

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 14.08.2014
Date of Reporting : 15.08.2014

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
43110	3451	46561	50.05	41695	3770	45465	49.91	999.5	67.27

* 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	67.99	22.43		90.42	123.27	123.51	0.23	213.93	0.00
Haryana	76.26	0.55		76.81	101.75	101.08	-0.67	177.89	0.36
Rajasthan	90.69	5.13	34.03	129.85	26.23	24.85	-1.38	154.70	0.00
Delhi	25.46			25.46	81.90	80.58	-1.32	106.03	0.06
UP	92.60	16.30	0.70	109.60	138.11	140.18	2.08	249.78	64.87
Uttarakhand		18.52		18.52	16.89	17.04	0.15	35.56	0.28
HP		24.72		24.72	-1.13	-1.83	-0.70	22.89	0.00
J & K		14.81	0.00	14.81	15.80	17.83	2.03	32.64	1.70
Chandigarh				0.00	5.54	6.06	0.53	6.06	0.00
Total	352.99	102.46	34.73	490.19	508.35	509.30	0.96	999.49	67.27

* 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	9068	0	-33	1415	9008	0	26	1681	9330
Haryana	8288	0	-253	1351	7742	0	102	1174	8402
Rajasthan	6782	0	-97	-888	6188	0	-33	-416	7054
Delhi	4554	6	-151	461	4169	0	-80	166	5152
UP	9730	3235	-495	360	10901	3770	206	1544	11128
Uttarakhand	1681	110	132	84	1407	0	-23	84	1681
HP	1103	0	-44	-1303	927	0	-13	-1477	1163
J&K	1632	100	209	-348	1129	0	152	-772	1649
Chandigarh	273	0	35	0	226	0	36	0	301
Total	43110	3451	-698	1130	41695	3770	372	1982	44088

* 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	1542	1640	1688	37.04	1543	36.03
	Rihand I STPS	1000	675	737	673	17.50	729	15.29	2.21
	Rihand II STPS	1000	725	840	703	18.29	762	16.33	1.96
	Rihand III STPS	1000	86	311	0	2.44	102	1.99	0.45
	Dadri I STPS	840	813	808	658	18.79	783	17.97	0.81
	Dadri II STPS	980	973	944	789	21.29	887	21.63	-0.34
	Unchahar I TPS	420	398	433	405	9.93	417	9.06	0.87
	Unchahar II TPS	420	398	427	422	9.91	413	9.02	0.88
	Unchahar III TPS	210	198	216	205	4.80	200	4.34	0.46
	ISTPP (Jhajjar)	1500	1185	1332	606	19.56	815	20.93	-1.37
	Dadri GPS	830	787	182	184	4.22	176	4.53	-0.30
	Anta GPS	419	393	256	195	5.38	224	5.15	0.23
	Auraiya GPS	663	634	137	162	3.41	142	3.28	0.14
	Dadri Solar	5	1	0	0	0.00	0	0.03	-0.03
	Unchahar Solar	10	3	0	0	0.00	0	0.07	-0.07
	Sub Total (A)	11297	8812	8263	6690	173	7190	166	7
B. NPC	NAPS	440	270	306	311	6.46	269	6.48	-0.02
	RAPS- B	440	198	224	224	4.80	200	4.75	0.05
	RAPS- C	440	370	402	408	8.70	363	8.88	-0.18
	Sub Total (B)	1320	838	932	943	19.97	832	20.11	-0.15
C. NHPC	Chamera I HPS	540	534	545	355	10.93	456	10.80	0.13
	Chamera II HPS	300	301	309	310	7.39	308	7.22	0.18
	Chamera III HPS	231	229	234	233	5.55	231	5.50	0.05
	Bairasui HPS	180	178	120	120	2.27	94	2.22	0.05
	Salal-HPS	690	662	676	676	16.24	677	15.89	0.35
	Tanakpur-HPS	94	81	88	30	1.99	83	1.95	0.04
	Uri-HPS	480	307	363	305	7.48	312	7.36	0.12
	Uri-II HPS	240	170	240	164	4.19	175	4.08	0.11
	Dhauliganga-HPS	280	208	208	208	4.96	207	4.99	-0.03
	Dulhasti-HPS	390	386	396	396	9.31	388	9.26	0.05
	Sewa-II HPS	120	119	116	0	1.02	43	0.90	0.12
	Parbati 3	520	251	264	266	4.49	187	4.64	-0.15
	Sub Total ©	4065	3427	3558	3063	76	3160	75	1
D.SJVNL	NJPC	1500	1605	1613	1616	37.98	1582	38.06	-0.08
	Rampur HEP	275	350	362	359	8.53	355	8.40	0.13
	Sub Total (D)	1775	1955	1975	1975	46.51	1938	46.46	0.05
E. THDC	Tehri HPS	1000	1020	1018	1007	24.24	1010	24.00	0.24
	Koteshwar HPS	400	385	400	382	8.63	360	8.60	0.03
	Sub Total (E)	1400	1405	1418	1389	32.87	1369	32.60	0.27
F. BBMB	Bhakra HPS	1514	984	1342	825	23.80	992	23.62	0.18
	Dehar HPS	990	570	825	560	14.17	591	13.68	0.50
	Pong HPS	396	162	318	132	3.86	161	3.89	-0.03
	Sub Total (F)	2900	1716	2485	1517	41.83	1743	41.19	0.64
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	187	174	4.08	170	3.91	0.17
	KWHEP HPS(IPP)	1000	0	1200	1200	28.12	1171	28.51	-0.40
	Malana Stg-II HPS	100	0	113	111	2.64	110	2.43	0.21
	Shree Cement TPS	300	0	140	138	3.25	135	3.23	0.02
	Budhil HPS(IPP)	70	0	71	72	1.70	71	1.67	0.02
	Sub Total (G)	1662	0	1711	1695	39.78	1658	39.75	0.03
H. Total Regional Entities (A-G)		24419	18153	20342	17272	429.35	17889	420.58	8.77

