

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पारदर्शित की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 22.08.2014
Date of Reporting : 23.08.2014

I. Regional Availability/Demand:

Demand Met	Evening Peak (20:00 Hrs) MW			Off Peak (03:00 Hrs) MW			Day Energy (Net MU)		
	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
46069	3976	50045	50.07	44929	4260	49189	49.94	1081.8	95.14

* 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	85.75	18.32		104.07	112.93	112.86	-0.07	216.93	4.05
Haryana	90.71	0.59		91.29	104.19	102.48	-1.71	193.78	0.00
Rajasthan	127.44	0.66	16.84	144.94	50.31	58.54	8.23	203.47	9.75
Delhi	30.04			30.04	80.09	80.65	0.55	110.69	0.46
UP	110.60	16.10	0.36	127.06	125.77	129.90	4.13	256.96	78.18
Uttarakhand		19.15		19.15	16.96	17.76	0.79	36.91	1.00
HP		26.63		26.63	-0.09	0.05	0.14	26.68	0.00
J & K		15.07	0.00	15.07	14.06	15.05	0.99	30.12	1.70
Chandigarh				0.00	5.48	6.29	0.81	6.29	0.00
Total	444.53	96.51	17.20	558.24	509.71	523.59	13.88	1081.83	95.14

* 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	9259	0	-95	1416	8913	450	-161	1434	11095
Haryana	8816	0	-176	1145	8321	0	52	1247	8991
Rajasthan	7855	965	449	-682	8743	0	182	-587	9366
Delhi	4941	6	104	705	4363	0	-48	298	5301
UP	10812	2715	-15	244	10945	3810	234	1724	11355
Uttarakhand	1747	190	153	84	1451	0	48	84	1747
HP	1206	0	58	-1317	939	0	-13	-1436	1292
J&K	1149	100	65	-420	1029	0	113	-824	1562
Chandigarh	284	0	47	0	225	0	25	0	322
Total	46069	3976	591	1174	44929	4260	432	1941	47643

