

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 24.04.2013
Date of Reporting : 25.04.2013

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
34082	1963	36045	50.02	29763	1696	31459	50.08	748.5	56.68

* 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	49.93	2.90		52.82	50.07	50.63	0.56	103.45	4.73
Haryana	55.94	0.59		56.53	47.05	44.63	-2.43	101.15	0.43
Rajasthan	88.09	0.00	7.52	95.61	53.14	50.34	-2.81	145.94	0.67
Delhi	27.80			27.80	53.86	50.65	-3.21	78.44	0.02
UP	124.11	5.05	14.40	143.56	87.65	83.76	-3.89	227.31	47.58
Uttarakhand		13.91		13.91	18.46	18.38	-0.08	32.28	1.26
HP		12.21		12.21	13.96	12.00	-1.96	24.20	0.29
J & K		10.75	0.00	10.75	22.74	20.67	-2.07	31.42	1.70
Chandigarh				0.00	4.41	4.31	-0.10	4.31	0.00
Total	345.85	45.40	21.92	413.17	351.34	335.35	-15.99	748.52	56.68

* 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	5031	288	34	237	4322	140	62	359	7.04
Haryana	5225	0	-185	133	4128	115	348	9	-6.14
Rajasthan	6266	0	-346	718	5718	36	-2	184	9.76
Delhi	3692	0	-123	-394	2746	0	-348	-859	-14.15
UP	9404	1500	-397	-24	9522	1405	-464	778	5.06
Uttarakhand	1596	75	30	448	1234	0	-29	409	9.79
HP	1031	0	-139	-552	850	0	-151	66	-3.86
J&K	1622	100	-27	-44	1106	0	-87	-10	0.10
Chandigarh	215	0	-6	0	138	0	-2	15	0.55
Total	34082	1963	-1160	522	29763	1696	-675	952	8.14

* 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	1250	1362	1367	30.12	1255	30.00	0.12
	Rihand I STPS	1000	930	1009	1005	22.38	932	22.32	0.05
	Rihand II STPS	1000	970	1035	1046	23.42	976	23.28	0.14
	Rihand III STPS	500	446	472	499	10.61	442	10.71	-0.10
	Dadri I STPS	840	744	648	721	15.11	629	15.92	-0.81
	Dadri II STPS	980	969	1012	1024	23.07	961	23.24	-0.17
	Unchahar I TPS	420	396	440	436	9.53	397	9.48	0.05
	Unchahar II TPS	420	398	444	438	9.52	397	9.53	-0.01
	Unchahar III TPS	210	0	0	0	0.00	0	0.00	0.00
	ISTPP (Jhajjar)	1500	995	716	670	14.82	618	12.60	2.22
	Dadri GPS	830	806	385	401	9.07	378	9.62	-0.55
	Anta GPS	419	392	251	247	5.91	246	5.97	-0.06
	Auraiva GPS	663	624	305	316	7.23	301	7.27	-0.04
	Sub Total (A)	10782	8920	8079	8170	180.77	7532	179.94	0.83
	B. NPC	NAPS	440	300	331	346	7.16	298	7.20
RAPS- B		440	418	454	460	9.89	412	10.03	-0.14
RAPS- C		440	435	464	473	10.05	419	10.44	-0.39
Sub Total (B)		1320	1153	1249	1279	27.10	1129	27.67	-0.57
C. NHPC	Chamera I HPS	540	360	360	0	6.24	260	6.21	0.03
	Chamera II HPS	300	310	311	0	3.59	150	2.63	0.95
	Chamera III HPS	231	231	227	0	2.30	96	2.25	0.04
	Bairasuil HPS	180	182	182	20	1.92	80	1.74	0.17
	Salal-HPS	690	336	522	310	8.16	340	7.83	0.33
	Tanakpur-HPS	94	29	45	32	0.82	34	0.69	0.13
	Uri-HPS	480	480	479	480	11.62	484	11.52	0.10
	Dhauliganga-HPS	280	280	278	0	1.72	72	1.64	0.08
	Dulhasti-HPS	390	387	402	0	5.02	209	4.79	0.23
	Sewa-II HPS	120	119	125	0	1.91	79	1.68	0.23
	Sub Total (C)	3305	2713	2931	842	43.29	1804	40.99	2.30
	D.NJPC	Natpda Jhakri	1500	1605	1562	254	20.62	859	20.50
Sub Total (D)		1500	1605	1562	254	20.62	859	20.50	0.12
E. THDC	Tehri HPS	1000	213	340	0	5.09	212	5.00	0.09
	Koteswar HPS	400	240	241	0	2.26	94	2.20	0.06
	Sub Total (E)	1400	453	581	0	7.35	306	7.20	0.15
F. BBMB	Bhakra HPS	1480	335	623	304	8.50	354	8.05	0.45
	Dehar HPS	990	330	825	145	8.58	358	7.91	0.67
	Pong HPS	396	10	120	0	0.34	14	0.25	0.09
	Sub Total (F)	2866	675	1568	449	17.42	726	16.21	1.21
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	80	30	1.09	46	1.03	0.06
	KWHEP HPS(IPP)	1000	0	835	150	11.63	485	11.10	0.53
	Malana Stg-II HPS	100	0	105	0	0.54	23	0.50	0.04
	Shree Cement TPS	300	0	261	265	6.42	268	6.39	0.03
	Budhil HPS(IPP)	70	0	34	0	0.51	21	0.61	-0.10
	Sub Total (G)	1662	0	1315	445	20.20	842	19.65	0.56
H. Total Regional Entities (A-G)	22836	15519	17285	11439	316.75	13198	312.15	4.59	

