

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 20.07.2014
Date of Reporting : 21.07.2014

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
41150	2495	43645	49.96	39562	1990	41552	50.10	947.5	35.61

* 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	61.86	23.09		84.95	119.97	120.91	0.94	205.86	0.00
Haryana	56.73	0.48		57.21	103.99	101.86	-2.13	159.07	0.00
Rajasthan	99.46	0.00	22.47	121.93	33.15	32.66	-0.49	154.59	0.00
Delhi	23.04			23.04	74.72	74.24	-0.48	97.28	0.15
UP	121.90	3.10	1.20	126.20	117.94	117.97	0.02	244.17	33.55
Uttarakhand		16.65		16.65	13.83	13.57	-0.25	30.22	0.12
HP		21.64		21.64	-1.58	1.52	3.11	23.16	0.10
J & K		10.51	0.00	10.51	19.32	18.12	-1.20	28.63	1.70
Chandigarh				0.00	4.77	4.53	-0.24	4.53	0.00
Total	362.99	75.47	23.67	462.12	486.11	485.38	-0.73	947.50	35.61

* 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	9064	0	125	1435	8710	0	11	1784	9064
Haryana	7154	0	-303	1836	6588	0	-70	1910	7478
Rajasthan	6333	0	-67	-448	6041	0	164	-302	7007
Delhi	4253	0	118	335	3925	0	-8	200	4818
UP	10081	2395	1	253	10641	1990	-176	419	11251
Uttarakhand	1486	0	-44	95	1257	0	-28	67	1534
HP	856	0	3	-1293	903	0	58	-1418	1097
J&K	1701	100	-3	-206	1329	0	-130	-305	1797
Chandigarh	221	0	7	0	169	0	-15	0	222
Total	41150	2495	-163	2008	39562	1990	-194	2356	43106

* 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	1692	1807	1810	38.03	1584	37.49	0.53
	Rihand I STPS	1000	858	963	912	21.41	892	19.62	1.80
	Rihand II STPS	1000	943	1027	993	22.38	933	20.74	1.64
	Rihand III STPS	1000	904	830	746	20.00	833	18.90	1.10
	Dadri I STPS	840	813	550	574	17.07	711	16.37	0.70
	Dadri II STPS	980	473	403	421	10.47	436	10.67	-0.20
	Unchahar I TPS	420	397	394	341	8.71	363	8.02	0.68
	Unchahar II TPS	420	400	411	315	8.88	370	8.10	0.78
	Unchahar III TPS	210	198	208	147	4.28	178	3.92	0.36
	ISTPP (Jhajjar)	1500	873	900	927	18.52	772	19.27	-0.75
	Dadri GPS	830	519	182	185	4.39	183	4.57	-0.18
	Anta GPS	419	379	257	46	4.97	207	5.11	-0.13
	Auraiya GPS	663	631	155	156	3.75	156	3.65	0.10
	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	9084	8087	7573	183	7620	177	6
B. NPC	NAPS	440	275	308	310	6.56	273	6.60	-0.04
	RAPS- B	440	392	437	439	9.48	395	9.41	0.07
	RAPS- C	440	375	414	411	8.82	368	9.00	-0.18
	Sub Total (B)	1320	1042	1159	1160	24.86	1036	25.01	-0.15
C. NHPC	Chamera I HPS	540	534	547	539	12.99	541	12.82	0.17
	Chamera II HPS	300	301	309	305	7.27	303	7.22	0.05
	Chamera III HPS	231	229	236	233	5.53	230	5.50	0.03
	Bairasui HPS	180	179	182	178	3.57	149	3.32	0.25
	Salal-HPS	690	663	672	672	16.17	674	15.91	0.26
	Tanakpur-HPS	94	0	0	0	0.00	0	0.00	0.00
	Uri-HPS	480	475	477	477	11.54	481	11.40	0.14
	Uri-II HPS	240	240	244	244	5.82	242	5.76	0.05
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	386	397	383	9.30	388	9.26	0.04
	Sewa-II HPS	120	119	87	106	1.43	60	1.43	0.00
	Parbati 3	390	180	133	255	4.22	176	4.31	-0.09
	Sub Total ©	3935	3306	3283	3393	78	3243	77	1
D.SJVNL	NJPC	1500	1605	1614	1615	35.57	1482	35.53	0.04
	Rampur HEP	275	179	146	293	4.37	182	4.29	0.09
	Sub Total (D)	1775	1784	1760	1908	39.94	1664	39.81	0.13
E. THDC	Tehri HPS	1000	768	773	500	10.09	420	10.00	0.09
	Koteshwar HPS	400	183	397	92	4.43	185	4.40	0.03
	Sub Total (E)	1400	951	1170	592	14.53	605	14.40	0.13
F. BBMB	Bhakra HPS	1514	926	1333	808	22.37	932	22.21	0.16
	Dehar HPS	990	201	0	560	4.97	207	4.83	0.14
	Pong HPS	396	187	368	62	4.54	189	4.49	0.06
	Sub Total (F)	2900	1314	1701	1430	31.89	1329	31.53	0.36
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	227	228	5.47	228	5.28	0.18
	KWHEP HPS(IPP)	1000	0	1200	1200	28.70	1196	28.51	0.19
	Malana Stg-II HPS	100	0	112	112	2.65	111	2.49	0.16
	Shree Cement TPS	300	0	180	197	4.11	171	4.12	-0.01
	Budhil HPS(IPP)	70	0	71	71	1.68	70	1.67	0.01
	Sub Total (G)	1662	0	1791	1808	42.62	1776	42.08	0.53
H. Total Regional Entities (A-G)		24289	17480	18950	17864	414.54	17273	406.28	8.26

