

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 22.05.2013
Date of Reporting : 23.05.2013

I. Regional Availability/Demand:

Demand Met	Evening Peak (20:00 Hrs) MW			Demand Met	Off Peak (03:00 Hrs) MW			Day Energy (Net MU)	
	Shortage	Requirement	Freq* (Hz)		Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
37403	2725	40128	50.08	37467	1073	38540	50.17	906.5	47.18

* 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:

State	State's Control Area Generation (Net MU)				Drawal Schedule (Net MU)	Actual Drawal (Net MU)	UI (Net MU)	Consumption (Net MU)	Shortages* (MU)
	Thermal	Hydro	Renewable/others \$	Total					
Punjab	45.29	9.87		55.16	96.76	98.29	1.53	153.45	1.08
Haryana	61.39	0.66		62.05	77.10	75.00	-2.10	137.05	0.00
Rajasthan	91.50	0.00	14.81	106.31	63.40	59.26	-4.14	165.56	0.00
Delhi	30.86			30.86	74.94	70.92	-4.03	101.77	0.23
UP	110.41	14.29	8.40	133.10	116.85	117.64	0.79	250.74	44.13
Uttarakhand		17.42		17.42	20.40	19.18	-1.22	36.60	0.00
HP		21.79		21.79	5.43	3.15	-2.27	24.94	0.03
J & K		13.40	0.00	13.40	20.41	16.73	-3.68	30.13	1.70
Chandigarh				0.00	5.64	6.22	0.58	6.22	0.03
Total	339.44	77.43	23.21	440.08	480.92	466.39	-14.53	906.47	47.18

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

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

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	
Punjab	6475	0	6	931	5933	0	29	1178	31.19
Haryana	5878	0	-159	286	5632	0	-81	77	5.55
Rajasthan	6563	0	-167	187	6674	0	-350	208	5.63
Delhi	4381	0	-116	-42	4095	3	-234	-290	-1.53
UP	9795	2625	-100	217	11447	1070	207	1682	15.19
Uttarakhand	1669	0	-64	403	1474	0	-38	233	7.23
HP	980	0	-254	-867	917	0	-57	-1140	-21.84
J&K	1391	100	-81	-239	1078	0	-284	-295	-6.21
Chandigarh	271	0	12	0	218	0	8	5	0.44
Total	37403	2725	-922	877	37467	1073	-801	1659	35.65

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

III. Regional Entities :

Entity	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	1858	2071	1883	44.52	1855	43.91	0.60
	Rihand I STPS	1000	915	940	1001	21.39	891	21.31	0.08
	Rihand II STPS	1000	965	1030	1044	22.64	943	22.61	0.03
	Rihand III STPS	500	474	511	511	11.19	466	11.09	0.10
	Dadri I STPS	840	807	770	680	16.86	702	16.98	-0.13
	Dadri II STPS	980	969	968	865	20.04	835	20.61	-0.57
	Unchahar I TPS	420	398	432	358	8.81	367	8.94	-0.13
	Unchahar II TPS	420	398	431	326	8.24	344	8.23	0.01
	Unchahar III TPS	210	198	217	161	4.03	168	4.05	-0.01
	ISTPP (Jhajjar)	1500	925	621	623	13.42	559	13.89	-0.47
	Dadri GPS	830	798	360	380	7.78	324	7.87	-0.10
	Anta GPS	419	385	237	235	5.41	225	5.53	-0.12
	Auraiva GPS	663	619	147	152	3.44	143	3.59	-0.15
	Sub Total (A)	10782	9709	8735	8219	187.76	7823	188.62	-0.86
B. NPC	NAPS	440	303	327	338	7.06	294	7.27	-0.22
	RAPS- B	440	398	437	445	9.55	398	9.55	0.00
	RAPS- C	440	430	460	466	9.64	402	10.32	-0.68
	Sub Total (B)	1320	1131	1224	1249	26.25	1094	27.14	-0.90
C. NHPC	Chamera I HPS	540	540	540	540	12.99	541	12.89	0.10
	Chamera II HPS	300	303	306	300	7.18	299	7.23	-0.05
	Chamera III HPS	231	231	229	231	5.42	226	5.35	0.07
	Bairasuil HPS	180	182	182	150	3.26	136	3.00	0.26
	Salal-HPS	690	675	672	672	16.04	668	16.20	-0.16
	Tanakpur-HPS	94	61	61	62	1.48	62	1.46	0.01
	Uri-HPS	480	480	478	477	11.57	482	11.54	0.03
	Dhauliganga-HPS	280	277	277	275	6.48	270	6.44	0.05
	Dulhasti-HPS	390	387	408	394	9.26	386	9.24	0.02
	Sewa-II HPS	120	119	124	34	2.21	92	2.33	-0.12
	Sub Total (C)	3305	3255	3277	3135	75.89	3162	75.67	0.21
D.NJPC	Nathpa Jhakri	1500	1605	1608	1624	38.53	1605	38.52	0.01
	Sub Total (D)	1500	1605	1608	1624	38.53	1605	38.52	0.01
E. THDC	Tehri HPS	1000	470	473	474	10.48	437	10.50	-0.02
	Koteshwar HPS	400	273	274	0	4.55	190	4.55	0.00
	Sub Total (E)	1400	743	747	474	15.03	626	15.05	-0.02
F. BBMB	Bhakra HPS	1480	729	1211	515	17.66	736	17.49	0.17
	Dehar HPS	990	583	825	620	15.22	634	14.00	1.22
	Pong HPS	396	143	292	120	3.54	147	3.43	0.11
	Sub Total (F)	2866	1455	2328	1255	36.42	1517	34.92	1.50
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	23	23	5.49	229	4.33	1.16
	KWHEP HPS(IPP)	1000	0	1199	1200	28.52	1189	28.51	0.01
	Malana Stg-II HPS	100	0	65	71	1.78	74	1.53	0.25
	Shree Cement TPS	300	0	236	249	5.86	244	5.88	-0.02
	Budhil HPS(IPP)	70	0	69	69	1.66	69	1.66	0.00
	Sub Total (G)	1662	0	1592	1612	43.31	1805	41.91	1.40
H. Total Regional Entities (A-G)	22836	17898	19511	17568	423.17	17632	421.83	1.35	

