	16713
13	1721	1063	11003	1968	15755	-174	15929	49.40	16221	150	16079	16371
14	1618	1068	10833	1931	15450	-123	15573	49.04	16035	150	15723	16185
15	1732	1066	10667	1845	15310	-48	15358	48.72	15971	150	15508	16121
16	1861	1064	10546	1907	15378	1	15377	48.32	16193	150	15527	16343
17	2487	1062	10557	1985	16091	-88	16179	49.16	16597	150	16329	16747
18	4761	1076	11423	2049	19309	-253	19562	49.76	19704	162	19724	19866
19	4999	1055	11677	2087	19818	-253	20071	49.40	20439	1529	21600	21968
20	5090	1058	11580	2090	19818	-254	20072	49.36	20465	702	20774	21167
21	4885	1074	11678	2098	19735	-253	19988	48.68	20812	552	20540	21364
22	3997	1069	11662	2100	18828	-88	18916	48.92	19549	307	19223	19856
23	3573	1063	11591	2087	18314	-188	18502	49.04	19051	150	18652	19201
24	2615	1070	11359	2072	17116	-189	17305	49.12	17774	150	17455	17924

8.1 HOURLY GENERATION / LOAD FOR THE REGIONAL PEAK DEMAND MET DAY IN DECEMBER 2001

DATE : 31.12.2001

HOUR	GENERATION					INTER REGIONAL EXCHANGE Export(+)/Import(-) 'I'	TOTAL DEMAND MET 'P' = 'A' - 'I'	FREQ. 'F'	FREQUENCY CORRECTED DEMAND 'P _f ' =PI/(1+0.03(F-50))	LOAD SHEDDING 'L _s '	REQUIREMENT	
	HYDRO	THERMAL			TOTAL 'A'						WITHOUT FREQ.	WITH FREQ.
		NUCLEAR	COAL FIRED	GAS FIRED							'P+L _s '	'P _f +L _s '
											'P _f '	'P _f +L _s '
	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	
1	1437	1073	11756	1901	16167	-237	16404	48.84	16995	200	16604	17195
2	1490	1089	11667	1899	16145	-235	16380	49.00	16887	200	16580	17087
3	1483	1091	11568	1892	16034	-235	16269	48.68	16940	200	16469	17140
4	1512	1094	11522	1995	16123	-234	16357	48.32	17225	200	16557	17425
5	1734	1096	11890	1998	16718	-305	17023	48.60	17769	200	17223	17969
6	2612	1092	12192	1932	17828	-307	18135	49.64	18333	254	18389	18587
7	3202	1077	12497	1937	18713	-307	19020	48.80	19730	840	19860	20570
8	2641	1078	12443	1920	18082	-281	18363	49.16	18838	936	19299	19774
9	3376	1078	12550	1914	18918	-315	19233	49.32	19634	1176	20409	20810
10	2369	1076	12560	1930	17935	-363	18298	48.64	19076	1178	19476	20254
11	1929	1074	12395	1932	17330	-385	17715	49.48	17996	1252	18967	19248
12	1634	1071	12066	1924	16695	-383	17078	49.68	17244	808	17886	18052
13	1603	1070	12255	1900	16828	-335	17163	49.40	17478	660	17823	18138
14	1600	1077	12119	1832	16628	-310	16938	49.04	17440	494	17432	17934
15	1571	1071	12217	1945	16804	-250	17054	48.72	17735	263	17317	17998
16	1811	1068	12341	1854	17074	-255	17329	48.32	18249	433	17762	18682
17	2446	1080	12319	1870	17715	-300	18015	49.16	18481	508	18523	18989
18	3629	1076	12323	1913	18941	-300	19241	49.76	19381	529	19770	19910
19	3981	1072	12322	2074	19449	-299	19748	49.40	20110	1553	21301	21663
20	3842	1068	12383	2067	19360	-297	19657	49.36	20042	1246	20903	21288
21	3406	1075	12445	2053	18979	-326	19305	48.68	20101	1004	20309	21105
22	3076	1074	12222	2059	18431	-378	18809	48.92	19439	1085	19894	20524
23	2516	1086	12257	1964	17823	-378	18201	49.04	18741	911	19112	19652
24	2031	1087	12383	1970	17471	-378	17849	49.12	18333	805	18654	19138

8.1 HOURLY GENERATION / LOAD FOR THE REGIONAL PEAK DEMAND MET DAY IN JANUARY 2002

DATE : 30.01.2002

HOUR	GENERATION					INTER REGIONAL EXCHANGE Export(+)/Import(-) 'I'	TOTAL DEMAND MET 'P' = 'A' - 'I'	FREQ. 'F'	FREQUENCY CORRECTED DEMAND 'P _f ' =PI/(1+0.03(F-50))	LOAD SHEDDING 'L _s '	REQUIREMENT	
	HYDRO	THERMAL			TOTAL 'A'						WITHOUT FREQ.	WITH FREQ.
		NUCLEAR	COAL FIRED	GAS FIRED							'P+L _s '	'P _f +L _s '
											'P+L _s '	'P _f +L _s '
(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(HZ)	(MW)	(MW)	(MW)	(MW)	
1	1464	981	12058	1713	16216	-337	16553	50.12	16494	343	16896	16837
2	1318	978	12098	1721	16115	-337	16452	50.28	16315	343	16795	16658
3	1251	1142	11916	1713	16022	-382	16404	50.36	16229	343	16747	16572
4	1332	1160	12268	1718	16478	-394	16872	50.32	16712	344	17216	17056
5	1778	1176	12648	1725	17327	-285	17612	49.60	17826	464	18076	18290
6	2714	1185	12934	1724	18557	-295	18852	49.24	19292	808	19660	20100
7	3473	1179	12842	1724	19218	-300	19518	49.16	20023	1850	21368	21873
8	3391	1194	12932	1727	19244	-305	19549	49.36	19932	1415	20964	21347
9	2520	1188	12964	1725	18397	-305	18702	49.56	18952	1052	19754	20004
10	2138	1174	12877	1724	17913	-305	18218	49.72	18372	1293	19511	19665
11	2142	1173	12839	1705	17859	-303	18162	49.80	18272	1191	19353	19463
12	1858	1170	12905	1723	17656	-303	17959	49.56	18199	656	18615	18855
13	1807	1175	12796	1691	17469	-303	17772	50.44	17540	528	18300	18068
14	1683	1183	12626	1697	17189	-303	17492	50.80	17082	402	17894	17484
15	1696	1183	12488	1689	17056	-273	17329	50.32	17164	399	17728	17563
16	1626	1172	12726	1686	17210	-283	17493	50.04	17472	384	17877	17856
17	1946	1186	12908	1674	17714	-263	17977	50.16	17891	373	18350	18264
18	2414	1179	12569	1682	17844	-268	18112	50.60	17792	365	18477	18157
19	3662	1175	12973	1694	19504	-283	19787	49.36	20174	1424	21211	21598
20	3530	1172	12930	1706	19338	-293	19631	50.12	19561	1821	21452	21382
21	2922	1177	13053	1702	18854	-278	19132	49.36	19507	1562	20694	21069
22	2739	1173	12742	1706	18360	-283	18643	49.52	18915	1551	20194	20466
23	2432	1173	12457	1705	17767	-290	18057	49.44	18366	954	19011	19320
24	1738	1182	12363	1710	16993	-360	17353	49.52	17607	839	18192	18446

8.1 HOURLY GENERATION / LOAD FOR THE REGIONAL PEAK DEMAND MET DAY IN FEBRUARY 2002

DATE : 05.02.2002

HOUR	GENERATION					INTER REGIONAL EXCHANGE Export(+)/Import(-) 'I'	TOTAL DEMAND MET 'P' = 'A' - 'I'	FREQ. 'F'	FREQUENCY CORRECTED DEMAND 'P _f ' =P/(1+0.03(F-50))	LOAD SHEDDING 'L _s '	REQUIREMENT	
	HYDRO	THERMAL			TOTAL 'A'						WITHOUT FREQ.	WITH FREQ.
		NUCLEAR	COAL FIRED	GAS FIRED							'P+L _s '	'P _f +L _s '
											(MW)	(MW)
1	1550	1206	12249	1595	16600	-365	16965	48.84	17577	367	17332	17944
2	1428	1211	12085	1595	16319	-325	16644	49.00	17159	367	17011	17526
3	1425	1218	12020	1628	16291	-325	16616	48.68	17301	367	16983	17668
4	1421	1215	12213	1704	16553	-240	16793	48.32	17684	367	17160	18051
5	1923	1214	12823	1705	17665	-212	17877	48.60	18661	367	18244	19028
6	2968	1215	12933	1704	18820	-207	19027	49.64	19235	975	20002	20210
7	3307	1218	12918	1706	19149	-207	19356	48.80	20079	1628	20984	21707
8	3092	1209	12946	1708	18955	-156	19111	49.16	19605	1775	20886	21380
9	2292	1196	12972	1695	18155	-206	18361	49.32	18743	1644	20005	20387
10	2212	1193	12852	1689	17946	-205	18151	48.64	18923	1653	19804	20576
11	1855	1196	12732	1682	17465	-207	17672	49.48	17952	1185	18857	19137
12	1674	1201	12762	1676	17313	-327	17640	49.68	17811	781	18421	18592
13	1675	1191	12894	1692	17452	-327	17779	49.40	18105	654	18433	18759
14	1643	1197	12792	1683	17315	-327	17642	49.04	18165	644	18286	18809
15	1552	1187	12763	1681	17183	-327	17510	48.72	18209	397	17907	18606
16	1708	1184	12764	1678	17334	-322	17656	48.32	18593	382	18038	18975
17	1983	1195	12914	1677	17769	-322	18091	49.16	18559	802	18893	19361
18	2721	1192	12827	1691	18431	-314	18745	49.76	18881	817	19562	19698
19	3587	1202	12925	1691	19405	-309	19714	49.40	20075	1676	21390	21751
20	3160	1199	12886	1699	18944	-322	19266	49.36	19643	1366	20632	21009
21	2675	1196	13036	1688	18595	-327	18922	48.68	19702	1233	20155	20935
22	2051	1216	13027	1698	17992	-327	18319	48.92	18932	1323	19642	20255
23	1998	1221	12741	1701	17661	-327	17988	49.04	18521	685	18673	19206
24	1716	1225	12456	1699	17096	-325	17421	49.12	17893	518	17939	18411