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	1250	1245	26.34	1098	
	Guru Nanak Dev TPS(Bhatinda)	440	330	403	7.71	321	
	Guru Hargobind Singh TPS(L.mbt)	920	660	716	13.49	562	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura	700	696	475	14.32	597	
	Talwandi Saboo	660	0	0	0.00	0	
	Thermal (Total)	3980	2936	2839	61.86	2577	
	Total Hydro	1148	990	959	23.09	962	
	Total Punjab	5128	3926	3798	84.95	3539	
	Haryana	Panipat TPS	1367	610	601	14.19	591
DCRTPP (Yamuna nagar)		600	427	428	10.04	419	
Faridabad GPS (NTPC)		432	193	196	4.61	192	
RGTPP (khedar) (IPP)		1200	753	921	19.03	793	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP)		1320	370	371	8.85	369	
Thermal (Total)		4944	2353	2517	56.73	2364	
Total Hydro		62	20	17	0.48	20	
Total Haryana		5006	2373	2534	57.21	2384	
Rajasthan		kota TPS	1240	900	853	20.86	869
		suratgarh TPS	1500	1028	1005	24.22	1009
	Chabra TPS	750	154	339	6.52	272	
	Dholpur GPS	330	0	0	0.00	0	
	Ramgarh GPS	271	116	70	2.70	112	
	RAPS A (NPC)	300	0	0	0.00	0	
	Barsingsar (NLC)	250	96	96	2.17	90	
	Giral LTPS	250	0	0	0.00	0	
	Rajwest LTPS (IPP)	1080	554	431	12.01	500	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Kalisindh Thermal	600	407	407	10.10	421	
	Kawai(Adani)	1320	860	858	20.90	871	
	Thermal (Total)	8026	4115	4059	99	4144	
	Total Hydro	550	0	0	0.00	0	
	Wind power	2798	888	865	20.91	871	
	Biomass	99	33	33	0.79	33	
	Solar	730	0	0	0.77	32	
	Renewable/Others (Total)	3627	921	898	22.47	936	
	Total Rajasthan	12203	5036	4957	121.93	5080	
	UP	Anpara TPS	1630	919	939	22.10	921
Obra TPS		1288	538	529	12.80	533	
Paricha TPS		1140	783	569	17.40	725	
Panki TPS		210	135	122	3.10	129	
Harduaganj TPS		665	405	384	9.50	396	
Tanda TPS (NTPC)		440	314	366	8.30	346	
Roza TPS (IPP)		1200	578	765	16.40	683	
Anpara-C (IPP)		1200	1015	1080	25.30	1054	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	280	280	7.00	292	
Thermal (Total)		8223	4967	5034	121.90	5079	
Vishnuparyag HPS (IPP)		400	0	0	0.00	0	
Other Hydro		527	110	173	3.10	129	
Cogeneration		981	50	50	1.20	50	
Total UP		10131	5127	5257	126.20	5258	
Uttarakhand		Total Hydro	1303	838	704	16.65	694
		Total Uttarakhand	1303	838	704	16.65	694
Delhi	Rajghat TPS	135	45	38	0.96	40	
	Delhi Gas Turbine	282	145	182	3.77	157	
	Pragati Gas Turbine	330	259	283	6.60	275	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	1370	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	495	454	11.72	488	
	Thermal (Total)	2917	944	957	23.04	960	
	Total Delhi	2917	944	957	23.04	960	
HP	Baspa HPS (IPP)	300	222	333	5.20	217	
	Malana HPS (IPP)	86	104	104	2.47	103	
	Other Hydro	728	603	524	13.97	582	
	Total HP	1114	929	961	21.64	902	
J & K	Baqilhar HPS (IPP)	450	438	438	10.51	438	
	Other Hydro/IPP	436	0	0	0.00	0	
	Gas/Diesel/Others	209	0	0	0.00	0	
	Total J & K	1094	438	438	10.51	438	
Total State Control Area Generation		38896	19611	19606	462.12	19255	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4869.99	3465.9	108.19	4508	
Total Regional Availability(Gross)		63186	43431	40936	984.85	41036	

