

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 12.07.2014
Date of Reporting : 13.07.2014

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
45675	4921	50595	49.83	46733	4100	50833	50.02	1071.9	77.55

* 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	63.38	23.28		86.66	127.07	126.73	-0.34	213.39	3.15
Haryana	66.94	0.60		67.54	123.09	122.23	-0.86	189.77	0.35
Rajasthan	103.40	0.20	19.01	122.61	80.90	80.41	-0.49	203.01	2.20
Delhi	26.68			26.68	90.42	88.73	-1.69	115.41	0.00
UP	115.80	11.20	1.10	128.10	119.33	122.04	2.71	250.14	65.16
Uttarakhand		22.59		22.59	12.62	12.64	0.02	35.23	3.73
HP		24.92		24.92	0.58	0.39	-0.19	25.32	1.27
J & K		14.63	0.00	14.63	16.51	18.37	1.87	33.00	1.70
Chandigarh				0.00	5.49	6.64	1.15	6.64	0.00
Total	376.19	97.42	20.11	493.72	576.00	578.19	2.19	1071.91	77.55

* 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				# Max(hourly) Demand Met of Day (MW)
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	
Punjab	9023	1375	-98	1555	9229	1200	-12	1712	9307
Haryana	8235	0	4	1080	8337	0	129	1095	8558
Rajasthan	7427	0	-110	256	8528	0	-3	523	9224
Delhi	5170	0	96	293	5127	0	36	391	5521
UP	11239	3335	372	273	11666	2640	-81	1210	11666
Uttarakhand	1726	110	189	-14	1323	260	-56	-26	1726
HP	983	1	-59	-1191	948	0	-3	-1370	1172
J&K	1585	100	76	-250	1333	0	14	-373	1689
Chandigarh	287	0	48	25	242	0	26	0	332
Total	45675	4921	518	2027	46733	4100	51	3163	46817

* STOA figures are at sellers boundary & PX figures are at regional boundary. # figures may not be at simultaneous hour.

