

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पारदर्शिता की पूर्ण स्वाभिमति प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 09.07.2014
Date of Reporting : 10.07.2014

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
45002	2765	47767	49.83	45306	2494	47800	49.87	1083.9	64.14

* 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	67.43	23.07		90.50	126.67	126.23	-0.44	216.73	7.08
Haryana	68.92	0.58		69.50	114.02	112.48	-1.54	181.98	0.00
Rajasthan	121.32	0.00	27.13	148.45	57.84	58.97	1.13	207.42	2.07
Delhi	31.38			31.38	86.35	82.98	-3.37	114.36	0.81
UP	123.10	11.90	1.20	136.20	124.84	126.22	1.38	262.42	51.96
Uttarakhand		22.50		22.50	14.50	13.85	-0.65	36.35	0.43
HP		24.09		24.09	1.80	1.82	0.01	25.90	0.10
J & K		14.78	0.00	14.78	17.47	17.28	-0.19	32.06	1.70
Chandigarh				0.00	5.78	6.75	0.96	6.75	0.00
Total	412.15	96.91	28.33	537.39	549.27	546.56	-2.70	1083.95	64.14

* 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	9091	225	-31	1589	9382	0	-55	1886	9506
Haryana	7975	0	-26	1355	7692	0	178	1267	8114
Rajasthan	7908	0	-98	-664	8335	94	128	-157	9303
Delhi	4890	0	-68	413	4521	0	-97	279	5578
UP	10752	2365	-8	632	11163	2400	-147	982	11569
Uttarakhand	1610	75	-13	94	1510	0	66	96	1657
HP	996	0	-29	-1163	938	0	10	-1385	1224
J&K	1495	100	-42	-250	1520	0	176	-373	1585
Chandigarh	286	0	29	0	245	0	22	20	357
Total	45002	2765	-285	2006	45306	2494	282	2615	46616

* 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	Off Peak MW	Energy	Average	Schedule	UI
				(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU
	Singrauli STPS	2000	1714	2061	1550	41.29	1721	41.08	0.21
	Rihand I STPS	1000	850	917	922	20.73	864	20.32	0.41
	Rihand II STPS	1000	950	1040	1031	22.59	941	22.68	-0.09
	Rihand III STPS	1000	843	910	925	20.44	852	20.14	0.30
	Dadri I STPS	840	813	860	832	17.79	741	18.61	-0.83
	Dadri II STPS	980	966	1017	904	20.83	868	21.66	-0.83
	Unchahar I TPS	420	393	426	433	9.15	381	9.13	0.02
	Unchahar II TPS	420	400	419	437	9.23	384	9.21	0.01
	Unchahar III TPS	210	198	207	217	4.53	189	4.50	0.02
	ISTPP (Jhajhar)	1500	1410	994	956	21.92	913	22.39	-0.47
	Dadri GPS	830	603	170	176	4.01	167	4.46	-0.45
	Anta GPS	419	377	248	252	5.87	245	5.80	0.07
	Auraiya GPS	663	630	141	149	3.38	141	3.51	-0.12
	Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.00	0	0.07	-0.07
	Sub Total (A)	11297	10150	9410	8784	202	8408	204	-2
B. NPC	NAPS	440	271	297	308	6.37	265	6.50	-0.14
	RAPS- B	440	391	433	439	9.39	391	9.38	0.01
	RAPS- C	440	205	220	223	4.75	198	4.92	-0.17
	Sub Total (B)	1320	867	950	970	20.51	855	20.81	-0.29
C. NHPC	Chamera I HPS	540	535	540	540	13.06	544	12.84	0.22
	Chamera II HPS	300	301	308	310	7.34	306	7.22	0.12
	Chamera III HPS	231	229	240	238	5.65	235	5.50	0.15
	Bairasui HPS	180	169	120	140	2.71	113	2.54	0.17
	Salal-HPS	690	663	676	678	16.22	676	15.91	0.32
	Tanakpur-HPS	94	75	83	53	1.87	78	1.79	0.08
	Uri-HPS	480	475	478	475	11.52	480	11.40	0.12
	Uri-II HPS	240	235	244	250	5.75	239	5.66	0.09
	Dhauliganga-HPS	280	138	139	139	3.32	138	3.31	0.01
	Dulhasti-HPS	390	258	275	269	6.38	266	6.19	0.19
	Sewa-II HPS	120	119	129	0	1.35	56	1.20	0.15
	Parbati 3	390	262	272	266	4.87	203	4.78	0.09
	Sub Total ©	3935	3459	3503	3358	80	3335	78	2
D.SJVNL	NJPC	1500	1605	1605	1605	38.50	1604	38.52	-0.03
	Rampur HEP	275	280	290	289	6.94	289	6.72	0.22
	Sub Total (D)	1775	1885	1895	1894	45.43	1893	45.24	0.19
E. THDC	Tehri HPS	1000	600	600	0	5.24	218	5.10	0.14
	Koteshwar HPS	400	104	201	92	2.55	106	2.50	0.05
	Sub Total (E)	1400	704	801	92	7.79	324	7.60	0.19
F. BBMB	Bhakra HPS	1514	923	1330	931	22.25	927	22.15	0.10
	Dehar HPS	990	580	825	560	13.99	583	13.91	0.08
	Pong HPS	396	234	360	180	5.58	233	5.61	-0.03
	Sub Total (F)	2900	1736	2515	1671	41.82	1743	41.67	0.15
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	231	118	5.01	209	5.05	-0.05
	KWHEP HPS(IPP)	1000	0	1200	1200	28.65	1194	28.40	0.24
	Malana Stg-II HPS	100	0	113	113	2.67	111	2.51	0.15
	Shree Cement TPS	300	0	260	252	5.08	212	5.29	-0.21
	Budhil HPS(IPP)	70	0	72	72	1.70	71	1.69	0.01
	Sub Total (G)	1662	0	1875	1755	43.10	1796	42.95	0.15
H. Total Regional Entities (A-G)		24289	18801	20949	18523	440.49	18354	440.21	0.28