8.1 HOURLY GENERATION / LOAD FOR THE REGIONAL PEAK DEMAND MET DAY IN MARCH 2002

DATE : 23.03.2002

HOUR	GENERATION					INTER REGIONAL EXCHANGE Export(+)/Import(-) 'I'	TOTAL DEMAND MET 'P' = 'A' - 'I'	FREQ. 'F'	FREQUENCY CORRECTED DEMAND 'P _f ' =PI/(1+0.03(F-50))	LOAD SHEDDING 'L _s '	REQUIREMENT	
	HYDRO	THERMAL			TOTAL 'A'						WITHOUT FREQ.	WITH FREQ.
		NUCLEAR	COAL FIRED	GAS FIRED							'P+L _s '	'P _f +L _s '
											'P+L _s '	'P _f +L _s '
	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	
1	3175	1193	11037	2025	17430	-199	17629	49.52	17887	500	18129	18387
2	3153	1184	11072	2025	17434	-198	17632	49.36	17977	200	17832	18177
3	3066	1189	11102	2029	17386	-198	17584	49.20	18016	200	17784	18216
4	3059	1189	11053	2039	17340	-198	17538	49.52	17794	320	17858	18114
5	3369	1192	11142	2031	17734	-203	17937	49.48	18221	512	18449	18733
6	3884	1182	11150	2054	18270	-199	18469	49.68	18648	522	18991	19170
7	3946	1194	11073	2001	18214	-109	18323	50.28	18170	1230	19553	19400
8	3545	1197	10501	2001	17244	-110	17354	50.92	16888	1225	18579	18113
9	3228	1190	10365	1990	16773	-84	16857	50.84	16443	897	17754	17340
10	3254	1183	10681	1967	17085	-98	17183	49.76	17308	936	18119	18244
11	3322	1184	10796	1916	17218	-144	17362	50.32	17197	841	18203	18038
12	3299	1188	10881	1911	17279	-146	17425	50.52	17157	437	17862	17594
13	3331	1195	10731	1896	17153	-155	17308	50.48	17062	462	17770	17524
14	3467	1185	10540	1342	16534	-141	16675	50.48	16438	527	17202	16965
15	3438	1181	10683	1341	16643	-135	16778	50.00	16778	527	17305	17305
16	3484	1185	10661	1341	16671	-153	16824	50.48	16585	447	17271	17032
17	3681	1187	10589	1359	16816	-162	16978	50.56	16697	447	17425	17144
18	3731	1187	10509	1396	16823	-291	17114	50.88	16674	786	17900	17460
19	4424	1195	11033	1990	18642	-340	18982	49.96	19005	1154	20136	20159
20	4898	1194	11374	2000	19466	-471	19937	50.44	19677	1544	21481	21221
21	4588	1182	11398	1979	19147	-286	19433	50.20	19317	1535	20968	20852
22	4255	1196	11429	1969	18849	-302	19151	50.00	19151	1528	20679	20679
23	3928	1200	11172	1967	18267	-324	18591	50.00	18591	1260	19851	19851
24	3745	1188	11131	1963	18027	-335	18362	50.00	18362	575	18937	18937

8.2 LOAD DURATION DATA OF THE NORTHERN REGION FOR THE YEAR 2001-02

UNRESTRICTED DEMAND IN MW	% OF TIME
ABOVE 24000	0.00
ABOVE 23500	0.08
ABOVE 23000	0.26
ABOVE 22500	0.80
ABOVE 22000	2.05
ABOVE 21500	4.45
ABOVE 21000	8.57
ABOVE 20500	14.86
ABOVE 20000	22.84
ABOVE 19500	32.91
ABOVE 19000	44.51
ABOVE 18500	55.84
ABOVE 18000	66.67
ABOVE 17500	76.74
ABOVE 17000	84.29
ABOVE 16500	90.42
ABOVE 16000	94.54
ABOVE 15500	97.21
ABOVE 15000	98.38
ABOVE 14500	99.28
ABOVE 14000	99.73
ABOVE 13500	99.87
ABOVE 13000	99.98
ABOVE 12500	100.00
ABOVE 12000	100.00
ABOVE 11500	100.00

REGIONAL LOAD DURATION CURVE FOR THE YEAR 2001-02 IS ENCLOSED (Graph G6)

9.1 FREQUENCY ANALYSIS FOR 2001-02

Month ----> ITEM	Apr'01	May'01	Jun'01	Jul'01	Aug'01	Sep'01	Oct'01	Nov'01	Dec'01	Jan'02	Feb'02	Mar'02	2001-02
Avg. freq. Hz	49.50	49.75	50.05	49.77	49.80	49.47	49.62	49.88	49.66	49.65	49.93	50.22	49.7
Std Dev Hz	0.67	0.68	0.59	0.54	0.57	0.57	0.58	0.57	0.56	0.57	0.59	0.42	0.5
Maximum Instant Freq. Hz	51.40	51.48	51.40	51.32	51.24	51.20	51.16	51.32	51.24	51.44	51.44	51.36	51.4
Minimum Instant Freq. Hz	47.96	47.96	48.00	48.20	48.16	48.16	48.12	48.16	48.16	48.16	48.16	48.24	47.9
Frequency Variation Index(FVI)	7.02	5.11	3.59	3.42	3.61	6.08	4.75	3.35	4.28	4.43	3.49	2.30	4.4
Above 50.5 %	7.62	15.17	24.97	9.25	10.39	3.05	5.22	12.05	6.57	7.09	18.18	32.04	12.6
50.5 - 49.0 %	66.28	71.15	71.84	83.10	80.31	75.62	79.91	80.23	81.69	80.87	76.25	67.27	76.2
Below 49.0 %	26.10	13.68	3.19	7.65	9.30	21.33	14.87	7.72	11.74	12.04	5.57	0.69	11.1
Below 48.5 %	6.89	2.49	0.64	0.48	1.16	3.65	2.84	1.27	1.31	1.19	0.54	0.07	1.8
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.0

NOTE : Calculation of FVI is done using the following formula -

$$FVI = \frac{10 \sum (F - 50)^2}{24 \times 60 \times 6}$$

where frequency 'F' is measured at 10 seconds interval.(approximate updation period of telemetered frequency from 220 kV BTPS bus at NRLDC)

3)

9.2 FREQUENCY SPECTRUM OF THE NORTHERN REGION DURING PAST DECADE

SL . NO.	YEAR	% OF TIME FREQUENCY REMAINED				AVERAGE FREQ (Hz) DURING YEAR
		BELOW 48.5 Hz	BELOW 49.0 Hz	BETWEEN 49.0 Hz TO 50.5 Hz	ABOVE 50.5 Hz	
1	1992-93	6.04	21.67	56.07	22.26	49.69
2	1993-94	20.53	44.33	43.80	11.87	49.21
3	1994-95	14.71	32.73	53.01	14.26	49.37
4	1995-96	8.71	22.77	53.82	23.41	49.63
5	1996-97	25.26	44.93	41.17	13.90	49.14
6	1997-98	15.43	28.16	40.74	31.10	49.61
7	1998-99	14.12	27.81	39.70	32.49	49.64
8	1999-2000	24.83	43.91	43.20	12.89	49.27
9	2000-01	15.19	34.13	55.84	10.03	49.38
10	2001-02	1.87	11.17	76.24	12.60	49.77

9.3 MONTHWISE MAXIMUM & MINIMUM VOLTAGE RECORDED AT 400 KV DADRI BUS DURING THE YEAR 2001-02

MONTH	MAXIMUM VOLTAGE		MINIMUM VOLTAGE	
	(KV)	Date	(KV)	Date
APR - 2001	424	17.04.2001	366	27.04.2001
MAY- 2001	428	29.05.2001	366	25.05.2001
JUN - 2001	422	05.06.2001	358	20.06.2001
JUL - 2001	416	22.07.2001	362	10.07.2001
AUG - 2001	422	14.08.2001	366	31.08.2001
SEP - 2001	416	26.09.2001	358	10.09.2001
OCT - 2001	415	20.10.2001	368	01.10.2001
NOV - 2001	418	14.11.2001	368	01.11.2001
DEC - 2001	418	10.12.2001	368	29.12.2001
JAN - 2002	422	16.01.2002	370	04.01.2002
FEB - 2002	432	25.02.2002	368	03.02.2002
MAR -2002	424	03.03.2002	380	08.03.2002
2001-02	432	25.02.2002	358	20.06.2001

9.4 RESERVOIR DATA FOR 2001-02

Reservoir ----->	Bhakra			Pong		
End of the Month	Reservoir Level (Mtr)	Live Capacity (Mhmt)	Energy Content (MU)	Reservoir Level (Mtr)	Live Capacity (Mhmt)	Energy Content (MU)
APR - 2001	454.52	0.05	170.00	394.22	0.09	125.00
MAY - 2001	457.40	0.07	240.00	392.70	0.11	100.00
JUN - 2001	464.75	0.12	410.00	393.14	0.09	100.00
JUL - 2001	485.46	0.32	1150.00	408.27	0.34	440.00
AUG - 2001	501.09	0.50	2000.00	419.28	0.55	820.00
SEP - 2001	501.70	0.52	2080.00	416.98	0.50	750.00
OCT - 2001	498.18	0.47	1800.00	414.35	0.43	625.00
NOV - 2001	493.06	0.41	1550.00	411.33	0.37	525.00
DEC - 2001	485.86	0.32	1200.00	407.57	0.30	425.00
JAN - 2002	478.33	0.26	880.00	403.36	0.24	325.00
FEB - 2002	469.72	0.16	600.00	398.59	0.16	210.00
MAR - 2002	458.86	0.08	250.00	394.77	0.11	130.00
Max. Level	502.86			419.37		
(DATE)	15.09.2001			04.09.2001		
Min. Level	453.88			391.71		
(DATE)	06.05.2001			12.06.2001		
Full Reservoir Level (FRL)	514.50			433.12		
Min. Draw Down Level (MDDL)	445.62			384.05		