Diversity is 1.05

III. Regional Entities :

A. NTPC	Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW	Off Peak MW	Energy	Average	Schedule	UI
				(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU
	Singrauli STPS	2000	1900	2055	2065	49.49	2062	45.60	3.89
	Rihand I STPS	1000	778	881	901	19.26	803	18.68	0.58
	Rihand II STPS	1000	850	948	969	20.99	874	20.39	0.59
	Rihand III STPS	1000	791	830	877	19.50	813	18.92	0.58
	Dadri I STPS	840	813	832	853	17.96	748	18.62	-0.66
	Dadri II STPS	980	966	1012	1008	22.42	934	22.80	-0.38
	Unchahar I TPS	420	397	430	429	10.29	429	9.42	0.87
	Unchahar II TPS	420	400	441	440	10.49	437	9.52	0.96
	Unchahar III TPS	210	198	218	217	5.17	215	4.69	0.48
	ISTPP (Jhajjar)	1500	1270	1231	1451	28.12	1172	29.89	-1.77
	Dadri GPS	830	518	359	179	6.35	264	6.38	-0.03
	Anta GPS	419	377	0	0	0.00	0	0.00	0.00
	Auraiya GPS	663	630	147	144	3.51	146	3.36	0.15
	Dadri Solar	5	1	0	0	0.03	1	0.03	0.00
	Unchahar Solar	10	0	0	0	0.00	0	0.00	0.00
	Sub Total (A)	11297	9889	9384	9533	214	8898	208	5
B. NPC	NAPS	440	266	302	305	6.40	267	6.38	0.02
	RAPS- B	440	391	440	440	9.39	391	9.38	0.00
	RAPS- C	440	205	226	227	4.48	187	4.92	-0.44
	Sub Total (B)	1320	862	968	972	20.26	844	20.69	-0.43
C. NHPC	Chamera I HPS	540	535	540	540	13.03	543	12.84	0.19
	Chamera II HPS	300	301	307	304	7.28	304	7.22	0.07
	Chamera III HPS	231	229	238	236	5.64	235	5.50	0.15
	Bairasui HPS	180	179	182	140	3.11	129	2.82	0.29
	Salal-HPS	690	647	683	660	15.85	661	15.52	0.33
	Tanakpur-HPS	94	72	82	51	1.78	74	1.73	0.05
	Uri-HPS	480	475	476	479	11.53	481	11.40	0.13
	Uri-II HPS	240	240	248	243	5.70	238	5.76	-0.06
	Dhauliganga-HPS	280	134	139	139	3.26	136	3.21	0.05
	Dulhasti-HPS	390	258	272	271	6.40	267	6.19	0.21
	Sewa-II HPS	120	119	129	0	1.08	45	1.00	0.08
	Parbati 3	390	261	268	261	5.49	229	5.38	0.12
	Sub Total ©	3935	3448	3563	3325	80	3340	79	2
D.SJVNL	NJPC	1500	1605	1615	1617	38.54	1606	38.52	0.02
	Rampur HEP	275	212	216	215	5.40	225	5.32	0.08
	Sub Total (D)	1775	1817	1831	1832	43.94	1831	43.84	0.09
E. THDC	Tehri HPS	1000	630	637	0	5.26	219	5.10	0.16
	Koteshwar HPS	400	104	203	92	2.55	106	2.50	0.05
	Sub Total (E)	1400	734	840	92	7.80	325	7.60	0.20
F. BBMB	Bhakra HPS	1514	926	1335	933	22.78	949	22.22	0.56
	Dehar HPS	990	561	825	560	13.99	583	13.47	0.52
	Pong HPS	396	243	360	180	5.98	249	5.84	0.15
	Sub Total (F)	2900	1730	2520	1673	42.75	1781	41.53	1.23
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	231	231	5.48	229	5.30	0.18
	KWHEP HPS(IPP)	1000	0	1200	1200	28.67	1194	28.51	0.15
	Malana Stg-II HPS	100	0	113	113	2.67	111	2.51	0.16
	Shree Cement TPS	300	0	187	234	4.85	202	4.71	0.14
	Budhil HPS(IPP)	70	0	72	71	1.69	70	1.68	0.01
	Sub Total (G)	1662	0	1802	1848	43.36	1807	42.72	0.65
H. Total Regional Entities (A-G)		24289	18481	20908	19275	451.83	18826	443.22	8.61

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	1245	1254	27.81	1159
	Guru Nanak Dev TPS(Bhatinda)	440	407	410	8.71	363
	Guru Hargobind Singh TPS(L.mbt)	920	707	707	15.58	649
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	700	496	547	11.28	470
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	3980	2855	2918	63.38	2641
	Total Hydro	1148	964	969	23.28	970
	Total Punjab	5128	3819	3887	86.66	3611
	Haryana	Panipat TPS	1367	784	782	18.48
DCRTPP (Yamuna nagar)		600	475	511	11.16	465
Faridabad GPS (NTPC)		432	0	0	0.00	0
RGTPP (khedar) (IPP)		1200	1148	1146	25.58	1066
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP)		1320	568	372	11.72	488
Thermal (Total)		4944	2975	2811	66.94	2789
Total Hydro		62	23	24	0.60	25
Total Haryana		5006	2998	2835	67.54	2814
Rajasthan		kota TPS	1240	908	942	22.15
	suratgarh TPS	1500	982	1056	25.14	1048
	Chabra TPS	750	217	218	5.36	223
	Dholpur GPS	330	0	0	0.00	0
	Ramgarh GPS	271	124	195	3.32	138
	RAPS A (NPC)	300	0	0	0.00	0
	Barsingsar (NLC)	250	97	96	2.16	90
	Giral LTPS	250	38	18	0.79	33
	Rajwest LTPS (IPP)	1080	625	822	18.85	786
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	450	450	11.22	468
	Kawai(Adani)	1320	503	602	14.40	600
	Thermal (Total)	8026	3944	4399	103	4308
	Total Hydro	550	0	26	0.20	8
	Wind power	2798	674	1034	18.02	751
	Biomass	99	29	29	0.70	29
	Solar	730	0	0	0.29	12
	Renewable/Others (Total)	3627	703	1063	19.01	792
	Total Rajasthan	12203	4647	5488	122.61	5109
	UP	Anpara TPS	1630	797	916	19.00
Obra TPS		1288	472	480	10.20	425
Paricha TPS		1140	749	778	16.10	671
Panki TPS		210	139	131	2.90	121
Harduaganj TPS		665	381	394	8.20	342
Tanda TPS (NTPC)		440	382	371	8.40	350
Roza TPS (IPP)		1200	1103	1107	23.00	958
Anpara-C (IPP)		1200	950	936	20.30	846
Bajaj Energy Pvt.Ltd(IPP) TPS		450	363	363	7.70	321
Thermal (Total)		8223	5336	5476	115.80	4825
Vishnuparyag HPS (IPP)		400	0	436	7.40	308
Other Hydro		527	188	182	3.80	158
Cogeneration		981	50	50	1.10	46
Total UP		10131	5574	6144	128.10	5029
Uttarakhand	Total Hydro	1303	951	899	22.59	941
	Total Uttarakhand	1303	951	899	22.59	941
Delhi	Rajghat TPS	135	45	46	1.05	44
	Delhi Gas Turbine	282	171	177	4.12	172
	Pragati Gas Turbine	330	277	284	0.68	28
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	279	293	6.88	287
	Badarpur TPS (NTPC)	705	596	528	13.95	581
	Thermal (Total)	2917	1368	1328	26.68	1112
	Total Delhi	2917	1368	1328	26.68	1112
HP	Baspa HPS (IPP)	300	300	330	7.78	324
	Malana HPS (IPP)	86	102	102	2.41	101
	Other Hydro	728	610	584	14.73	614
	Total HP	1114	1012	1016	24.92	1038
J & K	Baqilhar HPS (IPP)	450	438	438	10.41	434
	Other Hydro/IPP	436	163	175	4.22	176
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	601	613	14.63	609
Total State Control Area Generation		38896	20970	22210	493.72	20263
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			6082	6356	160.18	6674
Total Regional Availability(Gross)		63186	47960	47841	1105.73	45764