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	1035	1034	22.61	942	
	Guru Nanak Dev TPS(Bhatinda)	440	405	330	7.74	322	
	Guru Hargobind Singh TPS(L.mbt)	920	712	705	15.59	649	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura	700	658	1065	21.50	896	
	Talwandi Saboo	660	0	0	0.00	0	
	Thermal (Total)	3980	2810	3134	67.43	2810	
	Total Hydro	1148	973	984	23.07	961	
	Total Punjab	5128	3783	4118	90.50	3771	
	Haryana	Panipat TPS	1367	617	215	10.84	452
DCRTPP (Yamuna nagar)		600	526	527	12.34	514	
Faridabad GPS (NTPC)		432	0	0	0.00	0	
RGTPP (khedar) (IPP)		1200	1072	1138	24.66	1027	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP)		1320	760	742	21.09	879	
Thermal (Total)		4944	2975	2622	68.92	2872	
Total Hydro		62	27	24	0.58	24	
Total Haryana		5006	3002	2646	69.50	2896	
Rajasthan		kota TPS	1240	1082	1151	26.33	1097
	suratgarh TPS	1500	1012	1095	24.84	1035	
	Chabra TPS	750	314	390	8.98	374	
	Dholpur GPS	330	119	118	2.88	120	
	Ramgarh GPS	271	97	74	1.51	63	
	RAPS A (NPC)	300	0	0	0.00	0	
	Barsingsar (NLC)	250	98	98	2.15	90	
	Giral LTPS	250	77	77	1.70	71	
	Rajwest LTPS (IPP)	1080	859	729	21.12	880	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Kalisindh Thermal	600	198	79	3.16	132	
	Kawai(Adani)	1320	1084	1171	28.65	1194	
	Thermal (Total)	8026	4940	4982	121	5055	
	Total Hydro	550	0	0	0.00	0	
	Wind power	2798	878	1086	26.08	1087	
	Biomass	99	29	29	0.69	29	
	Solar	730	0	0	0.36	15	
	Renewable/Others (Total)	3627	907	1115	27.13	1130	
	Total Rajasthan	12203	5847	6097	148.45	6185	
	UP	Anpara TPS	1630	779	789	21.00	875
Obra TPS		1288	337	353	7.80	325	
Paricha TPS		1140	671	770	17.10	713	
Panki TPS		210	117	140	3.30	138	
Harduaganj TPS		665	378	385	9.20	383	
Tanda TPS (NTPC)		440	271	288	7.00	292	
Roza TPS (IPP)		1200	1103	1090	26.50	1104	
Anpara-C (IPP)		1200	959	928	22.40	933	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	363	404	8.80	367	
Thermal (Total)		8223	4978	5147	123.10	5129	
Vishnuparyag HPS (IPP)		400	0	436	8.10	338	
Other Hydro		527	215	198	3.80	158	
Cogeneration		981	50	50	1.20	50	
Total UP		10131	5243	5831	136.20	5338	
Uttarakhand		Total Uttarakhand	1303	898	830	22.50	937
		Total Uttarakhand	1303	898	830	22.50	937
Delhi	Rajghat TPS	135	45	45	1.08	45	
	Delhi Gas Turbine	282	139	177	3.93	164	
	Pragati Gas Turbine	330	276	287	6.86	286	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	1370	279	284	6.76	282	
	Badarpur TPS (NTPC)	705	587	348	12.76	532	
	Thermal (Total)	2917	1326	1141	31.38	1308	
	Total Delhi	2917	1326	1141	31.38	1308	
HP	Baspa HPS (IPP)	300	302	302	7.58	316	
	Malana HPS (IPP)	86	103	102	2.28	95	
	Other Hydro	728	585	598	14.22	593	
	Total HP	1114	990	1002	24.09	1004	
J & K	Baqilhar HPS (IPP)	450	438	442	10.56	440	
	Other Hydro/IPP	436	163	175	4.22	176	
	Gas/Diesel/Others	209	0	0	0.00	0	
	Total J & K	1094	601	617	14.78	616	
Total State Control Area Generation		38896	21690	22282	537.39	22054	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			6357	6668	140.39	5850	
Total Regional Availability(Gross)		63186	48996	47473	1118.26	46257	

