

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 14.07.2014
Date of Reporting : 15.07.2014

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
45545	4484	50029	49.91	43889	4317	48205	50.06	1050.2	107.80

* 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	58.79	23.45		82.24	125.17	125.01	-0.16	207.25	31.12
Haryana	55.50	0.59		56.09	124.12	125.38	1.25	181.47	0.58
Rajasthan	123.32	0.00	10.49	133.81	50.15	51.09	0.94	184.89	10.64
Delhi	33.33			33.33	88.09	84.42	-3.66	117.76	0.16
UP	110.90	12.85	1.20	124.95	128.52	133.51	4.98	258.46	62.84
Uttarakhand		22.60		22.60	13.97	13.30	-0.68	35.90	0.75
HP		24.57		24.57	0.21	-0.50	-0.71	24.07	0.03
J & K		14.73	0.00	14.73	16.88	19.05	2.16	33.78	1.70
Chandigarh				0.00	6.24	6.64	0.41	6.64	0.00
Total	381.84	98.79	11.69	492.32	553.35	557.89	4.54	1050.21	107.80

* 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	8958	775	-135	1542	8843	1200	32	1772	9139
Haryana	8040	517	213	1302	7761	0	39	1277	8067
Rajasthan	7761	328	180	-792	7593	127	61	-725	8205
Delhi	5040	0	10	568	4537	0	-293	578	5655
UP	11025	2695	181	1056	11300	2990	144	1433	11475
Uttarakhand	1757	70	-3	130	1326	0	-142	70	1757
HP	1012	0	-47	-1191	840	0	-19	-1375	1170
J&K	1659	100	176	-226	1449	0	153	-344	1975
Chandigarh	294	0	59	0	241	0	-1	0	342
Total	45545	4484	632	2391	43889	4317	-27	2685	46333

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

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III. Regional Entities :

