

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 13.08.2014
Date of Reporting : 14.08.2014

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
42419	3828	46247	49.95	40457	3435	43892	49.93	980.7	70.58

* 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	67.43	22.19		89.62	118.74	118.28	-0.46	207.90	0.20
Haryana	73.87	0.54		74.41	101.41	100.30	-1.10	174.72	0.00
Rajasthan	86.69	5.29	30.63	122.61	28.18	26.58	-1.60	149.18	0.00
Delhi	25.60			25.60	81.27	81.38	0.12	106.98	0.13
UP	90.90	17.50	0.70	109.10	130.53	133.79	3.26	242.89	67.92
Uttarakhand		17.47		17.47	17.59	17.76	0.17	35.24	0.50
HP		26.82		26.82	-0.88	-1.18	-0.31	25.64	0.13
J & K		14.79	0.00	14.79	15.37	17.21	1.84	32.00	1.70
Chandigarh				0.00	5.19	6.12	0.93	6.12	0.00
Total	344.49	104.60	31.33	480.42	497.39	500.24	2.85	980.65	70.58

* 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	9046	0	-1	1453	8481	0	-209	1519	9430
Haryana	8199	0	-172	1535	7392	0	117	1730	8394
Rajasthan	6579	0	32	-888	6042	0	-32	-652	6994
Delhi	4728	18	113	122	3994	0	-185	98	5221
UP	9576	3645	63	344	10835	3435	354	1519	10968
Uttarakhand	1534	65	11	84	1429	0	27	84	1591
HP	1078	0	-4	-1314	970	0	1	-1401	1236
J&K	1411	100	28	-378	1090	0	194	-772	1541
Chandigarh	269	0	43	0	224	0	30	0	298
Total	42419	3828	113	958	40457	3435	297	2125	43456

* 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 (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sentout(MW)	Schedule Net MU	UI Net MU
Rihand I STPS	1000	641	734	616	17.11	713	15.02	2.09	
Rihand II STPS	1000	689	707	763	17.32	722	16.04	1.29	
Rihand III STPS	1000	0	0	0	0.00	0	0.00	0.00	
Dadri I STPS	840	813	870	855	20.50	854	19.44	1.06	
Dadri II STPS	980	973	1012	985	23.31	971	23.07	0.24	
Unchahar I TPS	420	395	431	432	10.25	427	9.33	0.93	
Unchahar II TPS	420	253	406	212	6.36	265	5.90	0.46	
Unchahar III TPS	210	198	210	209	5.05	210	4.56	0.49	
ISTPP (Jhajjar)	1500	950	970	970	19.46	811	20.61	-1.15	
Dadri GPS	830	787	179	186	4.35	181	4.53	-0.19	
Anta GPS	419	393	198	225	5.39	225	5.19	0.19	
Auraiya GPS	663	636	158	158	3.79	158	3.66	0.13	
Dadri Solar	5	1	0	0	0.02	1	0.03	0.00	
Unchahar Solar	10	3	0	0	0.02	1	0.07	-0.05	
Sub Total (A)	11297	8349	7561	7447	172	7148	166	6	
B. NPC	NAPS	440	270	304	308	6.48	270	6.48	0.00
RAPS- B	440	198	225	226	4.91	205	4.75	0.16	
RAPS- C	440	390	380	400	9.40	392	9.36	0.04	
Sub Total (B)	1320	858	909	934	20.79	866	20.59	0.20	
C. NHPC	Chamera I HPS	540	534	543	543	10.63	443	10.50	0.13
Chamera II HPS	300	301	311	310	7.39	308	7.22	0.17	
Chamera III HPS	231	226	234	236	5.52	230	5.43	0.09	
Bairasui HPS	180	178	120	120	2.33	97	2.26	0.07	
Salal-HPS	690	662	676	676	16.26	678	15.89	0.37	
Tanakpur-HPS	94	84	87	40	2.06	86	2.02	0.05	
Uri-HPS	480	317	351	316	7.81	325	7.61	0.20	
Uri-II HPS	240	180	199	179	4.42	184	4.31	0.11	
Dhauliganga-HPS	280	208	208	208	4.97	207	4.99	-0.03	
Dulhasti-HPS	390	386	395	396	9.38	391	9.26	0.12	
Sewa-II HPS	120	119	128	0	1.11	46	1.00	0.11	
Parbati 3	390	261	266	134	4.45	185	4.40	0.05	
Sub Total ©	3935	3456	3519	3158	76	3181	75	1	
D.SJVNL	NJPC	1500	1605	1614	1617	38.04	1585	38.52	-0.48
Rampur HEP	275	334	361	288	8.14	339	8.02	0.12	
Sub Total (D)	1775	1939	1975	1905	46.17	1924	46.53	-0.36	
E. THDC	Tehri HPS	1000	1010	1015	1005	24.19	1008	24.00	0.19
Koteshwar HPS	400	385	404	381	8.66	361	8.60	0.06	
Sub Total (E)	1400	1395	1419	1386	32.84	1369	32.60	0.24	
F. BBMB	Bhakra HPS	1514	943	1338	801	23.00	958	22.62	0.38
Dehar HPS	990	571	825	560	14.20	592	13.71	0.49	
Pong HPS	396	167	384	132	4.03	168	4.01	0.02	
Sub Total (F)	2900	1680	2547	1493	41.23	1718	40.33	0.90	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	173	171	3.67	153	3.91	-0.23
KWHEP HPS(IPP)	1000	0	1200	1200	28.45	1185	28.51	-0.06	
Malana Stg-II HPS	100	0	111	110	2.58	108	2.43	0.16	
Shree Cement TPS	300	0	142	128	3.11	130	3.20	-0.09	
Budhil HPS(IPP)	70	0	72	72	1.70	71	1.67	0.02	
Sub Total (G)	1662	0	1697	1680	39.52	1647	39.72	-0.20	
H. Total Regional Entities (A-G)	24289	17677	19627	18003	428.44	17852	420.38	8.07	

