

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पॉवरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 23.08.2014
Date of Reporting : 24.08.2014

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
46088	4099	50187	50.01	45965	3335	49300	49.88	1077.2	109.13

* 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	79.70	21.45		101.15	112.37	113.37	1.00	214.52	5.70
Haryana	96.80	0.60		97.40	95.11	94.82	-0.29	192.22	0.00
Rajasthan	124.03	0.23	7.35	131.61	64.63	73.85	9.23	205.46	14.38
Delhi	29.40			29.40	80.16	81.31	1.16	110.71	0.28
UP	112.00	17.50	0.36	129.86	119.42	124.46	5.04	254.32	83.66
Uttarakhand		17.91		17.91	15.86	17.00	1.14	34.92	3.42
HP		26.67		26.67	0.41	0.63	0.22	27.29	0.00
J & K		15.14	0.00	15.14	14.36	16.55	2.19	31.69	1.70
Chandigarh				0.00	5.11	6.08	0.98	6.08	0.00
Total	441.93	99.50	7.71	549.13	507.42	528.07	20.65	1077.20	109.13

* 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	9485	100	34	1409	9079	0	-17	1428	9520
Haryana	8662	0	-333	1192	8296	0	78	902	8948
Rajasthan	7896	1039	405	-758	8994	0	237	11	9523
Delhi	4736	0	74	733	4622	0	14	377	5243
UP	10717	2655	139	234	11244	3335	400	897	11244
Uttarakhand	1508	205	5	84	1485	0	42	84	1589
HP	1182	0	9	-1258	987	0	47	-1465	1262
J&K	1625	100	166	-477	1030	0	45	-824	1626
Chandigarh	278	0	50	0	227	0	15	0	300
Total	46088	4099	548	1159	45965	3335	861	1411	46705

* 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	1233	1551	1174	29.58	1232	29.60	-0.02
	Rihand I STPS	1000	421	465	461	11.04	460	10.06	0.98
	Rihand II STPS	1000	965	1043	465	24.86	1036	23.08	1.78
	Rihand III STPS	1000	468	502	505	12.09	504	11.17	0.92
	Dadri I STPS	840	813	841	853	20.53	855	19.51	1.02
	Dadri II STPS	980	478	497	490	11.74	489	11.46	0.28
	Unchahar I TPS	420	383	423	420	10.05	419	9.17	0.88
	Unchahar II TPS	420	400	439	441	10.51	438	9.57	0.95
	Unchahar III TPS	210	198	220	218	5.21	217	4.75	0.46
	ISTPP (Jhajjar)	1500	950	953	999	22.30	929	22.80	-0.50
	Dadri GPS	830	788	369	379	8.82	367	8.86	-0.04
	Anta GPS	419	393	234	257	6.14	256	6.05	0.09
	Auraiya GPS	663	633	305	312	7.28	303	7.04	0.24
	Dadri Solar	5	1	0	0	0.03	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
	Sub Total (A)	11297	8127	7842	6974	180	7509	173	7
B. NPC	NAPS	440	268	306	306	6.34	264	6.43	-0.10
	RAPS- B	440	201	224	226	4.84	202	4.82	0.02
	RAPS- C	440	380	405	404	8.68	362	9.12	-0.44
	Sub Total (B)	1320	849	935	936	19.86	827	20.38	-0.52
C. NHPC	Chamera I HPS	540	534	552	538	8.59	358	8.40	0.19
	Chamera II HPS	300	300	301	310	7.34	306	7.20	0.14
	Chamera III HPS	231	229	231	232	4.94	206	4.90	0.04
	Bairasui HPS	180	178	147	83	2.08	87	1.93	0.15
	Salal-HPS	690	662	677	660	16.27	678	15.89	0.38
	Tanakpur-HPS	94	86	89	87	2.12	88	2.06	0.06
	Uri-HPS	480	404	455	409	10.33	431	9.70	0.63
	Uri-II HPS	240	236	242	241	5.75	240	5.67	0.08
	Dhauliganga-HPS	280	167	139	208	3.98	166	4.00	-0.02
	Dulhasti-HPS	390	386	395	396	9.34	389	9.26	0.07
	Sewa-II HPS	120	119	127	0	0.83	35	0.73	0.10
	Parbati 3	520	230	132	133	2.97	124	2.86	0.12
	Sub Total ©	4065	3532	3487	3296	75	3106	73	2
D.SJVNL	NJPC	1500	1605	1617	1615	38.56	1607	38.52	0.04
	Rampur HEP	275	350	358	357	8.56	357	8.40	0.16
	Sub Total (D)	1775	1955	1975	1972	47.12	1963	46.92	0.20
E. THDC	Tehri HPS	1000	1044	1047	724	16.23	676	16.00	0.23
	Koteshwar HPS	400	386	399	285	6.26	261	6.20	0.06
	Sub Total (E)	1400	1430	1446	1009	22.49	937	22.20	0.29
F. BBMB	Bhakra HPS	1514	1219	1338	1089	29.41	1225	29.25	0.16
	Dehar HPS	990	570	825	560	14.10	587	13.67	0.43
	Pong HPS	396	138	384	66	3.38	141	3.31	0.06
	Sub Total (F)	2900	1927	2547	1715	46.89	1954	46.24	0.65
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	115	134	2.70	113	3.05	-0.34
	KWHEP HPS(IPP)	1000	0	1188	1130	27.19	1133	27.35	-0.16
	Malana Stg-II HPS	100	0	111	76	2.21	92	2.08	0.13
	Shree Cement TPS	300	0	147	149	3.54	147	3.54	0.00
	Budhil HPS(IPP)	70	0	64	66	1.48	61	1.60	-0.13
	Sub Total (G)	1662	0	1625	1556	37.12	1547	37.62	-0.50
H. Total Regional Entities (A-G)		24419	17819	19857	17458	428.24	17843	419.18	9.06