IV. Total Hydro Generation:

Regional Entities Hydro	11302	10298	8466	211.47	8811
State Control Area Hydro	5589	3739	3729	97.42	3751
Total Regional Hydro	16891	14037	12195	308.89	12562

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	250	-400	400	250	4.98	0.86	4.12
Gwalior-Agra (D/C)	1874	2355	2363	0	47.72	0.00	47.72
Zerda-Kankroli	-65	-7	-149	7	1.12	0.00	1.12
Zerda-Bhinmal	63	20	132	148	0.00	0.61	-0.61
Malanpur-Auraiya	-27	-13	0	80	0.00	0.82	-0.82
Badod-Kota/Morak	1	36	74	35	0.64	0.00	0.64
Mundra-Mohindergarh(HVDC)	2298	2304	2325	0	54.39	0.00	54.39
Vindhychal - Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total WR	4394	4295			108.85	2.28	106.57
Pusaui Bypass	400	400	400	0	9.74	0.00	9.74
MZP- GKP (D/C)	378	590	700	0	13.28	0.00	13.28
Patna-Balia(D/C)	529	471	585	0	11.74	0.00	11.74
B'Sharif-Balia (D/C)	310	281	427	0	7.19	0.00	7.19
Pusaui-Balia	-32	-77	0	-99	0.00	-1.62	1.62
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00
Pusaui-Sahupuri	148	156	174	0	3.75	0.00	3.75
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-34	-36	0	0	0.00	0.00	0.00
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-11	276	451	117	6.31	0.00	6.31
Sub Total ER	1688	2061			52.00	-1.62	53.62
Total IR Exch	6082	6356			160.85	0.67	160.18

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

ISGS/LT Schedule (MU)			Bilateral Schedule (MU)			Power Exchange Shdl (MU)		Wheeling (MU)	
ER	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR	
28.49	3.50	31.99	20.26	1.22	0.82	18.97	-0.07	0.07	

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR incld Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
53.00	99.49	152.49	53.62	106.57	160.18	0.61	7.08	7.69

VI. Frequency Profile <----- % of Time Frequency ----->

<49.2	<49.7	<49.8	<49.9	<50.0	49.9-50.05	50.05-50.10	50.10-50.20	>50.20	>50.50
0.00	8.07	23.33	51.61	83.98	44.05	2.60	1.72	0.04	0.00