IV. Total Hydro Generation:

Regional Entities Hydro	11302	9452	8862	201.01	8375
State Control Area Hydro	5589	3325	3252	75.47	3144
Total Regional Hydro	16891	12777	12114	276.48	11520

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	150	-50	350	450	1.30	3.09	-1.79
Gwalior-Agra (D/C)	1542	1059	2154	0	38.14	0.00	38.14
Zerda-Kankroli	-189	-277	0	372	0.00	5.41	-5.41
Zerda-Bhinmal	-176	-263	0	360	0.00	4.97	-4.97
Malanpur-Auraiya	-88	-41	0	88	0.00	1.07	-1.07
Badod-Kota/Morak	-165	-167	0	228	0.00	3.24	-3.24
Mundra-Mohindergarh(HVDC)	2002	2002	2304	0	46.40	0.00	46.40
Vindhychal - Rihand	504	0	504	0	8.18	0.00	8.18
Sub Total WR	3580	2263			94.03	17.78	76.24
Pusaui Bypass	400	400	400	0	9.60	0.00	9.60
MZP- GKP (D/C)	370	414	590	0	9.76	0.00	9.76
Patna-Balia(D/C)	320	106	472	0	5.17	0.00	5.17
B'Sharif-Balia (D/C)	82	157	202	0	3.32	0.00	3.32
Pusaui-Balia	-140	-96	107	160	0.00	0.71	-0.71
Gaya-Fatehpur (765 Kv)	-3	47	-74	108	0.00	0.43	-0.43
Pusaui-Sahupuri	144	130	172	0	3.31	0.00	3.31
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	23	35	0	36	0.00	-0.70	0.70
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	94	10	165	151	1.23	0.00	1.23
Sub Total ER	1290	1203			32.39	0.44	31.94
Total IR Exch	4870	3466			126.42	18.23	108.19

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
19.73	3.70	23.43	15.76	11.88	-4.09	3.64	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
35.10	64.40	99.50	31.94	76.24	108.19	-3.16	11.85	8.69

