

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 20.08.2014
Date of Reporting : 21.08.2014

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
44169	2406	46575	49.83	44167	1722	45889	49.94	1053.7	113.59

* 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	79.37	20.72		100.09	103.18	102.34	-0.84	202.43	12.73
Haryana	99.83	0.59		100.42	103.26	102.95	-0.31	203.38	0.83
Rajasthan	126.94	0.00	17.27	144.21	45.34	49.55	4.22	193.76	5.05
Delhi	29.92			29.92	79.90	79.34	-0.56	109.26	0.93
UP	114.80	15.80	0.40	131.00	116.51	119.61	3.09	250.61	88.39
Uttarakhand		18.47		18.47	16.14	16.41	0.27	34.88	3.97
HP		25.51		25.51	-4.54	-3.93	0.61	21.58	0.00
J & K		13.49	0.00	13.49	15.02	18.03	3.02	31.52	1.70
Chandigarh				0.00	4.95	6.26	1.32	6.26	0.00
Total	450.87	94.58	17.67	563.11	479.76	490.57	10.81	1053.68	113.59

* 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	8008	0	-95	869	8617	0	-42	1617	8860
Haryana	8670	0	-48	1250	8122	0	45	1333	8806
Rajasthan	7941	490	409	-786	8153	0	-77	-512	8727
Delhi	4874	19	154	493	4424	0	-37	250	5258
UP	10342	1390	244	247	11170	1630	77	1514	11366
Uttarakhand	1594	245	55	84	1437	0	51	84	1662
HP	980	162	29	-890	862	92	18	-1449	1202
J&K	1475	100	68	-379	1158	0	249	-824	1570
Chandigarh	285	0	72	0	225	0	41	0	318
Total	44169	2406	888	888	44167	1722	325	2013	44540

* 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	1284	1621	1525	38.09	1587	30.82	7.27
	Rihand I STPS	1000	416	467	461	10.21	425	9.97	0.23
	Rihand II STPS	1000	904	1045	1041	23.50	979	21.70	1.80
	Rihand III STPS	1000	454	500	508	11.09	462	10.91	0.18
	Dadri I STPS	840	813	807	810	20.88	870	19.43	1.45
	Dadri II STPS	980	480	456	478	11.80	492	11.38	0.42
	Unchahar I TPS	420	360	218	218	5.23	218	8.64	-3.41
	Unchahar II TPS	420	400	439	441	10.46	436	9.59	0.87
	Unchahar III TPS	210	198	218	216	5.20	216	4.75	0.45
	ISTPP (Jhajjar)	1500	950	708	902	19.23	801	22.76	-3.53
	Dadri GPS	830	787	575	538	16.13	672	12.45	3.68
	Anta GPS	419	304	291	392	8.91	371	1.30	7.62
	Auraiya GPS	663	629	152	196	3.45	144	10.13	-6.69
	Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
	Unchahar Solar	10	3	0	0	0.02	1	0.07	-0.04
	Sub Total (A)	11297	7985	7497	7726	184	7676	174	10
B. NPC	NAPS	440	270	306	300	6.41	267	6.48	-0.07
	RAPS- B	440	200	228	225	4.81	200	4.80	0.01
	RAPS- C	440	380	410	411	8.73	364	9.12	-0.39
	Sub Total (B)	1320	850	944	936	19.95	831	20.40	-0.45
C. NHPC	Chamera I HPS	540	534	549	0	6.78	282	9.50	-2.72
	Chamera II HPS	300	300	303	302	5.65	235	7.20	-1.55
	Chamera III HPS	231	229	234	230	4.20	175	5.00	-0.80
	Bairasui HPS	180	178	123	79	1.87	78	2.10	-0.22
	Salal-HPS	690	662	670	671	16.00	667	15.89	0.11
	Tanakpur-HPS	94	23	87	90	1.87	78	0.59	1.28
	Uri-HPS	480	346	464	416	10.71	446	8.31	2.40
	Uri-II HPS	240	229	241	241	5.75	239	5.48	0.27
	Dhauliganga-HPS	280	193	209	210	4.90	204	4.64	0.26
	Dulhasti-HPS	390	386	395	396	9.33	389	9.26	0.07
	Sewa-II HPS	120	119	129	18	0.87	36	0.90	-0.03
	Parbati 3	520	239	133	132	3.16	131	3.61	-0.46
	Sub Total (C)	4065	3438	3537	2784	71	2962	72	-1
D. SJVNL	NJPC	1500	413	1605	1605	38.56	1607	9.89	28.67
	Rampur HEP	275	77	353	293	7.15	298	1.84	5.32
	Sub Total (D)	1775	489	1958	1898	45.71	1905	11.73	33.99
E. THDC	Tehri HPS	1000	1025	1049	505	9.62	401	23.07	-13.45
	Koteshwar HPS	400	386	387	91	3.47	144	8.55	-5.08
	Sub Total (E)	1400	1411	1436	596	13.08	545	31.62	-18.53
F. BBMB	Bhakra HPS	1514	1211	1343	1089	29.54	1231	29.05	0.49
	Dehar HPS	990	568	660	560	14.15	589	13.64	0.50
	Pong HPS	396	57	324	0	3.47	144	1.38	2.09
	Sub Total (F)	2900	1836	2327	1649	47.16	1965	44.07	3.09
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	115	95	2.46	103	3.91	-1.45
	KWHEP HPS(IPP)	1000	0	1200	970	25.01	1042	6.89	18.12
	Malana Stg-II HPS	100	0	104	70	1.65	69	2.17	-0.51
	Shree Cement TPS	300	0	148	149	3.53	147	3.55	-0.02
	Budhil HPS(IPP)	70	0	64	40	1.12	47	1.42	-0.30
	Sub Total (G)	1662	0	1631	1324	33.77	1407	17.94	15.84
H. Total Regional Entities (A-G)		24419	16009	19330	16913	414.99	17291	372.17	42.82

