

पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 31.07.2014
Date of Reporting : 01.08.2014

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
43494	3004	46498	49.84	42474	2940	45414	50.08	1024.4	63.04

* 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	74.81	23.07		97.89	118.33	118.54	0.21	216.42	0.00
Haryana	57.17	0.50		57.67	116.32	114.49	-1.83	172.15	0.00
Rajasthan	103.39	0.00	4.93	108.31	53.52	55.11	1.59	163.42	0.39
Delhi	28.18			28.18	80.25	79.78	-0.47	107.96	0.13
UP	119.70	14.60	1.20	135.50	127.26	132.87	5.61	268.37	57.63
Uttarakhand		12.13		12.13	18.05	20.23	2.18	32.36	3.20
HP		26.46		26.46	0.01	-0.04	-0.05	26.42	0.00
J & K		14.73	0.00	14.73	17.18	16.48	-0.70	31.21	1.70
Chandigarh				0.00	5.74	6.12	0.39	6.12	0.00
Total	383.25	91.48	6.13	480.86	536.65	543.58	6.93	1024.43	63.04

* 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	9400	0	18	1301	9186	0	-50	1749	9489
Haryana	7470	0	168	1585	7418	0	-140	1691	7900
Rajasthan	6585	54	122	-611	6780	0	87	-283	7201
Delhi	4786	0	195	422	4063	0	-4	175	5159
UP	10903	2585	-100	765	11532	2890	256	919	11968
Uttarakhand	1502	265	315	90	1323	50	135	95	1532
HP	1059	0	-54	-1298	963	0	28	-1448	1248
J&K	1510	100	2	-315	993	0	-154	-767	1518
Chandigarh	280	0	29	20	216	0	14	0	306
Total	43494	3004	695	1957	42474	2940	171	2130	44890

* 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
Rihand I STPS	1000	395	458	405	10.35	431	9.38	0.97	
Rihand II STPS	1000	927	918	975	23.97	999	22.05	1.92	
Rihand III STPS	1000	833	920	850	21.39	891	19.91	1.48	
Dadri I STPS	840	770	721	588	18.11	755	17.56	0.55	
Dadri II STPS	980	470	471	422	10.98	458	10.97	0.01	
Unchahar I TPS	420	391	423	425	10.12	421	9.27	0.84	
Unchahar II TPS	420	400	439	436	10.27	428	9.36	0.90	
Unchahar III TPS	210	198	214	190	5.10	212	4.66	0.43	
ISTPP (Jhajjar)	1500	950	663	624	15.72	655	15.97	-0.25	
Dadri GPS	830	649	275	282	8.15	340	8.16	-0.01	
Anta GPS	419	390	251	222	5.77	241	5.56	0.21	
Auraiya GPS	663	635	159	106	3.71	154	3.57	0.14	
Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01	
Unchahar Solar	10	3	0	0	0.02	1	0.07	-0.05	
Sub Total (A)	11297	8801	7930	7365	186	7765	179	7	
B. NPC	NAPS	440	272	308	309	6.47	270	6.53	-0.05
RAPS- B	440	396	436	437	9.40	392	9.50	-0.10	
RAPS- C	440	390	401	408	8.53	356	9.36	-0.83	
Sub Total (B)	1320	1058	1145	1154	24.41	1017	25.39	-0.98	
C. NHPC	Chamera I HPS	540	534	547	538	13.11	546	12.82	0.30
Chamera II HPS	300	301	310	306	7.31	305	7.22	0.09	
Chamera III HPS	231	229	236	231	5.56	232	5.50	0.05	
Bairasui HPS	180	178	180	180	3.82	159	3.75	0.07	
Salal-HPS	690	663	679	679	16.32	680	15.91	0.41	
Tanakpur-HPS	94	79	87	58	1.99	83	1.90	0.09	
Uri-HPS	480	454	462	452	11.05	461	10.91	0.15	
Uri-II HPS	240	238	239	242	5.74	239	5.72	0.03	
Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00	
Dulhasti-HPS	390	386	399	393	9.33	389	9.26	0.07	
Sewa-II HPS	120	119	128	77	1.61	67	1.50	0.11	
Parbati 3	390	261	267	267	6.35	264	6.26	0.09	
Sub Total ©	3935	3443	3534	3423	82	3424	81	1	
D.SJVNL	NJPC	1500	1605	1618	1616	38.55	1606	38.52	0.02
Rampur HEP	275	280	283	281	6.84	285	6.72	0.12	
Sub Total (D)	1775	1885	1901	1897	45.38	1891	45.24	0.14	
E. THDC	Tehri HPS	1000	884	902	884	21.23	885	21.00	0.23
Koteshwar HPS	400	400	401	302	8.21	342	8.20	0.01	
Sub Total (E)	1400	1284	1303	1186	29.44	1227	29.20	0.24	
F. BBMB	Bhakra HPS	1514	967	1237	826	23.47	978	23.21	0.26
Dehar HPS	990	573	660	580	14.12	588	13.74	0.38	
Pong HPS	396	194	384	126	4.89	204	4.65	0.24	
Sub Total (F)	2900	1733	2281	1532	42.48	1770	41.60	0.88	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	226	227	5.40	225	5.26	0.14
KWHEP HPS(IPP)	1000	0	1200	1200	28.71	1196	28.51	0.19	
Malana Stg-II HPS	100	0	111	112	2.64	110	2.50	0.14	
Shree Cement TPS	300	0	140	139	3.35	140	3.43	-0.08	
Budhil HPS(IPP)	70	0	35	35	0.88	36	0.82	0.05	
Sub Total (G)	1662	0	1712	1712	40.97	1707	40.52	0.45	
H. Total Regional Entities (A-G)	24289	18204	19806	18270	451.21	18801	441.76	9.45	

