

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 22.06.2014
Date of Reporting : 23.06.2014

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
41846	1550	43396	49.99	40573	2400	42973	50.20	1001.8	48.04

* 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	61.27	21.05		82.32	116.48	117.64	1.16	199.97	0.00
Haryana	58.08	0.65		58.73	104.94	102.45	-2.49	161.18	0.00
Rajasthan	111.37	0.00	27.46	138.83	46.02	44.85	-1.17	183.68	0.00
Delhi	31.51			31.51	79.38	77.13	-2.26	108.63	0.55
UP	126.60	8.75	1.20	136.56	121.24	121.41	0.16	257.96	43.97
Uttarakhand		18.23		18.23	16.48	15.18	-1.30	33.41	1.48
HP		24.15		24.15	-0.40	0.04	0.44	24.18	0.35
J & K		10.55	0.00	10.55	15.91	15.51	-0.40	26.05	1.70
Chandigarh				0.00	5.34	6.74	1.41	6.74	0.00
Total	388.83	83.39	28.66	500.88	505.40	500.93	-4.46	1001.81	48.04

* 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	8989	0	78	1963	7328	0	-82	563	9247
Haryana	7162	0	-351	1568	6506	0	-103	1503	7668
Rajasthan	6593	0	-287	-421	7317	0	-200	-342	8185
Delhi	4322	0	-164	-52	4750	45	201	171	5029
UP	10706	1450	63	380	11199	2355	-72	851	11786
Uttarakhand	1630	0	59	240	1312	0	-231	206	1630
HP	820	0	-96	-1324	997	0	92	-1370	1103
J&K	1337	100	160	-286	913	0	-109	-554	1496
Chandigarh	287	0	50	0	251	0	40	0	340
Total	41846	1550	-488	2068	40573	2400	-465	1030	44855

* STOA figures are at sellers boundary & PX figures are at regional boundary. # figures may not be at simultaneous hour.

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	1420	1462	1410	31.35	1306	31.50	-0.16
	Rihand I STPS	1000	917	869	864	19.07	795	19.31	-0.24
	Rihand II STPS	1000	965	912	708	19.43	809	20.12	-0.69
	Rihand III STPS	1000	899	861	667	18.31	763	18.40	-0.09
	Dadri I STPS	840	813	629	601	13.52	563	14.24	-0.72
	Dadri II STPS	980	966	834	696	17.11	713	17.87	-0.75
	Unchahar I TPS	420	405	355	307	7.07	294	7.50	-0.43
	Unchahar II TPS	420	406	331	309	6.91	288	7.23	-0.32
	Unchahar III TPS	210	202	168	158	3.43	143	3.59	-0.15
	ISTPP (Jhajhar)	1500	1410	611	625	14.07	586	14.36	-0.29
	Dadri GPS	830	790	535	557	12.30	513	12.75	-0.45
	Anta GPS	419	364	345	268	7.16	298	7.24	-0.08
	Auraiya GPS	663	493	444	354	9.02	376	9.00	0.02
	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	10054	8356	7524	179	7448	183	-4
B. NPC	NAPS	440	269	310	313	6.53	272	6.46	0.07
	RAPS- B	440	386	433	439	9.39	391	9.26	0.13
	RAPS- C	440	212	220	219	4.73	197	5.08	-0.35
	Sub Total (B)	1320	867	963	971	20.66	861	20.80	-0.14
C. NHPC	Chamera I HPS	540	537	540	540	12.89	537	12.89	0.00
	Chamera II HPS	300	301	306	299	7.21	300	7.22	-0.01
	Chamera III HPS	231	229	236	220	5.52	230	5.50	0.02
	Bairasui HPS	180	179	180	160	3.35	140	3.40	-0.05
	Salal-HPS	690	199	663	638	4.77	199	4.77	0.00
	Tanakpur-HPS	94	74	80	52	1.84	77	1.77	0.07
	Uri-HPS	480	475	478	474	11.45	477	11.40	0.05
	Uri-II HPS	240	208	246	241	4.86	202	4.98	-0.12
	Dhauliganga-HPS	280	153	206	209	3.65	152	3.67	-0.02
	Dulhasti-HPS	390	307	390	398	7.21	300	7.35	-0.14
	Sewa-II HPS	120	119	129	116	2.13	89	2.10	0.03
	Parbati 3	390	210	129	131	4.54	189	4.55	-0.01
	Sub Total ©	3935	2991	3583	3478	69	2892	70	0
D.SJVNL	NJPC	1500	1576	1620	1346	37.71	1571	37.71	0.00
	Rampur HEP	275	223	208	206	5.22	218	5.36	-0.14
	Sub Total (D)	1775	1799	1828	1552	42.94	1789	43.07	-0.13
E. THDC	Tehri HPS	1000	361	403	252	4.50	188	4.53	-0.03
	Koteshwar HPS	400	138	90	99	2.70	113	2.80	-0.10
	Sub Total (E)	1400	499	493	351	7.21	300	7.33	-0.13
F. BBMB	Bhakra HPS	1514	867	1219	797	21.29	887	20.81	0.48
	Dehar HPS	990	519	660	495	13.63	568	12.46	1.17
	Pong HPS	396	274	364	121	6.59	275	6.57	0.02
	Sub Total (F)	2900	1660	2243	1413	41.51	1730	39.84	1.67
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	228	226	5.52	230	5.37	0.14
	KWHEP HPS(IPP)	1000	0	1016	1200	24.15	1006	26.27	-2.12
	Malana Stg-II HPS	100	0	113	113	2.73	114	2.55	0.18
	Shree Cement TPS	300	0	275	273	6.68	278	6.79	-0.10
	Budhil HPS(IPP)	70	0	74	71	1.69	70	1.63	0.06
	Sub Total (G)	1662	0	1706	1883	40.76	1699	42.60	-1.84
H. Total Regional Entities (A-G)		24289	17869	19172	17172	401.23	16718	406.44	-5.22