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	1050	960	22.59	941
	Guru Nanak Dev TPS(Bhatinda)	440	448	355	9.46	394
	Guru Hargobind Singh TPS(L.mbt)	920	922	941	20.36	848
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	1400	1194	1187	26.96	1124
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	4680	3614	3443	79.37	3307
	Total Hydro	1148	895	798	20.72	863
	Total Punjab	5828	4509	4241	100.09	4171
	Haryana	Panipat TPS	1367	1146	1158	26.80
DCRTPP (Yamuna nagar)		600	528	551	12.46	519
Faridabad GPS (NTPC)		432	178	179	4.27	178
RGTPP (khedar) (IPP)		1200	1173	1155	26.64	1110
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP)		1320	1233	1232	29.66	1236
Thermal (Total)		4944	4258	4275	99.83	4160
Total Hydro		62	23	25	0.59	25
Total Haryana		5006	4281	4300	100.42	4184
Rajasthan		kota TPS	1240	1045	999	23.93
	suratgarh TPS	1500	853	1069	25.16	1048
	Chabra TPS	750	197	197	4.85	202
	Dholpur GPS	330	112	112	2.77	116
	Ramgarh GPS	271	123	118	3.20	133
	RAPS A (NPC)	300	0	0	0.00	0
	Barsingar (NLC)	250	98	97	2.11	88
	Giral LTPS	250	68	68	1.51	63
	Rajwest LTPS (IPP)	1080	783	884	22.87	953
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	495	495	12.28	512
	Kawai(Adani)	1320	1059	1087	28.25	1177
	Thermal (Total)	8026	4833	5126	127	5289
	Total Hydro	550	0	0	0.00	0
	Wind power	2798	615	821	16.03	668
	Biomass	99	36	36	0.86	36
	Solar	730	0	0	0.38	16
	Renewable/Others (Total)	3627	651	857	17.27	720
	Total Rajasthan	12203	5484	5983	144.21	6009
	UP	Anpara TPS	1630	868	837	20.30
Obra TPS		1288	446	464	11.10	463
Paricha TPS		1140	770	773	17.70	738
Panki TPS		210	135	140	3.10	129
Harduaganj TPS		665	424	431	10.20	425
Tanda TPS (NTPC)		440	373	360	9.00	375
Roza TPS (IPP)		1200	804	702	18.10	754
Anpara-C (IPP)		1200	869	860	20.60	858
Bajaj Energy Pvt.Ltd(IPP) TPS		450	162	243	4.70	196
Thermal (Total)		8223	4851	4810	114.80	4783
Vishnuparyag HPS (IPP)		400	436	326	9.30	388
Other Hydro		527	263	299	6.50	271
Cogeneration		981	15	15	0.40	17
Total UP		10131	5565	5450	131.00	5071
Uttarakhand		Total Hydro	1303	860	686	18.47
	Total Uttarakhand	1303	860	686	18.47	769
Delhi	Rajghat TPS	135	46	48	1.11	46
	Delhi Gas Turbine	282	102	106	2.50	104
	Pragati Gas Turbine	330	281	281	6.83	285
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	478	480	11.99	500
	Badarpur TPS (NTPC)	705	307	299	7.50	312
	Thermal (Total)	2917	1214	1214	29.92	1247
	Total Delhi	2917	1214	1214	29.92	1247
HP	Baspa HPS (IPP)	300	330	330	7.92	330
	Malana HPS (IPP)	86	72	72	1.59	66
	Other Hydro	728	649	652	16.00	666
Total HP	1114	1051	1054	25.51	1063	
J & K	Baglihar HPS (IPP)	450	438	438	10.35	431
	Other Hydro/IPP	436	128	128	3.14	131
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	566	566	13.49	562
Total State Control Area Generation		39596	23530	23494	563.11	23076
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5164	7622	136.28	5678
Total Regional Availability(Gross)		64016	48024	48029	1114.38	46045

