पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 14.04.2013
Date of Reporting : 15.04.2013

I. Regional Availability/Demand:

Evening Peak (20:00 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
31555	1740	33295	50.25	28197	2670	30867	50.12	683.8	49.70

* 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	47.74	6.33		54.07	43.11	44.47	1.36	98.54	1.89
Haryana	45.92	0.60		46.52	45.62	41.66	-3.97	88.18	0.28
Rajasthan	83.44	0.09	5.06	88.58	50.46	46.49	-3.97	135.07	0.43
Delhi	24.83			24.83	49.44	43.72	-5.72	68.55	0.02
UP	108.28	4.93	19.20	132.40	81.15	77.64	-3.51	210.04	44.78
Uttarakhand		10.57		10.57	18.85	17.87	-0.98	28.44	0.37
HP		10.73		10.73	12.80	11.30	-1.49	22.03	0.24
J & K		8.57	0.00	8.57	22.26	20.79	-1.47	29.35	1.70
Chandigarh				0.00	3.84	3.60	-0.25	3.60	0.00
Total	**310.21**	**41.81**	**24.26**	**376.27**	**327.52**	**307.54**	**-19.98**	**683.81**	**49.70**

*** 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 (20:00 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	4788	0	107	-92	4151	360	-31	-27	-0.33
Haryana	4693	0	-32	-21	3519	0	-21	-412	-7.07
Rajasthan	6074	0	-409	499	5534	0	-6	220	8.01
Delhi	3180	0	-331	-298	2504	0	-209	-802	-14.27
UP	8672	1640	-278	-49	9273	2190	371	556	2.29
Uttarakhand	1396	0	-54	483	1145	120	-5	472	10.90
HP	991	0	-148	-359	801	0	-36	0	-2.29
J&K	1577	100	-39	50	1140	0	50	33	0.90
Chandigarh	184	0	-29	-20	130	0	13	0	0.16
Total	**31555**	**1740**	**-1213**	**192**	**28197**	**2670**	**126**	**41**	**-1.70**

* 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	1245	1353	1365	29.95	1248	29.60	0.35
	Rihand I STPS	1000	874	982	1000	20.48	853	20.82	-0.33
	Rihand II STPS	1000	879	925	916	20.43	851	20.94	-0.51
	Rihand III STPS	500	368	5	503	8.58	358	8.81	-0.23
	Dadri I STPS	840	807	620	639	14.74	614	17.48	-2.74
	Dadri II STPS	980	969	805	905	19.77	824	21.87	-2.10
	Unchahar I TPS	420	405	419	442	9.67	403	9.69	-0.02
	Unchahar II TPS	420	400	424	442	9.52	397	9.55	-0.04
	Unchahar III TPS	210	0	0	0	0.00	0	0.00	0.00
	ISTPP (Jhajjhar)	1500	995	338	342	7.31	305	7.90	-0.59
	Dadri GPS	830	794	398	399	9.18	382	9.60	-0.42
	Anta GPS	419	389	240	243	5.74	239	5.95	-0.21
	Auraiya GPS	663	624	316	317	7.33	305	7.22	0.11
	Sub Total (A)	**10782**	**8748**	**6825**	**7513**	**162.70**	**6779**	**169.43**	**-6.73**
B. NPC	NAPS	440	0	141	0 0	0.00	0	0.00	0.00
	RAPS- B	440	419	461	462	10.03	418	10.06	-0.02
	RAPS- C	440	430	472	478	10.15	423	10.32	-0.17
	Sub Total (B)	**1320**	**849**	**1074**	**940**	**20.18**	**841**	**20.38**	**-0.20**
C. NHPC	Chamera I HPS	540	550	540	0	5.24	218	5.35	-0.11
	Chamera II HPS	300	310	300	0	3.40	142	4.05	-0.65
	Chamera III HPS	231	0	0	0	0.00	0	0.00	0.00
	Bairasuil HPS	180	182	150	40	2.42	101	2.96	-0.54
	Salal-HPS	690	350	443	351	7.30	304	8.54	-1.24
	Tanakpur-HPS	94	32	31	25	0.67	28	0.74	-0.07
	Uri-HPS	480	475	480	480	11.57	482	11.63	-0.07
	Dhauliganga-HPS	280	280	242	0	1.16	48	1.28	-0.12
	Dulhasti-HPS	390	387	403	0	3.42	142	4.03	-0.61
	Sewa-II HPS	120	119	108	19	2.14	89	2.83	-0.69
	Sub Total (C)	**3305**	**2684**	**2697**	**915**	**37.32**	**1555**	**41.41**	-4.09
D.NJPC	Nathpa Jhakri	1500	1605	1375	0	11.42	476	11.36	0.06
	Sub Total (D)	1500	1605	1375	0	11.42	476	11.36	0.06
E. THDC	Tehri HPS	1000	540	545	0	5.93	247	6.00	-0.07
	Koteshwar HPS	400	300	299	0	3.02	126	3.00	0.02
	Sub Total (E)	**1400**	**840**	**844**	**0**	**8.96**	**373**	**9.00**	-0.05
F. BBMB	Bhakra HPS	1480	319	463	316	8.08	337	7.66	0.42
	Dehar HPS	990	396	825	300	9.33	389	9.50	-0.17
	Pong HPS	396	10	120	0	0.31	13	0.25	0.06
	Sub Total (F)	**2866**	**726**	**1408**	**616**	**17.72**	**738**	**17.41**	0.31
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	63	0	0.57	24	0.55	0.02
	KWHEP HPS(IPP)	1000	0	450	0	5.96	248	5.03	0.92
	Malana Stg-II HPS	100	0	0	0	0.47	20	0.43	0.05
	Shree Cement TPS	300	0	224	248	5.62	234	5.73	-0.11
	Budhil HPS(IPP)	70	0	25	10	0.41	17	0.42	0.00
	Sub Total (G)	1662	0	762	258	13.03	543	12.15	0.88
H. Total Regional Entities (A-G)		**22836**	**15452**	**14985**	**10242**	**271.33**	**11305**	**281.15**	**-9.82**