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	1175	1175	26.07	1086
	Guru Nanak Dev TPS(Bhatinda)	440	333	336	7.01	292
	Guru Hargobind Singh TPS(L.mbt)	920	935	946	20.81	867
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	1400	700	590	14.09	587
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	4680	3143	3047	67.99	2833
	Total Hydro	1148	943	928	22.43	935
	Total Punjab	5828	4086	3975	90.42	3768
	Haryana	Panipat TPS	1367	415	401	9.44
DCRTPP (Yamuna nagar)		600	531	469	12.03	501
Faridabad GPS (NTPC)		432	180	157	4.15	173
RGTPP (khedar) (IPP)		1200	1150	1047	25.80	1075
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP)		1320	1150	1107	24.85	1036
Thermal (Total)		4944	3426	3181	76.26	3178
Total Hydro		62	24	22	0.55	23
Total Haryana		5006	3450	3203	76.81	3200
Rajasthan		kota TPS	1240	1057	981	23.58
	suratgarh TPS	1500	1022	974	22.97	957
	Chabra TPS	750	401	353	9.35	389
	Dholpur GPS	330	111	117	2.84	118
	Ramgarh GPS	271	134	133	3.07	128
	RAPS A (NPC)	300	0	0	0.00	0
	Barsingsar (NLC)	250	202	201	4.68	195
	Giral LTPS	250	73	59	1.47	61
	Rajwest LTPS (IPP)	1080	370	422	9.83	410
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	300	0	2.51	105
	Kawai(Adani)	1320	427	427	10.39	433
	Thermal (Total)	8026	4097	3667	91	3779
	Total Hydro	550	215	192	5.13	214
	Wind power	2798	1447	1255	32.89	1370
	Biomass	99	27	27	0.65	27
	Solar	730	0	0	0.49	21
	Renewable/Others (Total)	3627	1474	1282	34.03	1418
	Total Rajasthan	12203	5786	5141	129.85	5411
	UP	Anpara TPS	1630	445	418	10.60
Obra TPS		1288	419	266	7.90	329
Paricha TPS		1140	504	605	14.00	583
Panki TPS		210	113	99	2.50	104
Harduaganj TPS		665	404	421	9.60	400
Tanda TPS (NTPC)		440	274	280	6.80	283
Roza TPS (IPP)		1200	653	644	15.60	650
Anpara-C (IPP)		1200	761	759	18.10	754
Bajaj Energy Pvt.Ltd(IPP) TPS		450	321	322	7.50	313
Thermal (Total)		8223	3894	3814	92.60	3858
Vishnuparyag HPS (IPP)		400	327	436	10.30	429
Other Hydro		527	171	306	6.00	250
Cogeneration		981	30	30	0.70	29
Total UP		10131	4422	4586	109.60	4138
Uttarakhand		Total Hydro	1303	790	774	18.52
	Total Uttarakhand	1303	790	774	18.52	772
Delhi	Rajghat TPS	135	43	42	0.92	38
	Delhi Gas Turbine	282	71	71	1.66	69
	Pragati Gas Turbine	330	289	284	6.93	289
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	292	284	6.84	285
	Badarpur TPS (NTPC)	705	370	385	9.12	380
	Thermal (Total)	2917	1065	1066	25.46	1061
	Total Delhi	2917	1065	1066	25.46	1061
HP	Baspa HPS (IPP)	300	308	339	7.37	307
	Malana HPS (IPP)	86	103	102	2.45	102
	Other Hydro	728	721	697	14.89	620
	Total HP	1114	1132	1138	24.72	1030
J & K	Baqilhar HPS (IPP)	450	450	450	10.80	450
	Other Hydro/IPP	436	177	172	4.01	167
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	627	622	14.81	617
Total State Control Area Generation		39596	21358	20505	490.19	19995
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4477	5810	119.63	4985
Total Regional Availability(Gross)		64016	46177	43587	1039.16	42869