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	1260	1100	28	1160
	Guru Nanak Dev TPS(Bhatinda)	440	322	250	6	230
	Guru Hargobind Singh TPS(L.mbt)	920	866	680	20	840
	Goindwal(GVK)		0	0	0	0
	Rajpura	700	365	350	8	323
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	3980	2813	2380	61	2553
	Total Hydro	1148	842	833	21.05	877
	Total Punjab	5128	3655	3213	82.32	3430
	Haryana	Panipat TPS	1367	216	505	7.37
DCRTPP (Yamuna nagar)		600	503	513	12.09	504
Faridabad GPS (NTPC)		432	376	383	8.69	362
RGTPP (khedar) (IPP)		1200	457	465	10.80	450
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP)		1320	738	714	19.13	797
Thermal (Total)		4944	2290	2580	58	2420
Total Hydro		62	27	27	0.65	27
Total Haryana		5006	2317	2607	58.73	2447
Rajasthan		kota TPS	1240	902	898	21.09
	suratgarh TPS	1500	1216	1209	28.97	1207
	Chabra TPS	750	507	496	12.23	510
	Dholpur GPS	330	85	84	2.00	83
	Ramgarh GPS	221	90	71	1.98	82
	RAPS A (NPC)	300	170	170	4.12	172
	Barsingsar (NLC)	250	98	95	2.10	87
	Giral LTPS	250	68	68	1.47	61
	Rajwest LTPS (IPP)	1080	496	500	14.19	591
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	0	0.00	0
	Kawai(Adani)	1320	940	938	23.23	968
	Thermal (Total)	7976	4572	4529	111	4640
	Total Hydro	550	0	0	0.00	0
	Wind power	2798	651	1183	26.18	1091
	Biomass	99	40	40	0.96	40
	Solar	730	0	0	0.33	14
	Renewable/Others (Total)	3627	691	1223	27	1144
	Total Rajasthan	12153	5263	5752	138.83	5785
	UP	Anpara TPS	1630	1446	1428	30.90
Obra TPS		1288	411	593	11.40	475
Paricha TPS		1140	875	857	17.80	742
Panki TPS		210	140	145	3.10	129
Harduaganj TPS		665	423	430	9.20	383
Tanda TPS (NTPC)		440	239	243	6.31	263
Roza TPS (IPP)		1200	776	821	19.91	830
Anpara-C (IPP)		1200	950	896	21.84	910
Bajaj Energy Pvt.Ltd(IPP) TPS		450	169	272	6.14	256
Thermal (Total)		8223	5429	5685	127	5275
Vishnuparyag HPS (IPP)		400	436	0	5.95	248
Other Hydro		527	111	109	2.80	117
Cogeneration		981	50	50	1.20	50
Total UP		10131	6026	5844	136.56	5442
Uttarakhand		Total Hydro	1303	713	739	18.23
	Total Uttarakhand	1303	713	739	18.23	760
Delhi	Rajghat TPS	135	94	90	2.50	104
	Delhi Gas Turbine	282	142	144	3.54	148
	Pragati Gas Turbine	330	138	141	5.75	240
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	279	283	6.86	286
	Badarpur TPS (NTPC)	705	655	560	12.86	536
	Thermal (Total)	2917	1308	1218	31.51	1313
	Total Delhi	2917	1308	1218	31.51	1313
HP	Baspa HPS (IPP)	300	333	302	7.55	315
	Malana HPS (IPP)	86	101	103	2.45	102
	Other Hydro	728	570	590	14.15	589
	Total HP	1114	1004	995	24.15	1006
J & K	Baqlihar HPS (IPP)	450	114	110	10.55	440
	Other Hydro/IPP	436	0	0	0.00	0
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	114	110	10.55	440
Total State Control Area Generation		38846	20400	20478	500.88	20622
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5559	3654	123.05	5127
Total Regional Availability(Gross)		63136	45131	41304	1025.15	42467

IV. Total Hydro Generation:

Regional Entities Hydro	11302	9504	8333	193.46	8061
State Control Area Hydro	5589	2811	2813	83.39	3226
Total Regional Hydro	16891	12315	11146	276.84	11287

