

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 15.05.2013
Date of Reporting : 16.05.2013

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
35908	1656	37564	50.10	33789	1220	35009	50.02	839.6	40.53

* 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	45.23	9.14		54.37	79.08	78.80	-0.28	133.17	0.00
Haryana	56.15	0.59		56.74	67.90	64.37	-3.52	121.11	0.14
Rajasthan	86.32	0.00	9.91	96.22	63.81	58.34	-5.47	154.57	0.00
Delhi	30.28			30.28	65.73	61.97	-3.76	92.25	0.13
UP	132.37	7.36	8.40	148.14	98.02	97.71	-0.32	245.84	34.87
Uttarakhand		15.05		15.05	16.53	17.62	1.09	32.67	3.69
HP		14.38		14.38	8.36	9.73	1.36	24.11	0.00
J & K		13.21	0.00	13.21	19.17	17.65	-1.52	30.86	1.70
Chandigarh				0.00	4.78	5.00	0.23	5.00	0.00
Total	350.35	59.74	18.31	428.40	423.38	411.19	-12.19	839.59	40.53

* 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	5912	0	-59	925	5100	0	61	1111	25.30
Haryana	5667	31	-35	-1	4930	0	-34	42	0.16
Rajasthan	5939	0	-402	477	6422	0	-57	147	10.66
Delhi	4093	0	122	-412	3476	0	-213	-419	-9.80
UP	10015	1390	-349	107	10611	1070	152	634	8.48
Uttarakhand	1540	135	79	325	1257	150	35	231	5.21
HP	987	0	-72	-674	831	0	74	-404	-14.73
J&K	1519	100	67	-115	998	0	-117	-121	-3.16
Chandigarh	236	0	-5	0	164	0	17	0	0.29
Total	35908	1656	-654	631	33789	1220	-81	1222	22.40

* 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	1467	1640	1557	35.54	1481	35.01	0.54	
	Rihand I STPS	1000	915	994	995	21.73	905	21.79	-0.06	
	Rihand II STPS	1000	965	1037	1035	23.07	961	23.01	0.06	
	Rihand III STPS	500	480	519	504	11.40	475	11.46	-0.06	
	Dadri I STPS	840	807	820	659	16.93	705	17.19	-0.26	
	Dadri II STPS	980	969	987	974	21.08	878	21.86	-0.79	
	Unchahar I TPS	420	395	434	434	9.24	385	9.27	-0.03	
	Unchahar II TPS	420	400	438	440	9.02	376	8.93	0.09	
	Unchahar III TPS	210	200	219	209	4.60	192	4.60	-0.01	
	ISTPP (Jhajjar)	1500	940	502	611	11.19	466	11.03	0.16	
	Dadri GPS	830	797	370	342	8.13	339	8.37	-0.24	
	Anta GPS	419	389	0	0	0.00	0	0.00	0.00	
	Auraiya GPS	663	621	289	284	6.51	271	6.49	0.03	
	Sub Total (A)	10782	9345	8249	8044	178.44	7435	179.01	-0.57	
B. NPC	NAPS	440	303	334	338	7.15	298	7.27	-0.13	
	RAPS- B	440	401	445	450	9.62	401	9.62	0.00	
	RAPS- C	440	430	465	470	9.99	416	10.32	-0.34	
	Sub Total (B)	1320	1134	1244	1258	26.75	1115	27.22	-0.47	
C. NHPC	Chamera I HPS	540	540	540	0	7.89	329	7.64	0.25	
	Chamera II HPS	300	303	217	25	4.47	186	4.32	0.16	
	Chamera III HPS	231	231	238	0	3.04	126	3.16	-0.12	
	Bairasuil HPS	180	182	182	80	2.15	90	2.04	0.11	
	Salal-HPS	690	478	648	435	12.39	516	11.46	0.92	
	Tanakpur-HPS	94	35	29	31	0.79	33	0.83	-0.05	
	Uri-HPS	480	480	480	480	11.43	476	11.45	-0.02	
	Dhauliganga-HPS	280	280	282	0	1.95	81	1.87	0.08	
	Dulhasti-HPS	390	387	408	407	9.32	388	9.43	-0.11	
	Sewa-II HPS	120	101	122	67	2.30	96	2.27	0.03	
	Sub Total (C)	3305	3016	3146	1525	55.72	2322	54.46	1.25	
	D.NJPC	Nathpa Jhakri	1500	1605	1459	496	27.54	1148	27.95	-0.41
		Sub Total (D)	1500	1605	1459	496	27.54	1148	27.95	-0.41
E. THDC	Tehri HPS	1000	645	648	0	6.74	281	6.60	0.14	
	Koteshwar HPS	400	262	242	0	2.64	110	2.60	0.04	
	Sub Total (E)	1400	907	890	0	9.38	391	9.20	0.18	
F. BBMB	Bhakra HPS	1480	786	1095	663	19.25	802	18.87	0.38	
	Dehar HPS	990	402	825	290	9.83	410	9.65	0.19	
	Pong HPS	396	159	300	120	3.92	163	0.25	3.67	
	Sub Total (F)	2866	1347	2220	1073	33.00	1375	28.77	4.23	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	90	83	1.66	69	1.60	0.06	
	KWHEP HPS(IPP)	1000	0	600	453	16.00	667	16.32	-0.32	
	Malana Stg-II HPS	100	0	0	25	0.22	9	0.22	0.00	
	Shree Cement TPS	300	0	247	271	5.95	248	5.97	-0.02	
	Budhil HPS(IPP)	70	0	69	34	0.63	26	0.66	-0.03	
	Sub Total (G)	1662	0	1006	866	24.47	1019	24.76	-0.30	
H. Total Regional Entities (A-G)	22836	17355	18214	13262	355.30	14804	351.37	3.92		