9.4 RESERVOIR DATA FOR 2001-02

Reservoir ----->	Rana Pratap Sagar			Gandhi Sagar		
Month	Reservoir Level (Mtr)	Live Capacity (Mhmt)	Energy Content (MU)	Reservoir Level (Mtr)	Live Capacity (Mhmt)	Energy Content (MU)
APR - 2001	344.25	0.01	18.00	380.55	0.02	50.00
MAY - 2001	344.11	0.01	30.00	380.02	0.00	0.00
JUN - 2001	345.59	0.03	60.00	380.57	0.00	0.00
JUL - 2001	350.29	0.11	205.00	385.80	0.08	250.00
AUG - 2001	352.38	0.28	300.00	386.29	0.11	250.00
SEP - 2001	351.88	0.14	260.00	385.46	0.08	250.00
OCT - 2001	351.31	0.13	235.00	384.63	0.05	180.00
NOV - 2001	349.84	0.10	140.00	383.55	0.05	140.00
DEC - 2001	347.65	0.06	120.00	382.34	0.03	50.00
JAN - 2002	345.45	0.04	60.00	381.26	0.00	0.00
FEB - 2002	345.37	0.03	35.00	380.63	0.00	0.00
MAR - 2002	345.40	0.03	45.00	380.35	0.00	0.00
Max. Level	352.41			386.26		
(DATE)	01.09.2001			01.09.2001		
Min. Level	344.01			297.55		
(DATE)	10.06.2001			24.03.2002		
Full Reservoir Level (FRL)	352.65			402.64		
Min. Draw Down Level (MDDL)	342.90			381.00		

9.4 RESERVOIR DATA FOR 2001-02

Reservoir ----->	Rihand		
Month	Reservoir Level (Mtr)	Live Capacity (Mhmt)	Energy Content (MU)
APR - 2001	258.17	0.63	650.00
MAY - 2001	258.87	0.18	325.00
JUN - 2001	257.19	0.12	200.00
JUL - 2001	267.25	0.50	1025.00
AUG - 2001	266.76	0.50	975.00
SEP - 2001	266.88	0.50	975.00
OCT - 2001	266.82	0.50	975.00
NOV - 2001	266.76	0.50	975.00
DEC - 2001	265.39	0.44	825.00
JAN - 2002	262.31	0.41	575.00
FEB - 2002	261.24	0.28	525.00
MAR - 2002	259.48	0.22	350.00
Max. Level	268.01		
(DATE)	25.07.2001		
Min. Level	256.70		
(DATE)	01.06.2001		
Full Reservoir Level (FRL)	268.22		
Min. Draw Down Level (MDDL)	252.98		

Notes :

Energy content of Bhakra : Total energy content at Bhakra, Ganguwal and Kotla Power Stations.
 Energy content of Rihand : Total energy content at Rihand and Obra Power Stations.
 Energy content of RPS : Total energy content at Rana Pratap Sagar and Jawahar Sagar Power Stations.
 Energy Content of G. Sagar : Total energy content at Gandhi Sagar, R. P. Sagar and Jawahar Sagar Power Stations.

**10.1 SETTING OF FLAT UNDERFREQUENCY AND df/dt RELAYS
IN NORTHERN REGION AS APPROVED BY NREB
(AS ON 31.03.2002)**

CONSTITUENTS	Flat Under Frequency			df/dt relay setting						
	at 48.2 Hz	at 48.0 Hz	TOTAL	To be initialised at 50.0 Hz		To be initialised at 49.0 Hz		To be initialised at 48.5 Hz		TOTAL
	MW	MW	MW	Setting Hz/sec	Load relief MW	Setting Hz/sec	Load relief MW	Setting Hz/sec	Load relief MW	MW
Chandigarh	5	5	10	---	---	---	---	---	---	---
Delhi	75	115	190	---	---	0.22	581	0.20	166	747
Haryana	70	105	175	---	---	0.22	519	0.20	148	667
H.P.	15	25	40	---	---	---	---	---	---	---
J & K	25	35	60	---	---	---	---	---	---	---
Punjab	110	165	275	---	---	0.20	656	0.20	328	984
Rajasthan	105	160	265	---	---	0.22	655	0.20	327	982
U.P.	195	290	485	0.30	1586	---	---	---	---	1586
TOTAL	600	900	1500		1586		2411		969	4966

10.2 SHUNT CAPACITORS INSTALLATION IN NORTHERN REGION DURING 2001-02

CONSTITUENT	INSTALLED		INSTALLED AS ON 31.03.2002	REQUIREMENT AT AT THE END OF 2001-02	BACKLOG AS ON 31.03.2002
	AS ON 31.03.2001	DURING 2001-02			
	A	B	D	E	G=E-C
Chandigarh	93	7	100	127	27
Delhi	2236	397	2633	2734	101
Haryana	1643	416	2059	3080	1021
H.P.	136	57	193	335	142
J & K	147	12	159	880	721
Punjab	4431	199	4630	4950	320
Rajasthan	2357	59	2416	3300	884
U.P.	4206	485	4691	5654	963
BBMB	381	0	381	381	0
TOTAL	15630	1632	17262	21441	4179

SOURCE : Minutes of the 327th OCC meeting of the NREB.

10.3 STATUS OF IMPORTANT TRANSMISSION LINES UNDER CONSTRUCTION AS ON 31ST MARCH 2002

S. NO.	NAME OF LINE/CT	NO. OF CKTS.	Revised TARGET DATE	LENGTH IN Kms.	TOTAL LOCATIONS	STUBS COMPLETED	ERECTION OF TOWERS COMPLETED	STRINGING COMPLETED IN Ckt. Kms.	REMARKS
800 kV LINES									
POWERGRID									
1	Tehri - Meerut - I	S/C	Dec-2002	180	452	387	324	93	
2	Tehri - Meerut - II	S/C	Dec-2002	182	458	384	341	96	
400 KV LINES									
POWERGRID									
1	Meerut-Mandola	D/C	Dec_2002	120	165	138	118	—	
2	Agra(PG)-AgraUPPCL	D/C	Aug-02	60	88	64	12	—	
3	Dhauliganga(NHPC)-Bareilly	D/C	Mar-05	481	704	—	—	—	
HPSEB									
1	Nalagarh-Kunihar	S/C		—	—	—	—	—	
220 KV LINES									
POWERGRID									
1	LILO of Panki-Naubasta at kanpur	D/C	Aug.2002	30	67	—	—	—	
2	Allahabad-Phulpur	S/C	Jul.2002	37	130	—	—	—	
3	Allahabad-Riwa Road	D/C	Jul.2002	6	19	—	—	—	
4	LILO of Modipuram-Simbholi at Meerut		Jul.2002	20	32	—	—	—	
5	LILO of M'puram-(Nara)at Meerut		Jul.2002	12	18	—	—	—	
DVB									
1	LILO of Mandaula-PPG at SOW		Mar.2003	3	6	2	1	0	
2	SOW-Kashmiri Gate	D/C	Mar.2003	11	29	21	19	5	Work heldup
3	Bawana-Rohini	D/C	Mar.2003	20	55	41	28	5	
4	Ghazipur -NOIDA	D/C	Mar-2003	16	48	38	28	0	
5	Bawana -Rohini	D/C	Mar-2003	20	55	41	28	5	
6	400 kV Ballabgarh-Bamoli	S/C	Mar 2003	-	-	-	-	-	

10.3 STATUS OF IMPORTANT TRANSMISSION LINES UNDER CONSTRUCTION AS ON 31ST MARCH 2002

S. NO.	NAME OF LINE/CT	NO. OF CKTS.	Revised TARGET DATE	LENGTH IN Kms.	TOTAL LOCATIONS	STUBS COMPLETED	ERECTION OF TOWERS COMPLETED	STRINGING COMPLETED IN Ckt. Kms.	REMARKS
J&K , PDD									
3	Gladni-Udhampur	S/C	Mar.2003	50	166	164	75	16	
4	Thein-Hiranagar	D/C	Mar.2003	83	120	117	117	25	
PSEB									
1	S'purkhandi Ph-I to Ph-II	D/C	Mar.2003	6	-	-	-	-	
2	Jamsher -Kartarpur	D/C	Mar-2003	32	-	-	-	-	
3	Jallander-II-Kartarpur		Mar-2003	32	-	-	-	-	
4	Sarna -Kotli Suratmalli	D/C	Mar -2003	123	185	38	0	0	
5	Nalagrh-Muhali	D/C	Mar -2003	50	-	-	-	-	
6	LILO of Churian -Batala at Kotli Suratmalli (1 st Circuit)	D/C	Mar -2003	18	29	26	19	0	
UPPCL									
1	Gorakhpur-Deoria	S/C	Mar -2003	35	-	-	-	-	
2	LILO of H'Ganj-NAPP at Atrauli		Mar -2003	2x7	-	-	-	-	
3	Bareilly -Shahjahanpur	S/C on D/C	Mar -2003	101	296	133	126	0	
HPSEB									
1	Khodri - Majri (2 nd ckt)	D/C	Mar -2003	35	106	106	106	16	
HARYANA									
1	Palli - Badshahpur	D/C	Mar -2003	43	86	86	50	0	
2	Badshahpur -Manesar	S/C on D/C	Mar -2003	12	50	40	30	3	