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	1050	1055	22.51	938
	Guru Nanak Dev TPS(Bhatinda)	440	323	205	5.55	231
	Guru Hargobind Singh TPS(L.mbt)	920	931	924	19.69	820
	Thermal (Total)	2620	2304	2184	47.74	1989
	Total Hydro	1148	252	342	6.33	264
	Total Punjab	**3768**	**2556**	**2526**	**54.07**	**2253**
Haryana	Panipat TPS	1367	928	745	20.56	857
	DCRTPP (Yamuna nagar)	600	556	509	12.49	521
	Faridabad GPS (NTPC)	432	179	152	3.99	166
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	371	371	8.88	370
	Thermal (Total)	4944	2034	1777	45.92	1913
	Total Hydro	62	23	23	0.60	25
	Total Haryana	**5006**	**2057**	**1800**	**46.52**	**1938**
Rajasthan	kota TPS	1240	1057	1160	26.39	1100
	suratgarh TPS	1500	919	864	21.73	905
	Chabra TPS	500	388	440	9.81	409
	Dholpur GPS	330	145	137	3.32	138
	Ramgarh GPS	111	64	70	1.72	71
	RAPS A (NPC)	300	205	190	4.73	197
	Barsingsar (NLC)	250	0	0	0.00	0
	Giral LTPS	250	102	113	2.54	106
	Rajwest LTPS (IPP)	1080	462	630	13.22	551
	VSLP LTPS (IPP)	135	0		0.00	0
	Thermal (Total)	5696	3342	3604	83.44	3477
	Total Hydro	550	0	0	0.09	4
	Wind power	2191	385	35	2.92	122
	Biomass	91	23	23	0.54	23
	Solar	201	0	0	1.60	67
	Renewable/Others (Total)	2483	408	58	5.06	211
	Total Rajasthan	**8729**	**3750**	**3662**	**88.58**	**3691**
UP	Anpara TPS	1630	1402	1389	29.70	1238
	Obra TPS	1382	465	511	11.00	458
	Paricha TPS	890	768	771	15.70	654
	Panki TPS	210	70	75	1.60	67
	Harduaganj TPS	665	253	286	5.70	238
	Tanda TPS (NTPC)	440	401	404	9.80	409
	Roza TPS (IPP)	1200	396	532	12.53	522
	Anpara-C (IPP)	1200	524	527	13.24	552
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	252	405	9.00	375
	Thermal (Total)	8067	4531	4900	108.28	4512
	Vishnuparyag HPS (IPP)	400	89	99	2.26	94
	Other Hydro	527	62	138	2.67	111
	Cogeneration	981	800	800	19.20	800
	Total UP	**9975**	**5482**	**5937**	**132.40**	**5423**
Uttarakhand	Total Hydro	1303	471	412	10.57	441
	Total Uttarakhand	**1303**	**471**	**412**	**10.57**	**441**
Delhi	Rajghat TPS	135	101	103	1.73	72
	Delhi Gas Turbine	282	224	223	5.49	229
	Pragati Gas Turbine	330	263	261	6.43	268
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	0	0	0.00	0
	Badarpur TPS (NTPC)	705	500	490	11.17	466
	Thermal (Total)	2237	1088	1077	24.83	1035
	Total Delhi	**2237**	**1088**	**1077**	**24.83**	**1035**
HP	Baspa HPS (IPP)	330	61	31	1.40	58
	Malana HPS (IPP)	86	15	9	0.48	20
	Other Hydro	589	319	399	8.86	369
	Total HP	**1005**	**395**	**439**	**10.73**	**447**
J & K	Baglihar HPS (IPP)	450	294	294	7.16	298
	Other Hydro	323	46	93	1.40	58
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	**956**	**340**	**387**	**8.57**	357
Total State Control Area Generation		**32979**	**16139**	**16240**	**376.27**	**15584**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**1608**	**2667**	**34.95**	**1456**
Total Regional Availability(Gross)		**55815**	**32732**	**29149**	**682.54**	**28345**

