

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 15.08.2014
Date of Reporting : 16.08.2014

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
39911	1505	41416	49.99	40841	2085	42926	50.01	939.6	42.20

* 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	60.31	19.88		80.19	123.10	122.96	-0.13	203.15	0.00
Haryana	65.87	0.47		66.35	102.45	101.03	-1.42	167.38	0.00
Rajasthan	94.09	2.92	34.11	131.11	21.11	19.62	-1.48	150.73	0.00
Delhi	22.92			22.92	64.46	62.85	-1.61	85.77	0.00
UP	94.20	14.90	0.40	109.50	140.99	141.44	0.45	250.94	40.46
Uttarakhand		12.79		12.79	16.19	15.08	-1.10	27.87	0.05
HP		24.67		24.67	-4.22	-4.26	-0.04	20.40	0.00
J & K		14.86	0.00	14.86	15.72	13.43	-2.29	28.28	1.70
Chandigarh				0.00	4.99	5.07	0.08	5.07	0.00
Total	337.40	90.48	34.51	462.38	484.77	477.22	-7.55	939.60	42.20

* 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	8922	0	84	1486	8627	0	-68	1788	9002
Haryana	7399	0	-432	1671	7663	0	77	1706	7953
Rajasthan	6344	0	46	-701	6408	0	-78	-448	7031
Delhi	3581	0	136	76	4029	0	-188	189	4442
UP	10243	1370	-211	1279	10816	2085	50	1439	11040
Uttarakhand	1238	35	67	85	1258	0	-137	85	1354
HP	895	0	-36	-1481	850	0	-2	-1477	979
J&K	1053	100	-370	-329	962	0	14	-702	1630
Chandigarh	236	0	8	0	229	0	40	0	250
Total	39911	1505	-709	2086	40841	2085	-292	2579	42681

* 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	1459	1544	1665	34.30	1429	34.02
	Rihand I STPS	1000	504	258	688	12.39	516	11.26	1.12
	Rihand II STPS	1000	830	963	744	19.01	792	17.19	1.83
	Rihand III STPS	1000	424	486	388	10.25	427	9.31	0.94
	Dadri I STPS	840	813	472	799	15.63	651	14.60	1.02
	Dadri II STPS	980	477	349	613	9.93	414	9.38	0.55
	Unchahar I TPS	420	398	356	407	8.92	372	8.05	0.87
	Unchahar II TPS	420	400	329	347	8.21	342	7.39	0.81
	Unchahar III TPS	210	198	151	175	3.99	166	3.62	0.37
	ISTPP (Jhajjar)	1500	1350	842	1013	18.02	751	21.03	-3.01
	Dadri GPS	830	787	182	187	4.43	185	4.60	-0.17
	Anta GPS	419	391	257	-4	2.53	105	2.55	-0.02
	Auraiya GPS	663	635	158	140	3.71	155	3.57	0.14
	Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
	Unchahar Solar	10	3	0	0	0.01	0	0.07	-0.06
	Sub Total (A)	11297	8669	6347	7162	151	6305	147	5
B. NPC	NAPS	440	270	310	311	6.58	274	6.48	0.10
	RAPS- B	440	198	225	227	4.80	200	4.75	0.05
	RAPS- C	440	370	406	406	8.71	363	8.88	-0.17
	Sub Total (B)	1320	838	941	944	20.09	837	20.11	-0.02
C. NHPC	Chamera I HPS	540	534	543	364	11.07	461	11.00	0.07
	Chamera II HPS	300	301	306	310	7.38	307	7.22	0.16
	Chamera III HPS	231	229	235	232	5.54	231	5.50	0.04
	Bairasui HPS	180	178	178	120	2.44	101	2.45	-0.01
	Salal-HPS	690	662	676	676	16.24	677	15.89	0.35
	Tanakpur-HPS	94	84	89	50	2.02	84	2.01	0.01
	Uri-HPS	480	289	341	259	6.80	284	6.93	-0.12
	Uri-II HPS	240	160	203	149	3.85	161	3.87	-0.01
	Dhauliganga-HPS	280	188	206	137	4.38	183	4.50	-0.12
	Dulhasti-HPS	390	378	396	396	9.02	376	9.07	-0.05
	Sewa-II HPS	120	119	128	0	0.90	37	0.90	0.00
	Parbati 3	520	261	267	133	4.91	205	4.92	0.00
	Sub Total ©	4065	3382	3569	2826	75	3107	74	0
D.SJVNL	NJPC	1500	1605	1614	1614	38.40	1600	38.27	0.13
	Rampur HEP	275	350	350	350	8.40	350	8.40	0.00
	Sub Total (D)	1775	1955	1964	1964	46.80	1950	46.67	0.13
E. THDC	Tehri HPS	1000	1020	1021	1003	24.06	1002	23.94	0.12
	Koteshwar HPS	400	385	401	383	8.66	361	8.60	0.06
	Sub Total (E)	1400	1405	1422	1386	32.72	1363	32.54	0.18
F. BBMB	Bhakra HPS	1514	1126	1308	825	27.05	1127	27.01	0.04
	Dehar HPS	990	569	825	560	14.08	587	13.66	0.43
	Pong HPS	396	98	264	66	2.25	94	2.34	-0.10
	Sub Total (F)	2900	1792	2397	1451	43.38	1808	43.01	0.37
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	225	186	4.84	202	3.90	0.94
	KWHEP HPS(IPP)	1000	0	1200	1200	28.65	1194	28.51	0.13
	Malana Stg-II HPS	100	0	112	113	2.66	111	2.45	0.21
	Shree Cement TPS	300	0	103	112	2.26	94	2.25	0.01
	Budhil HPS(IPP)	70	0	71	71	1.70	71	1.67	0.03
	Sub Total (G)	1662	0	1712	1681	40.12	1672	38.80	1.32
H. Total Regional Entities (A-G)		24419	18041	18352	17414	409.00	17042	402.05	6.95

