

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 22.04.2013
Date of Reporting : 23.04.2013

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
33010	1620	34630	50.18	27138	1135	28273	50.16	699.3	39.15

* 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	46.44	1.53		47.97	51.23	52.49	1.27	100.46	0.00
Haryana	51.44	0.62		52.05	41.51	40.23	-1.28	92.28	0.00
Rajasthan	76.07	0.00	6.32	82.39	51.86	49.98	-1.88	132.37	0.02
Delhi	21.67			21.67	55.78	52.33	-3.45	74.01	0.02
UP	116.64	4.40	16.80	137.84	78.45	74.23	-4.22	212.07	37.17
Uttarakhand		13.01		13.01	18.73	18.89	0.16	31.90	0.20
HP		11.00		11.00	13.01	12.98	-0.02	23.98	0.05
J & K		8.97	0.00	8.97	18.10	19.02	0.92	27.99	1.70
Chandigarh				0.00	4.26	4.25	-0.01	4.25	0.00
Total	312.26	39.52	23.12	374.90	332.92	324.42	-8.51	699.31	39.15

* 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	4947	0	-45	693	4205	0	110	718	11.20
Haryana	5057	0	-64	170	3689	0	29	85	-2.93
Rajasthan	6036	0	-204	752	4899	0	-307	180	10.76
Delhi	3535	0	-217	-318	2518	0	-253	-676	-11.22
UP	9206	1460	-171	-24	8770	1135	-120	315	2.56
Uttarakhand	1556	60	119	473	1074	0	-122	473	10.62
HP	1078	0	-84	-511	759	0	13	42	-2.87
J&K	1384	100	-21	-183	1093	0	230	-198	-4.12
Chandigarh	211	0	1	-10	131	0	1	15	0.54
Total	33010	1620	-686	1041	27138	1135	-419	954	14.54

* 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	1258	1272	29.45	1227	28.60	0.85
	Rihand I STPS	1000	930	1008	970	21.91	913	21.63	0.28
	Rihand II STPS	1000	970	1036	1012	23.00	958	22.64	0.36
	Rihand III STPS	500	-10	0	0	0.00	0	-0.24	0.24
	Dadri I STPS	840	590	619	577	12.90	538	14.09	-1.18
	Dadri II STPS	980	969	902	664	19.47	811	22.49	-3.03
	Unchahar I TPS	420	398	423	374	9.00	375	9.04	-0.03
	Unchahar II TPS	420	400	420	339	8.65	360	8.63	0.01
	Unchahar III TPS	210	0	0	0	0.00	0	0.00	0.00
	ISTPP (Jhajjar)	1500	995	309	373	10.68	445	10.51	0.17
	Dadri GPS	830	805	373	392	8.67	361	8.79	-0.12
	Anta GPS	419	389	239	255	5.78	241	5.86	-0.08
	Auraiva GPS	663	624	306	321	7.33	305	6.89	0.43
	Sub Total (A)	10782	8310	6893	6549	156.84	6535	158.94	-2.09
	B. NPC	NAPS	440	194	325	307	6.66	277	4.65
RAPS- B		440	416	461	462	10.02	418	9.98	0.04
RAPS- C		440	430	472	477	10.19	425	10.32	-0.13
Sub Total (B)		1320	1040	1258	1246	26.87	1119	24.95	1.91
C. NHPC	Chamera I HPS	540	540	540	0	6.17	257	6.10	0.06
	Chamera II HPS	300	310	261	0	3.46	144	3.48	-0.02
	Chamera III HPS	231	231	164	0	2.07	86	2.25	-0.18
	Bairasuil HPS	180	182	182	100	1.83	76	1.87	-0.04
	Salal-HPS	690	289	343	237	6.78	282	6.93	-0.15
	Tanakpur-HPS	94	34	40	30	0.78	32	0.80	-0.03
	Uri-HPS	480	480	480	48	11.62	484	11.54	0.08
	Dhauliganga-HPS	280	280	283	0	1.69	70	1.70	-0.01
	Dulhasti-HPS	390	387	331	13	5.95	248	5.78	0.16
	Sewa-II HPS	120	119	124	0	1.90	79	1.90	-0.01
	Sub Total (C)	3305	2851	2748	428	42.23	1760	42.36	-0.13
D. NJPC	Natpaha Jhakri	1500	1605	1551	0	16.24	677	16.28	-0.04
	Sub Total (D)	1500	1605	1551	0	16.24	677	16.28	-0.04
E. THDC	Tehri HPS	1000	340	346	0	6.54	272	6.50	0.03
	Koteswar HPS	400	251	258	0	2.44	102	2.40	0.04
	Sub Total (E)	1400	591	604	0	8.98	374	8.90	0.08
F. BBMB	Bhakra HPS	1480	285	303	303	7.29	304	6.84	0.45
	Dehar HPS	990	314	825	145	7.55	315	7.53	0.02
	Pong HPS	396	10	120	0	0.33	14	0.25	0.08
	Sub Total (F)	2866	609	1248	448	15.17	632	14.62	0.55
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	90	65	1.14	47	1.10	0.03
	KWHEP HPS(IPP)	1000	0	695	0	8.85	369	8.40	0.45
	Malana Stg-II HPS	100	0	110	0	0.47	20	0.41	0.06
	Shree Cement TPS	300	0	259	229	6.10	254	6.24	-0.15
	Budhil HPS(IPP)	70	0	0	35	0.35	15	0.34	0.01
	Sub Total (G)	1662	0	1154	329	16.90	704	16.49	0.41
H. Total Regional Entities (A-G)	22836	15005	15456	9000	283.23	11801	282.53	0.69	