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	800	850	20.58	858
	Guru Nanak Dev TPS(Bhatinda)	440	295	295	6.59	275
	Guru Hargobind Singh TPS(L.mbt)	920	689	726	18.07	753
	Thermal (Total)	2620	1784	1871	45.23	1885
	Total Hydro	1148	377	377	9.14	381
	Total Punjab	3768	2161	2248	54.37	2266
Haryana	Panipat TPS	1367	937	905	22.47	936
	DCRTPP (Yamuna nagar)	600	294	262	6.28	262
	Faridabad GPS (NTPC)	432	190	160	4.32	180
	RGTPP (khedar) (IPP)	1200	405	447	10.76	448
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	522	352	12.33	514
	Thermal (Total)	4944	2348	2126	56.15	2340
	Total Hydro	62	23	22	0.59	25
	Total Haryana	5006	2371	2148	56.74	2364
	Rajasthan	kota TPS	1240	1062	1080	25.51
suratgarh TPS		1500	950	934	22.96	957
Chabra TPS		500	0	201	4.26	177
Dholpur GPS		330	124	124	2.96	123
Ramgarh GPS		111	145	142	3.57	149
RAPS A (NPC)		300	180	180	4.32	180
Barsingsar (NLC)		250	111	108	2.44	102
Giral LTPS		250	0	0	0.00	0
Rajwest LTPS (IPP)		1080	835	737	20.30	846
VSLP LTPS (IPP)		135	0	0	0.00	0
Thermal (Total)		5696	3407	3506	86.32	3596
Total Hydro		550	0	0	0.00	0
Wind power		2191	123	422	8.14	339
Biomass		91	32	32	0.77	32
Solar		201	0	0	0.99	41
Renewable/Others (Total)		2483	155	454	9.91	413
Total Rajasthan		8729	3562	3960	96.22	4009
UP		Anpara TPS	1630	1203	1380	30.90
	Obra TPS	1288	420	371	9.10	379
	Paricha TPS	1140	806	769	18.80	783
	Panki TPS	210	135	153	3.50	146
	Harduaganj TPS	665	320	329	6.60	275
	Tanda TPS (NTPC)	440	399	403	9.78	408
	Roza TPS (IPP)	1200	1008	990	24.15	1006
	Anpara-C (IPP)	1200	801	896	20.22	843
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	401	405	9.32	388
	Thermal (Total)	8223	5493	5696	132.37	5516
	Vishnuparyag HPS (IPP)	400	188	179	4.20	175
	Other Hydro	527	200	159	3.17	132
	Cogeneration	981	350	350	8.40	350
	Total UP	10131	6231	6384	148.14	5998
	Uttarakhand	Total Hydro	1303	582	650	15.05
Total Uttarakhand		1303	582	650	15.05	627
Delhi	Rajghat TPS	135	98	102	2.33	97
	Delhi Gas Turbine	282	101	105	2.55	106
	Pragati Gas Turbine	330	281	263	6.75	281
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	686	213	224	5.38	224
	Badarpur TPS (NTPC)	705	600	580	13.27	553
	Thermal (Total)	2232	1293	1274	30.28	1262
	Total Delhi	2232	1293	1274	30.28	1262
	HP	Baspa HPS (IPP)	330	112	194	3.43
Malana HPS (IPP)		86	8	12	0.56	23
Other Hydro		589	410	507	10.40	433
Total HP		1005	530	713	14.38	599
J & K	Baglihar HPS (IPP)	450	438	436	10.49	437
	Other Hydro	323	95	118	2.72	114
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	533	554	13.21	550
Total State Control Area Generation		33130	17263	17931	428.40	17675
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2517	3585	77.02	3209
Total Regional Availability(Gross)		55966	37994	34778	860.71	35688