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	1202	1060	26.35	1098	
	Guru Nanak Dev TPS(Bhatinda)	440	338	336	6.93	289	
	Guru Hargobind Singh TPS(L.mbt)	920	938	943	20.58	857	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura	700	635	595	13.58	566	
	Talwandi Saboo	660	0	0	0.00	0	
	Thermal (Total)	3980	3113	2934	67.43	2810	
	Total Hydro	1148	931	900	22.19	925	
	Total Punjab	5128	4044	3834	89.62	3734	
	Haryana	Panipat TPS	1367	426	584	11.37	474
DCRTPP (Yamuna nagar)		600	534	525	11.85	494	
Faridabad GPS (NTPC)		432	279	313	7.77	324	
RGTPP (khedar) (IPP)		1200	1152	535	21.50	896	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP)		1320	969	739	21.39	891	
Thermal (Total)		4944	3360	2696	73.87	3078	
Total Hydro		62	22	22	0.54	23	
Total Haryana		5006	3382	2718	74.41	3101	
Rajasthan		kota TPS	1240	1076	654	19.66	819
	suratgarh TPS	1500	910	853	20.15	839	
	Chabra TPS	750	321	311	8.24	343	
	Dholpur GPS	330	119	0	1.64	68	
	Ramgarh GPS	271	134	148	3.93	164	
	RAPS A (NPC)	300	0	0	0.00	0	
	Barsingsar (NLC)	250	201	201	4.65	194	
	Giral LTPS	250	58	56	1.23	51	
	Rajwest LTPS (IPP)	1080	642	475	12.78	533	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Kalisindh Thermal	600	0	360	2.95	123	
	Kawai(Adani)	1320	430	530	11.48	478	
	Thermal (Total)	8026	3891	3588	87	3612	
	Total Hydro	550	217	216	5.29	220	
	Wind power	2798	1171	1172	29.65	1235	
	Biomass	99	28	28	0.67	28	
	Solar	730	0	0	0.31	13	
	Renewable/Others (Total)	3627	1199	1200	30.63	1276	
	Total Rajasthan	12203	5307	5004	122.61	5109	
	UP	Anpara TPS	1630	407	435	10.10	421
Obra TPS		1288	250	257	6.20	258	
Paricha TPS		1140	581	589	13.50	563	
Panki TPS		210	126	122	2.90	121	
Harduaganj TPS		665	414	251	7.70	321	
Tanda TPS (NTPC)		440	280	354	6.70	279	
Roza TPS (IPP)		1200	797	797	19.20	800	
Anpara-C (IPP)		1200	761	757	18.10	754	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	282	282	6.50	271	
Thermal (Total)		8223	3898	3844	90.90	3788	
Vishnuparyag HPS (IPP)		400	436	436	10.40	433	
Other Hydro		527	299	308	7.10	296	
Cogeneration		981	30	30	0.70	29	
Total UP		10131	4663	4618	109.10	4113	
Uttarakhand		Total Hydro	1303	775	698	17.47	728
		Total Uttarakhand	1303	775	698	17.47	728
Delhi	Rajghat TPS	135	43	50	0.91	38	
	Delhi Gas Turbine	282	69	72	1.61	67	
	Pragati Gas Turbine	330	286	294	6.91	288	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	1370	291	297	6.79	283	
	Badarpur TPS (NTPC)	705	382	373	9.38	391	
	Thermal (Total)	2917	1071	1086	25.60	1067	
	Total Delhi	2917	1071	1086	25.60	1067	
HP	Baspa HPS (IPP)	300	332	332	7.70	321	
	Malana HPS (IPP)	86	101	96	2.29	95	
	Other Hydro	728	699	709	16.83	701	
	Total HP	1114	1132	1137	26.82	1117	
J & K	Baqilhar HPS (IPP)	450	450	450	10.80	450	
	Other Hydro/IPP	436	184	139	3.99	166	
	Gas/Diesel/Others	209	0	0	0.00	0	
	Total J & K	1094	634	589	14.79	616	
Total State Control Area Generation		38896	21008	19684	480.42	19584	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4707	5129	106.50	4438	
Total Regional Availability(Gross)		63186	45342	42816	1015.36	41873	

