

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 28.08.2014
Date of Reporting : 29.08.2014

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
45637	4677	50314	49.89	44449	4677	49126	49.98	1047.8	114.12

* 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 \$					
Punjab	82.49	21.77		104.26	103.82	104.24	208.50	12.38
Haryana	100.38	0.61		100.98	87.43	86.19	187.17	0.14
Rajasthan	111.80	0.63	5.68	118.11	43.62	55.79	173.89	30.89
Delhi	29.34			29.34	82.25	80.53	109.87	0.60
UP	115.40	17.10	0.36	132.86	133.90	133.56	266.42	64.03
Uttarakhand	17.40	17.40		17.40	15.24	16.65	34.05	4.29
HP		24.41		24.41	1.37	2.16	26.58	0.10
J & K		14.91	0.00	14.91	16.12	20.14	35.04	1.70
Chandigarh				0.00	5.31	6.28	6.28	0.00
Total	439.40	96.83	6.04	542.27	489.05	505.53	1047.80	114.12

* 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	9198	600	-123	1278	8881	0	129	1422	9450
Haryana	8515	0	-129	1710	8114	0	91	1555	8515
Rajasthan	7613	926	444	-887	7488	987	469	-832	7816
Delhi	4688	0	73	761	4719	0	-131	592	5113
UP	11011	2710	-95	558	11663	3405	43	1877	11663
Uttarakhand	1542	245	5	85	1161	285	85	85	1552
HP	1128	96	1	-1185	1001	0	78	-1371	1313
J&K	1670	100	178	-476	1183	0	166	-821	1721
Chandigarh	272	0	36	0	240	0	17	0	325
Total	45637	4677	390	1844	44449	4677	948	2507	45645

* 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	1310	1513	1329	31.68	1320	31.37
	Rihand I STPS	1000	421	460	456	11.07	461	10.03	1.04
	Rihand II STPS	1000	965	1044	1036	24.95	1040	23.05	1.91
	Rihand III STPS	1000	784	1010	607	20.41	850	18.68	1.73
	Dadri I STPS	840	813	583	758	19.08	795	17.99	1.08
	Dadri II STPS	980	478	375	444	11.32	472	10.96	0.36
	Unchahar I TPS	420	195	215	221	5.16	215	4.63	0.53
	Unchahar II TPS	420	400	440	438	10.45	435	9.46	0.98
	Unchahar III TPS	210	198	215	217	5.17	215	4.69	0.48
	I-STPP (Jhajhar)	1500	813	645	963	19.06	794	19.50	-0.44
	Dadri GPS	830	738	757	754	17.76	740	17.28	0.48
	Anta GPS	419	384	381	390	9.22	384	9.10	0.12
	Auraiva GPS	663	600	604	479	13.67	570	13.18	0.49
	Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
	Unchahar Solar	10	3	0	0	0.00	0	0.07	-0.07
	Sub Total (A)	11297	8103	8242	8092	199	8292	190	9
B. NPC	NAPS	440	267	305	309	6.43	268	6.41	0.02
	RAPS- B	440	200	225	230	4.81	201	4.80	0.01
	RAPS- C	440	385	409	412	8.79	366	9.24	-0.45
	Sub Total (B)	1320	852	939	951	20.03	835	20.45	-0.42
C. NHPC	Chamera I HPS	540	534	550	363	5.57	232	5.40	0.17
	Chamera II HPS	300	300	302	221	5.71	238	5.50	0.21
	Chamera III HPS	231	229	234	156	3.83	159	3.70	0.13
	Bairasuli HPS	180	178	121	63	1.76	73	1.64	0.12
	Salal-HPS	690	636	667	678	15.87	661	15.27	0.59
	Tanakpur-HPS	94	82	88	56	2.00	83	1.97	0.03
	Uri-HPS	480	409	448	411	10.09	421	9.82	0.27
	Uri-II HPS	240	225	243	240	5.64	235	5.40	0.24
	Dhauliganga-HPS	280	207	207	207	5.01	209	4.97	0.04
	Dulhasti-HPS	390	386	394	396	9.32	388	9.26	0.05
	Sewa-II HPS	120	119	130	0	0.72	30	0.60	0.12
	Parbati 3	520	130	133	131	2.78	116	2.73	0.05
	Sub Total ©	4065	3436	3518	2921	68	2846	66	2
D.SJVNL	NJPC	1500	1605	1614	1617	38.50	1604	38.52	-0.02
	Rampur HEP	275	350	363	360	8.67	361	8.40	0.27
	Sub Total (D)	1775	1955	1977	1977	47.17	1965	46.92	0.25
E. THDC	Tehri HPS	1000	1044	1049	732	9.67	403	9.50	0.17
	Koteshwar HPS	400	144	382	92	3.48	145	3.40	0.08
	Sub Total (E)	1400	1188	1431	824	13.16	548	12.90	0.26
F. BBMB	Bhakra HPS	1514	1077	1335	1089	25.76	1073	25.85	-0.09
	Dehar HPS	990	572	660	600	14.01	584	13.72	0.29
	Pong HPS	396	175	384	132	4.26	178	4.20	0.06
	Sub Total (F)	2900	1824	2379	1821	44.03	1835	43.78	0.26
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	116	104	2.25	94	2.76	-0.51
	KWHEP HPS(IPP)	1000	0	1200	1000	24.68	1028	25.19	-0.51
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.78	-0.78
	Shree Cement TPS	300	0	147	149	3.53	147	3.53	0.00
	Budhil HPS(IPP)	70	0	50	36	0.90	37	0.92	-0.02
	Sub Total (G)	1662	0	1513	1289	31.36	1307	33.17	-1.81
H. Total Regional Entities (A-G)		24419	17357	19998	17876	423.05	17627	413.49	9.56