IV. Total Hydro Generation:

Regional Entities Hydro	11432	10935	9430	231.88	9662
State Control Area Hydro	5589	3902	3982	102.46	3840
Total Regional Hydro	17021	14837	13411	334.34	13502

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	-100	300	300	200	2.01	2.03	-0.03
Gwalior-Agra (D/C)	1215	1677	2132	0	34.36	0.00	34.36
Zerda-Kankroli	-162	-124	0	287	0.00	4.85	-4.85
Zerda-Bhinmal	-163	-126	0	303	0.00	4.65	-4.65
Malanpur-Auraiya	-53	-36	0	89	0.00	0.91	-0.91
Badod-Kota/Morak	-149	-80	0	203	0.00	3.04	-3.04
Mundra-Mohindergarh(HVDC)	2002	2002	2004	0	48.37	0.00	48.37
Vindhychal - Rihand	388	387	393	0	9.36	0.00	9.36
Sub Total WR	2978	4000			94.09	15.48	78.61
Pusaali Bypass	249	70	30	300	0.08	2.23	-2.15
MZP- GKP (D/C)	388	714	822	0	15.71	0.00	15.71
Patna-Balia(D/C)	204	308	554	0	7.76	0.00	7.76
B'Sharif-Balia (D/C)	273	324	509	0	8.08	0.00	8.08
Pusaali-Balia	52	28	88	0	0.94	0.00	0.94
Gaya-Fatehpur (765 Kv)	28	68	166	32	2.29	0.00	2.29
Pusaali-Sahupuri	207	173	207	0	3.55	0.00	3.55
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-24	-30	0	40	0.00	-0.56	0.56
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	122	155	271	0	4.29	0.00	4.29
Sub Total ER	1499	1810			42.69	1.66	41.02
Total IR Exch	4477	5810			136.78	17.15	119.63

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
23.18	3.78	26.95	10.55	10.90	-2.27	-0.07	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
35.24	72.27	107.51	41.02	78.61	119.63	5.79	6.33	12.12

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	2.04	10.83	35.03	75.59	56.82	6.05	2.11	0.02	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			
50.14	6.04	49.60	19.21	49.93	0.15	0.10	50.16	49.74

