पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 20.05.2013
Date of Reporting : 21.05.2013

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
36740	1466	38206	50.01	35966	500	36466	50.11	891.0	39.60

* 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	42.02	8.62		50.64	98.46	99.20	0.74	149.84	0.00
Haryana	60.74	0.64		61.38	75.94	73.13	-2.81	134.51	0.00
Rajasthan	83.49	0.85	22.20	106.54	60.23	59.97	-0.26	166.51	0.81
Delhi	28.81			28.81	74.73	70.76	-3.97	99.57	0.45
UP	116.29	13.59	8.40	138.27	108.47	107.50	-0.97	245.78	36.41
Uttarakhand		17.09		17.09	19.59	18.69	-0.89	35.78	0.23
HP		21.36		21.36	5.93	3.18	-2.75	24.54	0.00
J & K		13.41	0.00	13.41	20.51	15.36	-5.16	28.77	1.70
Chandigarh				0.00	5.33	5.68	0.34	5.68	0.00
Total	**331.35**	**75.56**	**30.60**	**437.51**	**469.18**	**453.46**	**-15.73**	**890.97**	**39.60**

*** 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	6289	0	-19	947	5783	0	50	1108	31.74
Haryana	5821	0	-259	290	5259	0	-241	225	5.31
Rajasthan	6471	0	-935	346	6748	0	-331	161	5.43
Delhi	4167	6	-188	-24	3964	110	-102	-98	2.11
UP	9670	1360	-256	107	10975	390	16	1521	12.76
Uttarakhand	1668	0	-13	418	1373	0	-92	396	7.77
HP	991	0	-196	-892	826	0	-112	-898	-19.40
J&K	1415	100	-75	-140	832	0	-418	-295	-5.23
Chandigarh	248	0	-8	0	207	0	29	0	0.37
Total	**36740**	**1466**	**-1949**	**1052**	**35966**	**500**	**-1201**	**2120**	**40.88**

* 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	1733	1873	1882	41.71	1738	41.26	0.45
	Rihand I STPS	1000	915	975	957	20.87	870	20.50	0.37
	Rihand II STPS	1000	965	922	1033	22.15	923	21.69	0.46
	Rihand III STPS	500	172	500	0	4.15	173	3.78	0.37
	Dadri I STPS	840	807	709	642	15.91	663	15.89	0.02
	Dadri II STPS	980	969	909	740	19.75	823	20.00	-0.24
	Unchahar I TPS	420	398	426	367	8.74	364	8.82	-0.08
	Unchahar II TPS	420	401	439	324	8.35	348	8.19	0.16
	Unchahar III TPS	210	199	210	159	4.16	174	4.10	0.06
	ISTPP (Jhajjhar)	1500	470	331	318	7.21	300	9.26	-2.05
	Dadri GPS	830	797	305	301	7.89	329	8.05	-0.16
	Anta GPS	419	390	208	260	5.67	236	5.71	-0.04
	Auraiya GPS	663	619	147	153	3.44	143	3.74	-0.29
	Sub Total (A)	**10782**	**8834**	**7954**	**7136**	**170.01**	**7084**	**170.99**	**-0.98**
B. NPC	NAPS	440	303	325	332	6.99	291	7.27	-0.28
	RAPS- B	440	398	437	446	9.57	399	9.55	0.02
	RAPS- C	440	430	460	467	9.95	415	10.32	-0.37
	Sub Total (B)	**1320**	**1131**	**1222**	**1245**	**26.51**	**1105**	**27.14**	**-0.64**
C. NHPC	Chamera I HPS	540	540	540	0	9.67	403	9.61	0.07
	Chamera II HPS	300	303	305	303	7.19	299	7.02	0.16
	Chamera III HPS	231	231	241	232	5.52	230	5.10	0.42
	Bairasuil HPS	180	182	180	120	2.95	123	2.72	0.23
	Salal-HPS	690	676	672	675	16.11	671	16.23	-0.12
	Tanakpur-HPS	94	41	32	51	0.97	40	0.98	-0.02
	Uri-HPS	480	480	480	476	11.45	477	11.59	-0.14
	Dhauliganga-HPS	280	280	278	137	4.86	203	4.80	0.06
	Dulhasti-HPS	390	387	407	403	9.48	395	9.37	0.11
	Sewa-II HPS	120	119	125	59	2.63	109	2.58	0.05
	Sub Total (C)	**3305**	**3239**	**3260**	**2456**	**70.82**	**2951**	**69.99**	0.83
D.NJPC	Nathpa Jhakri	1500	1605	1625	1620	38.69	1612	38.52	0.17
	Sub Total (D)	1500	1605	1625	1620	38.69	1612	38.52	0.17
E. THDC	Tehri HPS	1000	480	479	165	9.98	416	10.00	-0.02
	Koteshwar HPS	400	266	270	82	4.31	180	4.30	0.01
	Sub Total (E)	**1400**	**746**	**749**	**247**	**14.28**	**595**	**14.30**	-0.02
F. BBMB	Bhakra HPS	1480	713	1201	514	17.67	736	17.12	0.55
	Dehar HPS	990	589	825	600	14.91	621	14.14	0.77
	Pong HPS	396	144	296	180	3.77	157	0.25	3.52
	Sub Total (F)	**2866**	**1446**	**2322**	**1294**	**36.35**	**1515**	**31.51**	4.84
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	206	2.70	113	3.17	-0.47
	KWHEP HPS(IPP)	1000	0	1196	1148	28.49	1187	28.80	-0.31
	Malana Stg-II HPS	100	0	0	0	0.14	6	0.34	-0.20
	Shree Cement TPS	300	0	254	263	5.85	244	5.93	-0.09
	Budhil HPS(IPP)	70	0	36	69	1.43	59	1.12	0.30
	Sub Total (G)	1662	0	1486	1686	38.61	1609	39.37	-0.76
H. Total Regional Entities (A-G)		**22836**	**17001**	**18618**	**15684**	**395.28**	**16470**	**391.82**	**3.46**