IV. Total Hydro Generation:

Regional Entities Hydro	11302	10944	9422	231.29	9637
State Control Area Hydro	5589	4010	3870	104.60	3925
Total Regional Hydro	16891	14954	13292	335.88	13562

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	50	350	500	1.07	3.38	-2.31
Gwalior-Agra (D/C)	1302	1313	2035	0	29.97	0.00	29.97
Zerda-Kankroli	-125	-171	0	397	0.00	5.21	-5.21
Zerda-Bhinmal	-142	-194	0	393	0.00	5.26	-5.26
Malanpur-Auraiya	-57	-46	0	106	0.00	1.32	-1.32
Badod-Kota/Morak	-87	-65	0	205	0.00	2.71	-2.71
Mundra-Mohindergarh(HVDC)	1998	2002	2203	0	47.69	0.00	47.69
Vindhychal - Rihand	478	490	490	0	8.77	0.00	8.77
Sub Total WR	3417	3379			87.49	17.89	69.61
Pusaui Bypass	181	74	93	181	0.12	2.09	-1.97
MZP- GKP (D/C)	440	690	896	0	14.83	0.00	14.83
Patna-Balia(D/C)	200	297	472	0	6.80	0.00	6.80
B'Sharif-Balia (D/C)	212	336	437	0	7.13	0.00	7.13
Pusaui-Balia	7	31	31	0	0.36	0.00	0.36
Gaya-Fatehpur (765 Kv)	12	84	179	0	2.28	0.00	2.28
Pusaui-Sahupuri	135	94	181	0	3.25	0.00	3.25
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-35	-35	0	40	0.00	0.27	-0.27
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	138	179	255	0	4.48	0.00	4.48
Sub Total ER	1290	1750			39.26	2.36	36.89
Total IR Exch	4707	5129			126.75	20.25	106.50

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
27.04	3.73	30.77	10.03	10.84	-6.74	-2.28	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
34.06	62.46	96.52	36.89	69.61	106.50	2.84	7.15	9.99

