

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 11.07.2014
Date of Reporting : 12.07.2014

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
46327	2855	49182	50.01	46565	3507	50072	50.05	1095.7	85.20

* 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	63.37	22.74		86.11	124.60	122.81	-1.79	208.92	22.63
Haryana	68.50	0.62		69.12	117.32	116.32	-1.00	185.44	0.03
Rajasthan	98.81	0.00	16.58	115.39	80.94	86.64	5.70	202.03	5.71
Delhi	32.78			32.78	89.33	88.85	-0.48	121.63	0.00
UP	127.81	14.46	1.20	143.47	127.35	128.85	1.50	272.31	53.48
Uttarakhand		22.66		22.66	13.74	14.83	1.09	37.49	0.77
HP		24.58		24.58	1.46	2.03	0.57	26.61	0.89
J & K		14.74	0.00	14.74	17.18	19.61	2.43	34.35	1.70
Chandigarh				0.00	5.57	6.92	1.35	6.92	0.00
Total	391.26	99.80	17.78	508.84	577.49	586.86	9.37	1095.70	85.20

* 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	8967	300	-228	1569	8802	1020	-62	1618	9235
Haryana	8003	0	6	1179	8096	0	54	1481	8494
Rajasthan	7805	85	258	313	8583	14	162	197	9362
Delhi	5145	0	12	338	4969	0	-25	229	5778
UP	11672	2295	59	490	11842	2440	85	1335	12027
Uttarakhand	1724	75	171	54	1544	0	53	43	1724
HP	1070	0	5	-1184	928	33	-14	-1385	1233
J&K	1657	100	148	-250	1535	0	180	-373	1771
Chandigarh	284	0	45	0	266	0	44	10	367
Total	46327	2855	477	2509	46565	3507	477	3154	47368

* 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	1894	2052	2050	49.28	2053	45.46	3.81
	Rihand I STPS	1000	792	766	942	20.91	871	19.00	1.91
	Rihand II STPS	1000	910	1054	1037	24.00	1000	21.84	2.16
	Rihand III STPS	1000	814	864	906	20.82	868	19.54	1.28
	Dadri I STPS	840	813	812	782	20.38	849	19.15	1.23
	Dadri II STPS	980	966	959	937	23.51	980	23.11	0.40
	Unchahar I TPS	420	395	427	431	10.28	428	9.48	0.80
	Unchahar II TPS	420	400	438	428	10.54	439	9.60	0.94
	Unchahar III TPS	210	198	216	215	5.20	217	4.75	0.46
	ISTPP (Jhajjar)	1500	1410	1379	1281	32.02	1334	32.64	-0.62
	Dadri GPS	830	519	172	177	4.12	172	4.17	-0.05
	Anta GPS	419	377	0	222	3.52	147	3.33	0.19
	Auraiya GPS	663	630	145	151	3.52	147	3.42	0.10
	Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
	Unchahar Solar	10	0	0	0	0.00	0	0.00	0.00
	Sub Total (A)	11297	10119	9284	9559	228	9505	216	13
B. NPC	NAPS	440	265	303	306	6.33	264	6.36	-0.03
	RAPS- B	440	391	439	438	9.37	391	9.38	-0.01
	RAPS- C	440	205	224	226	4.81	201	4.92	-0.11
	Sub Total (B)	1320	861	966	970	20.52	855	20.66	-0.14
C. NHPC	Chamera I HPS	540	535	540	540	13.07	544	12.84	0.23
	Chamera II HPS	300	301	309	307	7.33	305	7.22	0.11
	Chamera III HPS	231	223	226	233	5.56	232	5.35	0.21
	Bairasui HPS	180	179	182	130	2.99	125	2.87	0.12
	Salal-HPS	690	663	683	660	16.21	675	15.91	0.30
	Tanakpur-HPS	94	64	80	62	1.59	66	1.53	0.07
	Uri-HPS	480	475	477	480	11.50	479	11.40	0.10
	Uri-II HPS	240	240	249	246	5.86	244	5.76	0.09
	Dhauliganga-HPS	280	133	138	138	3.24	135	3.19	0.04
	Dulhasti-HPS	390	258	271	273	6.44	268	6.19	0.24
	Sewa-II HPS	120	119	129	0	1.25	52	1.10	0.15
	Parbati 3	390	228	266	263	5.10	213	5.16	-0.06
	Sub Total ©	3935	3417	3550	3332	80	3338	79	2
D.SJVNL	NJPC	1500	1605	1617	1619	38.46	1603	38.52	-0.06
	Rampur HEP	275	251	209	217	6.03	251	6.04	0.07
	Sub Total (D)	1775	1856	1826	1836	44.49	1854	44.56	-0.07
E. THDC	Tehri HPS	1000	616	614	0	5.22	218	5.10	0.12
	Koteshwar HPS	400	104	200	92	2.57	107	2.50	0.07
	Sub Total (E)	1400	720	814	92	7.79	325	7.60	0.19
F. BBMB	Bhakra HPS	1514	919	1335	932	22.39	933	22.06	0.32
	Dehar HPS	990	568	825	560	13.79	574	13.63	0.16
	Pong HPS	396	240	360	180	5.74	239	5.76	-0.02
	Sub Total (F)	2900	1727	2520	1672	41.91	1746	41.45	0.46
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	231	230	5.31	221	5.21	0.10
	KWHEP HPS(IPP)	1000	0	1200	1200	28.57	1190	28.51	0.06
	Malana Stg-II HPS	100	0	113	113	2.63	110	2.51	0.12
	Shree Cement TPS	300	0	235	234	5.68	237	5.66	0.02
	Budhil HPS(IPP)	70	0	72	72	1.71	71	1.70	0.01
	Sub Total (G)	1662	0	1851	1849	43.90	1829	43.60	0.30
H. Total Regional Entities (A-G)		24289	18700	20811	19309	466.85	19452	451.90	14.95