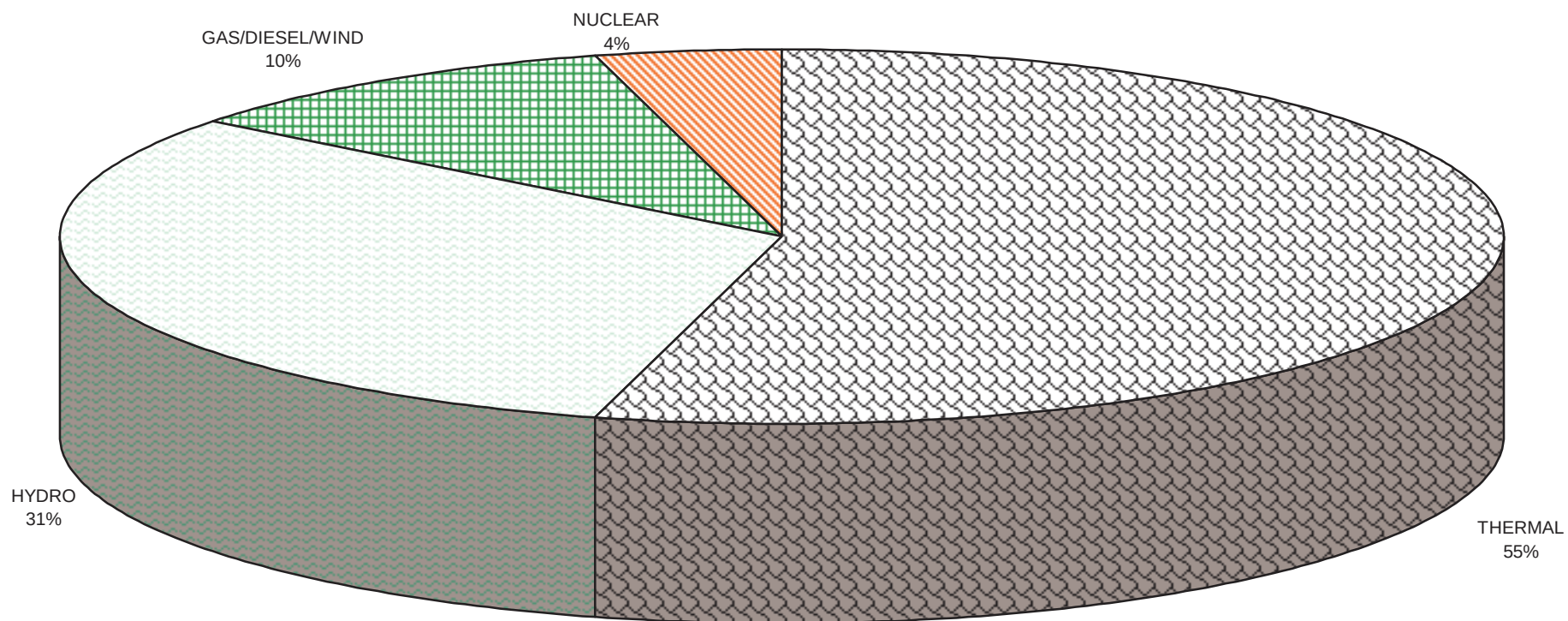
10.4 STATUS OF NEW GENERATING UNITS UNDER CONSTRUCTION AS ON 31ST MARCH 2002

SL. NO.	NAME OF SCHEME	NAME OF UNIT	CAPACITY (MW)	COMMISSIONING SCHEDULE	
				ORIGINAL	REVISED
1.	<u>NHPC</u>				
	(i) DULHASTI HPS	1	130	94-95	2003-04
		2	130	94-95	2003-04
		3	130	94-95	2003-04
	(ii) CHAMERA STAGE -II HPS	1	100	----	2004-05
		2	100	----	2004-05
		3	100	----	2004-05
	(iii) DHAULIGANGA HPS	1	70	----	2004-05
		2	70	----	2004-05
		3	70	----	2004-05
		4	70	----	2004-05
2.	<u>NJPC</u>				
	(i) NATHPA JHAKRI HPS	1	250	95-97	2003-04
		2	250	95-97	2003-04
		3	250	95-97	2003-04
		4	250	95-97	2003-04
		5	250	95-97	2003-04
		6	250	95-97	2003-04
3.	<u>THDC</u>				
	(i) TEHRI STAGE -I HPS	1	250	81-82	2003-04
		2	250	81-82	2003-04
		3	250	81-82	2003-04
		4	250	81-82	2003-04
4.	<u>HPSEB</u>				
	(i) Ghanvi HPS	1	11.25	2001-2002	2002-03
		2	11.25	2001-2002	2002-03
		3	11.25	2001-2002	2002-03
	(ii) Holi HPS	1	1.5	2001-2002	2002-03
		2	1.5	2001-2002	2002-03

10.4 STATUS OF NEW GENERATING UNITS UNDER CONSTRUCTION AS ON 31ST MARCH 2002

SL. NO.	NAME OF SCHEME	NAME OF UNIT	CAPACITY (MW)	COMMISSIONING SCHEDULE	
				ORIGINAL	REVISED
6.	<u>J & K</u>				
	(I) PHALAGAM HPS	1	1.5		2002-03
		2	1.5		2002-03
7.	<u>RRVPNL</u>				
	(I) Suratgarh stg-III	1	250		—
	(ii) Ramgarh GT stg-II	1	37.5		—
8	<u>PUNJAB</u>				
	(I) G.Hargobind TPS-St.II	1	250		—
		2	250		—
9	<u>UTTRANCHAL</u>				
	(I) Vishnu Prayag HPS	1	100		2004-06
		2	100		2004-06
		3	100		2004-06
		4	100		2004-06
10	<u>U.P.</u>				
	(I) Anpara 'C' STPS	1	500		2003-05
		2	500		

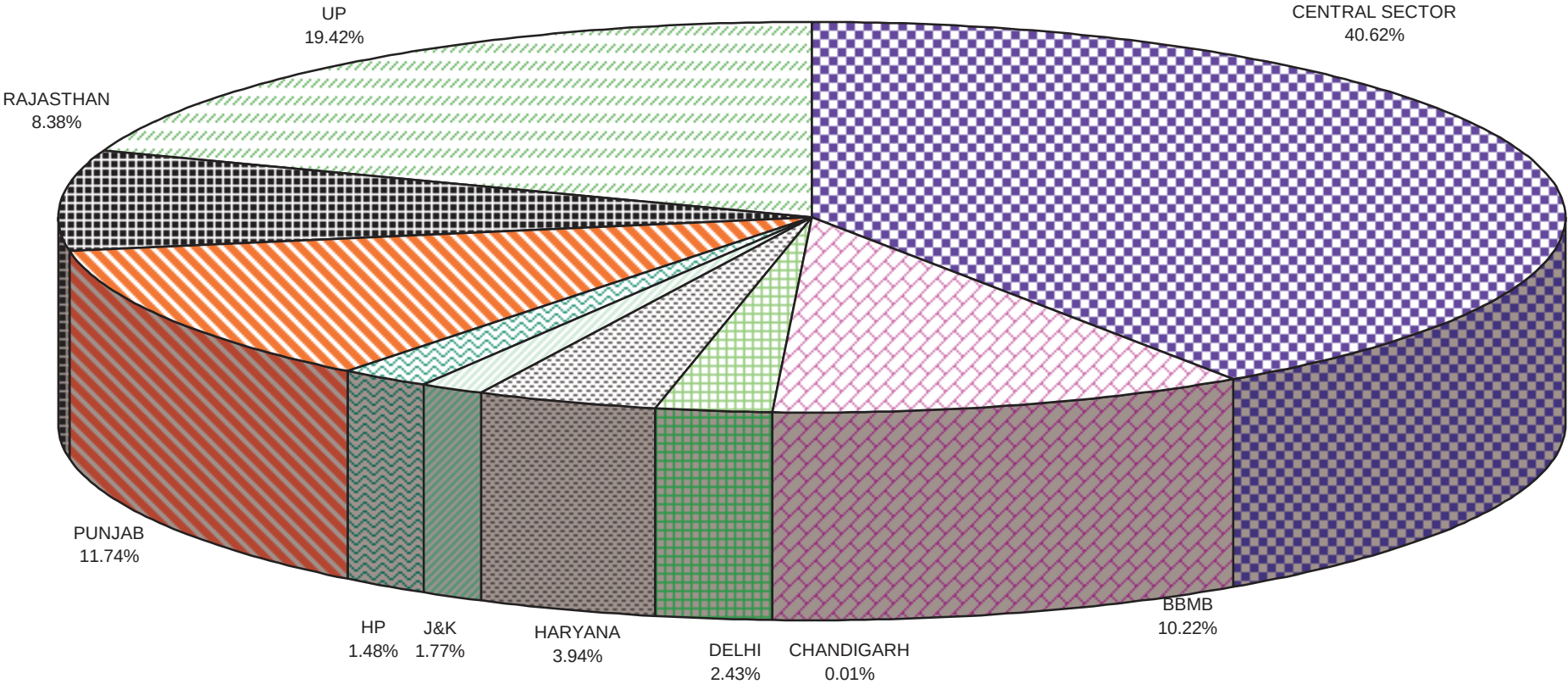
BREAK UP OF EFFECTIVE GENERATING CAPACITY (SOURCE WISE)
AS ON 31st MARCH 2002



GENERATION SOURCE EFFECTIVE CAPACITY (MW)

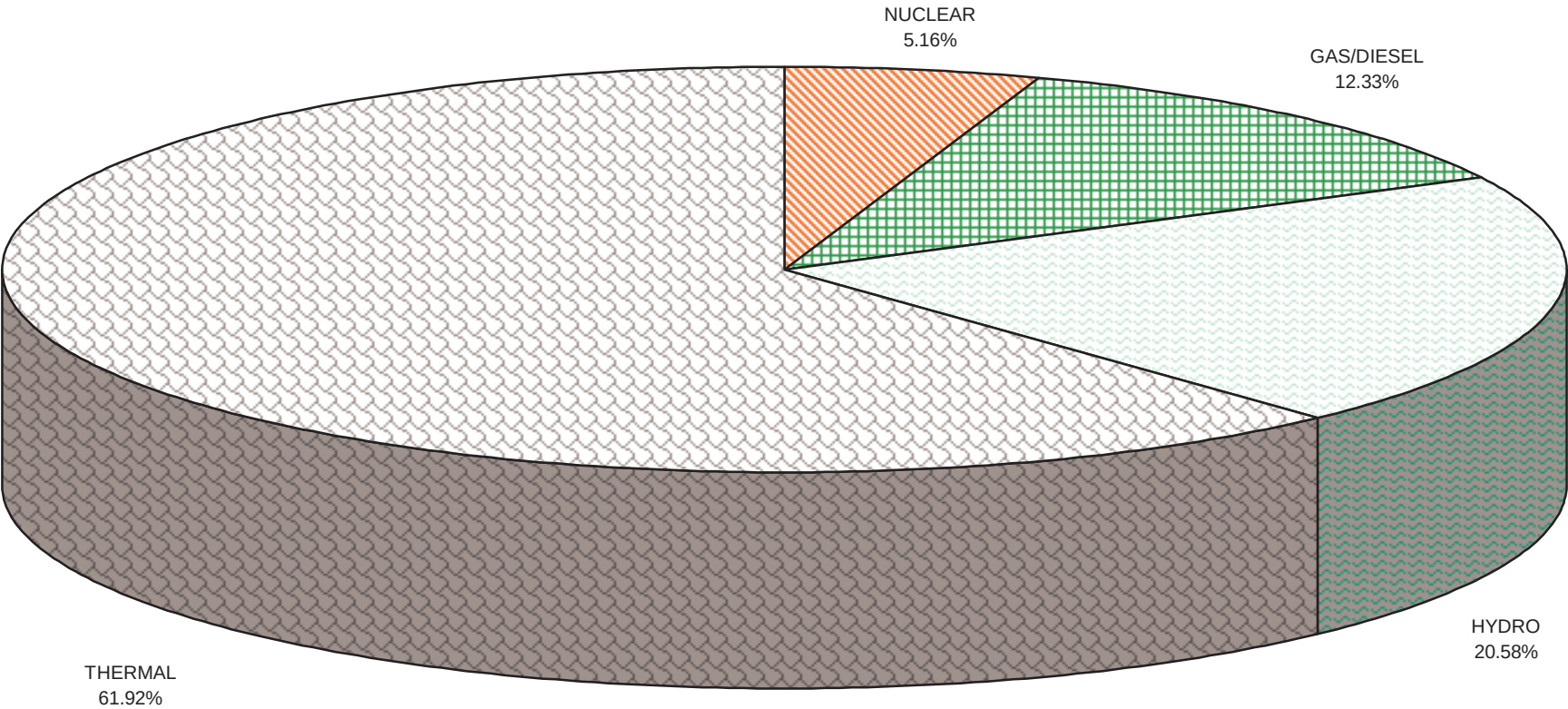
THERMAL	15135.50
HYDRO	8698.72
GAS/DIESEL/WIND	2887.45
NUCLEAR	1180.00
TOTAL REGION	27901.67