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	1157	890	23.73	989
	Guru Nanak Dev TPS(Bhatinda)	440	225	200	4.45	186
	Guru Hargobind Singh TPS(L.mbt)	920	673	541	13.83	576
	Thermal (Total)	2620	2055	1631	42.02	1751
	Total Hydro	1148	236	370	8.62	359
	Total Punjab	**3768**	**2291**	**2001**	**50.64**	**2110**
Haryana	Panipat TPS	1367	636	620	15.30	638
	DCRTPP (Yamuna nagar)	600	275	261	6.45	269
	Faridabad GPS (NTPC)	432	177	181	4.20	175
	RGTPP (khedar) (IPP)	1200	1092	945	25.78	1074
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	381	377	9.01	375
	Thermal (Total)	4944	2561	2384	60.74	2531
	Total Hydro	62	25	25	0.64	27
	Total Haryana	**5006**	**2586**	**2409**	**61.38**	**2557**
Rajasthan	kota TPS	1240	1146	1073	26.89	1121
	suratgarh TPS	1500	1109	953	25.39	1058
	Chabra TPS	500	198	205	5.17	215
	Dholpur GPS	330	77	0	1.15	48
	Ramgarh GPS	111	140	78	2.81	117
	RAPS A (NPC)	300	180	180	4.30	179
	Barsingsar (NLC)	250	183	167	4.36	182
	Giral LTPS	250	125	114	1.96	82
	Rajwest LTPS (IPP)	1080	504	765	11.47	478
	VSLP LTPS (IPP)	135	0		0.00	0
	Thermal (Total)	5696	3662	3535	83.49	3479
	Total Hydro	550	0	0	0.85	36
	Wind power	2191	686	1394	20.10	837
	Biomass	91	25	25	0.60	25
	Solar	201	0	0	1.50	63
	Renewable/Others (Total)	2483	711	1419	22.20	925
	Total Rajasthan	**8729**	**4373**	**4954**	**106.54**	**4439**
UP	Anpara TPS	1630	825	1037	20.80	867
	Obra TPS	1288	497	488	10.90	454
	Paricha TPS	1140	870	845	18.40	767
	Panki TPS	210	145	155	3.10	129
	Harduaganj TPS	665	187	245	4.60	192
	Tanda TPS (NTPC)	440	711	710	9.74	406
	Roza TPS (IPP)	1200	1026	995	24.29	1012
	Anpara-C (IPP)	1200	711	710	16.99	708
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	324	313	7.47	311
	Thermal (Total)	8223	5296	5498	116.29	4845
	Vishnuparyag HPS (IPP)	400	436	406	9.23	384
	Other Hydro	527	159	195	4.36	182
	Cogeneration	981	350	350	8.40	350
	Total UP	**10131**	**6241**	**6449**	**138.27**	**5377**
Uttarakhand	Total Hydro	1303	739	624	17.09	712
	Total Uttarakhand	**1303**	**739**	**624**	**17.09**	**712**
Delhi	Rajghat TPS	135	52	50	1.20	50
	Delhi Gas Turbine	282	111	111	2.52	105
	Pragati Gas Turbine	330	278	261	6.62	276
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	686	220	218	5.36	223
	Badarpur TPS (NTPC)	705	590	590	13.11	546
	Thermal (Total)	2232	1251	1230	28.81	1201
	Total Delhi	**2232**	**1251**	**1230**	**28.81**	**1201**
HP	Baspa HPS (IPP)	330	330	330	7.72	322
	Malana HPS (IPP)	86	15	77	1.11	46
	Other Hydro	589	505	537	12.52	522
	Total HP	**1005**	**850**	**944**	**21.36**	**890**
J & K	Baglihar HPS (IPP)	450	434	436	10.46	436
	Other Hydro	323	110	128	2.95	123
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	**956**	**544**	**564**	**13.41**	559
Total State Control Area Generation		**33130**	**18875**	**19175**	**437.51**	**17845**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**3411**	**3909**	**88.00**	**3667**
Total Regional Availability(Gross)		**55966**	**40904**	**38768**	**920.79**	**37982**