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	1045	1060	23.50	979
	Guru Nanak Dev TPS(Bhatinda)	440	448	450	8.90	371
	Guru Hargobind Singh TPS(L.mbt)	920	940	940	20.60	858
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	1400	1175	1156	26.70	1113
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	4680	3608	3606	79.70	3321
	Total Hydro	1148	909	841	21.45	894
	Total Punjab	5828	4517	4447	101.15	4215
	Haryana	Panipat TPS	1367	1162	957	25.14
DCRTPP (Yamuna nagar)		600	526	531	12.54	523
Faridabad GPS (NTPC)		432	181	182	4.41	184
RGTPP (khedar) (IPP)		1200	1043	1161	26.04	1085
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP)		1320	1232	1076	28.67	1195
Thermal (Total)		4944	4144	3907	96.80	4033
Total Hydro		62	25	25	0.60	25
Total Haryana		5006	4169	3932	97.40	4058
Rajasthan		kota TPS	1240	1081	1072	24.88
	suratgarh TPS	1500	1148	1062	26.56	1107
	Chabra TPS	750	175	194	4.48	187
	Dholpur GPS	330	120	119	3.01	125
	Ramgarh GPS	271	136	105	4.13	172
	RAPS A (NPC)	300	0	0	0.00	0
	Barsingsar (NLC)	250	99	95	2.19	91
	Giral LTPS	250	55	55	1.45	61
	Rajwest LTPS (IPP)	1080	713	713	17.25	719
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	480	475	11.78	491
	Kawai(Adani)	1320	1177	1161	28.31	1180
	Thermal (Total)	8026	5184	5051	124	5168
	Total Hydro	550	0	18	0.23	10
	Wind power	2798	113	459	6.20	258
	Biomass	99	27	27	0.65	27
	Solar	730	0	0	0.50	21
	Renewable/Others (Total)	3627	140	486	7.35	306
	Total Rajasthan	12203	5324	5555	131.61	5484
	UP	Anpara TPS	1630	875	864	20.50
Obra TPS		1288	482	483	11.50	479
Paricha TPS		1140	808	777	19.80	825
Panki TPS		210	54	54	1.30	54
Harduaganj TPS		665	394	399	9.20	383
Tanda TPS (NTPC)		440	281	287	6.90	288
Roza TPS (IPP)		1200	644	648	15.50	646
Anpara-C (IPP)		1200	858	861	20.60	858
Bajaj Energy Pvt.Ltd(IPP) TPS		450	284	248	6.70	279
Thermal (Total)		8223	4680	4621	112.00	4667
Vishnuparyag HPS (IPP)		400	436	436	10.50	438
Other Hydro		527	335	311	7.00	292
Cogeneration		981	15	15	0.36	15
Total UP		10131	5466	5383	129.86	4973
Uttarakhand		Total Hydro	1303	735	751	17.91
	Total Uttarakhand	1303	735	751	17.91	746
Delhi	Rajghat TPS	135	0	45	0.53	22
	Delhi Gas Turbine	282	104	107	2.52	105
	Pragati Gas Turbine	330	286	293	6.99	291
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	439	537	11.33	472
	Badarpur TPS (NTPC)	705	295	344	8.04	335
	Thermal (Total)	2917	1124	1326	29.40	1225
	Total Delhi	2917	1124	1326	29.40	1225
HP	Baspa HPS (IPP)	300	330	330	7.92	330
	Malana HPS (IPP)	86	80	65	1.87	78
	Other Hydro	728	690	697	16.88	703
	Total HP	1114	1100	1092	26.67	1111
J & K	Baqilhar HPS (IPP)	450	450	450	10.80	450
	Other Hydro/IPP	436	196	197	4.34	181
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	646	647	15.14	631
Total State Control Area Generation		39596	23081	23133	549.13	22443
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5034.26	5843.39	122.51	5105
Total Regional Availability(Gross)		64016	47972	46434	1099.89	45391