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	1225	900	23.21	967	
	Guru Nanak Dev TPS(Bhatinda)	440	446	345	9.12	380	
	Guru Hargobind Singh TPS(L.mbt)	920	941	793	19.92	830	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura	1400	1350	1351	30.24	1260	
	Talwandi Saboo	660	0	0	0.00	0	
	Thermal (Total)	4680	3962	3389	82.49	3437	
	Total Hydro	1148	907	894	21.77	907	
	Total Punjab	5828	4869	4283	104.26	4344	
	Haryana	Panipat TPS	1367	1132	1135	26.68	1112
DCRTPP (Yamuna nagar)		600	546	544	12.91	538	
Faridabad GPS (NTPC)		432	300	298	7.34	306	
RGTPP (khedar) (IPP)		1200	1148	1089	24.78	1033	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP)		1320	1147	1232	28.66	1194	
Thermal (Total)		4944	4273	4298	100.38	4182	
Total Hydro		62	24	23	0.61	25	
Total Haryana		5006	4297	4321	100.98	4208	
Rajasthan		kota TPS	1240	1043	1067	24.32	1013
	suratgarh TPS	1500	1032	1104	25.31	1055	
	Chabra TPS	750	183	188	4.49	187	
	Dholpur GPS	330	111	111	2.74	114	
	Ramgarh GPS	271	122	135	3.28	137	
	RAPS A (NPC)	300	0	0	0.00	0	
	Barsingar (NLC)	250	191	181	4.32	180	
	Giral LTPS	250	56	53	1.39	58	
	Rajwest LTPS (IPP)	1080	832	950	20.77	865	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Kalisindh Thermal	600	360	475	10.10	421	
	Kawai(Adani)	1320	602	622	15.08	628	
	Thermal (Total)	8026	4532	4886	112	4658	
	Total Hydro	550	59	0	0.63	26	
	Wind power	2798	422	190	4.57	190	
	Biomass	99	37	37	0.88	37	
	Solar	730	0	0	0.23	10	
	Renewable/Others (Total)	3627	459	227	5.68	237	
	Total Rajasthan	12203	5050	5113	118.11	4921	
	UP	Anpara TPS	1630	883	809	20.10	838
Obra TPS		1194	330	322	7.70	321	
Paricha TPS		1140	791	812	19.30	804	
Panki TPS		210	68	72	1.60	67	
Harduaganj TPS		665	422	428	9.90	413	
Tanda TPS (NTPC)		440	379	381	9.00	375	
Roza TPS (IPP)		1200	801	801	19.40	808	
Anpara-C (IPP)		1200	891	900	21.70	904	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	284	284	6.70	279	
Thermal (Total)		8129	4849	4809	115.40	4808	
Vishnuparyag HPS (IPP)		400	436	436	10.50	438	
Other Hydro		527	302	299	6.60	275	
Cogeneration		981	15	15	0.36	15	
Total UP		10037	5602	5559	132.86	5098	
Uttarakhand		Total Hydro	1398	762	403	17.40	725
		Total Uttarakhand	1398	762	403	17.40	725
Delhi	Raighat TPS	135	50	47	1.10	46	
	Delhi Gas Turbine	282	146	145	3.50	146	
	Pragati Gas Turbine	330	295	142	6.70	279	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	1370	445	444	10.89	454	
	Badarpur TPS (NTPC)	705	287	297	7.16	298	
	Thermal (Total)	2917	1223	1075	29.34	1222	
	Total Delhi	2917	1223	1075	29.34	1222	
	HP	Baspa HPS (IPP)	300	330	330	7.92	330
Malana HPS (IPP)		86	64	63	1.18	49	
Other Hydro		728	639	630	15.31	638	
Total HP		1114	1033	1023	24.41	1017	
J & K	Baqilhar HPS (IPP)	450	438	438	10.51	438	
	Other Hydro/IPP	436	183	187	4.40	184	
	Gas/Diesel/Others	209	0	0	0.00	0	
	Total J & K	1094	621	625	14.91	621	
Total State Control Area Generation		39597	23457	22402	542.27	22157	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4244	5102.565	114.80	4783	
Total Regional Availability(Gross)		64017	47699	45380	1080.13	44568	