A. NTPC	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
		Singrauli STPS	2000	1531	2063	1552	37.03	1543	36.74
	Rihand I STPS	1000	667	792	712	16.36	682	15.97	0.39
	Rihand II STPS	1000	750	824	832	18.22	759	17.92	0.30
	Rihand III STPS	1000	700	778	759	17.05	711	16.72	0.33
	Dadri I STPS	840	813	790	772	20.07	836	19.11	0.96
	Dadri II STPS	980	966	956	892	23.19	966	23.10	0.09
	Unchahar I TPS	420	394	418	404	10.13	422	9.34	0.79
	Unchahar II TPS	420	400	435	404	10.37	432	9.45	0.92
	Unchahar III TPS	210	198	216	192	5.06	211	4.62	0.44
	ISTPP (Jhajhar)	1500	1143	1019	1233	26.36	1098	26.92	-0.56
	Dadri GPS	830	518	0	174	1.00	42	2.11	-1.11
	Anta GPS	419	377	0	0	0.00	0	0.37	-0.37
	Auraiya GPS	663	631	151	152	3.65	152	3.62	0.03
	Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
	Unchahar Solar	10	0	0	0	0.00	0	0.00	0.00
	Sub Total (A)	11297	9089	8442	8078	189	7854	186	2
B. NPC	NAPS	440	265	311	309	6.48	270	6.36	0.12
	RAPS- B	440	391	224	226	4.89	204	9.38	-4.49
	RAPS- C	440	375	416	413	8.90	371	9.00	-0.10
	Sub Total (B)	1320	1031	951	948	20.27	845	24.74	-4.48
C. NHPC	Chamera I HPS	540	535	540	540	13.06	544	12.84	0.22
	Chamera II HPS	300	301	310	307	7.32	305	7.22	0.10
	Chamera III HPS	231	229	239	234	5.59	233	5.50	0.10
	Bairasui HPS	180	179	181	137	3.12	130	2.75	0.37
	Salal-HPS	690	663	683	660	16.29	679	15.91	0.38
	Tanakpur-HPS	94	77	84	80	1.91	79	1.86	0.05
	Uri-HPS	480	475	478	474	11.54	481	11.40	0.14
	Uri-II HPS	240	240	247	248	5.85	244	5.76	0.09
	Dhauliganga-HPS	280	138	139	139	3.34	139	3.31	0.02
	Dulhasti-HPS	390	258	271	271	6.36	265	6.19	0.17
	Sewa-II HPS	120	119	128	0	1.05	44	1.00	0.05
	Parbati 3	390	261	267	262	5.42	226	5.35	0.08
	Sub Total ©	3935	3475	3567	3350	81	3369	79	2
D.SJVNL	NJPC	1500	1605	1616	1616	38.55	1606	38.52	0.03
	Rampur HEP	275	273	290	216	6.65	277	6.56	0.09
	Sub Total (D)	1775	1878	1906	1832	45.19	1883	45.08	0.11
E. THDC	Tehri HPS	1000	644	665	0	5.43	226	5.30	0.13
	Koteshwar HPS	400	104	202	92	2.55	106	2.50	0.05
	Sub Total (E)	1400	748	867	92	7.98	332	7.80	0.18
F. BBMB	Bhakra HPS	1514	930	1336	934	22.71	946	22.33	0.39
	Dehar HPS	990	573	825	560	13.89	579	13.75	0.14
	Pong HPS	396	261	360	240	6.31	263	6.27	0.04
	Sub Total (F)	2900	1765	2521	1734	42.91	1788	42.35	0.56
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	230	230	5.48	228	5.30	0.17
	KWHEP HPS(IPP)	1000	0	1200	1200	28.67	1195	28.51	0.16
	Malana Stg-II HPS	100	0	113	113	2.67	111	2.51	0.16
	Shree Cement TPS	300	0	205	200	4.92	205	5.09	-0.17
	Budhil HPS(IPP)	70	0	71	71	1.70	71	1.68	0.01
	Sub Total (G)	1662	0	1819	1815	43.43	1810	43.09	0.34
H. Total Regional Entities (A-G)		24289	17985	20072	17849	429.14	17881	428.17	0.97

