

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 21.04.2013
Date of Reporting : 22.04.2013

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
31504	1280	32784	50.22	28222	4	28226	50.16	681.2	23.36

* 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	43.60	1.69		45.29	47.14	47.52	0.38	92.81	0.07
Haryana	52.27	0.60		52.88	43.05	37.88	-5.16	90.76	0.00
Rajasthan	76.86	0.00	7.28	84.14	50.76	47.42	-3.34	131.56	0.01
Delhi	20.78			20.78	52.78	50.33	-2.45	71.11	0.02
UP	111.27	4.40	16.80	132.47	82.70	75.66	-7.04	208.13	21.55
Uttarakhand		12.83		12.83	18.07	16.46	-1.61	29.29	0.00
HP		11.02		11.02	11.94	11.89	-0.06	22.90	0.00
J & K		12.15	0.00	12.15	18.45	18.77	0.32	30.91	1.70
Chandigarh				0.00	4.05	3.67	-0.37	3.67	0.00
Total	304.78	42.69	24.08	371.56	328.93	309.60	-19.34	681.15	23.36

* 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	4699	0	41	474	4042	0	-198	728	9.97
Haryana	4661	0	136	124	3683	0	-331	76	-0.28
Rajasthan	5431	0	-246	688	5164	0	-205	175	10.75
Delhi	3247	0	-176	-514	2782	4	-70	-776	-15.08
UP	9510	1180	28	-24	9458	0	-204	1091	7.88
Uttarakhand	1515	0	13	465	1090	0	-31	474	10.58
HP	994	0	-80	-462	874	0	87	77	-2.82
J&K	1265	100	-126	-183	993	0	154	-198	-4.12
Chandigarh	182	0	-26	-10	135	0	9	15	0.50
Total	31504	1280	-436	557	28222	4	-789	1663	17.38

* 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	1366	1354	28.45	1185	28.64	-0.19
	Rihand I STPS	1000	930	980	979	20.34	848	21.09	-0.74
	Rihand II STPS	1000	857	1014	505	18.67	778	19.21	-0.54
	Rihand III STPS	500	-10	0	0	0.00	0	-0.24	0.24
	Dadri I STPS	840	784	545	711	14.38	599	17.11	-2.74
	Dadri II STPS	980	969	720	614	15.92	663	21.63	-5.71
	Unchahar I TPS	420	396	372	387	7.87	328	8.36	-0.49
	Unchahar II TPS	420	400	353	336	7.51	313	7.75	-0.24
	Unchahar III TPS	210	0	0	0	0.00	0	0.00	0.00
	ISTPP (Jhajjar)	1500	995	466	463	9.79	408	10.36	-0.57
	Dadri GPS	830	801	382	339	8.80	366	8.90	-0.11
	Anta GPS	419	389	253	240	5.59	233	5.77	-0.18
	Auraiva GPS	663	627	392	308	6.99	291	6.81	0.19
	Sub Total (A)	10782	8387	6843	6236	144.30	6012	155.38	-11.08
B. NPC	NAPS	440	143	266	181	3.90	162	3.43	0.46
	RAPS- B	440	416	463	464	10.03	418	9.98	0.05
	RAPS- C	440	430	474	475	10.20	425	10.32	-0.12
	Sub Total (B)	1320	989	1203	1120	24.12	1005	23.74	0.39
C. NHPC	Chamera I HPS	540	550	540	0	5.79	241	6.00	-0.21
	Chamera II HPS	300	310	300	0	3.23	134	4.06	-0.83
	Chamera III HPS	231	231	210	0	2.30	96	2.43	-0.13
	Bairasuil HPS	180	182	180	20	1.92	80	2.39	-0.47
	Salal-HPS	690	392	489	410	7.77	324	9.23	-1.46
	Tanakpur-HPS	94	33	31	31	0.78	32	0.81	-0.03
	Uri-HPS	480	480	479	479	11.39	474	11.59	-0.20
	Dhauliganga-HPS	280	280	283	0	1.69	70	1.76	-0.07
	Dulhasti-HPS	390	387	400	0	5.29	220	6.02	-0.73
	Sewa-II HPS	120	119	111	0	1.47	61	1.64	-0.17
	Sub Total (C)	3305	2963	3023	940	41.62	1734	45.92	-4.30
D.NJPC	Nathpa Jhakri	1500	1605	1556	0	13.81	576	14.83	-1.02
	Sub Total (D)	1500	1605	1556	0	13.81	576	14.83	-1.02
E. THDC	Tehri HPS	1000	340	340	0	6.26	261	6.50	-0.24
	Koteshwar HPS	400	250	252	0	2.35	98	2.40	-0.05
	Sub Total (E)	1400	590	592	0	8.61	359	8.90	-0.29
F. BBMB	Bhakra HPS	1480	285	303	303	7.19	300	6.84	0.35
	Dehar HPS	990	312	825	145	8.12	338	7.49	0.63
	Pong HPS	396	10	120	0	0.31	13	0.25	0.06
	Sub Total (F)	2866	608	1248	448	15.62	651	14.58	1.04
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	65	77	1.02	42	0.99	0.03
	KWHEP HPS(IPP)	1000	0	694	0	6.85	285	6.94	-0.10
	Malana Stg-II HPS	100	0	0	0	0.47	20	0.43	0.04
	Shree Cement TPS	300	0	247	244	5.95	248	6.41	-0.46
	Budhil HPS(IPP)	70	0	0	34	0.25	10	0.27	-0.03
	Sub Total (G)	1662	0	1006	355	14.53	605	15.04	-0.51
H. Total Regional Entities (A-G)	22836	15142	15471	9099	262.60	10942	278.39	-15.78	