**BREAKUP OF EFFECTIVE GENERATING CAPACITY (CONSTITUENT WISE)
AS ON 31st MARCH 2002.**



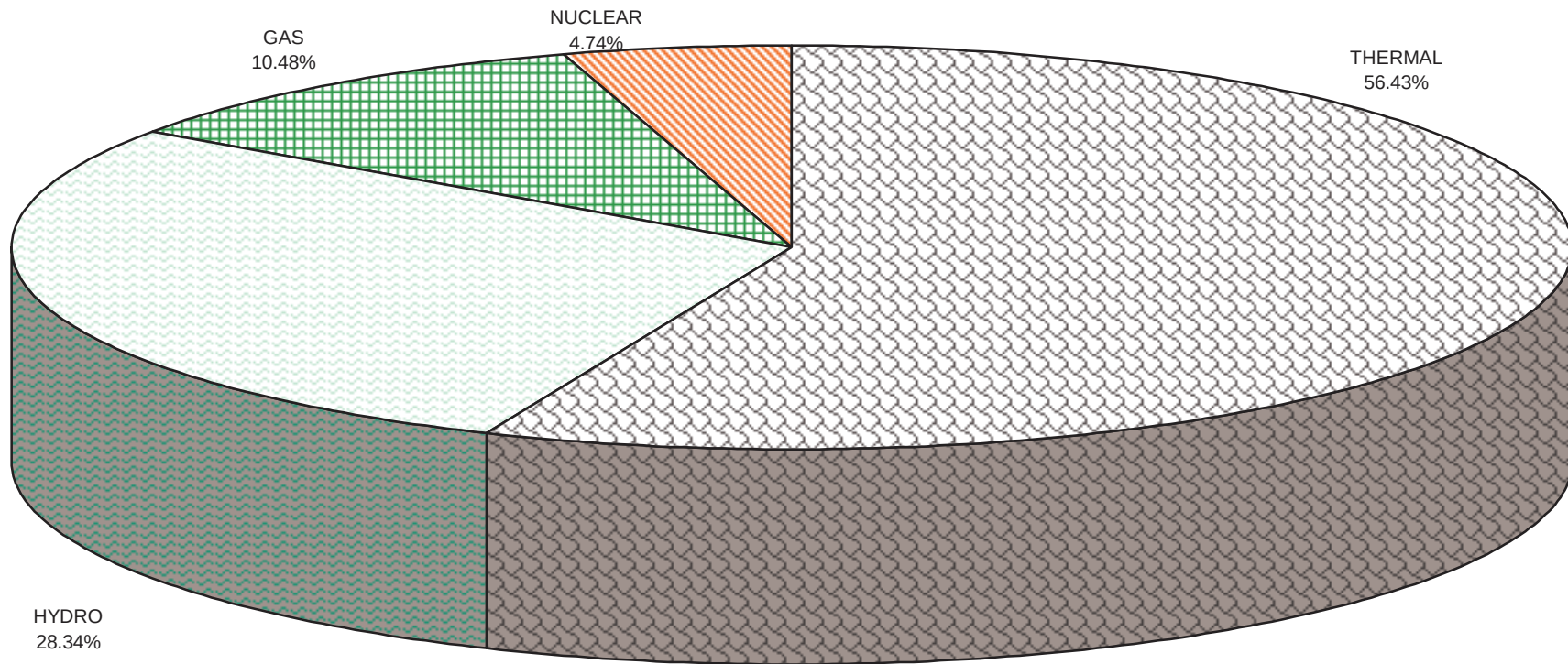
Control Area	CENTRAL SECTOR	BBMB	CHANDIGARH	DELHI	HARYANA	HP	J&K	PUNJAB	RAJASTHAN	UP	Total
Capacity	11333.24	2852.15	1.40	678.50	1098.20	412.10	493.87	3275.10	2337.36	5419.75	27901.67

SOURCE WISE CONTRIBUTION TO NET REGIONAL ENERGY DURING 2001-02



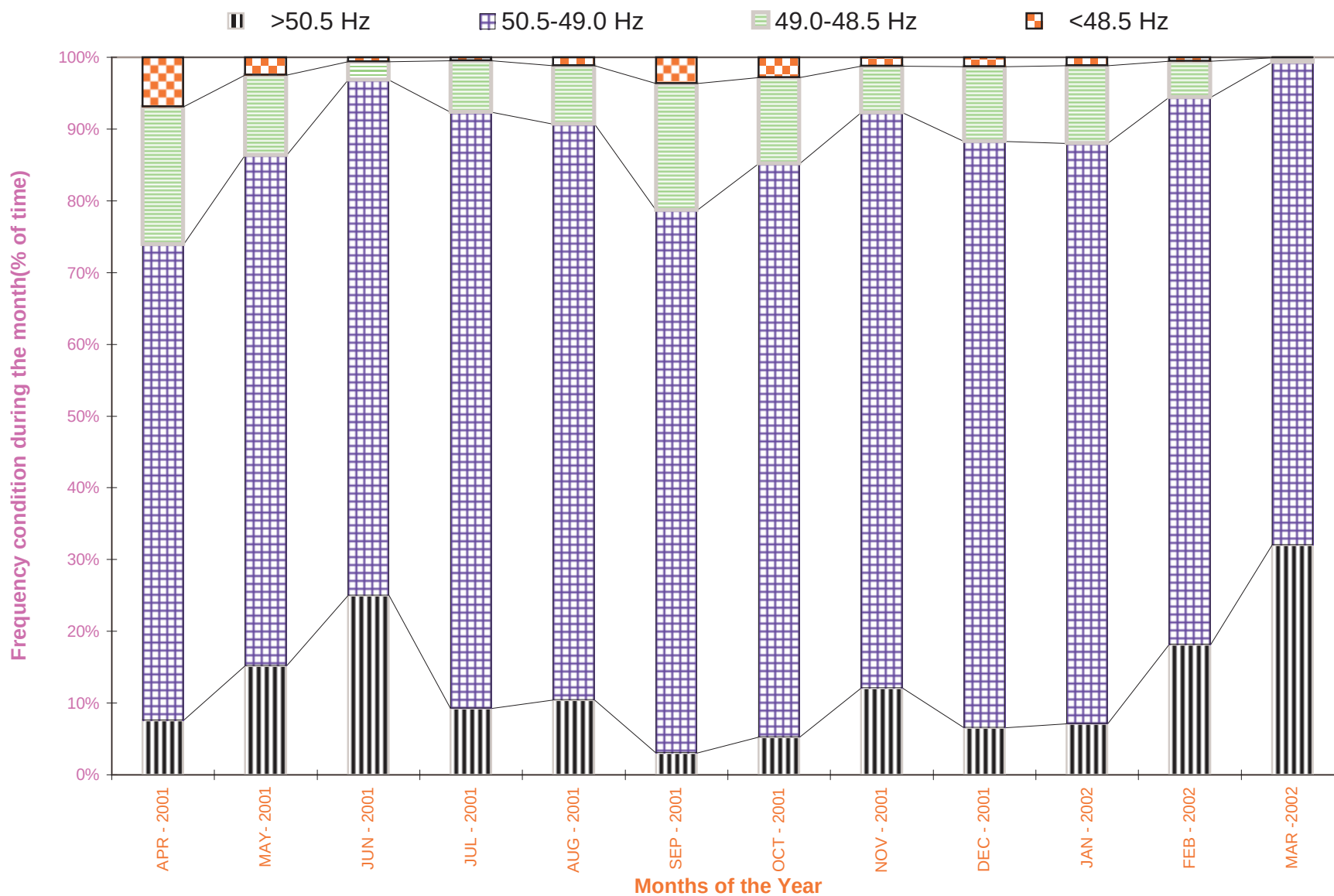
SOURCE	NUCLEAR	GAS/DIESEL	HYDRO	THERMAL	TOTAL REGIONAL
NET ENERGY (MU)	7251.34	17329.64	28924.17	87010.04	140515.20