IV. Total Hydro Generation:

Regional Entities Hydro	11432	10677	8062	206.17	8590
State Control Area Hydro	5589	3658	3428	94.58	3553
Total Regional Hydro	17021	14335	11490	300.74	12143

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	500	500	50	9.06	0.06	9.00
Gwalior-Agra (D/C)	2063	2408	2408	0	41.04	0.00	41.04
Zerda-Kankroli	22	53	53	185	0.00	1.17	-1.17
Zerda-Bhinmal	14	78	97	190	0.00	0.51	-0.51
Malanpur-Auraiya	-30	-49	0	47	0.00	1.58	-1.58
Badod-Kota/Morak	-33	13	45	137	0.00	0.80	-0.80
Mundra-Mohindergarh(HVDC)	1998	2205	2205	0	51.92	0.00	51.92
Vindhychal - Rihand	335	380	393	0	8.51	0.00	8.51
Sub Total WR	4419	5588			110.54	4.12	106.41
Pusaali Bypass	-284	-167	0	430	0.00	5.96	-5.96
MZP- GKP (D/C)	376	870	870	0	13.63	0.00	13.63
Patna-Balia(D/C)	123	414	414	0	5.32	0.00	5.32
B'Sharif-Balia (D/C)	257	404	404	0	7.19	0.00	7.19
Pusaali-Balia	39	23	57	0	0.62	0.00	0.62
Gaya-Fatehpur (765 Kv)	-4	50	140	66	0.33	0.00	0.33
Pusaali-Sahupuri	89	80	196	0	3.18	0.00	3.18
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-33	-46	0	47	0.00	0.96	-0.96
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	182	406	406	0	6.51	0.00	6.51
Sub Total ER	745	2034			36.78	6.91	29.87
Total IR Exch	5164	7622			147.32	11.03	136.28

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
28.82	3.96	32.78	18.46	0.99	-1.48	0.83	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
49.76	75.77	125.53	29.87	106.41	136.28	-19.90	30.65	10.75

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	11.33	35.32	67.40	92.89	30.72	1.44	0.44	0.00	NA