IV. Total Hydro Generation:

Regional Entities Hydro	11432	10621	8648	199.58	8316
State Control Area Hydro	5684	3708	3267	96.83	3597
Total Regional Hydro	17116	14329	11915	296.41	11913

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	250	500	0	6.40	0.00	6.40
Gwalior-Agra (D/C)	1459	1864	2339	0	36.26	0.00	36.26
Zerda-Kankroli	-131	-99	0	329	0.00	4.34	-4.34
Zerda-Bhinmal	-69	-88	30	382	0.00	3.21	-3.21
Malanpur-Auraiya	-185	-8	0	202	0.00	3.32	-3.32
Badod-Kota/Morak	-17	-22	11	115	0.00	1.26	-1.26
Mundra-Mohindergarh(HVDC)	1203	1002	1410	0	28.61	0.00	28.61
Vindhychal - Rihand	338	332	342	0	10.92	0.00	10.92
Sub Total WR	2798	3231			82.19	12.13	70.06
Pusauli Bypass	322	42	366	0	5.56	0.00	5.56
MZP- GKP (D/C)	406	710	760	0	14.23	0.00	14.23
Patna-Balia(D/C)	107	309	350	0	6.23	0.00	6.23
B'Sharif-Balia (D/C)	154	356	379	0	6.47	0.00	6.47
Pusauli-Balia	14	1	54	0	0.37	0.00	0.37
Gaya-Fatehpur (765 Kv)	74	76	113	0	1.90	0.00	1.90
Pusauli-Sahupuri	145	170	203	0	3.48	0.00	3.48
K'nasa-Sahupuri	0	0	0	0	0.96	0.00	0.96
Son Ngr-Rihand	-26	-40	0	0	0.00	0.78	-0.78
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	250	248	342	0	6.31	0.00	6.31
Sub Total ER	1446	1872			45.52	0.78	44.74
Total IR Exch	4244	5103			127.71	12.90	114.80

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	
22.44	3.74	26.18	14.44	8.38	-1.03	7.56	-0.05	0.05	

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
39.53	53.34	92.87	44.74	70.06	114.80	5.21	16.72	21.93