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	1245	1139	26.78	1116	
	Guru Nanak Dev TPS(Bhatinda)	440	412	418	8.71	363	
	Guru Hargobind Singh TPS(L.mbt)	920	716	717	15.76	657	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura	700	547	552	12.13	505	
	Talwandi Saboo	660	0	0	0.00	0	
	Thermal (Total)	3980	2920	2826	63.37	2641	
	Total Hydro	1148	972	959	22.74	947	
	Total Punjab	5128	3892	3785	86.11	3588	
	Haryana	Panipat TPS	1367	769	785	18.48	770
DCRTPP (Yamuna nagar)		600	509	501	12.05	502	
Faridabad GPS (NTPC)		432	0	0	0.00	0	
RGTPP (khedar) (IPP)		1200	1019	1171	26.41	1100	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP)		1320	386	402	11.56	482	
Thermal (Total)		4944	2683	2859	68.50	2854	
Total Hydro		62	26	24	0.62	26	
Total Haryana		5006	2709	2883	69.12	2880	
Rajasthan		kota TPS	1240	953	794	21.18	883
		suratgarh TPS	1500	1071	1107	25.75	1073
	Chabra TPS	750	217	375	6.88	287	
	Dholpur GPS	330	0	107	1.97	82	
	Ramgarh GPS	271	135	74	3.62	151	
	RAPS A (NPC)	300	0	0	0.00	0	
	Barsingsar (NLC)	250	97	98	2.17	91	
	Giral LTPS	250	0	42	0.20	8	
	Rajwst LTPS (IPP)	1080	833	835	19.20	800	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Kalisindh Thermal	600	374	0	3.38	141	
	Kawai(Adani)	1320	610	607	14.46	602	
	Thermal (Total)	8026	4290	4039	99	4117	
	Total Hydro	550	0	0	0.00	0	
	Wind power	2798	424	1043	15.15	631	
	Biomass	99	36	36	0.87	36	
	Solar	730	0	0	0.56	23	
	Renewable/Others (Total)	3627	460	1079	16.58	691	
	Total Rajasthan	12203	4750	5118	115.39	4808	
	UP	Anpara TPS	1630	936	901	21.90	913
Obra TPS		1288	459	392	10.70	446	
Paricha TPS		1140	746	126	16.08	670	
Panki TPS		210	135	126	3.18	132	
Harduaganj TPS		665	378	392	9.00	375	
Tanda TPS (NTPC)		440	343	339	9.28	387	
Roza TPS (IPP)		1200	1107	1107	26.46	1103	
Anpara-C (IPP)		1200	941	919	22.61	942	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	284	402	8.59	358	
Thermal (Total)		8223	5329	4704	127.81	5325	
Vishnuparyag HPS (IPP)		400	436	436	10.35	431	
Other Hydro		527	185	176	4.11	171	
Cogeneration		981	50	50	1.20	50	
Total UP		10131	6000	5366	143.47	5546	
Uttarakhand		Total Hydro	1303	917	917	22.66	944
		Total Uttarakhand	1303	917	917	22.66	944
Delhi		Rajghat TPS	135	49	49	1.07	45
	Delhi Gas Turbine	282	174	178	4.16	174	
	Pragati Gas Turbine	330	278	286	6.70	279	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	1370	286	289	6.82	284	
	Badarpur TPS (NTPC)	705	593	537	14.03	584	
	Thermal (Total)	2917	1380	1339	32.78	1366	
	Total Delhi	2917	1380	1339	32.78	1366	
HP	Baspa HPS (IPP)	300	330	330	7.88	328	
	Malana HPS (IPP)	86	101	102	2.46	103	
	Other Hydro	728	608	572	14.24	593	
	Total HP	1114	1039	1004	24.58	1024	
J & K	Baqilhar HPS (IPP)	450	438	438	10.52	438	
	Other Hydro/IPP	436	163	175	4.22	176	
	Gas/Diesel/Others	209	0	0	0.00	0	
	Total J & K	1094	601	613	14.74	614	
Total State Control Area Generation		38896	21288	21025	508.84	20770	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			6404	7433	164.64	6860	
Total Regional Availability(Gross)		63186	48503	47767	1140.33	47082	