**SOURCE WISE CONTRIBUTION TO REGION'S PEAK MET DURING
2001-02**

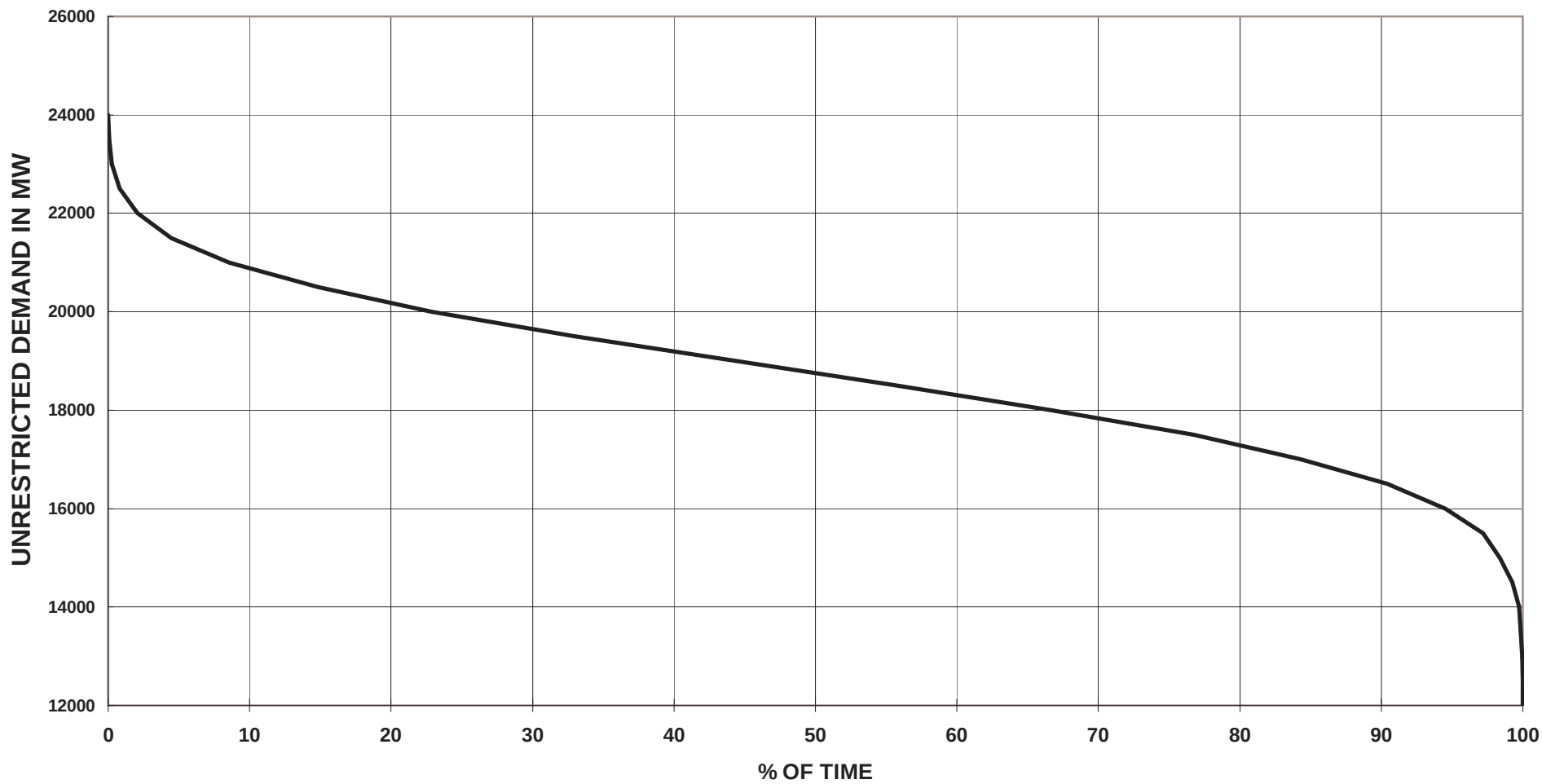


SOURCE	CONTRIBUTION (MW)
THERMAL	12052
HYDRO	6053
GAS	2238
NUCLEAR	1013
TOTAL GENERATION	21356
LESS EXPORT	-230
ADD IMPORT	0
REGIONAL PEAK	21586

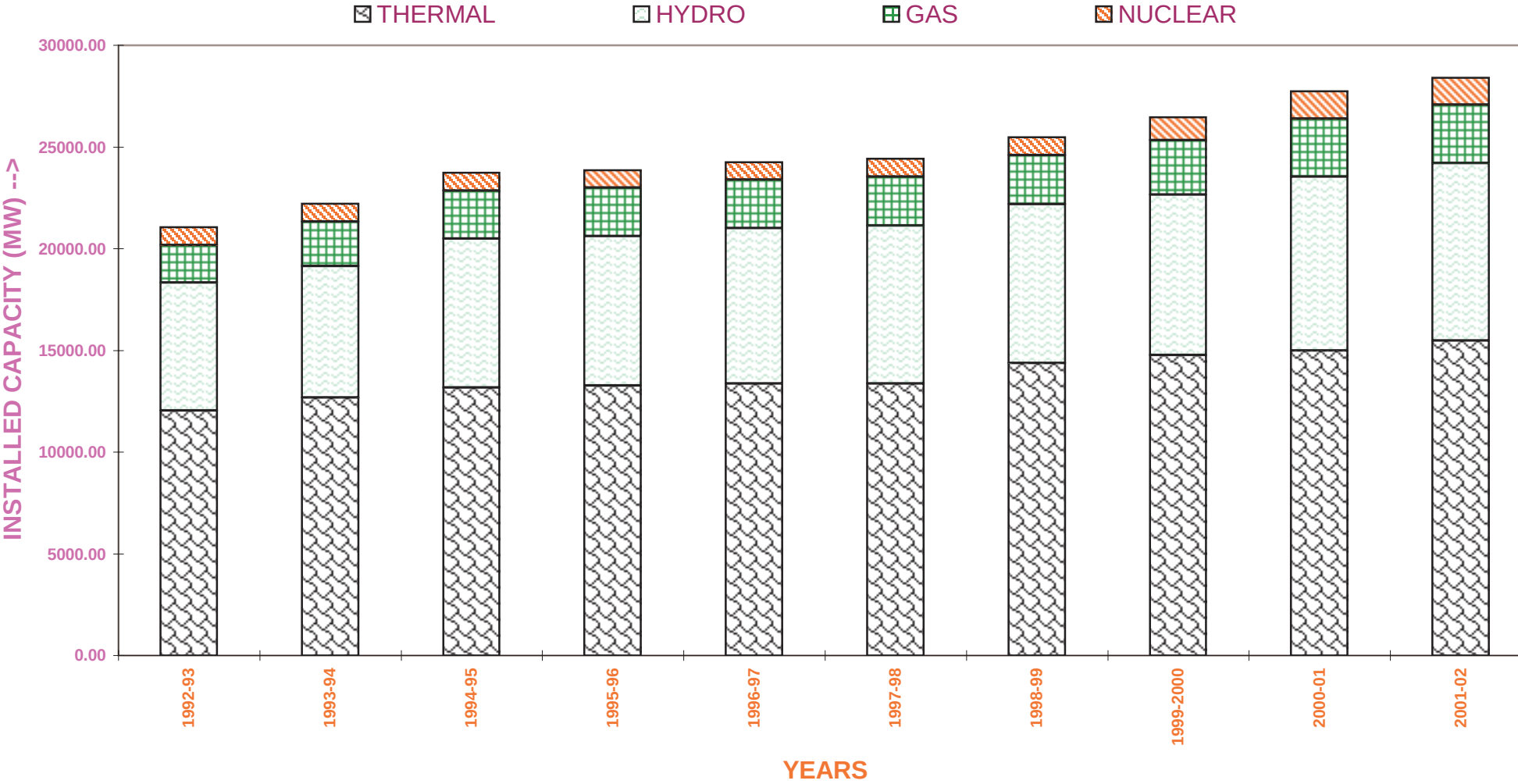
FREQUENCY SPECTRUM OF NORTHERN REGION DURING 2001-02



