

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पब्लिसिटी की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 20.06.2013
Date of Reporting : 21.06.2013

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
37826	1012	38838	49.85	35515	1050	36565	50.28	889.2	31.22

* 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)	UI [OD:(+ve), UD: (-ve)]	
	Thermal	Hydro	Renewable/others \$	Total				Consumption (Net MU)	Shortages * (MU)
Punjab	49.13	17.27		66.39	123.64	121.65	-1.98	188.05	0.00
Haryana	40.22	0.43		40.65	97.13	97.13	-0.67	137.78	0.64
Rajasthan	76.21	0.32	19.48	96.02	57.96	55.65	-2.31	151.67	1.36
Delhi	22.89			22.89	74.78	71.23	-3.55	94.13	0.05
UP	116.53	1.84	3.60	121.97	109.22	101.97	-7.25	223.94	27.20
Uttarakhand		9.42		9.42	22.43	23.23	0.81	32.66	0.00
HP		20.50		20.50	3.19	5.00	1.82	25.51	0.27
J & K		13.42	0.00	13.42	18.19	16.50	-1.70	29.91	1.70
Chandigarh				0.00	5.78	5.52	-0.26	5.52	0.00
Total	304.98	63.21	23.08	391.27	512.98	497.88	-15.10	889.16	31.22

* 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				Day Energy MU	
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	STOA/PX transaction	
Punjab	8305	0	-149	1894	7297	0	-66	2285	52.31	
Haryana	5935	20	-122	1115	5604	0	-39	896	24.31	
Rajasthan	6094	82	-184	305	6361	0	-130	292	5.80	
Delhi	4238	0	-32	89	3308	0	-289	-178	4.08	
UP	9269	810	-522	133	9569	1050	-725	750	8.50	
Uttarakhand	1512	0	52	453	1296	0	50	401	9.63	
HP	1029	0	-20	-899	937	0	49	-1051	-22.48	
J&K	1191	100	-58	-156	954	0	-304	-152	-3.60	
Chandigarh	254	0	-22	0	188	0	-23	0	0.21	
Total	37826	1012	-1056	2934	35515	1050	-1477	3243	78.77	

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

III. Regional Entities :

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	UI [OG:(+ve), UG: (-ve)]	
									Net MU	Net MU
A. NTPC	Singrauli STPS	2000	1935	2076	1789	45.31	1888	45.28	0.03	
	Rihand I STPS	1000	430	516	324	9.19	383	8.79	0.39	
	Rihand II STPS	1000	966	1039	999	19.43	809	19.57	-0.14	
	Rihand III STPS	500	467	475	445	9.32	388	9.46	-0.13	
	Dadri I STPS	840	805	629	555	14.00	583	13.90	0.10	
	Dadri II STPS	980	975	1006	702	19.37	807	20.00	-0.63	
	Unchahar I TPS	420	403	433	304	8.55	356	8.84	-0.29	
	Unchahar II TPS	420	201	220	154	4.09	170	4.10	-0.01	
	Unchahar III TPS	210	200	221	155	4.16	173	4.18	-0.02	
	ISTPP (Jhajihar)	1500	997	425	327	8.72	363	9.75	-1.03	
	Dadri GPS	830	803	512	460	11.31	471	11.40	-0.09	
	Anta GPS	419	398	0	0	0.00	0	0.00	0.00	
	Auraiya GPS	663	630	289	262	6.68	278	6.37	0.30	
	Sub Total (A)	10782	9209	7841	6476	160.11	6671	161.64	-1.53	
B. NPC	NAPS	440	298	326	341	7.04	293	7.15	-0.11	
	RAPS- B	440	391	424	435	9.29	387	9.38	-0.10	
	RAPS- C	440	410	434	453	9.45	394	9.84	-0.39	
	Sub Total (B)	1320	1099	1184	1229	25.78	1074	26.38	-0.60	
C. NHPC	Chamera I HPS	540	540	540	540	13.00	542	12.96	0.04	
	Chamera II HPS	300	306	303	309	7.31	305	7.34	-0.03	
	Chamera III HPS	231	231	237	231	5.55	231	5.57	-0.02	
	Bairasuil HPS	180	179	180	20	2.11	88	1.81	0.30	
	Salal-HPS	690	661	670	669	16.09	670	15.96	0.13	
	Tanakpur-HPS	94	38	0	81	0.87	36	0.90	-0.03	
	Uri-HPS	480	475	468	472	11.42	476	11.32	0.10	
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00	
	Dulhasti-HPS	390	387	406	359	7.98	332	7.89	0.08	
	Sewa-II HPS	120	119	125	0	1.29	54	1.18	0.11	
Sub Total (C)	3305	2937	2929	2681	65.60	2733	64.93	0.67		
D. NJPC	Natpaa Jhakri	1500	1605	1618	1545	38.10	1588	38.52	-0.42	
	Sub Total (D)	1500	1605	1618	1545	38.10	1588	38.52	-0.42	
E. THDC	Tehri HPS	1000	780	298	702	14.65	610	14.00	0.65	
	Sub Total (E)	1400	1047	584	994	20.95	873	20.30	0.65	
F. BBMB	Bhakra HPS	1480	953	1260	946	23.06	961	22.88	0.18	
	Dehar HPS	990	594	825	600	14.55	606	14.26	0.29	
	Pong HPS	396	56	186	0	1.40	58	1.34	0.06	
	Sub Total (F)	2866	1603	2271	1546	39.01	1625	38.48	0.53	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	145	121	2.94	123	2.80	0.15	
	KWHEP HPS(IPP)	1000	0	1177	1085	25.73	1072	25.05	0.68	
	Malana Stg-II HPS	100	0	73	61	1.43	60	1.51	-0.08	
	Shree Cement TPS	300	0	124	258	5.10	213	6.37	-1.27	
	Budhil HPS(IPP)	70	0	69	59	1.54	64	0.88	0.66	
	Sub Total (G)	1662	0	1588	1584	36.74	1531	36.60	0.14	
H. Total Regional Entities (A-G)	22836	17500	18015	16055	386.29	16096	386.84	-0.55		