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	1260	1055	26.39	1100
	Guru Nanak Dev TPS(Bhatinda)	440	228	175	4.51	188
	Guru Hargobind Singh TPS(L.mbt)	920	690	510	14.38	599
	Thermal (Total)	2620	2178	1740	45.29	1887
	Total Hydro	1148	434	368	9.87	411
	Total Punjab	3768	2612	2108	55.16	2298
Haryana	Panipat TPS	1367	645	620	15.33	639
	DCRTPP (Yamuna nagar)	600	282	274	6.49	271
	Faridabad GPS (NTPC)	432	176	10	3.27	136
	RGTPP (khedar) (IPP)	1200	1103	934	25.15	1048
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	325	611	11.15	464
	Thermal (Total)	4944	2531	2449	61.39	2558
	Total Hydro	62	25	26	0.66	28
	Total Haryana	5006	2556	2475	62.05	2585
	Rajasthan	kota TPS	1240	1117	1063	27.01
suratgarh TPS		1500	1167	1040	27.90	1162
Chabra TPS		500	208	213	5.07	211
Dholpur GPS		330	122	110	2.89	120
Ramgarh GPS		111	99	95	2.57	107
RAPS A (NPC)		300	180	180	4.31	180
Barsingsar (NLC)		250	207	174	4.68	195
Giral LTPS		250	103	103	1.85	77
Rajwest LTPS (IPP)		1080	719	441	15.22	634
VSLP LTPS (IPP)		135	0		0.00	0
Thermal (Total)		5696	3922	3419	91.50	3812
Total Hydro		550	0	0	0.00	0
Wind power		2191	16	1212	12.25	510
Biomass		91	24	24	0.58	24
Solar		201	0	0	1.98	82
Renewable/Others (Total)		2483	40	1236	14.81	617
Total Rajasthan		8729	3962	4655	106.31	4429
UP		Anpara TPS	1630	306	781	17.70
	Obra TPS	1288	487	454	11.80	492
	Paricha TPS	1140	803	616	18.50	771
	Panki TPS	210	149	140	3.40	142
	Harduaganj TPS	665	0	0	0.00	0
	Tanda TPS (NTPC)	440	480	396	9.72	405
	Roza TPS (IPP)	1200	869	1008	24.08	1003
	Anpara-C (IPP)	1200	674	651	15.95	665
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	400	400	9.26	386
	Thermal (Total)	8223	4168	4446	110.41	4600
	Vishnuparyag HPS (IPP)	400	436	436	10.15	423
	Other Hydro	527	241	148	4.14	173
	Cogeneration	981	350	350	8.40	350
	Total UP	10131	5195	5380	133.10	5123
Uttarakhand	Total Hydro	1303	732	741	17.42	726
	Total Uttarakhand	1303	732	741	17.42	726
Delhi	Rajghat TPS	135	45	47	1.00	42
	Delhi Gas Turbine	282	184	186	4.35	181
	Pragati Gas Turbine	330	277	287	6.66	278
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	686	212	232	5.43	226
	Badarpur TPS (NTPC)	705	595	580	13.42	559
	Thermal (Total)	2232	1313	1332	30.86	1286
	Total Delhi	2232	1313	1332	30.86	1286
HP	Baspa HPS (IPP)	330	303	333	7.59	316
	Malana HPS (IPP)	86	45	86	1.59	66
	Other Hydro	589	530	533	12.60	525
	Total HP	1005	878	952	21.79	908
J & K	Baglihar HPS (IPP)	450	436	434	10.44	435
	Other Hydro	323	110	128	2.95	123
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	546	562	13.40	558
Total State Control Area Generation		33130	17794	18205	440.08	17914
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2356	2792	60.72	2530
Total Regional Availability(Gross)		55966	39661	38565	923.98	38076