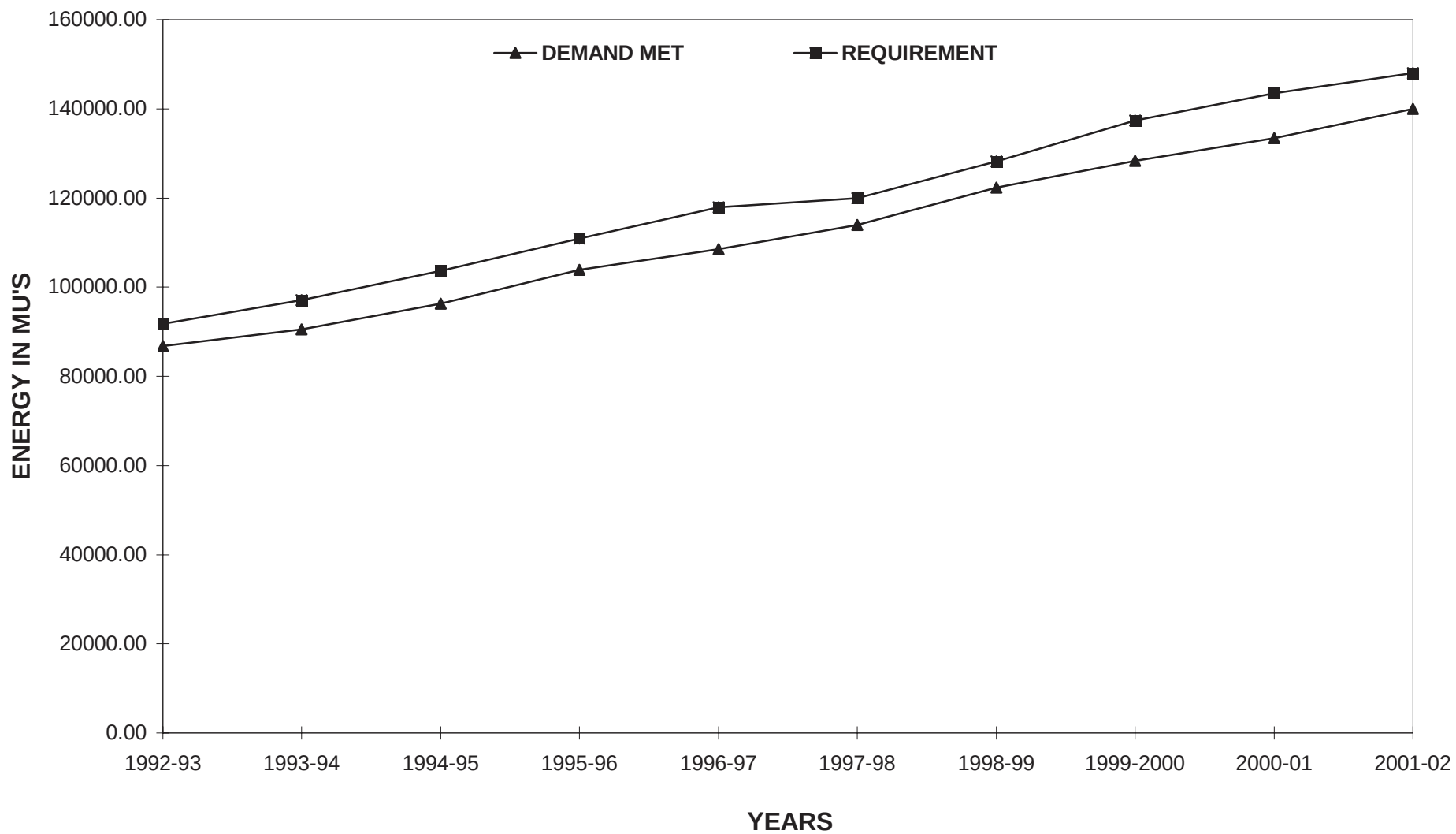
LOAD DURATION CURVE OF THE NORTHERN REGION DURING 2001-02



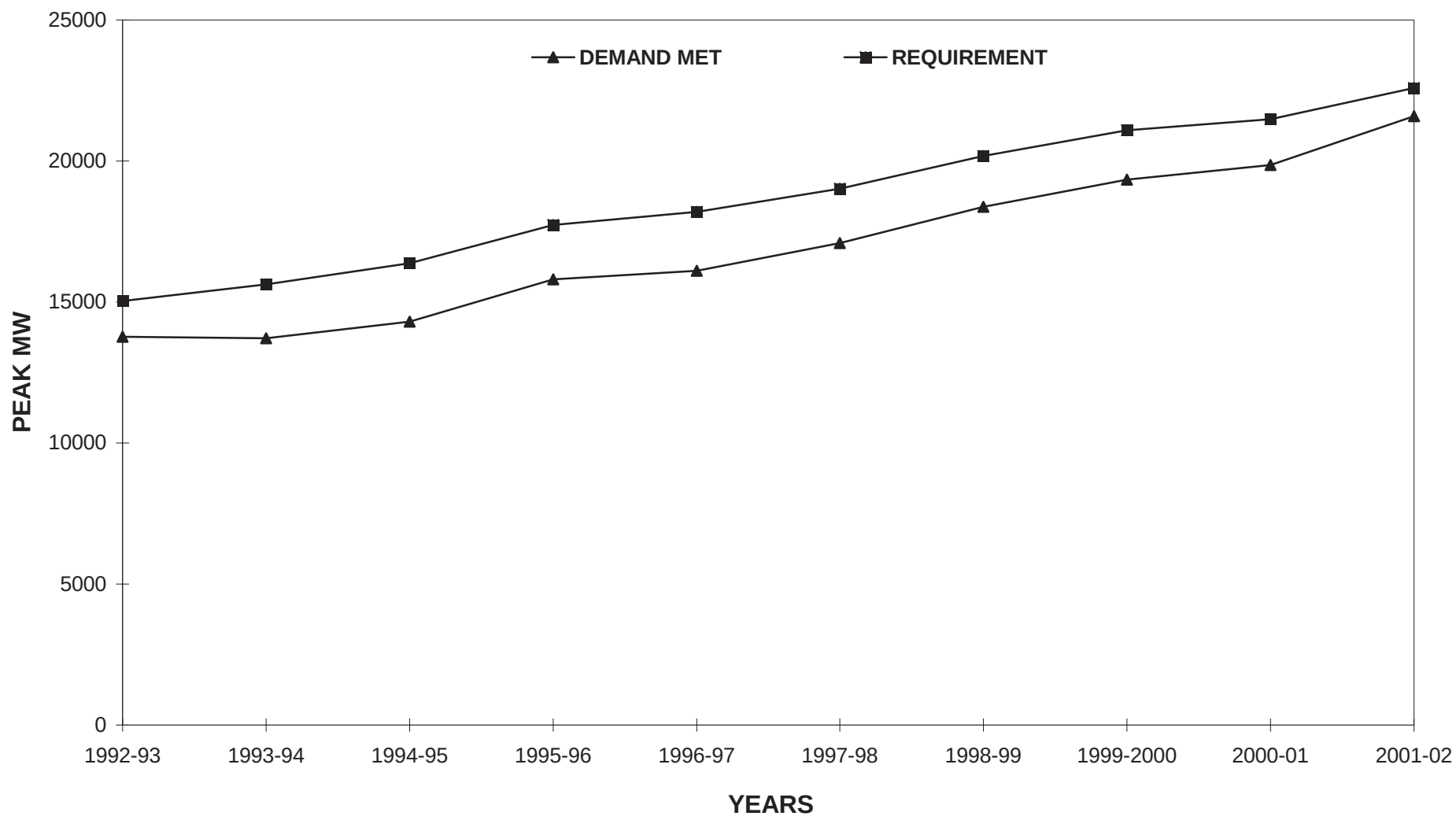
GROWTH OF INSTALLED GENERATING CAPACITY IN NORTHERN REGION



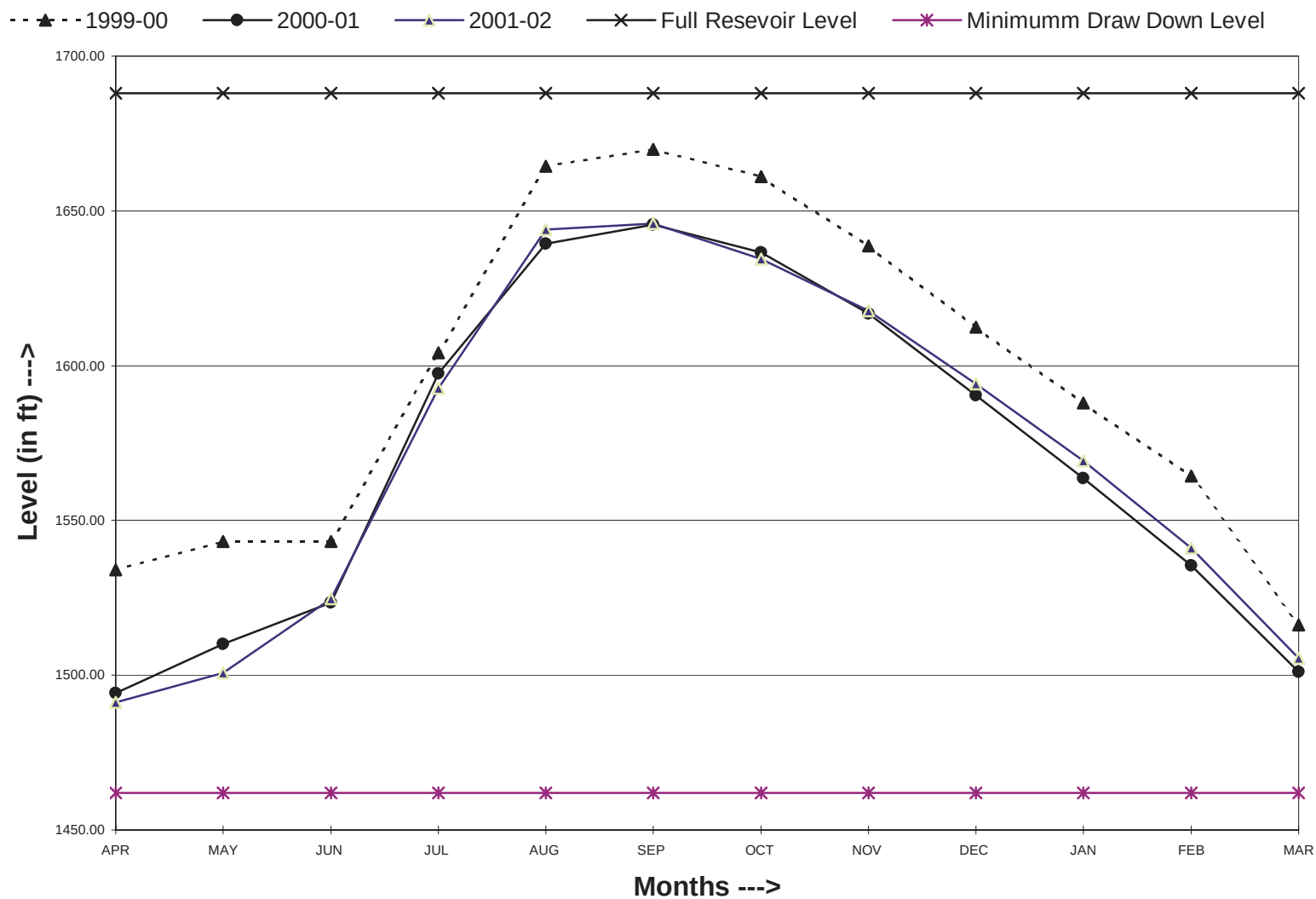
DEMAND MET VS REQUIREMENT IN ENERGY DURING PAST DECADE



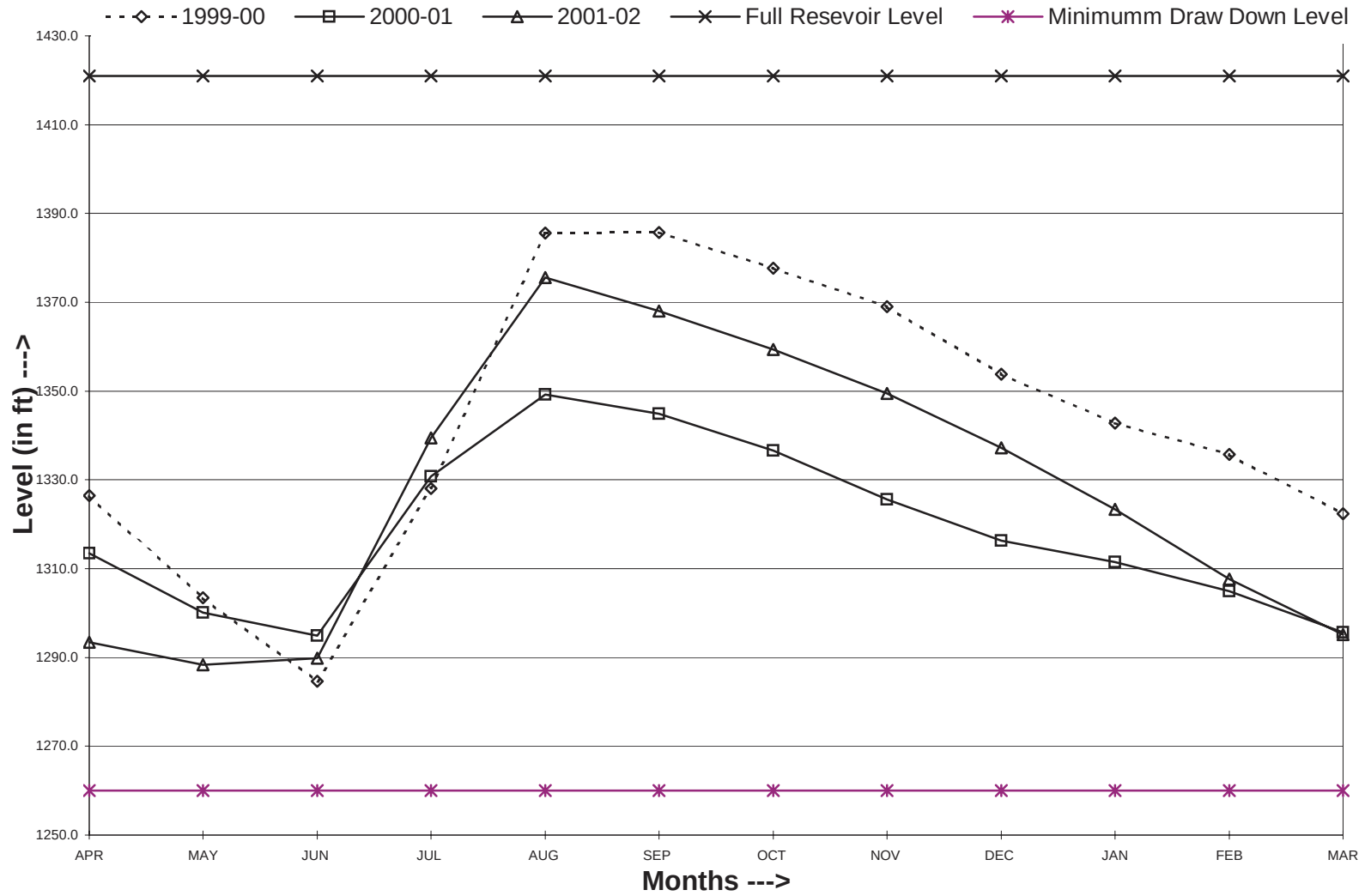
DEMAND MET VS REQUIREMENT IN PEAK MW IN NORTHERN REGION DURING PAST DECADE



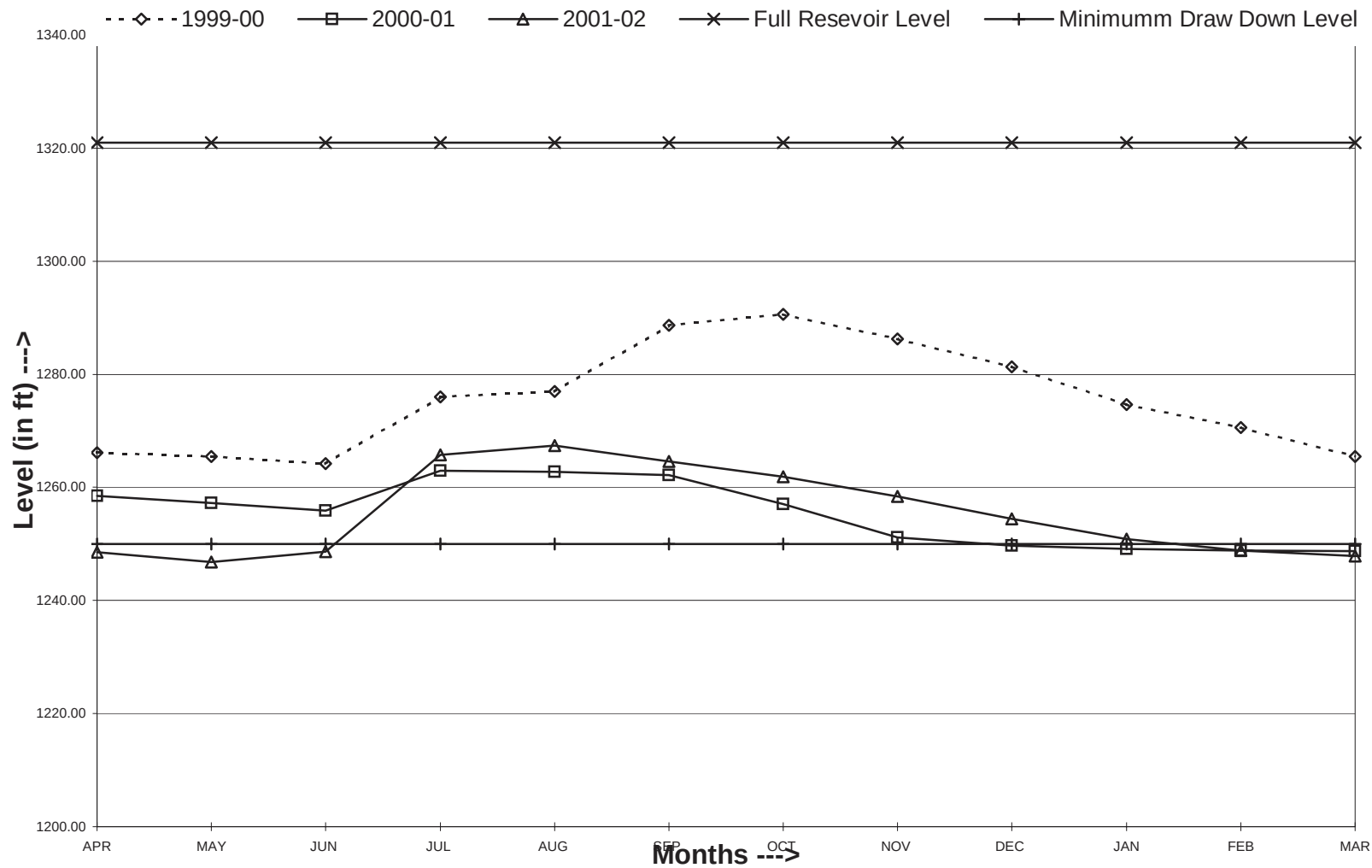
Levels recorded at Bhakra reservoir during 1999-2000,2000-01 and 2001-02



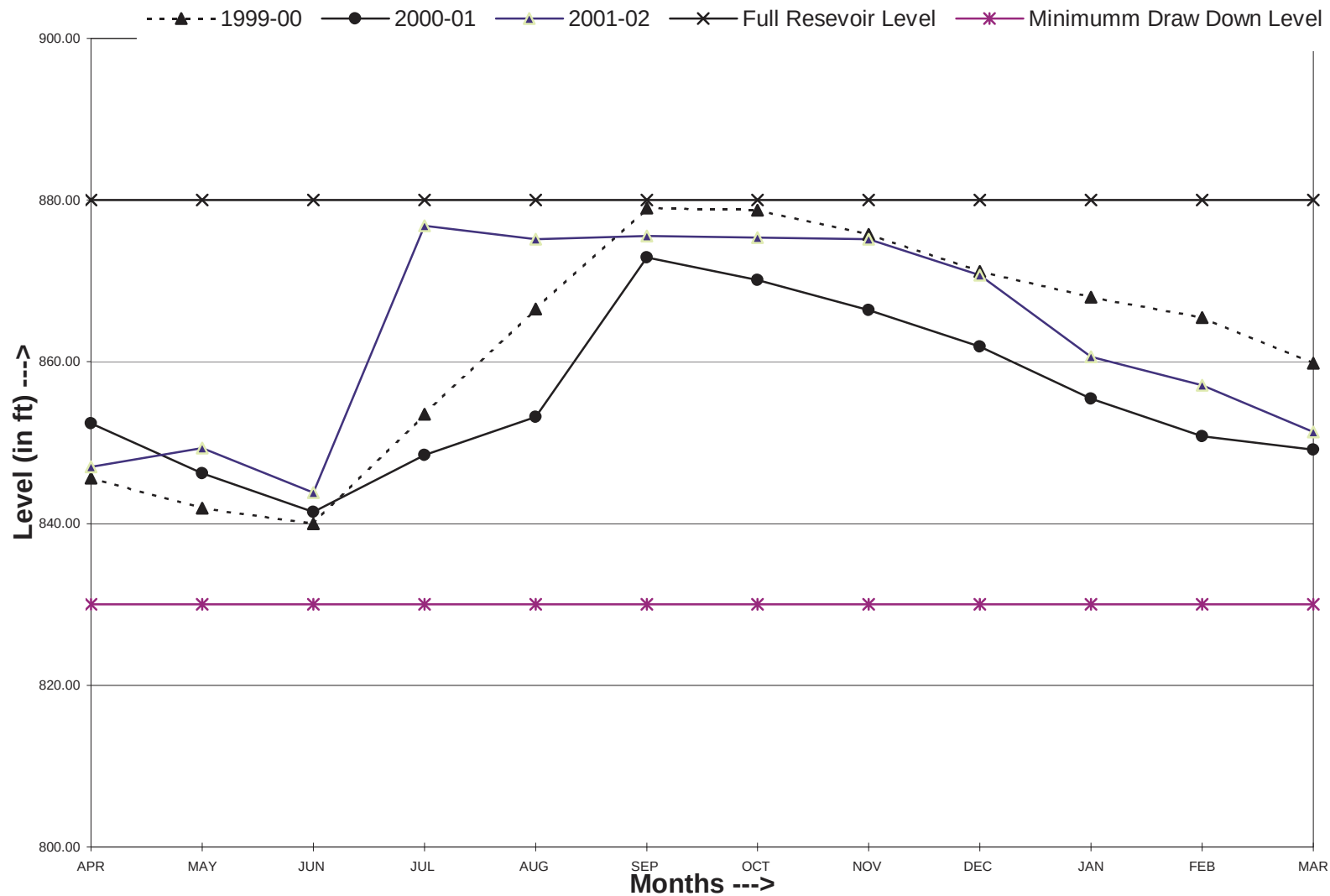
Levels recorded at Pong reservoir during 1999-2000,2000-01 and 2001-02



Levels recorded at Gandhi Sagar reservoir during 1999-2000,2000-01 and 2001-02



Levels recorded at Rihand reservoir during 1999-2000,2000-01 and 2001-02



Levels recorded at Rana Pratap Sagar reservoir during 1999-2000,2000-01 and 2001-02