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	930	870	19.80	825
	Guru Nanak Dev TPS(Bhatinda)	440	290	291	6.13	256
	Guru Hargobind Singh TPS(L.mbt)	920	921	941	18.70	779
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	1400	700	702	15.68	653
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	4680	2841	2804	60.31	2513
	Total Hydro	1148	858	828	19.88	828
	Total Punjab	5828	3699	3632	80.19	3341
	Haryana	Panipat TPS	1367	22	400	7.24
DCRTPP (Yamuna nagar)		600	529	532	11.55	481
Faridabad GPS (NTPC)		432	185	180	4.55	190
RGTPP (khedar) (IPP)		1200	1118	1039	23.85	994
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP)		1320	1058	743	18.68	778
Thermal (Total)		4944	2912	2894	65.87	2745
Total Hydro		62	19	20	0.47	20
Total Haryana		5006	2931	2914	66.35	2764
Rajasthan		kota TPS	1240	1028	1093	24.28
	suratgarh TPS	1500	1023	1041	24.29	1012
	Chabra TPS	750	327	362	8.10	337
	Dholpur GPS	330	0	110	1.70	71
	Ramgarh GPS	271	109	108	2.66	111
	RAPS A (NPC)	300	0	0	2.19	91
	Barsingsar (NLC)	250	164	200	4.18	174
	Giral LTPS	250	72	76	1.67	70
	Rajwest LTPS (IPP)	1080	396	475	11.12	463
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	361	3.29	137
	Kawai(Adani)	1320	427	452	10.60	442
	Thermal (Total)	8026	3546	4278	94	3920
	Total Hydro	550	109	215	2.92	121
	Wind power	2798	1422	1384	33.15	1381
	Biomass	99	28	28	0.66	28
	Solar	730	0	0	0.29	12
	Renewable/Others (Total)	3627	1450	1412	34.11	1421
	Total Rajasthan	12203	5105	5905	131.11	5463
	UP	Anpara TPS	1630	443	471	10.40
Obra TPS		1288	310	374	8.40	350
Paricha TPS		1140	662	610	14.80	617
Panki TPS		210	126	126	3.00	125
Harduaganj TPS		665	419	423	10.00	417
Tanda TPS (NTPC)		440	273	270	6.70	279
Roza TPS (IPP)		1200	648	644	15.50	646
Anpara-C (IPP)		1200	756	756	18.10	754
Bajaj Energy Pvt.Ltd(IPP) TPS		450	320	320	7.30	304
Thermal (Total)		8223	3957	3994	94.20	3925
Vishnuparyag HPS (IPP)		400	436	436	10.30	429
Other Hydro		527	124	282	4.60	192
Cogeneration		981	15	15	0.40	17
Total UP		10131	4532	4727	109.50	4133
Uttarakhand		Total Hydro	1303	517	685	12.79
	Total Uttarakhand	1303	517	685	12.79	533
Delhi	Rajghat TPS	135	44	46	1.12	47
	Delhi Gas Turbine	282	73	72	1.70	71
	Pragati Gas Turbine	330	138	269	4.65	194
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	236	296	6.21	259
	Badarpur TPS (NTPC)	705	370	437	9.25	385
	Thermal (Total)	2917	861	1120	22.92	955
	Total Delhi	2917	861	1120	22.92	955
HP	Baspa HPS (IPP)	300	329	329	7.61	317
	Malana HPS (IPP)	86	105	105	2.48	103
	Other Hydro	728	589	629	14.58	607
	Total HP	1114	1023	1063	24.67	1028
J & K	Baqilhar HPS (IPP)	450	436	436	10.45	435
	Other Hydro/IPP	436	183	187	4.40	184
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	619	623	14.86	619
Total State Control Area Generation		39596	19287	20669	462.38	18837
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5146	4896	110.43	4601
Total Regional Availability(Gross)		64016	42785	42979	981.80	40479

