

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 22.06.2013
Date of Reporting : 23.06.2013

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
39059	1925	40984	50.07	39629	1684	41313	50.15	934.0	58.52

* 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:

UI [OD:(+ve), UD:(-ve)]

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	48.36	18.38		66.73	124.26	122.91	-1.34	189.65	7.89
Haryana	48.26	0.67		48.93	107.97	107.22	-0.75	156.14	0.39
Rajasthan	73.09	0.00	32.50	105.59	59.80	57.37	-2.44	162.95	0.65
Delhi	23.80			23.80	81.72	76.57	-5.15	100.37	0.00
UP	120.34	2.50	3.60	126.44	104.84	102.93	-1.91	229.37	45.40
Uttarakhand		11.54		11.54	19.49	22.18	2.69	33.71	2.38
HP		21.77		21.77	5.38	4.10	-1.28	25.87	0.11
J & K		13.42	0.00	13.42	14.96	16.51	1.55	29.93	1.70
Chandigarh				0.00	5.82	5.96	0.14	5.96	0.00
Total	313.83	68.28	36.10	418.22	524.23	515.74	-8.49	933.96	58.52

* Shortage furnished by the respective constituent.\$ Others include UP Co-generation and JK Diesel

II. B. State's Demand Met in MWs:

UI/OA/PX IOD/Import: (+ve), UD/Export: (-ve)

State	Evening Peak (20:00 Hrs) MW				Off Peak (03:00 Hrs) MW			Day Energy MU	
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	STOA/PX transaction
Punjab	8148	255	-112	1921	7888	0	-144	1995	47.85
Haryana	6950	0	-94	1108	6565	0	-111	1094	24.46
Rajasthan	6153	0	-409	324	6784	0	15	282	5.88
Delhi	4397	0	-24	88	4300	0	-235	19	4.12
UP	9188	1570	-178	138	10385	1684	-115	603	10.81
Uttarakhand	1633	0	156	412	1415	0	4	230	6.58
HP	999	0	-103	-882	1011	0	10	-1017	-21.99
J&K	1318	100	69	-334	1065	0	4	-404	-8.53
Chandigarh	274	0	-1	0	217	0	3	0	0.12
Total	39059	1925	-696	2774	39629	1684	-568	2801	69.30

* STOA figures are at sellers boundary & PX figures are at regional boundary.

III. Regional Entities :

UI [OG:(+ve), UG:(-ve)]

