

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 28.07.2014
Date of Reporting : 29.07.2014

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
41880	2775	44655	49.97	42601	2340	44941	50.06	985.6	47.44

* 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	68.64	22.97		91.60	112.79	112.91	0.11	204.51	0.00
Haryana	60.41	0.31		60.72	108.34	106.06	-2.29	166.77	0.00
Rajasthan	94.07	0.21	22.20	116.48	42.22	41.56	-0.65	158.04	0.00
Delhi	26.64			26.64	77.95	78.35	0.40	104.98	0.04
UP	120.54	11.58	1.20	133.32	126.22	127.15	0.93	260.47	44.64
Uttarakhand		15.41		15.41	17.15	18.23	1.08	33.64	1.07
HP		24.12		24.12	-0.36	-0.04	0.31	24.08	0.00
J & K		10.41	0.00	10.41	16.78	17.02	0.24	27.43	1.70
Chandigarh				0.00	5.29	5.67	0.38	5.67	0.00
Total	370.30	85.00	23.40	478.70	506.38	506.89	0.51	985.59	47.44

* 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	8806	0	-5	1296	9096	0	-11	1657	9326
Haryana	7595	0	-174	1508	7172	0	66	1564	7918
Rajasthan	6363	0	-114	-801	6860	0	-23	-427	7092
Delhi	4291	0	82	541	4355	0	218	232	4880
UP	10463	2600	357	313	11570	2340	-80	1411	11832
Uttarakhand	1698	75	229	97	1279	0	-57	85	1698
HP	1036	0	-37	-1246	828	0	83	-1491	1157
J&K	1379	100	-236	-250	1225	0	-14	-450	1565
Chandigarh	249	0	21	0	216	0	20	0	274
Total	41880	2775	123	1459	42601	2340	201	2581	43796

* 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	1700	1837	1836	41.03	1710	40.58	0.45
	Rihand I STPS	1000	761	863	826	19.43	810	17.45	1.99
	Rihand II STPS	1000	383	469	419	10.08	420	8.85	1.23
	Rihand III STPS	1000	757	849	790	18.86	786	17.49	1.37
	Dadri I STPS	840	770	682	752	17.49	729	16.92	0.57
	Dadri II STPS	980	470	450	435	10.57	440	10.59	-0.02
	Unchahar I TPS	420	390	424	411	9.65	402	8.76	0.90
	Unchahar II TPS	420	400	417	392	9.41	392	8.55	0.86
	Unchahar III TPS	210	198	216	185	4.65	194	4.24	0.41
	ISTPP (Jhajjar)	1500	950	804	882	18.69	779	18.78	-0.09
	Dadri GPS	830	511	270	241	6.31	263	6.37	-0.06
	Anta GPS	419	386	250	220	5.64	235	5.49	0.16
	Auraiya GPS	663	631	160	163	3.76	157	3.63	0.13
	Dadri Solar	5	1	0	0	0.02	1	0.02	-0.01
	Unchahar Solar	10	3	0	0	0.02	1	0.07	-0.05
	Sub Total (A)	11297	8312	7691	7552	176	7317	168	8
B. NPC	NAPS	440	272	313	311	6.55	273	6.53	0.02
	RAPS- B	440	396	396	396	9.50	396	9.50	0.00
	RAPS- C	440	390	390	390	9.36	390	9.36	0.00
	Sub Total (B)	1320	1058	1099	1097	25.42	1059	25.39	0.02
C. NHPC	Chamera I HPS	540	534	540	540	13.05	544	12.82	0.24
	Chamera II HPS	300	301	309	301	7.30	304	7.22	0.08
	Chamera III HPS	231	229	234	233	5.54	231	5.50	0.04
	Bairasui HPS	180	87	120	182	2.11	88	2.07	0.04
	Salal-HPS	690	663	678	680	16.35	681	15.91	0.44
	Tanakpur-HPS	94	47	86	0	1.11	46	1.13	-0.01
	Uri-HPS	480	468	474	473	11.33	472	11.23	0.10
	Uri-II HPS	240	235	244	240	5.64	235	5.63	0.01
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	386	394	394	9.30	387	9.26	0.03
	Sewa-II HPS	120	119	130	0	1.25	52	1.20	0.05
	Parbati 3	390	261	273	263	6.35	265	6.27	0.09
	Sub Total ©	3935	3329	3483	3306	79	3306	78	1
D.SJVNL	NJPC	1500	1605	1614	1616	38.41	1600	38.52	-0.11
	Rampur HEP	275	280	290	290	6.88	287	6.72	0.16
	Sub Total (D)	1775	1885	1904	1906	45.29	1887	45.24	0.04
E. THDC	Tehri HPS	1000	860	870	400	18.11	754	18.00	0.11
	Koteshwar HPS	400	300	300	275	7.07	294	7.00	0.07
	Sub Total (E)	1400	1160	1170	675	25.17	1049	25.00	0.17
F. BBMB	Bhakra HPS	1514	964	1337	826	23.25	969	23.13	0.13
	Dehar HPS	990	566	825	585	14.10	587	13.59	0.51
	Pong HPS	396	239	315	125	5.82	243	5.75	0.08
	Sub Total (F)	2900	1769	2477	1536	43.17	1799	42.46	0.71
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	229	228	5.43	226	5.26	0.18
	KWHEP HPS(IPP)	1000	0	1200	1200	28.67	1195	28.51	0.16
	Malana Stg-II HPS	100	0	113	112	2.67	111	2.51	0.16
	Shree Cement TPS	300	0	145	140	3.47	145	3.49	-0.02
	Budhil HPS(IPP)	70	0	72	71	1.69	71	1.67	0.02
	Sub Total (G)	1662	0	1758	1751	41.93	1747	41.44	0.49
H. Total Regional Entities (A-G)		24289	17513	19582	17823	435.92	18163	425.55	10.37