IV. Total Hydro Generation:

Regional Entities Hydro	11432	10890	9125	233.62	9734
State Control Area Hydro	5589	3269	3716	90.48	3341
Total Regional Hydro	17021	14159	12841	324.09	13075

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	-500	50	150	500	0.59	7.16	-6.57
Gwalior-Agra (D/C)	1957	1247	2182	0	31.33	0.00	31.33
Zerda-Kankroli	-122	-261	0	351	0.00	5.87	-5.87
Zerda-Bhinmal	-129	-263	0	356	0.00	5.60	-5.60
Malanpur-Auraiya	-77	-55	0	86	0.00	1.10	-1.10
Badod-Kota/Morak	-60	-157	0	191	0.00	3.18	-3.18
Mundra-Mohindergarh(HVDC)	2002	2002	2005	0	48.37	0.00	48.37
Vindhychal - Rihand	364	390	394	0	8.43	0.00	8.43
Sub Total WR	3435	2953			88.73	22.90	65.83
Pusaui Bypass	55	23	72	132	0.21	0.80	-0.59
MZP- GKP (D/C)	700	802	870	0	17.39	0.00	17.39
Patna-Balia(D/C)	439	345	504	0	7.74	0.00	7.74
B'Sharif-Balia (D/C)	402	360	462	0	9.47	0.00	9.47
Pusaui-Balia	12	16	29	0	0.32	0.00	0.32
Gaya-Fatehpur (765 Kv)	41	161	190	10	2.46	0.00	2.46
Pusaui-Sahupuri	-133	0	206	0	3.30	0.00	3.30
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-33	-35	0	42	0.00	0.80	-0.80
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	228	271	312	0	5.31	0.00	5.31
Sub Total ER	1711	1943			46.19	1.59	44.60
Total IR Exch	5146	4896			134.92	24.50	110.43

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
22.58	3.81	26.39	10.59	10.78	5.77	1.21	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
42.75	58.61	101.36	44.60	65.83	110.43	1.85	7.22	9.07