Frequency (Hz)				Average Frequency	Frequency Variation	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz	Index	(Hz)	(Hz)	
50.16	6.03	49.49	20.37	49.84	0.37	0.11	50.09	49.69

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	408	06:01	399	23:03	0.0	0.0	0.0	0.0
Gorakhpur	400	411	08:02	389	03:06	0.0	0.6	0.0	0.0
Bareilly	400	414	07:11	391	14:54	0.0	0.0	0.0	0.0
Kanpur	400	417	06:02	400	23:01	0.0	0.0	0.0	0.0
Dadri	400	412	05:59	396	12:27	0.0	0.0	0.0	0.0
Ballabgarh	400	419	06:01	401	12:37	0.0	0.0	0.0	0.0
Bawana	400	417	07:10	402	11:47	0.0	0.0	0.0	0.0
Bassi	400	423	05:58	404	09:12	0.0	0.0	6.5	0.0
Hissar	400	409	07:10	394	11:47	0.0	0.0	0.0	0.0
Moga	400	416	07:09	403	10:28	0.0	0.0	0.0	0.0
Abdullapur	400	422	06:56	396	00:07	0.0	0.0	2.5	0.0
Nalagarh	400	427	06:45	406	00:07	0.0	0.0	9.0	0.0
Kishenpur	400	416	07:10	409	00:07	0.0	0.0	0.0	0.0
Wagoora	400	411	02:35	400	20:17	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	07:11	736	23:04	0.0	1.6	0.0	0.0
Balia	765	769	07:10	729	18:23	0.0	16.8	0.0	0.0
Moga	765	797	06:11	769	10:28	0.0	0.0	0.0	0.0
Agra	765	789	06:02	752	23:05	0.0	0.0	0.0	0.0
Bhiwani	765	795	07:11	767	12:39	0.0	0.0	0.0	0.0
Unnao	765	763	07:12	728	23:04	0.0	33.3	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	509.78	1545.02	509.83	1545.02	846.73	907.36
Pong	426.72	384.05	416.28	730.66	422.05	990.81	255.64	210.99
Tehri	829.79	740.04	813.40	871.00	819.85	1000.00	337.63	220.00
Koteshwar	612.50	598.50	610.80	4.97	610.85	4.97	220.00	230.00
Chamera-I	760.00	748.75	750.68	0.00	0.00	0.00	194.19	232.90
Rihand	268.22	252.98	855.10	273.10	851.30	276.40	0.00	0.00
RPS	352.80	343.81	1155.00	0.00	1155.76	3.49	0.00	0.00
Jawahar Sagar	298.70	295.78	0.00	0.00	1310.71	2.21	0.00	0.00
RSD	527.91	487.91	515.85	11.51	524.14	10.80	245.96	486.65

* 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	147	0	869	0	0	23.79	1.81	25.61
Delhi	320	-20	-51	470	23	0	10.06	1.92	11.99
Haryana	1376	-43	0	1231	20	0	30.88	-6.65	24.23
HP	-1135	-314	0	-880	-10	0	-22.88	-0.41	-23.28
J&K	-683	-141	0	-339	-39	0	-10.03	-1.88	-11.90
CHD	0	0	0	0	0	0	0.24	0.00	0.24
Rajasthan	-689	175	2	-739	-47	0	-15.54	2.40	-13.14
UP	827	638	48	246	0	1	9.64	3.97	13.61
Uttarakhand	84	0	0	84	0	0	2.02	0.00	2.02
Total	1570	443	-1	941	-54	1	28.20	1.16	29.36

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1470	835	445	0	0	0
Delhi	578	296	556	-142	0	-51
Haryana	1377	1231	86	-1029	0	0
HP	-856	-1135	222	-352	0	0
J&K	-280	-708	59	-291	0	0
CHD	29	0	0	0	0	0
Rajasthan	-430	-739	377	-48	4	0
UP	827	202	737	0	49	0
Uttarakhand	84	84	0	0	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 20.08.2014 :**

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