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	1055	1050	23.93	997
	Guru Nanak Dev TPS(Bhatinda)	440	227	227	4.79	200
	Guru Hargobind Singh TPS(L.mbt)	920	969	959	21.20	883
	Thermal (Total)	2620	2251	2236	49.93	2080
	Total Hydro	1148	210	105	2.90	121
	Total Punjab	3768	2461	2341	52.82	2201
Haryana	Panipat TPS	1367	654	663	15.91	663
	DCRTPP (Yamuna nagar)	600	568	573	13.18	549
	Faridabad GPS (NTPC)	432	185	151	4.10	171
	RGTPP (khedar) (IPP)	1200	505	379	13.38	558
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	522	549	9.35	390
	Thermal (Total)	4944	2434	2315	55.94	2331
	Total Hydro	62	19	20	0.59	25
	Total Haryana	5006	2453	2335	56.53	2355
	Rajasthan	kota TPS	1240	1090	1172	27.47
suratgarh TPS		1500	949	1135	28.20	1175
Chabra TPS		500	380	416	9.99	416
Dholpur GPS		330	135	136	3.31	138
Ramgarh GPS		111	0	30	1.79	75
RAPS A (NPC)		300	0	0	0.00	0
Barsingsar (NLC)		250	111	110	2.58	107
Giral LTPS		250	51	57	1.03	43
Rajwest LTPS (IPP)		1080	509	591	13.73	572
VSLP LTPS (IPP)		135	0	0	0.00	0
Thermal (Total)		5696	3225	3647	88.09	3670
Total Hydro		550	0	0	0.00	0
Wind power		2191	517	182	5.33	222
Biomass		91	34	34	0.82	34
Solar		201	0	0	1.37	57
Renewable/Others (Total)		2483	551	216	7.52	313
Total Rajasthan		8729	3776	3863	95.61	3984
UP		Anpara TPS	1630	1392	1395	29.70
	Obra TPS	1382	547	545	12.00	500
	Paricha TPS	890	811	837	17.80	742
	Panki TPS	210	80	80	1.50	63
	Harduaganj TPS	665	303	307	6.40	267
	Tanda TPS (NTPC)	440	399	403	9.80	408
	Roza TPS (IPP)	1200	549	554	13.13	547
	Anpara-C (IPP)	1200	1008	1008	24.14	1006
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	405	405	9.65	402
	Thermal (Total)	8067	5494	5534	124.11	5171
	Vishnuparyag HPS (IPP)	400	164	146	3.52	147
	Other Hydro	527	62	85	1.52	63
	Cogeneration	981	600	600	14.40	600
	Total UP	9975	6320	6365	143.56	5835
Uttarakhand	Total Hydro	1303	631	557	13.91	580
	Total Uttarakhand	1303	631	557	13.91	580
Delhi	Rajghat TPS	135	105	98	2.69	112
	Delhi Gas Turbine	282	186	191	4.68	195
	Pragati Gas Turbine	330	272	302	6.70	279
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	23	0	0.26	11
	Badarpur TPS (NTPC)	705	585	585	13.47	561
	Thermal (Total)	2237	1171	1176	27.80	1158
	Total Delhi	2237	1171	1176	27.80	1158
	HP	Baspa HPS (IPP)	330	61	111	2.38
Malana HPS (IPP)		86	92	7	0.57	24
Other Hydro		589	372	406	9.26	386
Total HP		1005	525	524	12.21	509
J & K	Baglihar HPS (IPP)	450	384	384	9.18	383
	Other Hydro	323	50	98	1.57	65
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	434	482	10.75	448
Total State Control Area Generation		32979	17771	17643	413.17	17069
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1551	1431	30.80	1283
Total Regional Availability(Gross)		55815	36607	30513	760.72	31550