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	1220	1230	26.31	1096	
	Guru Nanak Dev TPS(Bhatinda)	440	437	436	9.12	380	
	Guru Hargobind Singh TPS(L.mbt)	920	930	946	20.28	845	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura	700	1064	787	19.11	796	
	Talwandi Saboo	660	0	0	0.00	0	
	Thermal (Total)	3980	3651	3399	74.81	3117	
	Total Hydro	1148	978	977	23.07	961	
	Total Punjab	5128	4629	4376	97.89	4079	
	Haryana	Panipat TPS	1367	208	207	5.02	209
DCRTPP (Yamuna nagar)		600	264	441	8.03	335	
Faridabad GPS (NTPC)		432	193	169	4.31	180	
RGTPP (khedar) (IPP)		1200	870	804	20.35	848	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP)		1320	741	739	19.46	811	
Thermal (Total)		4944	2276	2360	57.17	2382	
Total Hydro		62	20	21	0.50	21	
Total Haryana		5006	2296	2381	57.67	2403	
Rajasthan		kota TPS	1240	989	1095	24.99	1041
	suratgarh TPS	1500	1071	1001	24.20	1008	
	Chabra TPS	750	271	330	7.80	325	
	Dholpur GPS	330	76	76	2.75	115	
	Ramgarh GPS	271	139	112	3.91	163	
	RAPS A (NPC)	300	0	0	0.00	0	
	Barsingsar (NLC)	250	191	190	4.32	180	
	Giral LTPS	250	0	0	0.00	0	
	Rajwest LTPS (IPP)	1080	748	950	20.99	875	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Kalisindh Thermal	600	0	0	0.00	0	
	Kawai(Adani)	1320	575	620	14.42	601	
	Thermal (Total)	8026	4060	4374	103	4308	
	Total Hydro	550	0	0	0.00	0	
	Wind power	2798	245	202	3.84	160	
	Biomass	99	22	22	0.53	22	
	Solar	730	0	0	0.56	23	
	Renewable/Others (Total)	3627	267	224	4.93	205	
	Total Rajasthan	12203	4327	4598	108.31	4513	
	UP	Anpara TPS	1630	841	852	20.00	833
Obra TPS		1288	486	378	10.60	442	
Paricha TPS		1140	828	660	18.60	775	
Panki TPS		210	135	126	3.20	133	
Harduaganj TPS		665	264	237	5.90	246	
Tanda TPS (NTPC)		440	371	357	9.00	375	
Roza TPS (IPP)		1200	1091	1049	25.90	1079	
Anpara-C (IPP)		1200	543	1031	16.30	679	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	402	400	10.20	425	
Thermal (Total)		8223	4961	5090	119.70	4988	
Vishnuparyag HPS (IPP)		400	396	436	10.30	429	
Other Hydro		527	122	185	4.30	179	
Cogeneration		981	50	50	1.20	50	
Total UP		10131	5529	5761	135.50	5217	
Uttarakhand		Total Hydro	1303	442	508	12.13	505
		Total Uttarakhand	1303	442	508	12.13	505
Delhi	Rajghat TPS	135	97	90	2.40	100	
	Delhi Gas Turbine	282	108	27	1.62	67	
	Pragati Gas Turbine	330	278	282	7.06	294	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	1370	294	299	7.28	303	
	Badarpur TPS (NTPC)	705	499	361	9.82	409	
	Thermal (Total)	2917	1276	1059	28.18	1174	
	Total Delhi	2917	1276	1059	28.18	1174	
HP	Baspa HPS (IPP)	300	330	330	7.78	324	
	Malana HPS (IPP)	86	105	105	2.50	104	
	Other Hydro	728	761	664	16.17	674	
	Total HP	1114	1196	1099	26.46	1102	
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	20296	20395	480.86	19606	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5774.44	4634.63	126.46	5269	
Total Regional Availability(Gross)		63186	45877	43299	1058.53	43676	

IV. Total Hydro Generation:

Regional Entities Hydro	11302	10556	9576	236.23	9843
State Control Area Hydro	5589	3359	3403	91.48	3383
Total Regional Hydro	16891	13915	12979	327.71	13225