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	1.53	9.95	30.06	60.99	48.77	12.23	6.84	2.17	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			
50.34	17.07	49.60	0.54	49.96	0.15	0.12	50.34	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	413	17:02	403	00:04	0.0	0.0	0.0	0.0
Gorakhpur	400	414	17:03	389	00:07	0.0	0.5	0.0	0.0
Bareilly	400	420	17:06	395	00:07	0.0	0.0	0.0	0.0
Kanpur	400	422	17:03	402	00:06	0.0	0.0	2.9	0.0
Dadri	400	418	17:04	398	01:05	0.0	0.0	0.0	0.0
Ballabgarh	400	425	17:03	407	00:06	0.0	0.0	19.4	0.0
Bawana	400	420	17:03	405	01:20	0.0	0.0	0.0	0.0
Bassi	400	430	04:03	412	23:05	0.0	0.0	76.5	0.0
Hissar	400	411	17:04	397	00:06	0.0	0.0	0.0	0.0
Moga	400	414	17:02	404	19:53	0.0	0.0	0.0	0.0
Abdullapur	400	412	07:33	396	00:20	0.0	0.0	0.0	0.0
Nalagarh	400	415	08:01	406	00:06	0.0	0.0	0.0	0.0
Kishenpur	400	420	22:56	410	19:16	0.0	0.0	0.0	0.0
Wagoora	400	418	22:56	402	06:12	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	17:03	745	22:20	0.0	0.0	0.0	0.0
Balia	765	778	17:03	732	00:11	0.0	5.5	0.0	0.0
Moga	765	798	08:01	780	00:06	0.0	0.0	0.0	0.0
Agra	765	800	17:04	760	22:09	0.0	0.0	0.0	0.0
Bhiwani	765	801	17:03	772	00:06	0.0	0.0	0.6	0.0
Unnao	765	763	16:03	733	06:23	0.0	9.9	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	508.76	1485.27	506.77	1396.66	2129.88	834.89
Pong	426.72	384.05	413.56	622.40	421.05	931.43	4130.91	142.18
Tehri	829.79	740.04	809.70	802.26	819.55	1002.27	911.73	560.00
Koteshwar	612.50	598.50	611.84	5.40	609.00	4.44	560.00	574.00
Chamera-I	760.00	748.75	751.57	0.00	0.00	0.00	325.47	299.96
Rihand	268.22	252.98	0.00	0.00	0.00	0.00	0.00	0.00
RPS	352.80	343.81	1155.59	1.49	0.00	0.00	3637.00	0.00
Jawahar Sagar	298.70	295.78	975.70	1.43	0.00	0.00	12663.00	0.00
RSD	527.91	487.91	518.53	11.38	521.67	3.11	10027.00	16978.00

* 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	1470	318	0	1453	33	0	34.74	8.62	43.36
Delhi	321	-81	-51	431	-304	-51	11.47	-9.25	2.23
Haryana	1595	111	0	1606	65	0	38.60	-0.83	37.77
HP	-1221	-256	0	-1170	-311	0	-28.37	-7.74	-36.11
J&K	-682	-20	0	-437	109	0	-11.55	0.02	-11.53
CHD	0	0	0	0	0	0	0.24	0.00	0.24
Rajasthan	-834	382	4	-921	219	0	-20.10	7.00	-13.10
UP	853	541	45	399	836	44	12.52	13.97	26.49
Uttarakhand	85	0	0	85	0	0	2.03	0.00	2.03
Total	1587	995	-2	1446	647	-7	39.58	11.79	51.37

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1482	1410	611	16	0	0
Delhi	698	296	-66	-602	-51	-51
Haryana	1645	1572	114	-726	0	0
HP	-1145	-1322	-231	-438	0	0
J&K	-378	-682	109	-115	0	0
CHD	30	0	0	0	0	0
Rajasthan	-816	-921	384	119	4	-6
UP	853	356	836	344	49	41
Uttarakhand	85	85	0	0	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 15.08.2014 :**

Load crash in JK due to heavy rain & wind storm

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 :**