

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 23.06.2014
Date of Reporting : 24.06.2014

I. Regional Availability/Demand:

Demand Met	Evening Peak (20:00 Hrs) MW			Demand Met	Off Peak (03:00 Hrs) MW			Day Energy (Net MU)	
	Shortage	Requirement	Freq* (Hz)		Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
41440	1420	42860	49.84	42253	1290	43543	50.11	1007.5	35.00

* 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	57.14	20.64		77.78	123.24	121.57	-1.66	199.36	0.00
Haryana	50.72	0.65		51.36	113.21	108.12	-5.09	159.49	0.00
Rajasthan	115.50	0.00	24.06	139.56	44.71	41.80	-2.91	181.35	0.00
Delhi	29.60			29.60	83.40	78.14	-5.26	107.75	0.60
UP	119.70	13.62	1.20	134.52	131.85	129.69	-2.15	264.21	31.89
Uttarakhand		17.45		17.45	19.85	19.13	-0.72	36.58	0.75
HP		23.92		23.92	0.47	1.23	0.76	25.15	0.06
J & K		10.51	0.00	10.51	16.86	17.50	0.64	28.02	1.70
Chandigarh				0.00	5.82	5.65	-0.17	5.65	0.00
Total	372.66	86.79	25.26	484.70	539.41	522.84	-16.57	1007.54	35.00

* 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	8753	0	-73	1737	8686	0	-132	563	9109
Haryana	7365	0	-307	1341	7147	0	-252	1415	7611
Rajasthan	6966	0	-143	-556	6923	0	-221	-473	8106
Delhi	4365	5	-363	397	4580	0	-40	218	5125
UP	9732	1240	-313	607	11527	1290	-234	992	11705
Uttarakhand	1652	75	-49	306	1427	0	-66	233	1723
HP	988	0	-46	-1273	868	0	5	-1440	1170
J&K	1374	100	-34	-461	878	0	-57	-517	1558
Chandigarh	245	0	0	0	217	0	1	0	271
Total	41440	1420	-1328	2099	42253	1290	-996	991	44574

* 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	1562	1298	31.71	1321	31.99	-0.27
	Rihand I STPS	1000	903	825	936	19.57	815	19.47	0.10
	Rihand II STPS	1000	965	839	897	20.94	873	21.03	-0.09
	Rihand III STPS	1000	888	857	762	18.24	760	18.37	-0.13
	Dadri I STPS	840	813	632	620	13.71	571	14.17	-0.46
	Dadri II STPS	980	917	721	711	16.30	679	17.24	-0.95
	Unchahar I TPS	420	406	316	304	7.74	323	8.11	-0.36
	Unchahar II TPS	420	406	321	325	7.22	301	7.43	-0.21
	Unchahar III TPS	210	202	154	155	3.46	144	3.58	-0.12
	ISTPP (Jhajjar)	1500	1410	990	628	14.55	606	14.81	-0.26
	Dadri GPS	830	790	491	527	12.36	515	12.69	-0.33
	Anta GPS	419	379	390	320	8.01	334	8.01	0.00
	Auraiya GPS	663	580	445	379	9.77	407	9.68	0.09
	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	10083	8543	7862	184	7649	187	-3
B. NPC	NAPS	440	265	307	313	6.53	272	6.36	0.17
	RAPS- B	440	389	433	436	9.40	392	9.34	0.06
	RAPS- C	440	330	408	366	8.26	344	7.56	0.70
	Sub Total (B)	1320	984	1148	1115	24.19	1008	23.26	0.93
C. NHPC	Chamera I HPS	540	535	540	540	12.95	540	12.84	0.11
	Chamera II HPS	300	301	308	301	7.27	303	7.22	0.05
	Chamera III HPS	231	229	239	233	5.60	233	5.50	0.10
	Bairasui HPS	180	151	140	140	3.01	125	2.95	0.06
	Salal-HPS	690	430	576	0	10.53	439	10.32	0.21
	Tanakpur-HPS	94	75	81	75	1.86	78	1.80	0.07
	Uri-HPS	480	475	478	475	11.53	481	11.40	0.13
	Uri-II HPS	240	240	244	246	5.78	241	5.76	0.02
	Dhauliganga-HPS	280	182	209	208	4.16	173	4.36	-0.20
	Dulhasti-HPS	390	258	272	271	6.38	266	6.19	0.19
	Sewa-II HPS	120	119	129	121	1.68	70	1.60	0.08
	Parbati 3	390	257	0	0	3.29	137	3.21	0.08
	Sub Total ©	3935	3252	3216	2610	74	3085	73	1
D.SJVNL	NJPC	1500	1605	1620	1616	38.62	1609	38.46	0.17
	Rampur HEP	275	206	211	214	5.05	210	4.94	0.11
	Sub Total (D)	1775	1811	1831	1830	43.67	1820	43.40	0.27
E. THDC	Tehri HPS	1000	412	412	409	7.27	303	7.20	0.07
	Koteshwar HPS	400	138	393	98	3.16	132	3.20	-0.04
	Sub Total (E)	1400	550	805	507	10.42	434	10.40	0.02
F. BBMB	Bhakra HPS	1514	861	1193	798	21.26	886	20.66	0.60
	Dehar HPS	990	581	660	640	15.13	630	13.95	1.19
	Pong HPS	396	260	364	182	6.36	265	6.24	0.12
	Sub Total (F)	2900	1702	2217	1620	42.75	1781	40.84	1.91
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	185	222	4.36	182	5.36	-1.00
	KWHEP HPS(IPP)	1000	0	1138	946	23.37	974	26.25	-2.88
	Malana Stg-II HPS	100	0	112	105	2.26	94	2.09	0.17
	Shree Cement TPS	300	0	277	273	6.78	282	6.70	0.07
	Budhil HPS(IPP)	70	0	14	14	1.69	70	1.64	0.04
	Sub Total (G)	1662	0	1726	1560	38.45	1602	42.04	-3.60
H. Total Regional Entities (A-G)		24289	18382	19486	17104	417.09	17379	419.77	-2.68