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	1240	1242	27.28	1137	
	Guru Nanak Dev TPS(Bhatinda)	440	410	410	8.56	357	
	Guru Hargobind Singh TPS(L.mbt)	920	445	417	9.55	398	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura	700	701	540	13.39	558	
	Talwandi Saboo	660	0	0	0.00	0	
	Thermal (Total)	3980	2796	2609	58.79	2450	
	Total Hydro	1148	985	986	23.45	977	
	Total Punjab	5128	3781	3595	82.24	3427	
	Haryana	Panipat TPS	1367	906	770	19.05	794
DCRTPP (Yamuna nagar)		600	528	504	11.84	493	
Faridabad GPS (NTPC)		432	0	0	0.00	0	
RGTPP (khedar) (IPP)		1200	488	569	11.86	494	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP)		1320	557	557	12.75	531	
Thermal (Total)		4944	2479	2400	55.50	2313	
Total Hydro		62	24	23	0.59	24	
Total Haryana		5006	2503	2423	56.09	2337	
Rajasthan		kota TPS	1240	943	949	21.82	909
		suratgarh TPS	1500	1072	1087	24.61	1025
	Chabra TPS	750	367	372	9.14	381	
	Dholpur GPS	330	0	0	0.00	0	
	Ramgarh GPS	271	108	111	3.11	129	
	RAPS A (NPC)	300	0	0	0.00	0	
	Barsingsar (NLC)	250	95	95	2.16	90	
	Giral LTPS	250	37	0	3.11	129	
	Rajwst LTPS (IPP)	1080	824	828	20.04	835	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Kalisindh Thermal	600	459	459	10.29	429	
	Kawai(Adani)	1320	1183	1177	29.05	1210	
	Thermal (Total)	8026	5088	5078	123	5138	
	Total Hydro	550	0	0	0.00	0	
	Wind power	2798	552	216	9.44	393	
	Biomass	99	36	36	0.86	36	
	Solar	730	0	0	0.19	8	
	Renewable/Others (Total)	3627	588	252	10.49	437	
	Total Rajasthan	12203	5676	5330	133.81	5575	
	UP	Anpara TPS	1630	923	889	21.60	900
Obra TPS		1288	491	458	10.90	454	
Paricha TPS		1140	535	551	12.80	533	
Panki TPS		210	135	153	3.20	133	
Harduaganj TPS		665	379	380	9.10	379	
Tanda TPS (NTPC)		440	292	278	7.15	298	
Roza TPS (IPP)		1200	783	1098	24.84	1035	
Anpara-C (IPP)		1200	528	531	12.62	526	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	363	361	8.69	362	
Thermal (Total)		8223	4429	4699	110.90	4621	
Vishnuparyag HPS (IPP)		400	396	436	9.22	384	
Other Hydro		527	122	180	3.63	151	
Cogeneration		981	50	50	1.20	50	
Total UP		10131	4997	5365	124.95	4822	
Uttarakhand		Total Hydro	1303	945	892	22.60	942
		Total Uttarakhand	1303	945	892	22.60	942
Delhi	Rajghat TPS	135	101	101	2.26	94	
	Delhi Gas Turbine	282	174	169	4.19	174	
	Pragati Gas Turbine	330	284	291	6.97	291	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	1370	280	279	6.68	278	
	Badarpur TPS (NTPC)	705	587	505	13.24	552	
	Thermal (Total)	2917	1426	1345	33.33	1389	
	Total Delhi	2917	1426	1345	33.33	1389	
HP	Baspa HPS (IPP)	300	330	300	7.49	312	
	Malana HPS (IPP)	86	102	104	2.47	103	
	Other Hydro	728	618	597	14.61	609	
	Total HP	1114	1050	1001	24.57	1024	
J & K	Baqilhar HPS (IPP)	450	438	438	10.51	438	
	Other Hydro/IPP	436	163	175	4.22	176	
	Gas/Diesel/Others	209	0	0	0.00	0	
	Total J & K	1094	601	613	14.73	614	
Total State Control Area Generation		38896	20979	20564	492.32	20129	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			6216	6881	158.56	6607	
Total Regional Availability(Gross)		63186	47267	45293	1080.02	44617	

IV. Total Hydro Generation:

Regional Entities Hydro	11302	10403	8551	213.76	8906
State Control Area Hydro	5589	3727	3695	98.79	3732
Total Regional Hydro	16891	14130	12246	312.54	12638

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	50	450	500	0	9.21	0.00	9.21
Gwalior-Agra (D/C)	1897	2010	2343	0	47.74	0.00	47.74
Zerda-Kankroli	-167	-100	0	297	0.00	4.12	-4.12
Zerda-Bhinmal	-144	-52	0	286	0.00	3.15	-3.15
Malanpur-Auraiya	-24	-32	0	47	0.00	0.55	-0.55
Badod-Kota/Morak	-17	-56	0	62	0.00	0.93	-0.93
Mundra-Mohindergarh(HVDC)	2297	2000	2314	0	50.39	0.00	50.39
Vindhychal - Rihand	477	463	477	0	11.01	0.00	11.01
Sub Total WR	4369	4683			118.36	8.75	109.61
Pusaui Bypass	400	400	400	0	9.72	0.00	9.72
MZP- GKP (D/C)	506	740	780	0	13.45	0.00	13.45
Patna-Balia(D/C)	484	524	635	0	12.30	0.00	12.30
B'Sharif-Balia (D/C)	243	259	405	0	6.46	0.00	6.46
Pusaui-Balia	-68	-68	0	95	0.00	1.59	-1.59
Gaya-Fatehpur (765 Kv)	7	0	82	0	0.32	0.00	0.32
Pusaui-Sahupuri	170	157	186	0	3.94	0.00	3.94
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
Son Ngr-Rihand	24	30	0	36	0.00	0.69	-0.69
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	81	156	381	0	4.57	0.00	4.57
Sub Total ER	1847	2198			51.24	2.28	48.95
Total IR Exch	6216	6881			169.59	11.03	158.56