IV. Total Hydro Generation:

Regional Entities Hydro	10364	9247	7782	201.66	8402
State Control Area Hydro	5368	2856	2797	77.43	2803
Total Regional Hydro	15731	12103	10579	279.09	11206

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 MU
	MW	MW	Import	Export	Import	Export	
Vindhychal B/B	-400	-400	0	500	0.00	8.86	-8.86
Gwalior-Agra (D/C)	651	1039	1169	0	21.31	0.00	21.31
Zerda-Kankroli	-93	-214	0	297	0.00	3.94	-3.94
Zerda-Bhinmal	-34	-189	13	255	0.00	2.68	-2.68
Malanpur-Auraiya	-116	-31	0	116	0.00	1.03	-1.03
Badod-Kota/Morak	-85	-103	0	146	0.00	2.18	-2.18
Mundra-Mohindergarh(HVDC)	1433	1435	1436	0	31.44	0.00	31.44
Sub Total WR	1356	1537			52.75	18.69	34.06
Pusauli Bypass	150	150	150	0	3.59	0.00	3.59
MZP- GKP (D/C)	272	466	548	0	9.01	0.00	9.01
Patna-Balia(D/C)	368	443	513	0	9.57	0.00	9.57
B'Sharif-Balia (D/C)	152	153	263	0	3.94	0.00	3.94
Pusauli-Balia	-78	-88	0	122	0.00	1.52	-1.52
Gaya-Fatehpur (765 Kv)	11	-2	116	158	0.56	0.00	0.56
Pusauli-Sahupuri	161	173	178	0	2.58	0.00	2.58
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	1000	1255			29.25	2.59	26.67
Total IR Exch	2356	2792			82.00	21.28	60.72

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

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)		Power Exchange Shdi (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
33.22	1.12	34.34	-2.44	6.53	4.32	-11.11	-0.93	0.93

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
35.29	40.50	75.79	26.67	34.06	60.72	-8.63	-6.44	-15.07

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	0.30	90.90	89.80	55.50	9.90

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz	Index			
50.48	6.07	49.76	15.12	50.03	0.16	0.12	50.46	49.95

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	409	0:02	401	16:28	0.0	0.0	0.0	0.0
Gorakhpur	400	427	6:59	410	1:19	0.0	0.0	16.8	0.0
Bareilly	400	0	0:00	9999	0:00	0.0	0.0	0.0	0.0
Kanpur	400	416	18:31	399	16:42	0.0	0.0	0.0	0.0
Dadri	400	413	6:06	390	14:55	0.0	0.0	0.0	0.0
Ballabgarh	400	420	0:00	397	14:56	0.0	0.0	0.0	0.0
Bawana	400	414	6:05	395	14:47	0.0	0.0	0.0	0.0
Bassi	400	419	18:51	397	23:32	0.0	0.0	0.0	0.0
Hissar	400	405	6:05	388	16:50	0.0	1.3	0.0	0.0
Moga	400	415	0:00	399	15:23	0.0	0.0	0.0	0.0
Abdullapur	400	409	6:04	389	16:24	0.0	0.1	0.0	0.0
Nalagarh	400	412	0:00	393	15:25	0.0	0.0	0.0	0.0
Kishenpur	400	410	0:00	398	15:03	0.0	0.0	0.0	0.0
Wagoora	400	410	3:27	385	10:50	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	756	6:06	730	15:14	0.0	41.9	0.0	0.0
Balia	765	770	6:19	737	11:15	0.0	15.2	0.0	0.0
Moga	765	789	0:00	758	15:23	0.0	0.0	0.0	0.0
Agra	765	785	18:35	747	15:12	0.0	0.0	0.0	0.0
Bhiwani	765	779	6:10	745	15:25	0.0	0.0	0.0	0.0
Unnao	765	772	18:33	743	16:42	0.0	0.0	0.0	0.0

IX. Reservoir Parameters:

Name of Reservoir	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	475.91	368.17	469.32	257.12	1036.42	610.14
Pong	426.72	384.05	399.14	203.01	401.76	259.17	110.44	252.93
Tehri	829.79	740.04	753.10	70.05	818.65	982.26	217.43	341.00
Koteshwar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	757.28	NA	NA	NA	374.45	351.58
Rihand	268.22	252.98	256.21	125.00	256.73	146.40	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 22.05.2013 :

1. Hot weather& Hot waves running in NR.

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 : 22.05.2013

पारी प्रभाती अजिंयता / SHIFT CHARGE ENGINEER