IV. Total Hydro Generation:

Regional Entities Hydro	**10364**	**9152**	**6971**	**191.48**	**7979**
State Control Area Hydro	**5368**	**2553**	**2722**	**75.56**	**2764**
Total Regional Hydro	**15731**	**11705**	**9693**	**267.05**	**10743**

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	100	300	300	200	5.68	0.09	5.58
Gwalior-Agra (D/C)	1000	1137	1234	0	23.66	0.00	23.66
Zerda-Kankroli	-154	-184	12	259	0.00	3.02	-3.02
Zerda-Bhinmal	-145	-182	180	260	0.00	1.78	-1.78
Malanpur-Auraiya	0	0	0	0	0.00	0.00	0.00
Badod-Kota/Morak	-68	-80	0	137	0.00	1.64	-1.64
Mundra-Mohindergarh(HVDC)	1432	1436	1437	0	31.62	0.00	31.62
Sub Total WR	**2165**	**2427**			**60.96**	**6.54**	**54.42**
Pusauli Bypass	-100	-100	150	100	0.12	2.36	-2.24
MZP- GKP (D/C)	448	560	692	0	12.82	0.00	12.82
Patna-Balia(D/C)	450	543	592	0	11.74	0.00	11.74
B'Sharif-Balia (D/C)	198	267	318	0	5.46	0.00	5.46
Pusauli-Balia	-8	18	40	8	0.17	0.16	0.01
Gaya-Fatehpur (765 Kv)	154	68	264	0	2.99	0.00	2.99
Pusauli-Sahupuri	140	166	180	0	3.86	0.00	3.86
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-40	0	44	0.00	1.07	-1.07
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	**1246**	**1482**			**37.16**	**3.58**	**33.58**
Total IR Exch	**3411**	**3909**			**98.12**	**10.12**	**88.00**

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
32.95	0.89	33.84	-1.69	6.75	2.33	-3.54	-0.90	0.90

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
33.59	56.60	90.19	33.58	54.42	88.00	-0.01	-2.18	-2.19

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	2.40	93.20	90.80	50.50	6.80

<---------- 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)
50.46	6.04	49.52	19.37	49.99	0.21	0.14	50.45	49.74

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	407	4:03	398	12:38	0.0	0.0	0.0	0.0
Gorakhpur	400	427	6:21	404	11:43	0.0	0.0	14.3	0.0
Bareilly	400	418	16:20	401	10:26	0.0	0.0	0.0	0.0
Kanpur	400	416	19:04	394	12:34	0.0	0.0	0.0	0.0
Dadri	400	413	6:02	390	12:46	0.0	0.0	0.0	0.0
Ballabhgarh	400	418	4:02	394	12:42	0.0	0.0	0.0	0.0
Bawana	400	414	6:04	394	12:45	0.0	0.0	0.0	0.0
Bassi	400	419	4:02	394	12:40	0.0	0.0	0.0	0.0
Hissar	400	405	19:04	388	12:44	0.0	1.0	0.0	0.0
Moga	400	414	19:04	396	12:44	0.0	0.0	0.0	0.0
Abdullapur	400	407	6:04	284	3:50	0.0	0.0	0.0	0.0
Nalagarh	400	413	3:59	395	15:32	0.0	0.0	0.0	0.0
Kishenpur	400	408	4:01	398	16:14	0.0	0.0	0.0	0.0
Wagoora	400	410	3:28	392	20:29	0.0	0.0	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	759	18:01	729	9:29	0.0	0.0	100.0	100.0
Balia	765	810	18:01	725	9:06	0.0	0.0	100.0	100.0
Moga	765	786	19:04	744	10:32	0.0	0.0	100.0	100.0
Agra	765	781	18:02	745	5:42	0.0	0.0	0.0	0.0
Bhiwani	765	793	13:29	762	5:40	0.0	0.0	0.0	0.0
Unnao	765	758	18:17	730	5:42	0.0	37.1	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	474.81	350.94	469.80	267.31	732.61	609.21
Pong	426.72	384.05	399.52	209.93	402.36	273.51	43.18	258.65
Tehri	829.79	740.04	754.70	80.00	818.65	982.26	176.57	191.00
Koteshwar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	270.13	205.92
Rihand	268.22	252.98	256.40	132.50	256.89	152.90	NA	NA
RPS	352.80	343.81	347.18	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	298.03	NA	NA	NA	NA	NA
RSD	527.91	487.91	507.19	NA	499.87	NA	164.55	182.56

*** NA: Not Available**

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 20.05.2013 :

1. Hot weather

XIII. Synchronisation of new generating units :

0.00

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 : 20.05.2013 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**