IV. Total Hydro Generation:

Regional Entities Hydro	11432	10869	9332	223.16	9298
State Control Area Hydro	5589	3750	3685	99.50	3708
Total Regional Hydro	17021	14619	13017	322.65	13006

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	200	500	200	2.88	1.40	1.48
Gwalior-Agra (D/C)	1587	1819	2009	0	36.80	0.00	36.80
Zerda-Kankroli	7	-27	7	149	0.00	1.34	-1.34
Zerda-Bhinmal	77	46	119	139	0.28	0.00	0.28
Malanpur-Auraiya	-158	-80	0	158	0.00	2.68	-2.68
Badod-Kota/Morak	-79	-16	0	106	0.00	1.48	-1.48
Mundra-Mohindergarh(HVDC)	2000	1998	2005	0	48.39	0.00	48.39
Vindhychal - Rihand	334	342	359	0	8.15	0.00	8.15
Sub Total WR	3818	4282			96.49	6.90	89.59
Pusaali Bypass	-277	-115	0	411	0.00	4.82	-4.82
MZP- GKP (D/C)	460	620	762	0	12.75	0.00	12.75
Patna-Balia(D/C)	210	300	452	0	7.52	0.00	7.52
B'Sharif-Balia (D/C)	244	357	387	0	6.69	0.00	6.69
Pusaali-Balia	18	0	31	10	0.15	0.00	0.15
Gaya-Fatehpur (765 Kv)	117	21	146	86	0.79	0.00	0.79
Pusaali-Sahupuri	155	172	212	0	4.11	0.00	4.11
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-24	-38	0	43	0.00	0.84	-0.84
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	313	244	415	0	6.57	0.00	6.57
Sub Total ER	1216	1561			38.58	5.66	32.92
Total IR Exch	5034	5843			135.07	12.55	122.51

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
24.16	3.84	28.00	14.90	1.20	-10.26	0.43	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
32.63	76.77	109.40	32.92	89.59	122.51	0.29	12.82	13.11

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	3.54	14.41	50.86	84.85	43.45	4.65	0.81	0.27	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	13.04	49.52	0.08	49.90	0.21	0.10	50.19	49.79