* 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	421	464	462	11.21	467	9.99	1.22	
Rihand II STPS	1000	965	1032	1033	24.80	1033	22.90	1.90	
Rihand III STPS	1000	465	488	494	11.98	499	11.05	0.93	
Dadri I STPS	840	660	799	638	16.26	677	15.61	0.65	
Dadri II STPS	980	478	494	506	11.85	494	11.42	0.43	
Unchahar I TPS	420	393	431	433	10.23	426	9.33	0.89	
Unchahar II TPS	420	400	440	440	10.31	430	9.36	0.95	
Unchahar III TPS	210	198	218	217	5.12	213	4.65	0.47	
ISTPP (Jhajjar)	1500	950	973	993	22.23	926	22.59	-0.36	
Dadri GPS	830	788	373	349	8.65	360	8.57	0.08	
Anta GPS	419	391	252	0	2.94	123	2.83	0.11	
Auraiya GPS	663	635	307	296	6.88	287	6.67	0.20	
Dadri Solar	5	1	0	0	0.02	1	0.03	0.00	
Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04	
Sub Total (A)	11297	7989	7839	7078	175	7296	165	10	
B. NPC	NAPS	440	266	306	305	6.43	268	6.38	0.04
RAPS- B	440	204	224	226	4.84	202	4.90	-0.05	
RAPS- C	440	380	405	408	8.64	360	9.12	-0.48	
Sub Total (B)	1320	850	935	939	19.91	830	20.40	-0.49	
C. NHPC	Chamera I HPS	540	534	549	546	8.67	361	8.45	0.22
Chamera II HPS	300	300	306	306	7.37	307	7.20	0.17	
Chamera III HPS	231	229	231	235	5.28	220	5.22	0.06	
Bairasui HPS	180	178	180	123	2.09	87	1.92	0.17	
Salal-HPS	690	662	677	660	16.30	679	15.89	0.41	
Tanakpur-HPS	94	86	88	89	2.11	88	2.07	0.04	
Uri-HPS	480	351	378	349	8.66	361	8.34	0.32	
Uri-II HPS	240	238	242	241	5.75	240	5.71	0.04	
Dhauliganga-HPS	280	207	207	206	4.98	208	4.97	0.01	
Dulhasti-HPS	390	386	394	393	9.31	388	9.26	0.04	
Sewa-II HPS	120	119	127	0	0.85	35	0.75	0.10	
Parbati 3	520	261	269	131	3.55	148	3.50	0.06	
Sub Total ©	4065	3551	3648	3279	75	3121	73	2	
D.SJVNL	NJPC	1500	1605	1618	1617	38.40	1600	38.42	-0.02
Rampur HEP	275	350	361	359	8.58	358	8.40	0.18	
Sub Total (D)	1775	1955	1979	1976	46.98	1957	46.82	0.16	
E. THDC	Tehri HPS	1000	1044	1046	723	21.10	879	21.00	0.10
Koteshwar HPS	400	367	399	202	7.28	304	7.30	-0.02	
Sub Total (E)	1400	1411	1445	925	28.39	1183	28.30	0.09	
F. BBMB	Bhakra HPS	1514	1214	1328	1089	29.30	1221	29.13	0.17
Dehar HPS	990	569	825	560	14.01	584	13.66	0.36	
Pong HPS	396	84	258	0	2.04	85	2.02	0.02	
Sub Total (F)	2900	1867	2411	1649	45.35	1890	44.80	0.55	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	139	135	2.77	115	3.05	-0.28
KWHEP HPS(IPP)	1000	0	1170	1200	28.21	1175	28.51	-0.30	
Malana Stg-II HPS	100	0	112	90	2.06	86	2.05	0.01	
Shree Cement TPS	300	0	148	148	3.52	147	3.53	-0.01	
Budhil HPS(IPP)	70	0	72	71	1.60	67	1.59	0.01	
Sub Total (G)	1662	0	1641	1644	38.15	1590	38.72	-0.57	
H. Total Regional Entities (A-G)	24419	17623	19898	17491	428.80	17867	417.15	11.65	