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	1085	26	1091	
	Guru Nanak Dev TPS(Bhatinda)	440	200	333	5	219	
	Guru Hargobind Singh TPS(L.mbt)	920	765	820	17	729	
	Goindwal(GVK)		0	0	0	0	
	Rajpura	700	364	360	8	342	
	Talwandi Saboo	660	0	0	0.00	0	
	Thermal (Total)	3980	2579	2598	57	2381	
	Total Hydro	1148	860	858	20.64	860	
	Total Punjab	5128	3439	3456	77.78	3241	
	Haryana	Panipat TPS	1367	217	211	5.19	216
DCRTPP (Yamuna nagar)		600	534	505	12.21	509	
Faridabad GPS (NTPC)		432	379	358	8.85	369	
RGTPP (khedar) (IPP)		1200	563	461	11.31	471	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP)		1320	547	741	13.16	548	
Thermal (Total)		4944	2240	2276	51	2113	
Total Hydro		62	28	28	0.65	27	
Total Haryana		5006	2268	2304	51.36	2140	
Rajasthan		kota TPS	1240	906	946	21.73	905
	suratgarh TPS	1500	1226	1216	29.55	1231	
	Chabra TPS	750	482	546	12.51	521	
	Dholpur GPS	330	101	84	2.42	101	
	Ramgarh GPS	221	10	80	1.00	42	
	RAPS A (NPC)	300	170	170	4.11	171	
	Barsingsar (NLC)	250	98	97	1.67	70	
	Giral LTPS	250	68	68	1.53	64	
	Rajwst LTPS (IPP)	1080	500	504	16.69	696	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Kalisindh Thermal	600	0	0	0.00	0	
	Kawai(Adani)	1320	951	921	24.31	1013	
	Thermal (Total)	7976	4512	4632	116	4813	
	Total Hydro	550	0	0	0.00	0	
	Wind power	2798	1021	1040	22.93	955	
	Biomass	99	33	33	0.79	33	
	Solar	730	0	0	0.34	14	
	Renewable/Others (Total)	3627	1054	1073	24	1002	
	Total Rajasthan	12153	5566	5705	139.56	5815	
	UP	Anpara TPS	1630	1369	1432	30.00	1250
Obra TPS		1288	269	414	8.50	354	
Paricha TPS		1140	755	784	17.50	729	
Panki TPS		210	140	140	3.10	129	
Harduaganj TPS		665	440	429	9.50	396	
Tanda TPS (NTPC)		440	222	237	6.30	262	
Roza TPS (IPP)		1200	765	772	18.46	769	
Anpara-C (IPP)		1200	723	878	20.14	839	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	227	279	6.20	258	
Thermal (Total)		8223	4910	5365	120	4987	
Vishnuparyag HPS (IPP)		400	436	436	10.45	435	
Other Hydro		527	131	182	3.17	132	
Cogeneration		981	50	50	1.20	50	
Total UP		10131	5527	6033	134.52	5169	
Uttarakhand		Total Hydro	1303	712	734	17.45	727
		Total Uttarakhand	1303	712	734	17.45	727
Delhi	Rajghat TPS	135	98	48	2.07	86	
	Delhi Gas Turbine	282	141	144	3.59	150	
	Pragati Gas Turbine	330	264	176	6.36	265	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	1370	230	279	4.40	183	
	Badarpur TPS (NTPC)	705	595	660	13.18	549	
	Thermal (Total)	2917	1328	1307	29.60	1233	
	Total Delhi	2917	1328	1307	29.60	1233	
HP	Baspa HPS (IPP)	300	330	300	7.73	322	
	Malana HPS (IPP)	86	92	100	2.12	89	
	Other Hydro	728	553	554	14.08	586	
	Total HP	1114	975	954	23.92	997	
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		38846	20253	20931	484.70	19761	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5772	5671	133.48	5562	
Total Regional Availability(Gross)		63136	45511	43706	1035.27	42701	