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	1050	890	20.42	851
	Guru Nanak Dev TPS(Bhatinda)	440	329	295	6.40	267
	Guru Hargobind Singh TPS(L.mbt)	920	950	808	16.78	699
	Thermal (Total)	2620	2329	1993	43.60	1817
	Total Hydro	1148	60	104	1.69	70
	Total Punjab	3768	2389	2097	45.29	1887
Haryana	Panipat TPS	1367	642	860	17.65	735
	DCRTPP (Yamuna nagar)	600	563	546	12.70	529
	Faridabad GPS (NTPC)	432	181	168	4.00	167
	RGTPP (khedar) (IPP)	1200	367	139	8.75	365
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	374	463	9.17	382
	Thermal (Total)	4944	2127	2176	52.27	2178
	Total Hydro	62	23	23	0.60	25
	Total Haryana	5006	2150	2199	52.88	2203
	Rajasthan	kota TPS	1240	1069	1170	27.08
suratgarh TPS		1500	940	995	23.98	999
Chabra TPS		500	200	378	8.83	368
Dholpur GPS		330	68	141	2.00	83
Ramgarh GPS		111	50	0	0.85	35
RAPS A (NPC)		300	0	0	0.00	0
Barsingsar (NLC)		250	110	89	2.56	107
Giral LTPS		250	60	64	1.33	55
Rajwest LTPS (IPP)		1080	571	376	10.24	427
VSLP LTPS (IPP)		135	0	0	0.00	0
Thermal (Total)		5696	3068	3213	76.86	3202
Total Hydro		550	0	0	0.00	0
Wind power		2191	63	668	4.80	200
Biomass		91	27	27	0.65	27
Solar		201	0	0	1.83	76
Renewable/Others (Total)		2483	90	695	7.28	303
Total Rajasthan		8729	3158	3908	84.14	3506
UP	Anpara TPS	1630	1367	1397	28.40	1183
	Obra TPS	1382	541	560	12.00	500
	Paricha TPS	890	840	830	18.00	750
	Panki TPS	210	65	70	1.40	58
	Harduaganj TPS	665	286	299	6.10	254
	Tanda TPS (NTPC)	440	393	403	9.35	390
	Roza TPS (IPP)	1200	388	536	9.95	414
	Anpara-C (IPP)	1200	1018	1028	19.97	832
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	252	308	6.10	254
	Thermal (Total)	8067	5150	5431	111.27	4636
	Vishnuparyag HPS (IPP)	400	128	121	2.86	119
	Other Hydro	527	48	43	1.55	65
	Cogeneration	981	700	700	16.80	700
	Total UP	9975	6026	6295	132.47	5401
Uttarakhand	Total Hydro	1303	617	459	12.83	535
	Total Uttarakhand	1303	617	459	12.83	535
Delhi	Rajghat TPS	135	104	102	2.76	115
	Delhi Gas Turbine	282	76	112	2.34	97
	Pragati Gas Turbine	330	123	300	4.45	185
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	0	0	0.00	0
	Badarpur TPS (NTPC)	705	510	500	11.23	468
	Thermal (Total)	2237	813	1014	20.78	866
	Total Delhi	2237	813	1014	20.78	866
HP	Baspa HPS (IPP)	330	69	79	1.65	69
	Malana HPS (IPP)	86	3	6	0.48	20
	Other Hydro	589	375	369	8.89	370
	Total HP	1005	447	454	11.02	459
J & K	Baglihar HPS (IPP)	450	442	440	10.58	441
	Other Hydro	323	50	98	1.57	65
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	492	538	12.15	506
Total State Control Area Generation		32979	16092	16964	371.56	15363
J. Net Inter Regional Exchange (Import (+ve)/Export (-ve))			2185	3324	50.67	2111
Total Regional Availability(Gross)		55815	33748	29387	684.83	28416