Frequency (Hz)				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time					
50.20	17.00	49.48	22.17	49.88	0.29	0.12	50.17	49.61

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	402	13:04	396	16:01	0.0	0.0	0.0	0.0
Gorakhpur	400	413	18:30	392	09:28	0.0	0.0	0.0	0.0
Bareilly	400	415	18:34	390	14:15	0.0	0.0	0.0	0.0
Kanpur	400	416	18:44	395	00:13	0.0	0.0	0.0	0.0
Dadri	400	407	18:08	390	00:13	0.0	0.0	0.0	0.0
Ballabgarh	400	415	18:10	394	00:17	0.0	0.0	0.0	0.0
Bawana	400	412	18:14	394	00:15	0.0	0.0	0.0	0.0
Bassi	400	423	19:00	391	08:51	0.0	0.0	2.4	0.0
Hissar	400	404	18:01	386	00:16	0.0	6.2	0.0	0.0
Moga	400	408	18:59	393	00:16	0.0	0.0	0.0	0.0
Abdullapur	400	412	18:03	396	00:17	0.0	0.0	0.0	0.0
Nalagarh	400	407	06:02	394	13:56	0.0	0.0	0.0	0.0
Kishenpur	400	412	08:06	403	00:17	0.0	0.0	0.0	0.0
Wagoora	400	408	05:25	392	20:41	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	779	18:38	736	00:17	0.0	3.1	0.0	0.0
Balia	765	774	18:31	737	00:16	0.0	4.5	0.0	0.0
Moga	765	789	18:59	757	00:17	0.0	0.0	0.0	0.0
Agra	765	788	18:32	744	00:17	0.0	0.0	0.0	0.0
Bhiwani	765	793	18:22	750	00:11	0.0	0.0	0.0	0.0
Unnao	765	773	18:40	721	00:15	8.5	72.2	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	487.48	652.97	491.45	778.28	1057.52	746.49
Pong	426.72	384.05	400.80	237.89	404.34	328.16	215.09	376.70
Tehri	829.79	740.04	748.65	42.00	NA	NA	301.26	205.00
Koteshwar	612.50	598.50	610.77	4.95	608.40	3.76	208.00	207.00
Chamera-I	760.00	748.75	757.00	12.82	NA	NA	505.02	347.40
Rihand	268.22	252.98	258.07	205.10	256.79	149.00	NA	NA
RPS	352.80	343.81	348.06	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	298.80	NA	NA	NA	NA	NA
RSD	527.91	487.91	516.64	144.00	506.65	144.00	224.47	197.51

* NA: Not Available

X(A). Short-Term Open Access Details:

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (20:00 Hrs)			Day Energy (MU)		
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	1604	108	0	1555	0	0	37.71	3.56	41.28
Delhi	320	122	-51	359	-26	-41	9.58	1.09	10.67
Haryana	1334	-239	0	1287	-207	0	29.95	-2.29	27.66
HP	-926	-444	0	-774	-417	0	-19.23	-10.55	-29.77
J&K	-334	-39	0	-334	84	0	-10.07	-2.54	-12.61
CHD	0	0	0	0	25	0	0.33	0.27	0.60
Rajasthan	-756	1277	2	-756	1012	0	-14.52	34.08	19.56
UP	370	837	4	273	0	0	7.15	4.55	11.70
Uttarakhand	0	-26	0	0	-14	0	0.00	-0.44	-0.44
Total	1612	1596	-45	1610	457	-41	40.90	27.74	68.65

X(B). Short-Term Open Access Details:

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1604	1555	280	0	0	0
Delhi	615	271	490	-372	0	-51
Haryana	1334	1085	167	-669	0	0
HP	-723	-926	-359	-540	0	0
J&K	-334	-536	84	-318	0	0
CHD	42	0	44	0	0	0
Rajasthan	-363	-756	1951	713	49	0
UP	371	236	837	0	18	0
Uttarakhand	0	0	-12	-26	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 12.07.2014 :**

1. Hot weather.

XIV. Synchronisation of new generating units :
0.00**XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :****XVI. Tripping of lines in pooling stations :****XVII. Complete generation loss in a generating station :**