Entity	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	Net MU
A. NTPC	Singrauli STPS	2000	1427	1565	1569	34.03	1418	34.18	-0.15
	Rihand I STPS	1000	464	493	523	11.22	467	11.07	0.14
	Rihand II STPS	1000	945	1029	1039	22.40	933	22.62	-0.22
	Rihand III STPS	500	470	494	508	11.00	458	11.15	-0.15
	Dadri I STPS	840	810	828	843	16.52	688	16.83	-0.31
	Dadri II STPS	980	975	994	940	20.41	850	20.87	-0.46
	Unchahar I TPS	420	403	417	421	8.99	374	9.45	-0.46
	Unchahar II TPS	420	201	204	189	4.40	183	4.60	-0.20
	Unchahar III TPS	210	200	208	208	4.42	184	4.54	-0.11
	ISTPP (Jhajjar)	1500	1349	698	637	14.32	597	14.73	-0.41
	Dadri GPS	830	800	399	471	11.10	462	11.23	-0.14
	Anta GPS	419	398	45	0	0.31	13	0.69	-0.38
	Auraiva GPS	663	629	272	303	6.35	265	6.26	-0.09
	Sub Total (A)	10782	9069	7646	7651	165.47	6895	168.22	-2.75
B. NPC	INAPS	440	293	320	331	6.95	290	7.03	-0.08
	RAPS- B	440	387	427	431	9.26	386	9.29	-0.02
	RAPS- C	440	400	442	449	9.65	402	9.60	0.05
	Sub Total (B)	1320	1080	1189	1211	25.87	1078	25.92	-0.05
C. NHPC	Chamera I HPS	540	540	540	540	13.01	542	12.96	0.05
	Chamera II HPS	300	306	311	307	7.34	306	7.34	-0.01
	Chamera III HPS	231	231	235	235	5.57	232	5.57	0.00
	Bairasul HPS	180	179	180	40	2.27	95	2.00	0.27
	Salal-HPS	690	666	672	672	16.11	671	15.96	0.15
	Tanakpur-HPS	94	0	0	0	0.00	0	0.00	0.00
	Uri-HPS	480	473	465	465	11.29	470	11.40	-0.12
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	379	406	403	9.12	380	9.20	-0.09
	Sewa-II HPS	120	119	121	0	1.11	46	1.12	-0.01
	Sub Total (C)	3305	2893	2930	2662	65.81	2742	65.56	0.25
D. NJPC	Nathpa Jhakri	1500	1605	1610	1619	38.44	1602	38.52	-0.08
	Sub Total (D)	1500	1605	1610	1619	38.44	1602	38.52	-0.08
E. THDC	Tehri HPS	1000	785	788	701	18.38	766	18.50	-0.13
	Koteswar HPS	400	341	393	217	7.53	314	7.60	-0.07
	Sub Total (E)	1400	1126	1181	918	25.90	1079	26.10	-0.20
F. BBMB	Bhakra HPS	1480	1063	1259	945	25.80	1075	25.51	0.29
	Dehar HPS	990	609	825	640	15.15	631	14.61	0.54
	Pong HPS	396	122	306	0	3.12	130	2.94	0.18
	Sub Total (F)	2866	1794	2390	1585	44.07	1836	43.06	1.01
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	220	170	4.81	201	4.15	0.66
	KWHEP HPS(IPP)	1000	0	1200	1197	28.45	1185	28.51	-0.06
	Malana Stg-II HPS	100	0	99	51	1.81	75	1.42	0.39
	Shree Cement TPS	300	0	264	262	6.32	263	6.37	-0.05
	Budhil HPS(IPP)	70	0	69	69	1.36	57	1.19	0.18
	Sub Total (G)	1662	0	1852	1749	42.76	1782	41.64	1.11
H. Total Regional Entities (A-G)	22836	17567	18798	17395	408.32	17013	409.02	-0.69	