IV. Total Hydro Generation:

Regional Entities Hydro	11302	9504	7840	200.87	8370
State Control Area Hydro	5589	3144	3194	86.79	3181
Total Regional Hydro	16891	12648	11034	287.66	11550

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	300	500	200	6.75	0.90	5.85
Gwalior-Agra (D/C)	1854	1641	1954	0	40.75	0.00	40.75
Zerda-Kankroli	-122	-206	0	338	0.00	4.92	-4.92
Zerda-Bhinmal	-112	-209	0	328	0.00	4.63	-4.63
Malanpur-Auraiya	-116	-81	0	159	0.00	1.77	-1.77
Badod-Kota/Morak	-102	-121	0	164	0.00	2.38	-2.38
Mundra-Mohindergarh(HVDC)	2303	2098	2306	0	52.66	0.00	52.66
Sub Total WR	3905	3422			100.16	14.60	85.56
Pusaui Bypass	300	300	300	0	7.19	0.00	7.19
MZP- GKP (D/C)	576	810	948	0	16.96	0.00	16.96
Patna-Balia(D/C)	523	540	639	0	10.95	0.00	10.95
B'Sharif-Balia (D/C)	319	412	498	0	8.61	0.00	8.61
Pusaui-Balia	-17	14	37	48	0.00	0.03	-0.03
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00
Pusaui-Sahupuri	166	173	176	0	3.99	0.00	3.99
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)	0	0	93	0	0.27	0.00	0.27
Sub Total ER	1867	2249			47.96	0.03	47.92
Total IR Exch	5772	5671			148.12	14.64	133.48

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 WR	Through WR
28.95	3.65	32.60	25.27	2.51	-1.17	5.30	-0.45	0.45

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
56.26	83.23	139.49	47.92	85.56	133.48	-8.34	2.33	-6.01

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	2.13	9.45	24.90	60.00	52.51	12.50	8.73	1.93	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				
50.35	8.03	49.52	22.08	49.96	0.16	0.12	50.31	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	409	07:44	397	14:40	0.0	0.0	0.0	0.0
Gorakhpur	400	440	08:02	404	14:47	0.0	0.0	47.5	13.1
Bareilly	400	418	06:03	387	14:50	0.0	2.1	0.0	0.0
Kanpur	400	420	08:04	394	14:44	0.0	0.0	0.0	0.0
Dadri	400	419	07:59	389	15:39	0.0	1.3	0.0	0.0
Ballabgarh	400	424	07:58	391	15:49	0.0	0.0	3.0	0.0
Bawana	400	419	07:57	390	14:52	0.0	0.0	0.0	0.0
Bassi	400	423	18:47	392	14:50	0.0	0.0	2.9	0.0
Hissar	400	413	06:06	383	14:50	0.0	12.3	0.0	0.0
Moga	400	417	06:03	393	14:50	0.0	0.0	0.0	0.0
Abdullapur	400	413	07:57	396	15:42	0.0	0.0	0.0	0.0
Nalagarh	400	414	06:34	394	15:51	0.0	0.0	0.0	0.0
Kishenpur	400	416	06:20	404	15:30	0.0	0.0	0.0	0.0
Wagoora	400	401	03:00	392	08:00	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	765	08:03	708	13:36	16.1	59.8	0.0	0.0
Balia	765	794	08:01	728	14:50	0.0	17.5	0.0	0.0
Moga	765	804	06:03	754	15:51	0.0	0.0	1.9	0.0
Agra	765	786	08:00	728	14:50	0.0	10.2	0.0	0.0
Bhiwani	765	804	08:00	743	14:53	0.0	0.0	1.0	0.0
Unnao	765	767	06:05	701	16:25	16.7	64.2	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	1424	313	0	34.18	13.98	48.16
Delhi	439	-221	0	547	-150	0	12.27	-2.64	9.64
Haryana	1299	117	0	1223	118	0	30.66	1.30	31.96
HP	-866	-574	0	-714	-559	0	-18.21	-12.98	-31.19
J&K	-498	-20	0	-498	37	0	-13.06	-0.06	-13.12
CHD	0	0	0	0	0	0	0.41	0.11	0.53
Rajasthan	-714	239	2	-714	156	2	-17.14	6.23	-10.91
UP	746	245	0	607	0	0	15.14	4.01	19.15
Uttarakhand	105	111	17	105	200	0	2.52	3.15	5.66
Total	512	460	19	1980	116	3	46.78	13.12	59.89

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 23.06.2014 :**

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 :**