IV. Total Hydro Generation:

Regional Entities Hydro	10364	8405	3655	143.52	5980
State Control Area Hydro	5368	2245	2475	59.74	2314
Total Regional Hydro	15731	10650	6130	203.26	8294

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	-100	-100	450	200	2.41	1.58	0.83
Gwalior-Agra (D/C)	363	1020	1328	0	19.93	0.00	19.93
Zerda-Kankroli	-41	-155	0	342	0.00	4.26	-4.26
Zerda-Bhinmal	0	-116	45	259	0.00	1.40	-1.40
Malanpur-Auraiya	0	0	0	0	0.00	0.00	0.00
Badod-Kota/Morak	-54	-23	0	148	0.00	2.40	-2.40
Mundra-Mohindergarh(HVDC)	1433	1433	1437	0	33.93	0.00	33.93
Sub Total WR	1601	2059			56.27	9.64	46.63
Pusauli Bypass	-100	-100	0	100	0.00	2.40	-2.40
MZP- GKP (D/C)	326	626	646	0	11.64	0.00	11.64
Patna-Balia(D/C)	437	555	568	0	12.86	0.00	12.86
B'Sharif-Balia (D/C)	86	228	254	0	3.66	0.00	3.66
Pusauli-Balia	-43	-6	0	65	0.00	0.56	-0.56
Gaya-Fatehpur (765 Kv)	107	102	230	0	2.72	0.00	2.72
Pusauli-Sahupuri	139	161	171	0	3.53	0.00	3.53
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	916	1526			34.41	4.02	30.39
Total IR Exch	2517	3585			90.68	13.66	77.02

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
31.20	1.69	32.89	-1.11	4.26	6.29	-9.90	4.21	-4.21

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
42.27	40.69	82.96	30.39	46.63	77.02	-11.88	5.94	-5.94

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	0.40	94.90	94.50	47.00	5.10

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz				
50.44	18.04	49.65	14.12	50.00	0.12	0.13	50.37	49.85

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	406	22:40	399	16:44	0.0	0.0	0.0	0.0
Gorakhpur	400	425	5:12	408	13:48	0.0	0.0	8.3	0.0
Bareilly	400	0	0:00	9999	0:00	0.0	0.0	0.0	0.0
Kanpur	400	417	3:50	399	16:46	0.0	0.0	0.0	0.0
Dadri	400	415	4:30	395	16:45	0.0	0.0	0.0	0.0
Ballabgarh	400	422	3:50	401	16:45	0.0	0.0	3.9	0.0
Bawana	400	420	4:30	400	16:47	0.0	0.0	0.0	0.0
Bassi	400	426	3:48	401	23:08	0.0	0.0	14.0	0.0
Hissar	400	411	4:29	393	12:13	0.0	0.0	0.0	0.0
Moga	400	419	3:50	402	9:25	0.0	0.0	0.0	0.0
Abdullapur	400	414	18:43	398	12:13	0.0	0.0	0.0	0.0
Nalagarh	400	421	4:30	400	14:45	0.0	0.0	0.2	0.0
Kishenpur	400	414	3:50	397	14:56	0.0	0.0	0.0	0.0
Wagoora	400	414	3:41	388	19:58	0.0	1.5	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	763	18:47	729	7:22	0.0	0.0	100.0	100.0
Balia	765	776	22:43	717	8:49	0.0	0.0	100.0	100.0
Moga	765	781	3:49	752	12:13	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. 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	475.71	368.17	471.46	293.05	588.96	782.90
Pong	426.72	384.05	400.39	230.85	402.89	288.96	40.89	11.50
Tehri	829.79	740.04	757.50	100.00	818.65	982.26	127.58	181.00
Koteshwar	612.50	598.50	601.40	0.80	NA	NA	181.00	147.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	236.98	198.27
Rihand	268.22	252.98	256.79	149.00	257.37	173.70	NA	NA
RPS	352.80	343.81	346.59	NA	349.12	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.88	NA	298.25	NA	NA	NA
RSD	527.91	487.91	506.82	NA	500.20	NA	155.60	114.74

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 15.05.2013 :

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 : 15.05.2013

पारी प्रभाती अश्विनी / SHIFT CHARGE ENGINEER