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	300	100	500	0	6.63	0.00	6.63
Gwalior-Agra (D/C)	1749	1243	1947	0	36.79	0.00	36.79
Zerda-Kankroli	-113	-315	113	61	0.00	3.49	-3.49
Zerda-Bhinmal	53	-319	151	416	0.00	4.60	-4.60
Malanpur-Auraiya	-83	-106	0	116	0.00	2.36	-2.36
Badod-Kota/Morak	-48	-157	0	157	0.00	1.68	-1.68
Mundra-Mohindergarh(HVDC)	1998	1699	2105	0	45.13	0.00	45.13
Sub Total WR	3856	2145			88.55	12.13	76.42
Pusaui Bypass	300	200	300	0	5.75	0.00	5.75
MZP- GKP (D/C)	502	704	780	0	15.51	0.00	15.51
Patna-Balia(D/C)	365	0	668	0	10.00	0.00	10.00
B'Sharif-Balia (D/C)	294	292	494	0	7.79	0.00	7.79
Pusaui-Balia	-46	0	25	61	0.00	0.18	-0.18
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00
Pusaui-Sahupuri	141	121	172	0	3.43	0.00	3.43
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	0	0	0	0	0.00	0.00	0.00
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	147	192	302	108	4.32	0.00	4.32
Sub Total ER	1703	1509			46.80	0.18	46.63
Total IR Exch	5559	3654			135.35	12.30	123.05

V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)		Power Exchange Shdl (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
21.48	2.77	24.25	20.26	6.00	-1.98	3.96	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
42.53	73.12	115.66	46.63	76.42	123.05	4.10	3.30	7.39

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	0.16	6.46	35.20	56.89	18.19	15.07	3.46	0.00

<----- 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				
50.32	18.03	49.76	20.23	50.03	0.08	0.09	50.32	49.90

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	406	03:05	397	22:48	0.0	0.0	0.0	0.0
Gorakhpur	400	438	07:49	414	00:16	0.0	0.0	74.5	21.5
Bareilly	400	418	08:03	395	22:48	0.0	0.0	0.0	0.0
Kanpur	400	419	18:40	398	23:16	0.0	0.0	0.0	0.0
Dadri	400	413	09:02	393	15:10	0.0	0.0	0.0	0.0
Ballabgarh	400	420	09:02	397	22:48	0.0	0.0	0.0	0.0
Bawana	400	414	06:23	395	15:10	0.0	0.0	0.0	0.0
Bassi	400	425	18:39	396	22:48	0.0	0.0	5.1	0.0
Hissar	400	408	06:23	386	15:06	0.0	13.1	0.0	0.0
Moga	400	414	04:27	393	15:06	0.0	0.0	0.0	0.0
Abdullapur	400	408	09:02	396	14:56	0.0	0.0	0.0	0.0
Nalagarh	400	409	04:02	394	15:11	0.0	0.0	0.0	0.0
Kishenpur	400	413	04:17	398	20:27	0.0	0.0	0.0	0.0
Wagoora	400	401	03:00	392	08:00	0.0	2.1	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	773	18:39	720	23:19	6.1	11.0	0.0	0.0
Balia	765	789	07:32	752	13:46	0.0	0.0	0.0	0.0
Moga	765	835	21:09	3	21:07	61.5	61.5	0.1	0.1
Agra	765	786	18:40	741	22:48	0.0	0.2	0.0	0.0
Bhiwani	765	797	09:02	756	15:14	0.0	0.0	0.0	0.0
Unnao	765	764	18:41	727	15:14	0.0	32.2	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 (m ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	485.71	610.73	486.77	636.01	1570.37	736.35
Pong	426.72	384.05	401.78	259.17	402.45	273.51	414.90	365.94
Tehri	829.79	740.04	746.35	32.00	NA	NA	438.59	242.00
Koteshwar	612.50	598.50	610.82	4.95	608.40	3.98	432.00	281.00
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. Short-Term Open Access Details:

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (20:00 Hrs)			Day Energy (MU)		
	STOA(Bilateral) (MW)	IEX (MW)	PXIL (MW)	STOA (MW)	IEX (MW)	PXIL (MW)	STOA (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	0	563	0	1467	496	0	35.20	14.55	49.74
Delhi	401	-181	-49	528	-580	0	11.53	-8.40	3.13
Haryana	1351	152	0	1464	104	0	34.64	2.25	36.90
HP	-864	-506	0	-763	-560	0	-18.78	-12.22	-30.99
J&K	-521	-32	0	-482	195	0	-12.31	1.46	-10.85
CHD	0	0	0	0	0	0	0.41	0.00	0.41
Rajasthan	-712	369	2	-712	289	2	-17.10	7.45	-9.65
UP	556	246	49	380	0	0	10.04	2.95	12.99
Uttarakhand	105	93	8	105	126	9	2.53	2.63	5.16
Total	315	704	11	1988	70	11	46.16	10.68	56.84

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 22.06.2014 :**

1. Hot & Humid 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 :**