IV. Total Hydro Generation:

Regional Entities Hydro	**10364**	**6837**	**1531**	**82.41**	**3434**
State Control Area Hydro	**5368**	**1543**	**1741**	**41.81**	**1648**
Total Regional Hydro	**15731**	**8380**	**3272**	**124.22**	**5082**

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

Element	Peak(20:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy
	MW	MW	Import	Export	Import	Export	MU
Vindhychal B/B	-150	250	250	150	2.37	1.98	0.39
Gwalior-Agra (D/C)	679	877	1210	0	14.06	0.00	14.06
Zerda-Kankroli	-154	-200	0	332	0.00	5.21	-5.21
Zerda-Bhinmal	-113	-123	0	270	0.00	3.77	-3.77
Malanpur-Auraiya	-128	-75	0	147	0.00	2.14	-2.14
Badod-Kota/Morak	-28	-87	0	192	0.00	2.95	-2.95
Mundra-Mohindergarh(HVDC)	952	953	954	0	23.20	0.00	23.20
Sub Total WR	**1058**	**1595**			**39.62**	**16.04**	**23.59**
Pusauli Bypass	150	150	150	0	3.59	0.00	3.59
MZP- GKP (D/C)	66	220	290	0	1.44	0.00	1.44
Patna-Balia(D/C)	245	408	408	0	6.14	0.00	6.14
B'Sharif-Balia (D/C)	116	237	237	0	1.48	0.00	1.48
Pusauli-Balia	-107	-146	0	189	0.00	3.26	-3.26
Gaya-Fatehpur (765 Kv)	33	107	173	171	0.06	0.00	0.06
Pusauli-Sahupuri	83	136	153	0	2.88	0.00	2.88
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-40	0	44	0.00	0.97	-0.97
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	**550**	**1072**			**15.59**	**4.23**	**11.36**
Total IR Exch	**1608**	**2667**			**55.21**	**20.27**	**34.95**

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
26.28	0.56	26.84	-2.66	-9.51	1.66	-2.99	0.55	-0.55

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
26.40	20.11	46.51	11.36	23.59	34.95	-15.03	3.47	-11.56

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	0.28	94.79	94.51	82.97	5.21

<---------- 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)
50.48	18.04	49.79	19.20	50.11	0.24	0.09	50.36	49.73

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	416	17:06	406	19:23	0.0	0.0	0.0	0.0
Gorakhpur	400	430	21:18	406	19:24	0.0	0.0	75.1	0.0
Bareilly	400	425	18:00	410	10:00	0.0	0.0	0.0	0.0
Kanpur	400	425	16:26	407	19:21	0.0	0.0	18.9	0.0
Dadri	400	423	15:05	407	19:21	0.0	0.0	15.7	0.0
Ballabhgarh	400	431	16:26	412	19:15	0.0	0.0	71.1	0.1
Bawana	400	424	15:09	406	19:21	0.0	0.0	23.5	0.0
Bassi	400	431	17:33	408	5:41	0.0	0.0	47.6	0.1
Hissar	400	417	15:05	397	19:17	0.0	0.0	0.0	0.0
Moga	400	422	16:39	404	19:16	0.0	0.0	4.9	0.0
Abdullapur	400	427	15:08	404	19:16	0.0	0.0	24.2	0.0
Nalagarh	400	424	2:16	405	19:18	0.0	0.0	31.1	0.0
Kishenpur	400	424	3:07	400	19:34	0.0	0.0	17.8	0.0
Wagoora	400	413	17:31	385	20:00	0.0	5.0	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	783	16:26	743	19:22	0.0	0.0	0.0	0.0
Balia	765	773	21:20	727	19:21	0.0	6.4	0.0	0.0
Moga	765	789	15:05	752	19:18	0.0	0.0	0.0	0.0
Agra	765	805	15:07	768	5:42	0.0	0.0	6.0	0.0
Bhiwani	765	796	15:09	761	19:18	0.0	0.0	0.0	0.0
Unnao	765	781	16:03	737	19:21	0.0	0.9	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	478.42	427.60	474.72	345.61	323.38	235.23
Pong	426.72	384.05	400.18	223.85	403.01	288.96	55.95	21.66
Tehri	829.79	740.04	767.00	180.91	818.65	982.26	67.75	176.00
Koteshwar	612.50	598.50	610.20	4.44	609.90	4.44	223.00	223.00
Chamera-I	760.00	748.75	756.79	NA	NA	NA	155.15	141.95
Rihand	268.22	252.98	257.40	175.00	259.11	257.10	NA	NA
RPS	352.80	343.81	NA	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.94	NA	NA	NA	NA	NA
RSD	527.91	487.91	506.81	NA	496.38	NA	96.08	142.52

*** NA: Not Available**

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 14.04.2013 :
1.Normal weather.

XIII. Synchronisation of new generating units :

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

XV. Tripping of lines in pooling stations :

XVI. Complete generation loss in a generating station :

Report for : 14.04.2013 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**