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	1.83	15.20	38.94	80.07	54.16	4.42	2.11	0.39	NA

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				
50.23	13.06	49.57	18.54	49.92	0.17	0.10	50.22	49.77

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	411	10:04	403	22:19	0.0	0.0	0.0	0.0
Gorakhpur	400	417	07:02	396	22:07	0.0	0.0	0.0	0.0
Bareilly	400	417	07:02	399	15:07	0.0	0.0	0.0	0.0
Kanpur	400	420	06:36	401	14:40	0.0	0.0	0.0	0.0
Dadri	400	413	07:52	395	14:48	0.0	0.0	0.0	0.0
Ballabgarh	400	421	06:23	400	14:48	0.0	0.0	0.0	0.0
Bawana	400	416	06:18	400	14:37	0.0	0.0	0.0	0.0
Bassi	400	432	05:08	412	14:39	0.0	0.0	52.7	1.1
Hissar	400	409	06:20	393	14:40	0.0	0.0	0.0	0.0
Moga	400	412	07:01	399	14:41	0.0	0.0	0.0	0.0
Abdullapur	400	416	06:21	396	14:25	0.0	0.0	0.0	0.0
Nalagarh	400	413	07:06	399	14:37	0.0	0.0	0.0	0.0
Kishenpur	400	418	13:03	410	14:25	0.0	0.0	0.0	0.0
Wagoora	400	413	01:17	397	20:21	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	783	07:02	743	18:51	0.0	0.0	0.0	0.0
Balia	765	782	07:02	741	22:18	0.0	0.2	0.0	0.0
Moga	765	797	07:03	770	14:42	0.0	0.0	0.0	0.0
Agra	765	795	05:13	760	14:40	0.0	0.0	0.0	0.0
Bhiwani	765	794	08:00	762	14:43	0.0	0.0	0.0	0.0
Unnao	765	762	07:55	734	14:40	0.0	19.9	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	507.53	1426.07	506.05	1352.81	1243.05	714.07
Pong	426.72	384.05	410.30	504.32	420.28	902.94	724.85	262.41
Tehri	829.79	740.04	808.60	782.78	819.55	992.00	686.70	566.00
Koteshwar	612.50	598.50	610.86	4.95	610.00	4.44	566.00	574.00
Chamera-I	760.00	748.75	751.07	0.00	0.00	0.00	278.18	287.86
Rihand	268.22	252.98	260.39	326.40	257.59	183.00	0.00	0.00
RPS	352.80	343.81	1156.00	0.00	0.00	0.00	0.00	0.00
Jawahar Sagar	298.70	295.78	0.00	0.00	0.00	0.00	0.00	0.00
RSD	527.91	487.91	518.91	11.20	518.25	3.61	308.17	460.09

* 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	1470	49	0	1453	0	0	34.74	3.67	38.40
Delhi	321	-172	-51	431	-259	-51	11.47	-4.24	7.24
Haryana	1595	135	0	1454	81	0	37.84	-7.05	30.79
HP	-1170	-231	0	-993	-321	0	-24.95	-6.57	-31.52
J&K	-682	-90	0	-437	59	0	-11.56	-1.73	-13.29
CHD	0	0	0	0	0	0	0.24	0.16	0.40
Rajasthan	-834	191	-9	-819	-69	0	-19.90	2.27	-17.63
UP	831	639	49	306	0	38	10.84	9.00	19.84
Uttarakhand	84	0	0	84	0	0	2.01	0.00	2.01
Total	1614	521	-10	1478	-508	-12	40.72	-4.49	36.23

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1482	1410	457	0	0	0
Delhi	698	296	155	-509	0	-51
Haryana	1645	1454	137	-1080	0	0
HP	-968	-1170	-222	-422	0	0
J&K	-378	-682	59	-285	0	0
CHD	30	0	39	0	0	0
Rajasthan	-816	-839	405	-170	4	-48
UP	831	268	934	0	49	0
Uttarakhand	84	84	0	0	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 13.08.2014 :****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 :**