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	0.00	0.22	10.27	54.12	70.31	14.70	4.76	0.01	0.00

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			
50.19	8.02	49.75	19.52	49.99	0.05	0.07	50.21	49.94

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	05:03	400	22:09	0.0	0.0	0.0	0.0
Gorakhpur	400	409	18:09	395	15:45	0.0	0.0	0.0	0.0
Bareilly	400	415	05:05	397	22:39	0.0	0.0	0.0	0.0
Kanpur	400	418	05:05	400	22:36	0.0	0.0	0.0	0.0
Dadri	400	416	06:05	397	22:15	0.0	0.0	0.0	0.0
Ballabgarh	400	423	04:50	403	22:16	0.0	0.0	14.9	0.0
Bawana	400	417	05:05	399	22:38	0.0	0.0	0.0	0.0
Bassi	400	430	05:01	413	22:40	0.0	0.0	56.9	0.0
Hissar	400	411	04:52	395	15:42	0.0	0.0	0.0	0.0
Moga	400	413	05:04	405	23:31	0.0	0.0	0.0	0.0
Abdullapur	400	417	03:48	396	22:30	0.0	0.0	0.0	0.0
Nalagarh	400	416	05:04	393	15:43	0.0	0.0	0.0	0.0
Kishenpur	400	414	04:50	400	14:49	0.0	0.0	0.0	0.0
Wagoora	400	0	00:00	9999	00:00	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	05:04	737	22:17	0.0	2.6	0.0	0.0
Balia	765	769	18:09	739	22:41	0.0	3.0	0.0	0.0
Moga	765	796	04:50	166	15:50	29.1	29.1	0.0	0.0
Agra	765	792	05:03	754	22:16	0.0	0.0	0.0	0.0
Bhiwani	765	798	04:53	379	23:54	0.4	0.4	0.0	0.0
Unnao	765	751	18:09	723	15:45	6.6	70.2	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	487.48	652.97	491.45	778.28	1057.52	746.49
Pong	426.72	384.05	400.80	237.89	404.34	328.16	215.09	376.70
Tehri	829.79	740.04	748.65	42.00	NA	NA	301.26	205.00
Koteshwar	612.50	598.50	610.77	4.95	608.40	3.76	208.00	207.00
Chamera-I	760.00	748.75	757.00	12.82	NA	NA	505.02	347.40
Rihand	268.22	252.98	258.07	205.10	256.79	149.00	NA	NA
RPS	352.80	343.81	348.06	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	298.80	NA	NA	NA	NA	NA
RSD	527.91	487.91	516.64	144.00	506.65	144.00	224.47	197.51

* 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	1410	374	0	1360	74	0	33.04	8.80	41.85
Delhi	313	-98	-14	352	-3	-13	11.38	-3.01	8.37
Haryana	1731	179	0	1685	152	0	39.79	3.40	43.19
HP	-927	-491	0	-775	-518	0	-19.26	-11.82	-31.08
J&K	-305	0	0	-334	128	0	-9.65	-1.11	-10.76
CHD	0	0	0	0	0	0	0.33	0.00	0.33
Rajasthan	-758	453	3	-758	308	2	-16.13	9.19	-6.94
UP	419	0	0	253	0	0	7.46	0.00	7.46
Uttarakhand	-8	75	0	-8	103	0	-0.19	1.57	1.37
Total	1874	493	-11	1775	245	-11	46.77	7.02	53.79

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1410	1360	511	74	0	0
Delhi	824	263	125	-403	-13	-14
Haryana	1731	1482	183	-239	0	0
HP	-725	-927	-412	-634	0	0
J&K	-305	-537	128	-254	0	0
CHD	41	0	0	0	0	0
Rajasthan	-463	-758	457	284	3	2
UP	473	214	0	0	0	0
Uttarakhand	-8	-8	103	12	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 20.07.2014 :**

1. Scattered Rain 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 :**