IV. Total Hydro Generation:

Regional Entities Hydro	11302	10254	8475	210.83	8785
State Control Area Hydro	5589	3740	3693	99.80	3727
Total Regional Hydro	16891	13994	12168	310.63	12511

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	-100	300	200	2.96	0.75	2.21
Gwalior-Agra (D/C)	1819	2427	2427	0	46.87	0.00	46.87
Zerda-Kankroli	-16	12	96	78	0.00	0.05	-0.05
Zerda-Bhinmal	-13	4	85	166	0.00	0.60	-0.60
Malanpur-Auraiya	-23	-10	0	86	0.00	0.66	-0.66
Badod-Kota/Morak	20	87	104	0	1.31	0.00	1.31
Mundra-Mohindergarh(HVDC)	2302	2297	2317	0	55.62	0.00	55.62
Vindhychal - Rihand	490	440	504	0	9.68	0.00	9.68
Sub Total WR	4479	5157			116.44	2.06	114.38
Pusaui Bypass	400	400	400	0	9.65	0.00	9.65
MZP- GKP (D/C)	550	744	806	0	14.81	0.00	14.81
Patna-Balia(D/C)	426	336	566	0	9.49	0.00	9.49
B'Sharif-Balia (D/C)	247	405	405	0	7.39	0.00	7.39
Pusaui-Balia	-89	-53	0	98	0.00	1.68	-1.68
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00
Pusaui-Sahupuri	175	138	182	0	3.71	0.00	3.71
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-36	0	37	0.00	0.78	-0.78
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	252	342	475	0	7.68	0.00	7.68
Sub Total ER	1925	2276			52.73	2.46	50.26
Total IR Exch	6404	7433			169.16	4.52	164.64

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
26.64	3.48	30.12	20.93	-0.07	3.12	10.32	0.00	0.00

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Inclds Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
54.17	91.39	145.56	50.26	114.38	164.64	-3.91	22.99	19.08

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	4.92	17.14	41.70	81.42	50.46	5.58	2.20	0.06	0.00

Frequency (Hz)				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
50.20	8.01	49.55	14.16	49.91	0.21	0.11	50.12	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	402	09:03	398	14:15	0.0	0.0	0.0	0.0
Gorakhpur	400	408	18:04	394	14:15	0.0	0.0	0.0	0.0
Bareilly	400	411	18:58	389	14:07	0.0	0.1	0.0	0.0
Kanpur	400	411	18:02	397	15:45	0.0	0.0	0.0	0.0
Dadri	400	407	06:57	390	15:45	0.0	0.0	0.0	0.0
Ballabgarh	400	414	18:57	394	15:47	0.0	0.0	0.0	0.0
Bawana	400	411	06:58	394	22:31	0.0	0.0	0.0	0.0
Bassi	400	417	05:02	395	08:39	0.0	0.0	0.0	0.0
Hissar	400	405	18:02	390	00:08	0.0	0.0	0.0	0.0
Moga	400	408	18:00	395	08:36	0.0	0.0	0.0	0.0
Abdullapur	400	412	06:57	396	14:10	0.0	0.0	0.0	0.0
Nalagarh	400	409	07:28	395	12:08	0.0	0.0	0.0	0.0
Kishenpur	400	412	18:00	403	14:10	0.0	0.0	0.0	0.0
Wagoora	400	407	06:02	393	20:35	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	770	18:01	740	16:40	0.0	0.4	0.0	0.0
Balia	765	767	08:04	740	14:06	0.0	0.7	0.0	0.0
Moga	765	789	18:00	762	08:39	0.0	0.0	0.0	0.0
Agra	765	782	18:01	747	16:38	0.0	0.0	0.0	0.0
Bhiwani	765	791	18:58	755	01:44	0.0	0.0	0.0	0.0
Unnao	765	750	18:58	725	14:16	2.0	78.7	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	0	0	1569	0	0	38.04	0.92	38.97
Delhi	320	-66	-25	359	4	-25	9.58	0.68	10.26
Haryana	1334	148	0	1287	-108	0	28.63	-5.72	22.91
HP	-926	-459	0	-774	-410	0	-19.23	-9.77	-29.00
J&K	-334	-39	0	-334	84	0	-10.07	-2.29	-12.37
CHD	0	10	0	0	0	0	0.33	0.32	0.66
Rajasthan	-609	803	2	-756	1069	0	-13.48	25.66	12.19
UP	361	935	39	297	143	49	7.30	10.94	18.24
Uttarakhand	0	43	0	0	54	0	0.00	0.65	0.65
Total	1765	1374	15	1649	836	24	41.11	21.39	62.50

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1618	1569	143	0	0	0
Delhi	615	271	517	-445	0	-25
Haryana	1334	882	160	-814	0	0
HP	-723	-926	-351	-501	0	0
J&K	-334	-536	84	-292	0	0
CHD	42	0	69	0	0	0
Rajasthan	-116	-756	1668	422	51	0
UP	396	238	935	0	49	0
Uttarakhand	0	0	62	-24	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 11.07.2014 :**

1. Hot weather.

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 :**