IV. Total Hydro Generation:

Regional Entities Hydro	10364	7178	1465	87.99	3666
State Control Area Hydro	5368	1687	1621	42.69	1660
Total Regional Hydro	15731	8865	3086	130.68	5326

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	200	400	100	2.12	1.31	0.81
Gwalior-Agra (D/C)	963	1337	1360	0	20.35	0.00	20.35
Zerda-Kankroli	-94	-151	0	332	0.00	4.94	-4.94
Zerda-Bhinmal	-37	-97	9	263	0.00	3.14	-3.14
Malanpur-Auraiya	-86	-26	0	119	0.00	1.53	-1.53
Badod-Kota/Morak	-39	-97	0	154	0.00	2.67	-2.67
Mundra-Mohindergarh(HVDC)	1177	1140	1178	0	26.75	0.00	26.75
Sub Total WR	1784	2306			49.22	13.58	35.64
Pusauli Bypass	200	200	0	200	4.80	2.90	1.90
MZP- GKP (D/C)	14	106	286	0	2.69	0.00	2.69
Patna-Balia(D/C)	281	430	456	0	7.37	0.00	7.37
B'Sharif-Balia (D/C)	61	171	296	0	3.36	0.00	3.36
Pusauli-Balia	-126	-66	0	126	0.00	2.34	-2.34
Gaya-Fatehpur (765 Kv)	-123	73	170	124	0.32	0.00	0.32
Pusauli-Sahupuri	130	144	156	0	2.49	0.00	2.49
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	401	1018			21.03	5.99	15.03
Total IR Exch	2185	3324			70.24	19.57	50.67

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
25.68	0.58	26.26	-3.61	-8.36	7.86	8.78	-4.88	4.93

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
25.63	37.20	62.83	15.03	35.64	50.67	-10.59	-1.57	-12.16

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	0.10	62.90	62.80	91.90	37.10

<----- 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				
50.52	17.05	49.68	19.10	50.16	0.41	0.12	50.55	50.04

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	419	4:02	405	5:52	0.0	0.0	0.0	0.0
Gorakhpur	400	435	4:06	410	19:11	0.0	0.0	64.8	5.1
Bareilly	400	0	0:00	9999	0:00	0.0	0.0	0.0	0.0
Kanpur	400	426	4:04	405	5:52	0.0	0.0	7.9	0.0
Dadri	400	425	4:04	409	5:52	0.0	0.0	12.6	0.0
Balabhgarh	400	432	4:04	413	19:14	0.0	0.0	76.5	0.7
Bawana	400	427	4:01	408	19:10	0.0	0.0	24.6	0.0
Bassi	400	430	3:49	409	5:51	0.0	0.0	45.0	0.0
Hissar	400	420	4:01	401	19:09	0.0	0.0	0.0	0.0
Moga	400	426	4:04	406	19:12	0.0	0.0	14.4	0.0
Abdullapur	400	429	4:01	402	19:10	0.0	0.0	30.9	0.0
Nalagarh	400	429	4:01	405	19:10	0.0	0.0	29.7	0.0
Kishenpur	400	428	3:57	398	20:15	0.0	0.0	12.0	0.0
Wagoora	400	430	4:04	388	20:17	0.0	0.2	11.3	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	782	4:04	737	19:14	0.0	0.0	100.0	100.0
Balia	765	787	7:01	713	5:46	0.0	0.0	100.0	100.0
Moga	765	799	4:01	760	19:10	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	479.35	447.73	474.35	340.29	329.15	214.56
Pong	426.72	384.05	400.31	223.85	403.24	296.79	55.90	21.61
Tehri	829.79	740.04	764.40	147.00	818.65	982.26	56.87	189.00
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 21.04.2013 :

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 : 21.04.2013

पारी प्रभाती अश्विनी / SHIFT CHARGE ENGINEER