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
29.76	3.67	33.42	15.80	2.21	-0.80	12.29	0.00	0.00

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
48.42	97.75	146.18	48.95	109.61	158.56	0.53	11.86	12.39

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	0.59	7.78	28.98	68.49	58.89	9.06	3.24	0.03	0.00

Frequency (Hz)				Average Frequency	Frequency Variation	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz	Index			
50.20	5.03	49.65	19.45	49.95	0.11	0.09	50.18	49.84

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	404	19:02	399	00:16	0.0	0.0	0.0	0.0
Gorakhpur	400	407	06:02	390	14:15	0.0	0.0	0.0	0.0
Bareilly	400	412	06:05	392	14:11	0.0	0.0	0.0	0.0
Kanpur	400	414	06:03	401	00:15	0.0	0.0	0.0	0.0
Dadri	400	408	06:03	390	14:42	0.0	0.0	0.0	0.0
Ballabgarh	400	416	06:03	397	14:40	0.0	0.0	0.0	0.0
Bawana	400	410	11:12	395	14:40	0.0	0.0	0.0	0.0
Bassi	400	419	22:17	400	09:27	0.0	0.0	0.0	0.0
Hissar	400	402	06:04	387	14:42	0.0	1.5	0.0	0.0
Moga	400	406	06:03	394	14:40	0.0	0.0	0.0	0.0
Abdullapur	400	412	06:03	396	14:41	0.0	0.0	0.0	0.0
Nalagarh	400	410	06:04	392	14:40	0.0	0.0	0.0	0.0
Kishenpur	400	412	06:02	400	19:44	0.0	0.0	0.0	0.0
Wagoora	400	409	06:03	388	19:44	0.0	0.5	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	766	06:03	740	00:16	0.0	2.8	0.0	0.0
Balia	765	765	06:04	733	14:43	0.0	13.4	0.0	0.0
Moga	765	785	06:04	758	14:41	0.0	0.0	0.0	0.0
Agra	765	784	06:04	754	10:16	0.0	0.0	0.0	0.0
Bhiwani	765	786	06:03	754	14:42	0.0	0.0	0.0	0.0
Unnao	765	756	06:04	731	00:16	0.0	50.8	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	1590	182	0	1542	0	0	37.39	4.26	41.64
Delhi	319	310	-51	308	260	0	10.22	5.31	15.53
Haryana	1170	107	0	1260	42	0	26.66	0.07	26.73
HP	-927	-448	0	-775	-416	0	-19.49	-9.75	-29.24
J&K	-305	-39	0	-334	109	0	-9.80	-2.13	-11.93
CHD	0	0	0	0	0	0	0.33	1.04	1.38
Rajasthan	-758	31	2	-758	-34	0	-15.96	4.71	-11.25
UP	401	1032	0	295	761	0	8.20	14.09	22.29
Uttarakhand	-7	77	0	-7	137	0	-0.16	2.06	1.90
Total	1484	1250	-49	1531	859	0	37.39	19.66	57.05

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1590	1541	292	0	0	0
Delhi	782	270	598	-240	0	-51
Haryana	1268	866	152	-660	0	0
HP	-725	-927	-357	-476	0	0
J&K	-305	-588	109	-306	0	0
CHD	41	0	74	0	0	0
Rajasthan	-463	-758	947	-39	2	0
UP	490	256	1032	0	2	0
Uttarakhand	-7	-7	225	24	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 14.07.2014 :**

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 :**