IV. Total Hydro Generation:

Regional Entities Hydro	10364	7662	1725	101.94	4248
State Control Area Hydro	5368	1881	1773	45.40	1745
Total Regional Hydro	15731	9543	3498	147.34	5992

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	0	200	0.00	2.15	-2.15
Gwalior-Agra (D/C)	435	700	1005	0	12.04	0.00	12.04
Zerda-Kankroli	-120	-182	0	330	0.00	4.74	-4.74
Zerda-Bhinmal	-97	-136	0	309	0.00	3.46	-3.46
Malanpur-Auraiya	-149	-99	0	149	0.00	2.57	-2.57
Badod-Kota/Morak	-113	-126	0	205	0.00	3.38	-3.38
Mundra-Mohindergarh(HVDC)	1131	589	1187	0	24.97	0.00	24.97
Sub Total WR	987	646			37.01	16.30	20.71
Pusauli Bypass	100	200	200	0	3.28	0.00	3.28
MZP- GKP (D/C)	116	160	260	0	1.31	0.00	1.31
Patna-Balia(D/C)	279	279	339	0	4.82	0.00	4.82
B'Sharif-Balia (D/C)	25	121	178	0	0.84	0.00	0.84
Pusauli-Balia	-100	-79	0	148	0.00	2.38	-2.38
Gaya-Fatehpur (765 Kv)	46	12	67	69	0.13	0.00	0.13
Pusauli-Sahupuri	134	132	144	0	2.84	0.00	2.84
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-40	0	44	0.00	0.75	-0.75
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	564	785			13.22	3.13	10.09
Total IR Exch	1551	1431			50.23	19.43	30.80

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
29.63	0.72	30.34	-6.04	-11.21	-0.14	8.25	-3.57	3.57

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
20.60	31.89	52.49	10.09	20.71	30.80	-10.51	-11.18	-21.69

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	0.03	8.92	99.13	90.24	48.48	0.84

<----- 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				
50.43	18.32	49.43	14.22	49.99	0.19	0.11	50.22	49.69

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	408	1:58	404	8:09	0.0	0.0	0.0	0.0
Gorakhpur	400	424	15:25	413	5:42	0.0	0.0	16.6	0.0
Bareilly	400	420	6:48	400	11:31	0.0	0.0	0.0	0.0
Kanpur	400	416	1:58	401	19:35	0.0	0.0	0.0	0.0
Dadri	400	416	1:58	403	19:35	0.0	0.0	0.0	0.0
Balabhgarh	400	425	2:07	407	19:37	0.0	0.0	24.3	0.0
Bawana	400	419	2:05	406	11:23	0.0	0.0	0.0	0.0
Bassi	400	426	3:55	404	19:37	0.0	0.0	15.1	0.0
Hissar	400	412	2:05	396	19:39	0.0	0.0	0.0	0.0
Moga	400	416	2:04	400	19:24	0.0	0.0	0.0	0.0
Abdullapur	400	419	2:04	403	19:36	0.0	0.0	0.0	0.0
Nalagarh	400	418	2:05	401	19:06	0.0	0.0	0.0	0.0
Kishenpur	400	417	3:11	394	19:39	0.0	0.0	0.0	0.0
Wagoora	400	413	3:09	384	19:38	0.0	11.4	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	761	3:59	727	19:38	0.0	0.0	100.0	100.0
Balia	765	756	21:10	736	19:38	0.0	0.0	100.0	100.0
Moga	765	782	3:11	749	19:38	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	479.65	454.47	474.63	345.61	355.57	273.29
Pong	426.72	384.05	400.39	230.85	403.31	296.79	61.82	22.65
Tehri	829.79	740.04	763.25	146.00	818.65	982.26	82.99	155.00
Koteshwar	612.50	598.50	599.40	0.15	610.70	4.96	155.00	150.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	144.75	172.02
Rihand	268.22	252.98	257.13	163.30	258.38	219.60	NA	NA
RPS	352.80	343.81	NA	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	NA	NA	NA	NA	NA	NA
RSD	527.91	487.91	507.05	NA	496.84	NA	141.90	44.17

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 24.04.2013 :

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 : 24.04.2013

पारी प्रभाती अशियंता / SHIFT CHARGE ENGINEER