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	1052	850	21.17	882	
	Guru Nanak Dev TPS(Bhatinda)	440	315	295	6.59	275	
	Guru Hargobind Singh TPS(L.mbt)	920	961	726	18.68	778	
	Thermal (Total)	2620	2328	1871	46.44	1935	
	Total Hydro	1148	60	60	1.53	64	
	Total Punjab	3768	2388	1931	47.97	1999	
Haryana	Panipat TPS	1367	666	605	15.47	644	
	DCRTPP (Yamuna nagar)	600	561	521	12.78	533	
	Faridabad GPS (NTPC)	432	181	173	4.01	167	
	RGTPP (khedar) (IPP)	1200	513	371	9.80	408	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	503	375	9.39	391	
	Thermal (Total)	4944	2424	2045	51.44	2143	
	Total Hydro	62	24	24	0.62	26	
	Total Haryana	5006	2448	2069	52.05	2169	
	Rajasthan	kota TPS	1240	1073	1135	26.03	1085
suratgarh TPS		1500	951	953	23.54	981	
Chabra TPS		500	228	200	5.32	222	
Dholpur GPS		330	128	148	3.34	139	
Ramgarh GPS		111	29	30	1.94	81	
RAPS A (NPC)		300	0	0	0.00	0	
Barsingsar (NLC)		250	109	110	2.58	107	
Giral LTPS		250	44	60	0.81	34	
Rajwest LTPS (IPP)		1080	578	492	12.52	522	
VSLP LTPS (IPP)		135	0	0	0.00	0	
Thermal (Total)		5696	3140	3128	76.07	3170	
Total Hydro		550	0	0	0.00	0	
Wind power		2191	291	480	4.64	193	
Biomass		91	28	28	0.68	28	
Solar		201	0	0	1.00	42	
Renewable/Others (Total)		2483	319	508	6.32	263	
Total Rajasthan		8729	3459	3636	82.39	3433	
UP		Anpara TPS	1630	1328	1377	29.40	1225
		Obra TPS	1382	537	542	11.80	492
	Paricha TPS	890	820	750	17.90	746	
	Panki TPS	210	80	50	1.30	54	
	Harduaganj TPS	665	297	306	6.30	263	
	Tanda TPS (NTPC)	440	404	406	9.81	409	
	Roza TPS (IPP)	1200	432	540	12.37	515	
	Anpara-C (IPP)	1200	1012	1010	21.47	895	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	276	288	6.29	262	
	Thermal (Total)	8067	5186	5269	116.64	4860	
	Vishnuparyag HPS (IPP)	400	139	128	2.98	124	
	Other Hydro	527	57	82	1.42	59	
	Cogeneration	981	700	700	16.80	700	
	Total UP	9975	6082	6179	137.84	5619	
	Uttarakhand	Total Hydro	1303	548	458	13.01	542
Total Uttarakhand		1303	548	458	13.01	542	
Delhi	Rajghat TPS	135	102	103	2.42	101	
	Delhi Gas Turbine	282	190	71	3.59	149	
	Pragati Gas Turbine	330	148	148	3.51	146	
	Rithala GPS	108	0	0	0.00	0	
	Bawana GPS	677	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	575	560	12.15	506	
	Thermal (Total)	2237	1015	882	21.67	903	
	Total Delhi	2237	1015	882	21.67	903	
HP	Baspa HPS (IPP)	330	70	60	1.80	75	
	Malana HPS (IPP)	86	88	6	0.48	20	
	Other Hydro	589	338	362	8.72	363	
	Total HP	1005	496	428	11.00	458	
J & K	Baglihar HPS (IPP)	450	296	292	7.40	308	
	Other Hydro	323	50	98	1.57	65	
	Gas/Diesel/Others	183	0	0	0.00	0	
	Total J & K	956	346	390	8.97	374	
Total State Control Area Generation		32979	16782	15973	374.90	15497	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2575	2988	53.79	2241	
Total Regional Availability(Gross)		55815	34813	27961	711.91	29539	