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	1020	960	21.91	913
	Guru Nanak Dev TPS(Bhatinda)	440	424	330	7.48	312
	Guru Hargobind Singh TPS(L.mbt)	920	948	937	19.47	811
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	700	751	1051	19.78	824
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	3980	3143	3278	68.64	2860
	Total Hydro	1148	978	977	22.97	957
	Total Punjab	5128	4121	4255	91.60	3817
	Haryana	Panipat TPS	1367	208	205	5.01
DCRTPP (Yamuna nagar)		600	442	464	10.69	445
Faridabad GPS (NTPC)		432	157	153	3.69	154
RGTPP (khedar) (IPP)		1200	923	910	21.56	899
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP)		1320	1118	740	19.46	811
Thermal (Total)		4944	2848	2472	60.41	2517
Total Hydro		62	0	16	0.31	13
Total Haryana		5006	2848	2488	60.72	2530
Rajasthan		kota TPS	1240	931	896	21.29
	suratgarh TPS	1500	1063	1048	24.57	1024
	Chabra TPS	750	344	344	7.39	308
	Dholpur GPS	330	87	87	2.77	115
	Ramgarh GPS	271	111	138	3.31	138
	RAPS A (NPC)	300	0	0	0.00	0
	Barsingsar (NLC)	250	97	97	2.17	90
	Giral LTPS	250	0	0	0.00	0
	Rajwest LTPS (IPP)	1080	879	859	20.54	856
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	0	0.00	0
	Kawai(Adani)	1320	519	558	12.04	502
	Thermal (Total)	8026	4031	4027	94	3920
	Total Hydro	550	13	0	0.21	9
	Wind power	2798	675	1044	21.17	882
	Biomass	99	39	39	0.93	39
	Solar	730	0	0	0.10	4
	Renewable/Others (Total)	3627	714	1083	22.20	925
	Total Rajasthan	12203	4758	5110	116.48	4853
	UP	Anpara TPS	1630	869	872	20.50
Obra TPS		1288	449	464	10.50	438
Paricha TPS		1140	722	795	17.30	721
Panki TPS		210	63	45	1.30	54
Harduaganj TPS		665	418	411	9.40	392
Tanda TPS (NTPC)		440	375	367	9.11	379
Roza TPS (IPP)		1200	1107	1080	26.31	1096
Anpara-C (IPP)		1200	717	710	17.47	728
Bajaj Energy Pvt.Ltd(IPP) TPS		450	396	362	8.66	361
Thermal (Total)		8223	5116	5106	120.54	5023
Vishnuparyag HPS (IPP)		400	0	436	8.13	339
Other Hydro		527	188	146	3.45	144
Cogeneration		981	50	50	1.20	50
Total UP		10131	5354	5738	133.32	5216
Uttarakhand		Total Hydro	1303	743	757	15.41
	Total Uttarakhand	1303	743	757	15.41	642
Delhi	Rajghat TPS	135	101	95	2.18	91
	Delhi Gas Turbine	282	153	149	3.55	148
	Pragati Gas Turbine	330	266	290	6.75	281
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	303	302	7.16	298
	Badarpur TPS (NTPC)	705	302	228	6.99	291
	Thermal (Total)	2917	1125	1064	26.64	1110
	Total Delhi	2917	1125	1064	26.64	1110
HP	Baspa HPS (IPP)	300	332	332	7.71	321
	Malana HPS (IPP)	86	104	104	2.47	103
	Other Hydro	728	660	460	13.94	581
	Total HP	1114	1096	896	24.12	1005
J & K	Baqilhar HPS (IPP)	450	438	438	10.41	434
	Other Hydro/IPP	436	0	0	0.00	0
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	438	438	10.41	434
Total State Control Area Generation		38896	20483	20746	478.70	19607
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4551.28	4826.63	101.84	4243
Total Regional Availability(Gross)		63186	44616	43396	1016.46	42014

IV. Total Hydro Generation:

Regional Entities Hydro	11302	10575	8963	229.74	9572
State Control Area Hydro	5589	3456	3230	85.00	3203
Total Regional Hydro	16891	14031	12193	314.74	12775