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	409	18:00	401	00:04	0.0	0.0	0.0	0.0
Gorakhpur	400	415	06:03	393	00:08	0.0	0.0	0.0	0.0
Bareilly	400	414	06:07	397	15:36	0.0	0.0	0.0	0.0
Kanpur	400	417	08:03	401	00:04	0.0	0.0	0.0	0.0
Dadri	400	411	08:01	397	14:18	0.0	0.0	0.0	0.0
Ballabgarh	400	419	06:03	403	14:40	0.0	0.0	0.0	0.0
Bawana	400	416	06:03	401	14:50	0.0	0.0	0.0	0.0
Bassi	400	429	04:02	414	00:04	0.0	0.0	55.6	0.0
Hissar	400	408	08:00	394	14:19	0.0	0.0	0.0	0.0
Moga	400	412	06:03	400	14:48	0.0	0.0	0.0	0.0
Abdullapur	400	415	06:03	396	19:14	0.0	0.0	0.0	0.0
Nalagarh	400	412	04:04	399	14:39	0.0	0.0	0.0	0.0
Kishenpur	400	418	08:01	409	14:35	0.0	0.0	0.0	0.0
Wagoora	400	412	00:39	397	20:06	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	775	08:01	742	21:18	0.0	0.0	0.0	0.0
Balia	765	776	06:03	738	00:05	0.0	3.2	0.0	0.0
Moga	765	798	08:03	773	14:47	0.0	0.0	0.0	0.0
Agra	765	797	18:01	762	00:05	0.0	0.0	0.0	0.0
Bhiwani	765	793	06:03	767	14:46	0.0	0.0	0.0	0.0
Unnao	765	748	18:03	740	00:00	0.0	92.1	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	508.05	1455.60	506.43	1382.01	1641.98	716.19
Pong	426.72	384.05	411.77	555.85	420.59	916.71	3347.78	250.26
Tehri	829.79	740.04	808.80	782.78	819.70	1002.27	654.82	567.00
Koteshwar	612.50	598.50	611.00	5.20	610.20	4.69	567.00	572.00
Chamera-I	760.00	748.75	751.28	0.00	0.00	0.00	314.82	296.35
Rihand	268.22	252.98	855.10	846.10	340.20	196.40	17135.03	6800.57
RPS	352.80	343.81	1155.75	29.26	1155.72	4.03	0.00	9666.00
Jawahar Sagar	298.70	295.78	976.10	22.08	1309.64	2.29	0.00	0.00
RSD	527.91	487.91	518.66	11.51	519.13	3.56	283.93	480.76

* 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	211	0	1415	0	0	34.71	7.01	41.72
Delhi	321	-96	-59	431	87	-58	11.47	-1.52	9.95
Haryana	1595	-421	0	1419	-68	0	38.41	-10.87	27.55
HP	-1196	-282	0	-993	-310	0	-25.07	-6.62	-31.70
J&K	-682	-90	0	-309	-39	0	-11.30	-1.79	-13.09
CHD	0	0	0	0	0	0	0.24	0.42	0.65
Rajasthan	-834	414	4	-819	-69	0	-19.98	2.98	-17.00
UP	855	639	49	311	0	49	10.95	11.55	22.50
Uttarakhand	84	0	0	84	0	0	2.01	0.78	2.79
Total	1613	376	-6	1538	-400	-9	41.43	1.94	43.36

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1516	1410	496	0	0	0
Delhi	698	296	356	-428	-10	-59
Haryana	1645	1419	96	-946	0	0
HP	-968	-1196	-221	-412	0	0
J&K	-309	-682	-35	-285	0	0
CHD	30	0	54	0	0	0
Rajasthan	-816	-900	414	-353	4	-48
UP	855	289	934	0	49	0
Uttarakhand	84	84	108	0	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 14.08.2014 :**

Rains in some parts of NR.

XIV. Synchronisation of new generating units :

0.00

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

- 1: 400 kV Makhu - Muktsar of PSEB Ckt -1 & 2 first time charged at 16.49hrs and 18.04hrs of dt 12.08.2014 respectively.
- 2: 315MVA ICT-I first time charged at 19.28hrs of dt. 12.08.2014 at Muktsar (PSEB) s/station.
- 3: 315MVA ICT-II First time charged at 18:35 hrs of dt 14.08.2014 at Muktsar(PSEB) s/station.

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