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	6.74	27.90	61.10	87.34	35.74	2.82	0.34	0.00	NA

Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz				
50.13	14.03	49.46	19.14	49.87	0.31	0.11	50.11	49.68

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	407	05:53	400	22:44	0.0	0.0	0.0	0.0
Gorakhpur	400	410	20:35	390	12:36	0.0	0.0	0.0	0.0
Bareilly	400	411	18:01	388	11:28	0.0	0.2	0.0	0.0
Kanpur	400	412	06:04	398	11:23	0.0	0.0	0.0	0.0
Dadri	400	408	06:05	391	11:27	0.0	0.0	0.0	0.0
Ballabgarh	400	414	06:01	396	11:28	0.0	0.0	0.0	0.0
Bawana	400	409	06:01	395	11:25	0.0	0.0	0.0	0.0
Bassi	400	425	20:35	389	12:52	0.0	0.3	8.0	0.0
Hissar	400	404	06:03	389	14:30	0.0	0.0	0.0	0.0
Moga	400	409	05:03	398	11:23	0.0	0.0	0.0	0.0
Abdullapur	400	410	06:04	396	12:44	0.0	0.0	0.0	0.0
Nalagarh	400	413	06:04	401	10:26	0.0	0.0	0.0	0.0
Kishenpur	400	414	17:59	404	11:34	0.0	0.0	0.0	0.0
Wagoora	400	410	23:55	392	19:37	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	765	06:05	738	11:25	0.0	2.6	0.0	0.0
Balia	765	764	06:04	736	09:20	0.0	10.8	0.0	0.0
Moga	765	782	06:04	758	11:28	0.0	0.0	0.0	0.0
Agra	765	780	06:04	750	11:27	0.0	0.0	0.0	0.0
Bhiwani	765	783	06:04	755	11:28	0.0	0.0	0.0	0.0
Unnao	765	752	21:04	738	14:43	0.0	3.4	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	1530.03	510.21	1560.04	833.00	783.41
Pong	426.72	384.05	413.52	622.40	422.32	1005.78	230.10	259.86
Tehri	829.79	740.04	814.15	882.26	819.95	1002.27	325.55	220.00
Koteshwar	612.50	598.50	610.57	5.46	609.60	4.38	220.00	231.00
Chamera-I	760.00	748.75	751.38	13.26	0.00	0.00	189.33	151.51
Rihand	268.22	252.98	0.00	0.00	0.00	0.00	0.00	0.00
RPS	352.80	343.81	0.00	0.00	0.00	0.00	0.00	0.00
Jawahar Sagar	298.70	295.78	0.00	0.00	0.00	0.00	0.00	0.00
RSD	527.91	487.91	514.83	11.49	515.38	10.77	171.26	488.43

* 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	1295	127	0	1278	0	0	30.53	1.36	31.89
Delhi	322	321	-51	432	329	0	9.63	7.31	16.94
Haryana	1740	-184	0	1746	-36	0	42.57	-10.07	32.50
HP	-1207	-164	0	-954	-231	0	-24.60	-4.01	-28.60
J&K	-681	-140	0	-436	-39	0	-11.54	-1.87	-13.41
CHD	0	0	0	0	0	0	0.24	0.20	0.44
Rajasthan	-830	-2	0	-815	-71	0	-19.85	0.17	-19.68
UP	842	985	49	168	390	0	8.94	19.45	28.39
Uttarakhand	93	-8	0	93	-8	0	2.23	-0.20	2.03
Total	1573	935	-1	1510	334	0	38.16	12.35	50.51

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1308	1235	529	0	0	0
Delhi	467	297	884	-402	0	-51
Haryana	1840	1696	18	-1149	0	0
HP	-929	-1207	-92	-325	0	0
J&K	-377	-681	-39	-191	0	0
CHD	30	0	64	0	0	0
Rajasthan	-812	-901	1404	-100	0	0
UP	842	168	985	0	49	0
Uttarakhand	93	93	-8	-8	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 28.08.2014 :**

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 :**