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	12:01	401	00:03	0.0	0.0	0.0	0.0
Gorakhpur	400	414	07:01	392	00:07	0.0	0.0	0.0	0.0
Bareilly	400	416	06:30	393	00:10	0.0	0.0	0.0	0.0
Kanpur	400	416	07:03	398	00:07	0.0	0.0	0.0	0.0
Dadri	400	411	06:12	396	00:05	0.0	0.0	0.0	0.0
Ballabgarh	400	418	06:03	400	14:36	0.0	0.0	0.0	0.0
Bawana	400	415	06:10	399	14:52	0.0	0.0	0.0	0.0
Bassi	400	420	23:51	393	10:52	0.0	0.0	0.0	0.0
Hissar	400	406	06:31	392	14:36	0.0	0.0	0.0	0.0
Moga	400	411	06:01	400	19:28	0.0	0.0	0.0	0.0
Abdullapur	400	413	06:11	396	14:30	0.0	0.0	0.0	0.0
Nalagarh	400	414	05:59	399	14:35	0.0	0.0	0.0	0.0
Kishenpur	400	414	08:00	403	19:28	0.0	0.0	0.0	0.0
Wagoora	400	410	03:23	392	19:24	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	773	08:04	741	00:08	0.0	0.1	0.0	0.0
Balia	765	774	07:01	736	00:08	0.0	2.0	0.0	0.0
Moga	765	793	06:03	771	00:05	0.0	0.0	0.0	0.0
Agra	765	788	06:35	750	16:56	0.0	0.0	0.0	0.0
Bhiwani	765	793	06:36	762	14:52	0.0	0.0	0.0	0.0
Unnao	765	765	07:02	733	00:08	0.0	2.8	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	509.82	1545.02	509.07	1500.16	948.98	904.89
Pong	426.72	384.05	416.17	718.14	421.80	975.89	383.18	204.62
Tehri	829.79	740.04	812.05	844.00	819.40	990.00	430.98	373.00
Koteshwar	612.50	598.50	610.69	4.95	609.90	4.44	373.00	415.00
Chamera-I	760.00	748.75	751.53	0.00	0.00	0.00	241.04	234.88
Rihand	268.22	252.98	855.60	348.70	850.80	268.30	0.00	0.00
RPS	352.80	343.81	1155.02	0.88	1155.22	3.62	0.00	290.00
Jawahar Sagar	298.70	295.78	0.00	0.00	1310.22	2.31	0.00	0.00
RSD	527.91	487.91	516.99	11.57	524.27	10.71	234.00	448.00

* 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	1428	0	0	1409	0	0	33.71	0.00	33.71
Delhi	320	108	-51	431	302	0	9.38	3.58	12.96
Haryana	1072	-170	0	1282	-91	0	26.68	-12.42	14.26
HP	-1172	-293	0	-918	-340	0	-23.73	-6.93	-30.66
J&K	-683	-141	0	-438	-39	0	-11.57	-2.01	-13.58
CHD	0	0	0	0	0	0	0.24	0.00	0.24
Rajasthan	-472	434	49	-740	-18	0	-12.31	11.65	-0.65
UP	897	0	0	234	0	0	10.24	0.82	11.06
Uttarakhand	88	-4	0	88	-4	0	2.12	-0.38	1.74
Total	1478	-66	-2	1349	-190	0	34.75	-5.68	29.07

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1440	1369	0	0	0	0
Delhi	480	296	614	-557	0	-51
Haryana	1376	826	-87	-1169	0	0
HP	-893	-1172	-202	-392	0	0
J&K	-378	-683	-31	-217	0	0
CHD	29	0	0	0	0	0
Rajasthan	-150	-740	1460	-32	49	0
UP	897	218	737	0	0	0
Uttarakhand	88	88	-4	-80	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 23.08.2014 :**

1. Normal weather in NR.

XIV. Synchronisation of new generating units :

0.00

XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus //substation :

1.1000 MVA Anapara D ICT ideally charged at 21.19 hrs on 22.08.14

XVI. Tripping of lines in pooling stations :**XVII. Complete generation loss in a generating station :**