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	1075	1240	27.99	1166
	Guru Nanak Dev TPS(Bhatinda)	440	448	451	10.75	448
	Guru Hargobind Singh TPS(L.mbt)	920	951	916	22.23	926
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	1400	1152	1060	24.77	1032
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	4680	3626	3667	85.75	3573
	Total Hydro	1148	780	779	18.32	763
	Total Punjab	5828	4406	4446	104.07	4336
	Haryana	Panipat TPS	1367	997	639	21.40
DCRTPP (Yamuna nagar)		600	521	519	12.42	517
Faridabad GPS (NTPC)		432	182	185	4.36	182
RGTPP (khedar) (IPP)		1200	1159	1152	25.36	1056
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP)		1320	1230	1232	27.17	1132
Thermal (Total)		4944	4089	3727	90.71	3779
Total Hydro		62	24	24	0.59	25
Total Haryana		5006	4113	3751	91.29	3804
Rajasthan		kota TPS	1240	1070	1078	24.51
	suratgarh TPS	1500	1138	1107	26.43	1101
	Chabra TPS	750	193	378	7.81	326
	Dholpur GPS	330	113	65	2.49	104
	Ramgarh GPS	271	103	87	3.34	139
	RAPS A (NPC)	300	0	160	2.58	108
	Barsingsar (NLC)	250	98	99	2.20	92
	Giral LTPS	250	58	61	1.26	53
	Rajwest LTPS (IPP)	1080	713	832	18.01	750
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	379	428	10.45	436
	Kawai(Adani)	1320	1120	1179	28.35	1181
	Thermal (Total)	8026	4985	5474	127	5310
	Total Hydro	550	72	0	0.66	27
	Wind power	2798	406	862	15.76	657
	Biomass	99	28	28	0.66	28
	Solar	730	0	0	0.42	17
	Renewable/Others (Total)	3627	434	890	16.84	702
	Total Rajasthan	12203	5491	6364	144.94	6039
	UP	Anpara TPS	1630	838	865	20.60
Obra TPS		1288	509	449	11.20	467
Paricha TPS		1140	826	603	16.70	696
Panki TPS		210	131	122	3.00	125
Harduaganj TPS		665	414	419	10.10	421
Tanda TPS (NTPC)		440	275	279	6.80	283
Roza TPS (IPP)		1200	648	643	15.50	646
Anpara-C (IPP)		1200	856	815	20.00	833
Bajaj Energy Pvt.Ltd(IPP) TPS		450	284	284	6.70	279
Thermal (Total)		8223	4781	4479	110.60	4608
Vishnuparyag HPS (IPP)		400	436	0	8.90	371
Other Hydro		527	324	320	7.20	300
Cogeneration		981	15	15	0.36	15
Total UP		10131	5556	4814	127.06	4923
Uttarakhand	Total Hydro	1303	820	769	19.15	798
	Total Uttarakhand	1303	820	769	19.15	798
Delhi	Rajghat TPS	135	46	75	0.88	37
	Delhi Gas Turbine	282	105	107	2.53	105
	Pragati Gas Turbine	330	288	290	6.97	291
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	540	442	11.87	495
	Badarpur TPS (NTPC)	705	329	409	7.79	324
	Thermal (Total)	2917	1308	1323	30.04	1252
	Total Delhi	2917	1308	1323	30.04	1252
HP	Baspa HPS (IPP)	300	330	330	7.79	325
	Malana HPS (IPP)	86	86	87	1.96	82
	Other Hydro	728	684	681	16.88	703
	Total HP	1114	1100	1098	26.63	1109
J & K	Baqilhar HPS (IPP)	450	450	450	10.80	450
	Other Hydro/IPP	436	197	167	4.27	178
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	647	617	15.07	628
Total State Control Area Generation		39596	23441	23182	558.24	22889
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4763	5532	122.18	5091
Total Regional Availability(Gross)		64016	48102	46205	1109.21	45846

IV. Total Hydro Generation:

Regional Entities Hydro	11432	10904	9255	228.67	9528
State Control Area Hydro	5589	3767	3607	96.51	3650
Total Regional Hydro	17021	14671	12862	325.17	13178

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	300	500	50	3.96	0.47	3.49
Gwalior-Agra (D/C)	1400	1448	1833	0	33.93	0.00	33.93
Zerda-Kankroli	73	63	166	13	0.00	1.71	-1.71
Zerda-Bhinmal	-26	-22	101	119	0.00	0.39	-0.39
Malanpur-Auraiya	-117	-97	0	121	0.00	2.24	-2.24
Badod-Kota/Morak	-43	-68	0	104	0.00	1.66	-1.66
Mundra-Mohindergarh(HVDC)	2001	1998	2012	0	48.66	0.00	48.66
Vindhychal - Rihand	338	348	444	0	8.57	0.00	8.57
Sub Total WR	3826	3970			95.13	6.47	88.66
Pusaui Bypass	-344	-148	0	388	0.00	5.51	-5.51
MZP- GKP (D/C)	470	648	742	0	14.09	0.00	14.09
Patna-Balia(D/C)	184	321	429	0	7.43	0.00	7.43
B'Sharif-Balia (D/C)	207	313	367	0	7.08	0.00	7.08
Pusaui-Balia	-5	-1	20	9	0.08	0.00	0.08
Gaya-Fatehpur (765 Kv)	8	52	92	41	0.69	0.00	0.69
Pusaui-Sahupuri	162	155	208	0	3.74	0.00	3.74
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-10	-34	0	40	0.00	0.71	-0.71
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	265	256	342	0	6.63	0.00	6.63
Sub Total ER	937	1562			39.74	6.22	33.52
Total IR Exch	4763	5532			134.87	12.69	122.18

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
26.07	3.85	29.93	12.94	0.36	-5.08	3.25	0.00	0.00

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Inclds Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
37.78	75.95	113.73	33.52	88.66	122.18	-4.27	12.71	8.44