IV. Total Hydro Generation:

Regional Entities Hydro	10364	7046	941	93.07	3878
State Control Area Hydro	5368	1531	1442	39.52	1523
Total Regional Hydro	15731	8577	2383	132.59	5400

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	-150	150	150	150	1.20	1.81	-0.61
Gwalior-Agra (D/C)	1141	1135	1170	0	20.51	0.00	20.51
Zerda-Kankroli	1	-180	1	345	0.00	4.63	-4.63
Zerda-Bhinmal	29	-145	46	278	0.00	3.27	-3.27
Malanpur-Auraiya	-110	-32	0	110	0.00	1.60	-1.60
Badod-Kota/Morak	-13	-105	0	195	0.00	2.51	-2.51
Mundra-Mohindergarh(HVDC)	1179	1159	1179	0	28.22	0.00	28.22
Sub Total WR	2077	1982			49.93	13.81	36.12
Pusauli Bypass	200	200	200	0	4.80	0.00	4.80
MZP- GKP (D/C)	68	226	234	0	2.31	0.00	2.31
Patna-Balia(D/C)	209	345	393	0	6.81	0.00	6.81
B'Sharif-Balia (D/C)	72	189	259	0	3.12	0.00	3.12
Pusauli-Balia	-136	-59	0	136	0.00	1.19	-1.19
Gaya-Fatehpur (765 Kv)	12	49	80	58	0.32	0.00	0.32
Pusauli-Sahupuri	109	96	116	0	2.25	0.00	2.25
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	498	1006			19.61	1.94	17.67
Total IR Exch	2575	2988			69.54	15.75	53.79

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
27.72	0.54	28.26	-3.54	-10.13	4.27	9.76	-2.24	2.29

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
26.74	36.28	63.02	17.67	36.12	53.79	-9.07	-0.16	-9.23

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	1.25	99.65	98.40	71.84	0.35

<----- 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				
50.33	4.34	49.66	19.27	50.05	0.13	0.07	50.27	49.90

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	412	0:13	404	19:27	0.0	0.0	0.0	0.0
Gorakhpur	400	431	16:16	413	19:25	0.0	0.0	63.4	0.4
Bareilly	400	417	18:02	403	19:27	0.0	0.0	0.0	0.0
Kanpur	400	419	3:03	402	19:27	0.0	0.0	0.0	0.0
Dadri	400	417	13:15	406	19:26	0.0	0.0	0.0	0.0
Balabhgarh	400	426	2:59	409	19:25	0.0	0.0	40.1	0.0
Bawana	400	422	2:34	405	19:27	0.0	0.0	10.6	0.0
Bassi	400	428	2:59	405	9:02	0.0	0.0	35.7	0.0
Hissar	400	415	2:59	397	19:27	0.0	0.0	0.0	0.0
Moga	400	420	2:34	401	19:25	0.0	0.0	0.0	0.0
Abdullapur	400	424	2:59	404	19:25	0.0	0.0	15.7	0.0
Nalagarh	400	424	2:34	401	19:24	0.0	0.0	15.6	0.0
Kishenpur	400	419	2:59	396	19:41	0.0	0.0	0.0	0.0
Wagoora	400	417	1:59	387	19:21	0.0	1.7	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	760	0:40	731	19:27	0.0	0.0	100.0	100.0
Balia	765	775	16:08	734	19:26	0.0	0.0	100.0	100.0
Moga	765	788	2:59	751	19:25	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	479.45	447.73	474.45	345.61	316.41	219.46
Pong	426.72	384.05	400.34	223.85	403.27	296.79	61.82	22.65
Tehri	829.79	740.04	763.95	154.00	818.65	982.26	75.93	198.00
Koteshwar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	134.57	152.16
Rihand	268.22	252.98	257.13	163.30	258.62	231.70	NA	NA
RPS	352.80	343.81	345.86	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.97	NA	NA	NA	NA	NA
RSD	527.91	487.91	506.38	NA	495.88	NA	129.41	4.16

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 22.04.2013 :

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 : 22.04.2013

पारी प्रभाती अश्विनी / SHIFT CHARGE ENGINEER