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	1050	1050	23.36	973	
	Guru Nanak Dev TPS(Bhatinda)	440	212	203	4.41	184	
	Guru Hargobind Singh TPS(L.mbt)	920	934	938	20.59	858	
	Goindwal(GVK)		0	0	0.00	0	
	Thermal (Total)	2620	2196	2191	48.36	2015	
	Total Hydro	1148	744	783	18.38	766	
	Total Punjab	3768	2940	2974	66.73	2781	
Haryana	Panipat TPS	1367	615	444	11.81	492	
	DCRTPP (Yamuna nagar)	600	283	280	6.51	271	
	Faridabad GPS (NTPC)	432	178	178	4.26	177	
	RGTPP (khedar) (IPP)	1200	1052	1113	25.67	1070	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	0	0	0.00	0	
	Thermal (Total)	4944	2128	2015	48.26	2011	
	Total Hydro	62	26	28	0.67	28	
		Total Haryana	5006	2154	2043	48.93	2039
	Rajasthan	kota TPS	1240	777	769	17.94	747
suratgarh TPS		1500	1085	1090	24.50	1021	
Chabra TPS		500	214	220	5.20	217	
Dholpur GPS		330	0	0	0.00	0	
Ramgarh GPS		111	65	68	1.67	70	
RAPS A (NPC)		300	179	179	4.25	177	
Barsingar (NLC)		250	93	0	1.24	52	
Giral LTPS		250	0	26	0.85	36	
Rajwest LTPS (IPP)		1080	653	806	17.44	726	
VSLP LTPS (IPP)		135	0	0	0.00	0	
Kalisindh Thermal		600	0	0	0.00	0	
Kawai(Adani)		660	0	0	0.00	0	
Thermal (Total)		6956	3066	3158	73.09	3045	
Total Hydro		550	0	9	0.00	0	
Wind power		2191	1127	1391	30.50	1271	
Biomass		91	19	19	0.45	19	
Solar		201	0	0	1.56	65	
Renewable/Others (Total)		2483	1146	1410	32.50	1354	
		Total Rajasthan	9989	4212	4577	105.59	4399
UP	Anpara TPS	1630	1323	1278	28.20	1175	
	Obra TPS	1288	474	848	10.50	438	
	Paricha TPS	1140	862	821	18.20	758	
	Panki TPS	210	85	90	1.80	75	
	Harduaganj TPS	665	425	416	9.30	388	
	Tanda TPS (NTPC)	440	294	294	7.20	300	
	Roza TPS (IPP)	1200	999	1008	24.26	1011	
	Anpara-C (IPP)	1200	482	522	11.71	488	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	398	402	9.18	382	
	Thermal (Total)	8223	5342	5679	120.34	5014	
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0	
	Other Hydro	527	59	147	2.50	104	
	Cogeneration	981	150	150	3.60	150	
		Total UP	10131	5551	5976	126.44	5268
	Uttarakhand	Total Hydro	1303	496	491	11.54	481
Total Uttarakhand		1303	496	491	11.54	481	
Delhi	Rajghat TPS	135	40	41	1.09	46	
	Delhi Gas Turbine	282	184	184	4.51	188	
	Pragati Gas Turbine	330	136	140	3.42	142	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	686	195	226	1.83	76	
	Badarpur TPS (NTPC)	705	595	560	12.96	540	
	Thermal (Total)	2232	1150	1151	23.80	992	
		Total Delhi	2232	1150	1151	23.80	992
HP	Baspa HPS (IPP)	330	330	333	7.68	320	
	Malana HPS (IPP)	86	74	43	1.41	59	
	Other Hydro	589	536	527	12.68	528	
		Total HP	1005	940	903	21.77	907
J & K	Baglihar HPS (IPP)	450	436	436	10.47	436	
	Other Hydro	323	110	128	2.95	123	
	Gas/Diesel/Others	183	0	0	0.00	0	
		Total J & K	956	546	564	13.42	559
Total State Control Area Generation		34390	17989	18679	418.22	17426	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5197	5724	125.35	5223	
Total Regional Availability(Gross)		57226	41984	41798	951.89	39662	

IV. Total Hydro Generation:

Regional Entities Hydro	10364	9630	8202	209.30	8721
State Control Area Hydro	5368	2811	2925	68.28	2845
Total Regional Hydro	15731	12441	11127	277.58	11566

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	500	500	0	10.40	0.00	10.40
Gwalior-Agra (D/C)	1458	1719	1976	0	35.45	0.00	35.45
Zerda-Kankroli	-23	-9	80	208	0.00	1.90	-1.90
Zerda-Bhinmal	-33	-46	99	240	0.00	2.24	-2.24
Malanpur-Auraiya	-90	-22	0	101	0.00	1.34	-1.34
Badod-Kota/Morak	-21	24	57	67	0.00	1.23	-1.23
Mundra-Mohindergarh(HVDC)	1449	1448	1450	0	33.95	0.00	33.95
Sub Total WR	3140	3614			79.80	6.70	73.10
Pusauli Bypass	-140	-206	0	254	0.00	3.43	-3.43
MZP- GKP (D/C)	660	754	932	0	17.95	0.00	17.95
Patna-Balia(D/C)	679	767	937	0	17.52	0.00	17.52
B Sharif-Balia (D/C)	376	473	591	0	10.79	0.00	10.79
Pusauli-Balia	1	52	52	0	0.57	0.00	0.57
Gaya-Fatehpur (765 Kv)	97	31	220	0	1.85	0.00	1.85
Pusauli-Sahupuri	145	82	69	0	3.58	0.00	3.58
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-38	-40	0	45	0.00	0.90	-0.90
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	277	197	376	0	4.31	0.00	4.31
Sub Total ER	2057	2110			56.58	4.32	52.26
Total IR Exch	5197	5724			136.38	11.02	125.35