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	26.38	1099	
	Guru Nanak Dev TPS(Bhatinda)	440	210	190	4.21	175	
	Guru Hargobind Singh TPS(L.mbt)	920	951	687	18.54	772	
	Goindwal(GVK)		0	0	0.00	0	
	Thermal (Total)	2620	2421	1977	49.13	2047	
	Total Hydro	1148	670	714	17.27	719	
	Total Punjab	3768	3091	2691	66.39	2766	
Haryana	Panipat TPS	1367	624	639	15.54	647	
	DCRTPP (Yamuna nagar)	600	279	276	6.62	276	
	Faridabad GPS (NTPC)	432	184	184	4.13	172	
	RGTPP (khedar) (IPP)	1200	547	542	13.94	581	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	0	0	0.00	0	
	Thermal (Total)	4944	1634	1641	40.22	1676	
	Total Hydro	62	26	0	0.43	18	
		Total Haryana	5006	1660	1641	40.65	1694
	Rajasthan	kota TPS	1240	574	920	17.23	718
suratgarh TPS		1500	1051	943	24.70	1029	
Chabra TPS		500	227	200	5.25	219	
Dholpur GPS		330	134	134	2.74	114	
Ramgarh GPS		111	63	67	1.65	69	
RAPS A (NPC)		300	179	176	4.30	179	
Barsingar (NLC)		250	0	0	0.00	0	
Giral LTPS		250	0	0	0.00	0	
Rajwest LTPS (IPP)		1080	927	788	20.35	848	
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	3155	3228	76.21	3176	
Total Hydro		550	0	0	0.32	13	
Wind power		2191	634	991	17.79	741	
Biomass		91	18	18	0.44	18	
Solar		201	0	0	1.25	52	
Renewable/Others (Total)		2483	652	1009	19.48	812	
		Total Rajasthan	9989	3807	4237	96.02	4001
UP		Anpara TPS	1630	1342	1354	28.30	1179
	Obra TPS	1288	504	479	10.90	454	
	Paricha TPS	1140	862	886	18.40	767	
	Panki TPS	210	75	95	1.50	63	
	Harduaganj TPS	665	418	432	8.70	363	
	Tanda TPS (NTPC)	440	293	298	7.26	302	
	Roza TPS (IPP)	1200	1042	810	22.88	953	
	Anpara-C (IPP)	1200	391	470	11.73	489	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	324	238	6.87	286	
	Thermal (Total)	8223	5251	5062	116.53	4855	
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0	
	Other Hydro	527	59	40	1.84	77	
	Cogeneration	981	150	150	3.60	150	
		Total UP	10131	5460	5252	121.97	5082
Uttarakhand	Total Hydro	1303	444	395	9.42	393	
	Total Uttarakhand	1303	444	395	9.42	393	
Delhi	Rajghat TPS	135	70	72	2.03	84	
	Delhi Gas Turbine	282	147	154	3.66	153	
	Pragati Gas Turbine	330	137	145	3.48	145	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	686	134	27	2.64	110	
	Badarpur TPS (NTPC)	705	520	500	11.08	462	
	Thermal (Total)	2232	1008	898	22.89	954	
		Total Delhi	2232	1008	898	22.89	954
HP	Baspa HPS (IPP)	330	330	330	7.90	329	
	Malana HPS (IPP)	86	67	20	1.22	51	
	Other Hydro	589	448	528	11.38	474	
	Total HP	1005	845	878	20.50	854	
J & K	Baglihar HPS (IPP)	450	438	436	10.46	436	
	Other Hydro	323	110	128	2.95	123	
	Gas/Diesel/Others	183	0	0	0.00	0	
		Total J & K	956	548	564	13.42	559
Total State Control Area Generation		34390	16863	16556	391.27	16303	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5713	4437	133.13	5547	
Total Regional Availability(Gross)		57226	40591	37048	910.69	37946	