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	1.28	10.69	45.34	82.86	48.84	4.16	1.55	0.23	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			
50.24	6.04	49.50	0.06	49.91	0.16	0.09	50.16	49.82

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	410	07:00	401	23:29	0.0	0.0	0.0	0.0
Gorakhpur	400	412	05:09	393	14:47	0.0	0.0	0.0	0.0
Bareilly	400	414	06:07	393	16:55	0.0	0.0	0.0	0.0
Kanpur	400	420	06:04	398	14:36	0.0	0.0	0.0	0.0
Dadri	400	413	06:05	393	14:36	0.0	0.0	0.0	0.0
Ballabgarh	400	420	06:04	395	14:36	0.0	0.0	0.0	0.0
Bawana	400	416	06:05	397	14:35	0.0	0.0	0.0	0.0
Bassi	400	420	16:00	398	09:11	0.0	0.0	0.0	0.0
Hissar	400	406	06:03	390	14:19	0.0	0.0	0.0	0.0
Moga	400	412	06:03	399	11:36	0.0	0.0	0.0	0.0
Abdullapur	400	413	06:04	396	14:19	0.0	0.0	0.0	0.0
Nalagarh	400	414	06:03	401	14:36	0.0	0.0	0.0	0.0
Kishenpur	400	415	06:03	407	10:42	0.0	0.0	0.0	0.0
Wagoora	400	412	18:06	380	18:25	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	779	06:05	739	14:36	0.0	2.1	0.0	0.0
Balia	765	774	06:05	736	14:51	0.0	3.6	0.0	0.0
Moga	765	794	06:03	769	12:37	0.0	0.0	0.0	0.0
Agra	765	793	06:05	753	14:20	0.0	0.0	0.0	0.0
Bhiwani	765	794	06:05	759	14:36	0.0	0.0	0.0	0.0
Unnao	765	760	08:33	733	14:50	0.0	21.2	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	509.80	1545.02	508.80	1485.27	968.58	902.46
Pong	426.72	384.05	416.09	718.14	421.74	975.89	368.94	123.43
Tehri	829.79	740.04	811.85	839.00	819.15	985.00	509.36	488.00
Koteshwar	612.50	598.50	611.64	5.46	609.90	4.44	488.00	483.00
Chamera-I	760.00	748.75	751.42	0.00	0.00	0.00	258.81	223.62
Rihand	268.22	252.98	260.82	350.40	850.00	259.08	0.00	0.00
RPS	352.80	343.81	1155.05	0.32	1154.74	4.03	0.00	3.72
Jawahar Sagar	298.70	295.78	0.00	0.00	1311.10	2.25	0.00	0.00
RSD	527.91	487.91	517.43	10.71	524.30	11.55	233.78	447.57

* 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	1434	0	0	1416	0	0	33.87	0.00	33.87
Delhi	320	28	-51	431	274	0	9.39	4.24	13.63
Haryana	1173	74	0	1129	15	0	30.02	-7.13	22.89
HP	-1172	-264	0	-994	-322	0	-24.23	-6.44	-30.67
J&K	-683	-141	0	-438	17	0	-11.57	-1.86	-13.43
CHD	0	0	0	0	0	0	0.24	0.34	0.57
Rajasthan	-662	73	2	-586	-96	0	-17.29	5.08	-12.21
UP	843	835	46	244	0	0	9.97	8.41	18.39
Uttarakhand	84	0	0	84	0	0	2.02	0.00	2.02
Total	1337	606	-3	1286	-112	0	32.41	2.65	35.06

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1446	1374	0	0	0	0
Delhi	431	296	702	-534	0	-51
Haryana	1377	926	77	-1022	0	0
HP	-893	-1197	-192	-376	0	0
J&K	-378	-683	59	-217	0	0
CHD	29	0	59	0	0	0
Rajasthan	-409	-861	1168	-98	2	0
UP	843	213	933	0	49	0
Uttarakhand	84	84	0	0	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 22.08.2014 :**

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 :**