IV. Total Hydro Generation:

Regional Entities Hydro	11302	10258	8445	211.41	8809
State Control Area Hydro	5589	3704	3655	96.91	3700
Total Regional Hydro	16891	13962	12100	308.32	12509

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	-400	50	200	400	1.04	4.80	-3.76
Gwalior-Agra (D/C)	2322	2322	2322	0	43.87	0.00	43.87
Zerda-Kankroli	-92	-112	0	246	0.00	4.39	-4.39
Zerda-Bhinmal	-92	-112	0	278	0.00	4.21	-4.21
Malanpur-Auraiya	-3	-17	0	73	0.00	0.66	-0.66
Badod-Kota/Morak	-37	-9	8	92	0.00	1.27	-1.27
Mundra-Mohindergarh(HVDC)	2302	2102	2304	0	51.62	0.00	51.62
Vindhychal - Rihand	505	507	507	0	12.35	0.00	12.35
Sub Total WR	4505	4731			108.88	15.33	93.56
Pusaali Bypass	400	400	400	0	9.72	0.00	9.72
MZP- GKP (D/C)	492	676	680	0	14.04	0.00	14.04
Patna-Balia(D/C)	348	280	520	0	7.27	0.00	7.27
B'Sharif-Balia (D/C)	379	356	452	0	7.71	0.00	7.71
Pusaali-Balia	-77	-113	0	168	0.00	1.29	-1.29
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00
Pusaali-Sahupuri	155	144	183	0	3.76	0.00	3.76
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-20	-38	0	38	0.00	-0.65	0.65
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	175	232	387	11	4.97	0.00	4.97
Sub Total ER	1852	1937			47.47	0.64	46.83
Total IR Exch	6357	6668			156.36	15.96	140.39

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
25.27	3.75	29.02	21.83	-0.07	-0.79	5.36	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
50.07	78.03	128.10	46.83	93.56	140.39	-3.23	15.53	12.29

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	5.52	20.12	51.24	83.68	42.71	4.59	1.46	0.03	0.00

Frequency (Hz)				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
50.17	18.02	49.58	21.25	49.89	0.24	0.11	50.16	49.76

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	403	07:59	399	10:25	0.0	0.0	0.0	0.0
Gorakhpur	400	410	18:03	388	14:51	0.0	0.8	0.0	0.0
Bareilly	400	408	08:03	386	14:55	0.0	5.5	0.0	0.0
Kanpur	400	410	18:02	392	14:57	0.0	0.0	0.0	0.0
Dadri	400	405	06:02	386	14:57	0.0	8.4	0.0	0.0
Ballabgarh	400	412	06:02	386	15:52	0.0	5.0	0.0	0.0
Bawana	400	408	06:02	391	15:07	0.0	0.0	0.0	0.0
Bassi	400	417	19:02	392	09:53	0.0	0.0	0.0	0.0
Hissar	400	401	18:02	384	15:51	0.0	22.0	0.0	0.0
Moga	400	402	19:02	389	12:43	0.0	0.2	0.0	0.0
Abdullapur	400	409	06:03	396	14:40	0.0	0.0	0.0	0.0
Nalagarh	400	406	07:03	387	15:06	0.0	4.9	0.0	0.0
Kishenpur	400	411	07:03	400	15:29	0.0	0.0	0.0	0.0
Wagoora	400	408	05:59	394	15:28	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	768	18:02	724	11:40	3.1	40.2	0.0	0.0
Balia	765	766	18:03	727	00:10	0.7	45.2	0.0	0.0
Moga	765	780	18:03	752	12:39	0.0	0.0	0.0	0.0
Agra	765	774	18:01	739	11:39	0.0	1.3	0.0	0.0
Bhiwani	765	783	18:03	748	11:45	0.0	0.0	0.0	0.0
Unnao	765	750	08:03	718	14:56	16.4	77.4	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	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	1618	268	0	1569	20	0	38.04	5.40	43.45
Delhi	320	-21	-20	359	54	0	9.50	0.94	10.45
Haryana	1334	-67	0	1287	68	0	29.64	-1.55	28.09
HP	-926	-459	0	-774	-390	0	-19.23	-9.58	-28.80
J&K	-334	-39	0	-334	84	0	-10.15	-2.33	-12.48
CHD	0	20	0	0	0	0	0.33	0.46	0.79
Rajasthan	-756	600	0	-756	92	0	-14.61	11.84	-2.76
UP	343	640	0	287	345	0	7.37	6.52	13.89
Uttarakhand	0	96	0	0	94	0	0.00	1.58	1.58
Total	1598	1037	-20	1639	368	0	40.91	13.30	54.21

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1618	1569	446	0	0	0
Delhi	591	271	423	-347	0	-20
Haryana	1334	1030	157	-820	0	0
HP	-723	-926	-353	-491	0	0
J&K	-334	-562	84	-292	0	0
CHD	42	0	59	0	0	0
Rajasthan	-363	-756	1108	-25	5	0
UP	435	236	640	0	0	0
Uttarakhand	0	0	116	15	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 09.07.2014 :**

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 :**