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	300	-100	100	300	0.51	5.06	-4.55
Gwalior-Agra (D/C)	1598	1675	1890	0	35.64	0.00	35.64
Zerda-Kankroli	-114	-143	0	349	0.00	4.81	-4.81
Zerda-Bhinmal	-102	-142	0	373	0.00	4.43	-4.43
Malanpur-Auraiya	-100	-36	0	100	0.00	3.59	-3.59
Badod-Kota/Morak	-109	-37	0	145	0.00	1.57	-1.57
Mundra-Mohindergarh(HVDC)	2001	1998	2007	0	48.39	0.00	48.39
Vindhychal - Rihand	324	322	327	0	7.78	0.00	7.78
Sub Total WR	3798	3537			92.32	19.45	72.86
Pusaui Bypass	400	400	400	0	9.84	0.00	9.84
MZP- GKP (D/C)	228	446	446	0	7.81	0.00	7.81
Patna-Balia(D/C)	84	167	506	0	4.49	0.00	4.49
B'Sharif-Balia (D/C)	130	233	286	0	4.49	0.00	4.49
Pusaui-Balia	-105	-70	0	114	0.00	2.19	-2.19
Gaya-Fatehpur (765 Kv)	-80	-24	57	136	0.00	0.63	-0.63
Pusaui-Sahupuri	138	149	182	0	3.77	0.00	3.77
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-27	-33	0	-36	0.00	-0.63	0.63
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-15	22	145	46	0.76	0.00	0.76
Sub Total ER	753	1290			31.16	2.19	28.98
Total IR Exch	4551	4827			123.48	21.64	101.84

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
22.36	3.76	26.13	13.56	5.93	-8.57	12.01	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
32.16	69.03	101.19	28.98	72.86	101.84	-3.19	3.83	0.64

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	0.73	4.77	20.80	60.28	62.41	11.59	4.12	1.16	NA

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			
50.26	13.03	49.65	19.26	49.97	0.10	0.09	50.26	49.80

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	409	05:05	403	00:04	0.0	0.0	0.0	0.0
Gorakhpur	400	415	05:15	394	09:24	0.0	0.0	0.0	0.0
Bareilly	400	417	05:08	401	09:24	0.0	0.0	0.0	0.0
Kanpur	400	420	05:07	407	19:24	0.0	0.0	0.0	0.0
Dadri	400	414	18:00	399	00:05	0.0	0.0	0.0	0.0
Ballabgarh	400	421	05:09	408	00:04	0.0	0.0	0.3	0.0
Bawana	400	415	06:06	404	00:06	0.0	0.0	0.0	0.0
Bassi	400	429	05:03	413	09:14	0.0	0.0	70.2	0.0
Hissar	400	411	17:06	399	00:05	0.0	0.0	0.0	0.0
Moga	400	412	17:55	406	09:54	0.0	0.0	0.0	0.0
Abdullapur	400	416	17:46	396	00:06	0.0	0.0	0.0	0.0
Nalagarh	400	412	06:06	402	09:17	0.0	0.0	0.0	0.0
Kishenpur	400	414	08:03	406	19:52	0.0	0.0	0.0	0.0
Wagoora	400	409	02:05	391	19:52	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	05:07	751	19:28	0.0	0.0	0.0	0.0
Balia	765	783	05:13	746	09:49	0.0	0.0	0.0	0.0
Moga	765	799	17:08	780	19:25	0.0	0.0	0.0	0.0
Agra	765	793	17:06	764	09:48	0.0	0.0	0.0	0.0
Bhiwani	765	796	17:06	774	00:06	0.0	0.0	0.0	0.0
Unnao	765	769	05:15	743	19:28	0.0	0.0	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	312	0	1296	0	0	31.50	6.65	38.15
Delhi	313	-30	-51	352	230	-41	11.38	2.83	14.22
Haryana	1430	134	0	1480	29	0	33.89	-4.47	29.42
HP	-1144	-347	0	-991	-254	0	-23.23	-8.35	-31.58
J&K	-334	-115	0	-334	84	0	-10.09	-2.28	-12.37
CHD	0	0	0	0	0	0	0.33	0.01	0.35
Rajasthan	-791	361	3	-791	-10	0	-17.30	5.98	-11.32
UP	531	835	45	275	0	38	8.76	10.97	19.74
Uttarakhand	86	-1	0	86	11	0	2.06	0.13	2.19
Total	1435	1149	-3	1372	90	-3	37.30	11.49	48.79

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1345	1296	782	0	0	0
Delhi	825	264	560	-250	-4	-51
Haryana	1577	1181	153	-1016	0	0
HP	-839	-1144	-222	-481	0	0
J&K	-334	-537	84	-344	0	0
CHD	41	0	11	0	0	0
Rajasthan	-550	-791	458	-10	3	0
UP	580	236	1032	0	46	0
Uttarakhand	86	86	11	-1	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 28.07.2014 :**

Scattered Rain

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 :**