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	200	-250	250	250	1.93	1.59	0.34
Gwalior-Agra (D/C)	1641	1249	2248	0	34.96	0.00	34.96
Zerda-Kankroli	-54	-81	0	228	0.00	2.84	-2.84
Zerda-Bhinmal	-47	-73	9	246	0.00	2.46	-2.46
Malanpur-Auraiya	-70	-75	0	102	0.00	1.53	-1.53
Badod-Kota/Morak	-2	-38	12	71	0.00	0.74	-0.74
Mundra-Mohindergarh(HVDC)	2002	2002	2005	0	47.75	0.00	47.75
Vindhychal - Rihand	405	390	411	0	9.15	0.00	9.15
Sub Total WR	4075	3124			93.79	9.16	84.63
Pusaali Bypass	400	400	400	0	9.70	0.00	9.70
MZP- GKP (D/C)	480	546	700	0	12.71	0.00	12.71
Patna-Balia(D/C)	313	183	363	0	6.31	0.00	6.31
B'Sharif-Balia (D/C)	347	236	411	0	7.94	0.00	7.94
Pusaali-Balia	-56	-88	0	113	0.00	1.72	-1.72
Gaya-Fatehpur (765 Kv)	23	6	112	23	0.98	0.00	0.98
Pusaali-Sahupuri	105	175	195	0	3.49	0.00	3.49
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-34	-40	0	40	0.00	0.82	-0.82
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	122	92	217	0	3.25	0.00	3.25
Sub Total ER	1699	1511			44.38	2.54	41.84
Total IR Exch	5774	4635			138.17	11.70	126.46

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	
28.32	3.77	32.09	12.49	6.03	-2.45	13.02	1.04	-1.04	

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
43.18	72.59	115.77	41.84	84.63	126.46	-1.35	12.04	10.69

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	1.31	10.46	33.04	70.45	55.82	8.48	2.49	0.35	NA

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					
50.23	13.03	49.63	19.25	49.94	0.14	0.10	50.23	49.78

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	406	13:02	400	21:40	0.0	0.0	0.0	0.0
Gorakhpur	400	411	05:06	393	19:26	0.0	0.0	0.0	0.0
Bareilly	400	415	08:02	397	19:26	0.0	0.0	0.0	0.0
Kanpur	400	419	08:01	404	19:25	0.0	0.0	0.0	0.0
Dadri	400	410	08:01	395	14:53	0.0	0.0	0.0	0.0
Ballabgarh	400	420	08:01	401	14:22	0.0	0.0	0.0	0.0
Bawana	400	414	08:00	401	12:18	0.0	0.0	0.0	0.0
Bassi	400	431	04:02	414	09:37	0.0	0.0	51.7	0.1
Hissar	400	409	18:03	396	14:18	0.0	0.0	0.0	0.0
Moga	400	409	03:08	402	12:03	0.0	0.0	0.0	0.0
Abdullapur	400	414	18:03	396	14:23	0.0	0.0	0.0	0.0
Nalagarh	400	410	02:48	397	14:21	0.0	0.0	0.0	0.0
Kishenpur	400	414	08:02	407	11:35	0.0	0.0	0.0	0.0
Wagoora	400	408	09:09	399	19:55	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	780	08:01	744	19:25	0.0	0.0	0.0	0.0
Balia	765	775	05:04	743	19:26	0.0	0.0	0.0	0.0
Moga	765	795	08:02	774	12:07	0.0	0.0	0.0	0.0
Agra	765	794	08:03	758	19:25	0.0	0.0	0.0	0.0
Bhiwani	765	794	08:02	769	14:53	0.0	0.0	0.0	0.0
Unnao	765	764	08:03	740	19:26	0.0	0.4	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	1345	403	0	1296	5	0	31.47	8.32	39.79
Delhi	321	-95	-51	360	112	-51	10.54	1.69	12.23
Haryana	1528	164	0	1481	103	0	35.21	3.13	38.35
HP	-1144	-305	0	-991	-306	0	-23.18	-8.32	-31.51
J&K	-367	-400	0	-473	158	0	-11.51	-2.19	-13.70
CHD	0	0	0	0	20	0	0.33	0.36	0.70
Rajasthan	-791	507	1	-752	140	0	-17.24	9.85	-7.40
UP	530	344	44	277	442	45	8.84	4.57	13.42
Uttarakhand	84	12	0	84	6	0	2.01	0.32	2.32
Total	1506	629	-5	1281	680	-5	36.47	17.73	54.20

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1345	1281	619	5	0	0
Delhi	788	272	486	-252	-5	-51
Haryana	1528	1254	170	-63	0	0
HP	-839	-1144	-255	-412	0	0
J&K	-367	-656	158	-400	0	0
CHD	41	0	39	0	0	0
Rajasthan	-629	-791	507	115	1	0
UP	588	238	442	0	45	0
Uttarakhand	84	84	33	1	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 31.07.2014 :**
Normal**XIV. Synchronisation of new generating units :**
0.00**XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :**
1 400 kv Dadri-Loni-I first time synchronised at 17:35hrs. Of 31/07/14
2 400/220 kv ICT-1 at Alwar first time synchronised at 21:46 hrs. Of 31/07/14**XVI. Tripping of lines in pooling stations :****XVII. Complete generation loss in a generating station :**