IV. Total Hydro Generation:

Regional Entities Hydro	10364	8797	8033	193.77	8074
State Control Area Hydro	5368	2592	2591	63.21	2634
Total Regional Hydro	15731	11389	10624	256.97	10707

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)	1624	1319	1888	0	38.00	0.00	38.00
Zerda-Kankroli	121	-60	151	95	0.62	0.00	0.62
Zerda-Bhinmal	106	-88	141	120	0.49	0.00	0.49
Malanpur-Auraiya	-63	-33	0	72	0.00	1.10	-1.10
Badod-Kota/Morak	30	-28	87	50	0.61	0.00	0.61
Mundra-Mohindergarh(HVDC)	1174	1450	1450	0	30.47	0.00	30.47
Sub Total WR	3392	3060			80.59	1.10	79.49
Pusauli Bypass	-167	-267	0	280	0.00	4.63	-4.63
MZP- GKP (D/C)	660	570	834	0	17.05	0.00	17.05
Patna-Balia(D/C)	817	716	962	0	19.54	0.00	19.54
B'Sharif-Balia (D/C)	488	378	540	0	10.39	0.00	10.39
Pusauli-Balia	35	48	0	48	0.67	0.00	0.67
Gaya-Fatehpur (765 Kv)	106	-47	170	49	2.13	0.00	2.13
Pusauli-Sahupuri	138	130	159	0	3.27	0.00	3.27
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)	282	-111	352	0	6.13	0.00	6.13
Sub Total ER	2321	1377			59.17	5.53	53.64
Total IR Exch	5713	4437			139.76	6.63	133.13

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
42.19	2.31	44.50	7.26	18.75	0.74	19.74	0.59	-0.59

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
53.10	90.20	143.30	53.64	79.49	133.13	0.55	-10.72

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	0.30	3.80	92.60	6.50	89.10	55.60	7.10

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					
50.31	6.05	49.44	22.08	50.00	0.23	0.15	50.40	49.73

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	411	04:29	396	22:08	0.0	0.0	0.0	0.0
Gorakhpur	400	423	08:14	399	00:12	0.0	0.0	4.2	0.0
Bareilly	400	420	06:03	396	13:45	0.0	0.0	0.0	0.0
Kanpur	400	423	04:02	400	22:06	0.0	0.0	4.3	0.0
Dadri	400	416	04:08	395	14:51	0.0	0.0	0.0	0.0
Ballabgarh	400	426	04:02	399	12:43	0.0	0.0	11.3	0.0
Bawana	400	420	04:02	399	12:42	0.0	0.0	0.0	0.0
Bassi	400	433	04:02	406	22:08	0.0	0.0	22.2	1.7
Hissar	400	409	04:01	390	12:39	0.0	0.0	0.0	0.0
Moga	400	416	04:00	397	14:30	0.0	0.0	0.0	0.0
Abdullapur	400	415	06:06	401	12:15	0.0	0.0	0.0	0.0
Nalagarh	400	413	04:03	395	14:49	0.0	0.0	0.0	0.0
Kishenpur	400	416	04:10	400	14:30	0.0	0.0	0.0	0.0
Wagoora	400	412	02:42	394	06:39	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	776	19:06	744	22:07	0.0	0.0	0.0	0.0
Balia	765	760	08:02	719	12:43	5.4	40.4	0.0	0.0
Moga	765	796	04:02	758	14:30	0.0	0.0	0.0	0.0
Agra	765	811	04:04	756	22:08	0.0	0.0	7.7	0.0
Bhiwani	765	794	04:02	752	12:43	0.0	0.0	0.0	0.0
Unnao	765	763	04:04	725	22:07	0.1	42.0	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	486.53	627.57	465.62	204.14	1053.05	939.92
Pong	426.72	384.05	402.38	273.51	396.21	146.09	22.00	99.14
Tehri	829.79	740.04	777.65	297.05	818.65	982.26	771.35	493.00
Koteswar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	316.18	352.24
Rihand	288.22	252.98	254.97	75.00	254.87	71.40	NA	NA
RPS	352.80	343.81	348.24	NA	349.85	NA	NA	7.48
Jawahar Sagar	298.70	295.78	297.94	NA	298.12	NA	NA	9.29
RSD	527.91	487.91	514.05	160.00	499.65	124.00	480.11	53.18

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 20.06.2013 :

1. Normal 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.
2. 50%(400MW) generation of Uttarakhand revived.