पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 31.03.2013
Date of Reporting : 01.04.2013

I. Regional Availability/Demand:

Evening Peak (19:00 Hrs) MW				Off Peak (03:00 Hrs) MW				Day Energy (Net MU)	
Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
27482	1500	28982	50.00	26002	1300	27302	50.15	675.0	31.19

* Half hourly (two 15 minutes block--one block each before and after the designated time) average frequency

II. A. State's Load Details (At States periphery) in MUs:

UI [OD:(+ve), UD: (-ve)]

State	State's Control Area Generation (Net MU)				Drawal Schedule	Actual Drawal	UI	Consumption	Shortages *
	Thermal	Hydro	Renewable/others $	Total	(Net MU)	(Net MU)	(Net MU)	(Net MU)	(MU)
Punjab	28.82	7.64		36.46	54.37	55.82	1.45	92.28	0.00
Haryana	32.20	0.63		32.83	59.11	58.74	-0.38	91.57	0.40
Rajasthan	88.33	0.41	4.46	93.20	66.37	61.79	-4.58	154.98	0.11
Delhi	22.70			22.70	34.06	33.35	-0.71	56.06	0.01
UP	85.62	6.22	19.20	111.03	82.56	83.96	1.39	194.99	28.89
Uttarakhand		11.93		11.93	14.08	15.33	1.25	27.25	0.08
HP		9.45		9.45	12.81	11.59	-1.22	21.04	0.00
J & K		11.63	0.00	11.63	22.66	22.16	-0.51	33.78	1.70
Chandigarh				0.00	3.50	3.09	-0.41	3.09	0.00
Total	**257.67**	**47.91**	**23.66**	**329.23**	**349.52**	**345.81**	**-3.71**	**675.04**	**31.19**

*** Shortage furnished by the respective constituent.$ Others include UP Co-generation and JK Diesel**

II. B. State's Demand Met in MWs:

UI/OA/PX [OD/Import: (+ve), UD/Export: (-ve)]

State	Evening Peak (19:00 Hrs) MW				Off Peak (03:00 Hrs) MW				Day Energy MU
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	STOA/PX transaction
Punjab	3613	0	-528	184	3311	0	131	249	5.83
Haryana	4227	0	-56	-198	3269	0	-117	-251	-9.19
Rajasthan	5168	0	-888	840	6562	0	65	760	19.66
Delhi	2736	0	103	-1056	1702	0	-36	-1552	-28.84
UP	7670	1400	75	-15	8064	1300	209	72	1.35
Uttarakhand	1376	0	146	223	996	0	124	142	3.98
HP	763	0	-255	-444	759	0	46	-25	-1.73
J&K	1768	100	104	-39	1245	0	-7	-39	-0.94
Chandigarh	160	0	-24	-41	94	0	-4	0	-0.18
Total	**27482**	**1500**	**-1323**	**-546**	**26002**	**1300**	**411**	**-644**	**-10.07**

* STOA figures are at sellers boundary & PX figures are at regional boundary.

III. Regional Entities :

UI [OG:(+ve), UG: (-ve)]

	Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sentout(MW)	Schedule Net MU	UI Net MU
A. NTPC	Singrauli STPS	2000	1959	2111	2104	46.24	1927	43.87	2.37
	Rihand I STPS	1000	715	608	773	16.51	688	15.78	0.73
	Rihand II STPS	1000	975	794	1039	22.24	927	21.06	1.19
	Rihand III STPS	500	485	475	518	11.47	478	11.50	-0.03
	Dadri I STPS	840	807	705	690	17.53	730	18.17	-0.65
	Dadri II STPS	980	969	382	506	11.04	460	13.37	-2.33
	Unchahar I TPS	420	408	429	438	9.70	404	8.53	1.17
	Unchahar II TPS	420	406	418	441	9.68	403	8.30	1.37
	Unchahar III TPS	210	202	219	220	4.85	202	4.19	0.65
	ISTPP (Jhajjhar)	1500	995	369	384	8.22	342	8.25	-0.03
	Dadri GPS	830	799	382	380	8.94	372	9.29	-0.35
	Anta GPS	419	402	237	216	5.75	240	5.72	0.03
	Auraiya GPS	663	640	151	156	3.55	148	3.76	-0.21
	Sub Total (A)	**10782**	**9763**	**7280**	**7865**	**175.71**	**7321**	**171.79**	**3.92**
B. NPC	NAPS	440	300	332	342	7.16	298	7.20	-0.04
	RAPS- B	440	423	463	467	10.13	422	10.15	-0.03
	RAPS- C	440	430	474	476	10.18	424	10.32	-0.14
	Sub Total (B)	**1320**	**1153**	**1269**	**1285**	**27.47**	**1144**	**27.67**	**-0.21**
C. NHPC	Chamera I HPS	540	550	540	0	3.14	131	3.10	0.04
	Chamera II HPS	300	310	300	0	2.75	115	2.65	0.10
	Chamera III HPS	231	231	237	0	1.71	71	1.69	0.02
	Bairasuil HPS	180	182	110	20	2.02	84	1.42	0.60
	Salal-HPS	690	246	447	260	7.01	292	5.76	1.25
	Tanakpur-HPS	94	28	29	26	0.68	28	0.66	0.01
	Uri-HPS	480	480	478	479	11.64	485	11.61	0.03
	Dhauliganga-HPS	280	289	272	0	1.36	57	1.32	0.04
	Dulhasti-HPS	390	387	387	0	3.50	146	3.42	0.08
	Sewa-II HPS	120	119	122	0	2.23	93	2.07	0.16
	Sub Total (C)	**3305**	**2822**	**2922**	**785**	**36.03**	**1501**	**33.70**	2.33
D.NJPC	Nathpa Jhakri	1500	1605	1285	0	8.34	348	7.91	0.44
	Sub Total (D)	1500	1605	1285	0	8.34	348	7.91	0.44
E. THDC	Tehri HPS	1000	750	753	0	13.25	552	13.00	0.25
	Koteshwar HPS	400	300	301	100	5.73	239	5.70	0.03
	Sub Total (E)	**1400**	**1050**	**1054**	**100**	**18.97**	**791**	**18.70**	0.27
F. BBMB	Bhakra HPS	1480	608	992	414	14.81	617	14.59	0.22
	Dehar HPS	990	314	660	165	7.85	327	7.53	0.32
	Pong HPS	396	36	180	0	0.88	37	5.01	-4.13
	Sub Total (F)	**2866**	**957**	**1832**	**579**	**23.54**	**981**	**27.12**	-3.58
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	39	0	0.30	13	0.26	0.05
	KWHEP HPS(IPP)	1000	0	300	0	4.06	169	3.70	0.36
	Malana Stg-II HPS	100	0	50	0	0.29	12	0.25	0.03
	Shree Cement TPS	300	0	168	231	5.63	235	5.18	0.45
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.29	-0.29
	Sub Total (G)	1662	0	557	231	10.28	428	9.68	0.60
H. Total Regional Entities (A-G)		**22836**	**17349**	**16199**	**10845**	**300.34**	**12514**	**296.57**	**3.77**

I. State Entities	Station	Effective Installed Capacity (MW)	Peak MW	Off Peak MW	Energy(MU)	Average(Sent out MW)
Punjab	Guru Gobind Singh TPS (Ropar)	1260	480	510	12.65	527
	Guru Nanak Dev TPS(Bhatinda)	440	99	95	2.14	89
	Guru Hargobind Singh TPS(L.mbt)	920	524	591	14.03	584
	Thermal (Total)	2620	1103	1196	28.82	1201
	Total Hydro	1148	148	326	7.64	319
	Total Punjab	**3768**	**1251**	**1522**	**36.46**	**1519**
Haryana	Panipat TPS	1367	428	423	10.40	433
	DCRTPP (Yamuna nagar)	600	278	281	6.66	277
	Faridabad GPS (NTPC)	432	185	151	4.52	188
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	571	406	10.63	443
	Thermal (Total)	4944	1462	1261	32.20	1342
	Total Hydro	62	24	19	0.63	26
	Total Haryana	**5006**	**1486**	**1280**	**32.83**	**1368**
Rajasthan	kota TPS	1240	1045	977	24.83	1035
	suratgarh TPS	1500	1034	1192	26.05	1085
	Chabra TPS	500	364	262	8.04	335
	Dholpur GPS	330	100	142	3.17	132
	Ramgarh GPS	111	40	71	1.68	70
	RAPS A (NPC)	300	172	172	4.80	200
	Barsingsar (NLC)	250	159	190	4.29	179
	Giral LTPS	250	54	123	2.24	93
	Rajwest LTPS (IPP)	1080	512	608	13.23	551
	VSLP LTPS (IPP)	135	0		0.00	0
	Thermal (Total)	5696	3480	3737	88.33	3680
	Total Hydro	550	0	86	0.41	17
	Wind power	2191	129	49	2.10	87
	Biomass	91	28	28	0.68	28
	Solar	201	42	0	1.68	70
	Renewable/Others (Total)	2483	157	77	4.46	186
	Total Rajasthan	**8729**	**3637**	**3900**	**93.20**	**3883**
UP	Anpara TPS	1630	1122	1119	23.70	988
	Obra TPS	1382	541	416	11.10	463
	Paricha TPS	890	829	869	18.30	763
	Panki TPS	210	0	85	0.50	21
	Harduaganj TPS	665	243	304	5.70	238
	Tanda TPS (NTPC)	440	303	302	7.39	308
	Roza TPS (IPP)	1200	428	446	11.34	473
	Anpara-C (IPP)	1200	0	0	0.00	0
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	327	252	7.59	316
	Thermal (Total)	8067	3793	3793	85.62	3567
	Vishnuparyag HPS (IPP)	400	84	83	1.97	82
	Other Hydro	527	124	244	4.25	177
	Cogeneration	981	800	800	19.20	800
	Total UP	**9975**	**4801**	**4920**	**111.03**	**4544**
Uttarakhand	Total Hydro	1303	538	430	11.93	497
	Total Uttarakhand	**1303**	**538**	**430**	**11.93**	**497**
Delhi	Rajghat TPS	135	107	105	2.78	116
	Delhi Gas Turbine	282	86	85	2.07	86
	Pragati Gas Turbine	330	262	263	6.69	279
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	0	0	0.00	0
	Badarpur TPS (NTPC)	705	500	505	11.16	465
	Thermal (Total)	2237	955	958	22.70	946
	Total Delhi	**2237**	**955**	**958**	**22.70**	**946**
HP	Baspa HPS (IPP)	330	29	38	1.08	45
	Malana HPS (IPP)	86	46	0	0.26	11
	Other Hydro	589	305	340	8.11	338
	Total HP	**1005**	**380**	**378**	**9.45**	**394**
J & K	Baglihar HPS (IPP)	450	296	292	7.08	295
	Other Hydro	323	95	130	4.55	189
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	**956**	**391**	**422**	**11.63**	484
Total State Control Area Generation		**32979**	**13439**	**13810**	**329.23**	**13636**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**1874**	**3270**	**75.26**	**3136**
Total Regional Availability(Gross)		**55815**	**31512**	**27925**	**704.82**	**29286**

IV. Total Hydro Generation:

Regional Entities Hydro	**10364**	**7482**	**1464**	**91.53**	**3814**
State Control Area Hydro	**5368**	**1605**	**1905**	**47.91**	**1914**
Total Regional Hydro	**15731**	**9087**	**3369**	**139.44**	**5728**

V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(19:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy
	MW	MW	Import	Export	Import	Export	MU
Vindhychal B/B	100	-150	150	100	0.23	2.46	-2.23
Gwalior-Agra (D/C)	304	746	1358	0	19.06	0.00	19.06
Zerda-Kankroli	-141	-67	26	191	0.00	1.79	-1.79
Zerda-Bhinmal	-194	-122	0	223	0.00	3.28	-3.28
Malanpur-Auraiya	-117	-53	0	117	0.00	1.18	-1.18
Badod-Kota/Morak	-89	-51	0	100	0.00	1.31	-1.31
Mundra-Mohindergarh(HVDC)	1264	1264	1269	0	30.30	0.00	30.30
Sub Total WR	**1127**	**1567**			**49.59**	**10.02**	**39.58**
Pusauli Bypass	350	200	350	0	6.31	0.00	6.31
MZP- GKP (D/C)	56	440	580	0	7.50	0.00	7.50
Patna-Balia(D/C)	312	547	634	0	12.04	0.00	12.04
B'Sharif-Balia (D/C)	63	346	427	0	6.64	0.00	6.64
Pusauli-Balia	-145	-11	74	145	0.00	0.98	-0.98
Gaya-Fatehpur (765 Kv)	11	112	229	0	2.15	0.00	2.15
Pusauli-Sahupuri	136	109	141	0	2.85	0.00	2.85
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-40	0	44	0.00	0.83	-0.83
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	**747**	**1703**			**37.49**	**1.81**	**35.68**
Total IR Exch	**1874**	**3270**			**87.08**	**11.83**	**75.26**

V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ISGS/LT Schedule (MU)			Bilateral Schedule (MU)		Power Exchange Shdl (MU)		Wheeling (MU)	
ER	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
43.09	0.21	43.29	-10.05	-1.85	2.50	-9.94	-2.26	2.26

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Inclds Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
33.48	42.85	76.34	35.68	39.58	75.26	2.20	-3.28	-1.08

VI. Frequency Profile <---------- % of Time Frequency ---------->

<48.80	<49.0	<49.20	<49.50	<49.7	49.5 - 50.2	49.7 - 50.2	> 50.00	> 50.2
0.00	0.00	0.00	0.00	0.80	94.70	93.90	43.00	5.30

<---------- Frequency (Hz) ---------->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz			(Hz)	(Hz)
50.45	18.47	49.60	22.33	49.99	0.16	0.13	50.30	49.86

VII. Voltage profile 400 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)			
		Voltage(KV)	Time	Voltage (KV)	Time	<380 kV	<390 kV	>420 kV	>430 kV
Rihand	400	414	18:31	404	11:12	0.0	0.0	0.0	0.0
Gorakhpur	400	429	4:32	416	10:53	0.0	0.0	62.1	0.0
Bareilly	400	429	18:32	412	10:53	0.0	0.0	41.7	0.0
Kanpur	400	425	18:16	410	10:59	0.0	0.0	9.0	0.0
Dadri	400	425	4:02	411	10:59	0.0	0.0	22.5	0.0
Ballabhgarh	400	434	18:31	418	11:07	0.0	0.0	91.3	3.1
Bawana	400	430	3:35	413	11:08	0.0	0.0	56.8	0.0
Bassi	400	433	18:01	410	22:34	0.0	0.0	53.1	2.7
Hissar	400	420	3:10	402	19:25	0.0	0.0	0.0	0.0
Moga	400	428	4:02	407	10:36	0.0	0.0	27.7	0.0
Abdullapur	400	429	3:06	298	7:57	0.1	0.1	43.9	0.0
Nalagarh	400	428	17:07	409	6:37	0.0	0.0	50.4	0.0
Kishenpur	400	425	4:11	401	19:12	0.0	0.0	15.1	0.0
Wagoora	400	414	4:14	389	7:19	0.0	3.9	0.0	0.0

VIII. Voltage profile 765 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)			
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV
Fatehpur	765	787	18:17	757	5:51	0.0	0.0	0.0	0.0
Balia	765	767	5:01	743	11:34	0.0	0.0	0.0	0.0
Moga	765	800	4:02	762	19:25	0.0	0.0	0.0	0.0
Lucknow	765	0	0:00	9999	0:00	0.0	0.0	0.0	0.0

IX. Reservior Parameters:

Name of Reservior	Parameters		Present Parameters		Last Year		Last day	
	FRL (m)	MDDL (m)	Level (m)	Energy (MU)	Level (m)	Energy (MU)	Inflow (m^3/s)	Usage (m^3/s)
Bhakra	513.59	445.62	479.53	447.73	476.89	394.40	290.64	461.08
Pong	426.72	384.05	399.83	216.87	403.32	296.70	91.01	61.62
Tehri	829.79	740.04	773.80	251.76	818.65	982.26	63.28	376.00
Koteshwar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	NA	NA
Rihand	268.22	252.98	258.07	NA	260.18	NA	NA	NA
RPS	352.80	343.81	345.61	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	NA	NA	NA	NA	NA	NA
RSD	527.91	487.91	507.39	NA	405.50	NA	104.40	137.31

*** NA: Not Available**

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 31.03.2013 :

1.Normal weather.

XIII. Synchronisation of new generating units :

XIV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :

1. 400/220kv ICT-I & II successfully charged at 22.35 hrs and 22.47 hrs respectively at Jind.
2. 400kv Bhiwani(PG)-Jind ckt -I successfully charged at 22.23 hrs.
3. 400kv Kishenpur-Samba-I&II successfully charged at 20.01 and 20.20 hrs respectively.
1. 400/220kv ICT-I & II successfully charged at 20.35 hrs and 20.50 hrs respectively at Samba.

XV. Tripping of lines in pooling stations :

XVI. Complete generation loss in a generating station :

Report for : 31.03.2013 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**