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
43.87	2.89	46.76	6.98	18.98	-0.19	6.03	3.39	-3.39

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
56.94	75.96	132.91	52.26	73.10	125.35	-4.69	-2.87	-7.55

VI. Frequency Profile

% of Time Frequency									
<48.80	<49.0	<49.20	<49.50	<49.7	49.5 - 50.2	49.7-49.8	49.7 - 50.2	> 50.00	> 50.2
0.00	0.00	0.00	0.00	0.90	89.24	3.80	88.33	83.19	10.76

Frequency (Hz)				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time					
50.49	13.03	49.63	22.06	50.13	0.35	0.11	50.42	49.82

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	407	06:08	396	10:42	0.0	0.0	0.0	0.0
Gorakhpur	400	421	18:45	399	23:28	0.0	0.0	3.6	0.0
Bareilly	400	417	07:56	398	01:52	0.0	0.0	0.0	0.0
Kanpur	400	416	18:27	402	22:05	0.0	0.0	0.0	0.0
Dadri	400	412	06:03	395	14:46	0.0	0.0	0.0	0.0
Ballabgarh	400	421	06:06	400	15:45	0.0	0.0	0.0	0.0
Bawana	400	414	06:03	397	14:47	0.0	0.0	0.0	0.0
Bassi	400	423	04:02	400	11:06	0.0	0.0	0.6	0.0
Hissar	400	403	06:06	388	12:40	0.0	2.5	0.0	0.0
Moga	400	412	04:01	396	15:04	0.0	0.0	0.0	0.0
Abdullapur	400	411	06:06	279	15:37	0.0	0.0	0.0	0.0
Nalagarh	400	409	06:03	392	15:44	0.0	0.0	0.0	0.0
Kishenpur	400	411	04:02	400	15:39	0.0	0.0	0.0	0.0
Wagoora	400	413	03:00	399	22:03	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	800	13:10	740	11:46	0.0	0.6	0.0	0.0
Balia	765	762	18:28	720	01:10	15.4	49.7	0.0	0.0
Moga	765	786	04:02	756	15:45	0.0	0.0	0.0	0.0
Agra	765	800	06:06	757	22:07	0.0	0.0	0.0	0.0
Bhiwani	765	784	06:06	751	15:45	0.0	0.0	0.0	0.0
Unnao	765	773	18:30	743	01:14	0.0	0.0	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	486.71	638.01	465.62	204.14	928.76	798.00
Pong	426.72	384.05	402.45	273.51	395.64	136.17	184.00	113.27
Tehri	829.79	740.04	778.20	297.10	818.65	982.26	462.28	477.00
Koteshwar	612.50	598.50	609.30	4.21	NA	NA	406.00	410.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	311.88	352.34
Rihand	268.22	252.98	254.93	73.80	254.81	69.00	NA	NA
RPS	352.80	343.81	348.32	NA	NA	NA	NA	18.58
Jawahar Sagar	298.70	295.78	297.94	NA	NA	NA	NA	17.92
RSD	527.91	487.91	513.47	NA	499.55	NA	326.07	406.40

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 22.06.2013 :

1. Hot weather.

XIII. Synchronisation of new generating units :

XIV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :

XV. Tripping of lines in pooling stations :

XVI. Complete generation loss in a generating station :

1. Dhauliganga (280 MW) closed down till 30.09.2013 due to flooding of power house.

1. Tanakpur (120 MW) closed down due to high silt level in river water.

Report for : 22.06.2013

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER